THE EVOLUTION OF THE ARYAN

THE EVOLUTION

OF THE

ARYAN

65-5-10

BY

RUDOLPH VON IHERING

Translated from the German

BY

A. DRUCKER, M.P.

LONDON
SWAN SONNENSCHEIN & CO., LIM.
PATERNOSTER SQUARE
1897

TRANSLATOR'S PREFACE

RESEARCH into the history of the Indo-European race —a missing link between the latest Sanskrit and the earliest Babylonian records—has always had a great fascination for me, and, I think, for most students and lovers of history.

When, therefore, a few years ago a copy of von Ihering's *Vorgeschichte der Indo-Europäer* was put into my hands, I hastened to read it, although I rather feared that it might be another of the numerous attempts which have been made to establish the descent of the Aryan by linguistical methods. To my surprise and delight, I found that von Ihering had based his hypotheses far more often upon facts and upon customs than on mere words and expressions. For whatever philology may have, and has, done for our knowledge of hitherto unknown phases in the existence of nations, sometimes, unless strongly corroborated by extraneous evidence, it cannot be denied that errors have been made.

Some *savants* tell us now that the entire theory of the descent of the European of to-day from the Aryan is an absolute error. This is not the place for me to discuss the probabilities of the correctness of an attempt to demolish the work of many decades of laborious study. All I can say is, that even to those

who do not believe in the Aryan descent, von Ihering's practical method and lawyer-like way of arguing must appeal. Von Ihering was a wonderfully versatile man. A Professor of Roman Law—one of the greatest authorities on the subject that ever lived—he devoted much of his spare time to the study of ancient history, principally of those customs pertaining to law which seemed to him incongruous with the state of civilization which the Romans of that period had reached; and this work is the outcome of his researches.

The translation of a scientific work is at all times difficult. In this case it was particularly so, owing to the large number of technical expressions, and also to the fact that, unfortunately, von Ihering died before he could revise the MS. or proofs.

Still, I hope that the perusal of these pages may be as interesting to the reader as the work of translation has been to me.

A. DRUCKER.

39A, CURZON STREET, W.

CONTENTS

			PAGE
		TRANSLATOR'S PREFACE	v
§ 1.		INTRODUCTION	x

First Book

THE ARYAN PARENT-NATION

§ 2.	I.	THE NATIVE COUNTRY	1
	II.	CIVILIZATION OF THE ARYANS	10
§ 3.		Summary	11
§ 4.	(1)	The Mother-Nation knew no Agriculture	11
§ 5.	(2)	A Pastoral Nation	14
§ 6.	(3)	A Settled and very Populous Nation	19
§ 7.	(4)	Knew neither Towns nor Stone Houses	20
§ 8.	(5)	Was Ignorant of Working Metals	22
§ 9.	(6)	Low Stage of Development of the Law	25
	(*a*)	The Political Union of the Nation	25
§ 10.	(*b*)	International Intercourse	26
§ 11.	(*c*)	Domestic Law—Woman	27
§ 12.	(*d*)	Domestic Law—the Children	32
§ 13.	(*e*)	Sacrifices to the Dead, and Maternal Right (Matriarchal Theory; Matria Potestas)	38
§ 14.	(*f*)	The Law of Property	48
§ 15.	(*g*)	Jurisdiction and Criminal Law	50
§ 16.	III.	CONCLUSION	62

Second Book

ARYANS AND SEMITES

§ 17.	I.	PROBLEM OF THE ORIGIN OF NATIONALITIES	69
§ 18.	II.	CONTRAST BETWEEN ARYAN AND SEMITIC CIVILIZATION	78
§ 19.	(1)	Herdsman and Husbandman	80
§ 20.	(2)	The Town	85
	(*a*)	Origin of the Town; the Fortress	85

PAGE

§ 21. (b) The Town as a Condition of Civilization 90
§ 22. (3) The Wooden House and the Stone House 97
§ 23. (4) Architecture in Babylon 110
(a) The Building Trade; the Sabbath Rest; Measurement of Time 110
§ 24. (b) Architecture; Linear Measurement; Political Significance 122
§ 25. (5) Use of Stone and Wood for other purposes than Building 134
(a) The Writing Tablet 134
(b) The Road 137
(c) Stoning to Death 139
(d) The Coffin 140
§ 26. (6) The Burning of the First Brick; Parallelism between Plough and Stone 141
§ 27. (7) Water in Primitive Times 149
(a) The Deluge 149
§ 28. (b) Waterworks of the Babylonians 154
§ 29. (c) Sea and River Navigation of the Babylonians . . 162
Babylonian Account of the Deluge 169
Antiquity of Astronomy in Babylon 175
§ 30. (8) Commerce; Transport by Land and by Sea; Commercial Law 185
§ 31. (9) Summary 211
§ 32. { III. Transmission of Babylonian Civilization to the Aryans 216
IV. The National Character of the Aryans and the Semites 226
§ 33. (1) Necessity of ascertaining the National Character of each 226
§ 34. (2) Renan's attempt to trace the difference between Aryans and Semites back to Polytheism and Monotheism . 231
§ 35. (3) The Semites 245
§ 36. (4) The Aryans 245

Third Book

EMIGRATION OF THE ARYANS

I. The Ver Sacrum 249
§ 37. (1) The Tradition 249
§ 38. (2) The Several Features of the Ver Sacrum 257
§ 39. II. The Conservation of the Tradition 291
§ 40. III. The Legend of the Hirpini 300

Fourth Book

THE WANDERING

PAGE

§ 41. I. Universal Points of View 309
§ 42. II. The Army 312
(1) Time of the Campaign 312
§ 43. (2) Division of the Army 315
§ 44. (3) The Commander 322
§ 45. (4) The Law of Booty 327
§ 46. III. The Old and the Infirm 332
§ 47. IV. The Women 334
V. Experts 350
§ 48. (1) The Fetiales 350
§ 49. (2) The Pontifices 351
§ 50. (3) The Auspices 361
§ 51. VI. Moral Influences of the Migration . . . 380

Fifth Book

THE SECOND HOME

§ 52. The Second Home 389

Sixth Book

ORIGIN OF THE EUROPEAN NATIONS

Seventh Book

DIFFERENCE OF THE EUROPEAN NATIONS

civilization which other nations of Asia already possessed. Recent comparative philology has established beyond doubt the fact that all the civilized nations of Europe became separated from it in distant prehistoric times. At one time they talked the same language as the mother-nation; and only after the separation of the daughter-nation from the mother-nation, the severance into branches, the consequent independence of their development, and contact with nations speaking different dialects, do we find that extraordinary divergence of language which from the first historical existence of those nations distinguishes the separate idioms from the tongue of the mother-nations, and obscures the original unity to all but the philologist.

One of the most brilliant scientific discoveries of the nineteenth century is that which traced the descent of all Indo-European nations from the Aryans. The first result, consisting of extraordinarily valuable discoveries respecting both the historical development of the several languages, and the growth of language generally, belongs to philology. But it was soon seen that these linguistic discoveries contained also historical discoveries.

The language of a nation comprises all that the nation calls its own. Existence of a word implies existence of the thing it designates; absence of the word means absence of the thing. Language is the true image of fact. Guided by language, it has been possible to find out what part of their civilization the Aryan daughter-nations took with them on their separation from the mother-nation, and what part

they acquired only later. When an expression is the same in all or at any rate in most of the daughter-languages, whilst it is unknown to the mother-language, it justifies the assumption that the thing (institution or idea) has come to the separate nations when they were still together; if it occurs in only one or another language, we may conclude that it has become known to the nation only after the separation.

It must be admitted that much of what was thought to have been discovered by this means has proved incorrect. Some, trying to give us as worthy forefathers as possible, have so exaggerated the degree of civilization of the mother-nation that it cannot pass criticism; and, in my opinion, great credit is due to Victor Hehn for having forcibly exposed the intangible character of many hasty conclusions thus arrived at.

Philology and history must go hand in hand. By a comparison of the institutions which we find amongst the Indo-European nations at the time of their first appearance in history, history must decide what part belonged to them before their separation, and what part is to be accredited to each separate nation. The comparative history of law in particular supplies us with explanations, and although research in this direction has only just commenced, it has already shown important results. In my opinion, certain facts, which I will presently specify, may now be considered to have been proved.

My profession—that of Roman Law—caused me to study the ancient history of the European nations. I desired to clearly discover how the Romans treated

those legal institutions which they had derived from the original nation—what they kept and what they altered. I made these investigations not so much because I expected that any special fact would have been of special importance for me (however interesting it might be to the historian of law), as on account of conclusions at which I thought I might be able to arrive with regard to the characteristics of the Roman nation. Greeks and ancient Teutons preserved the Aryan institution of ordeal; the Romans did not—why was this? Teutons and Slavs kept the Aryan system of communal property, even of arable land; the Romans did not—why not? On the other hand, by no other Indo-European nation have so many institutions dating from primitive times been maintained as by the Romans, who afford, as I will show later on, a perfect mine of knowledge of past ages. Thus we find a totally different action in each of the two cases: in the one, an entire breach with the past; in the other, its careful preservation. One cannot but inquire how this apparent discrepancy is to be accounted for. The first legal achievement the Roman mind accomplished was practically a criticism of the legal institutions of the mother-nation: it was a feat of Hercules in his cradle.

All that we can establish by the aid of philology is the descent of the Indo-Europeans from the Aryans, from which follows community of language and of certain institutions. All the rest is wrapped in darkness. We are not told the locality of the mother-nation, when the emigration took place, what time elapsed before the different Indo-European nations

settled, by what path they wandered, or whether they separated in their original country or later.

Scientific research in this direction finishes at one end with the mother-nation and begins at the other with the appearance in history of the different branches of the daughter-nations. It is considered that the gap which is formed by the interval cannot be filled up. It is like a stream lost in the earth, which after a long subterranean course reappears at another place. If it came out as it had gone in, we should not concern ourselves much about its underground career; but when it emerges we find that it has entirely changed its appearance. At first an insignificant rivulet, scarcely able to drive small mills, it has now acquired a force which casts aside everything in its way; several large rivers have emerged from the one little stream. In the place of the Aryan, the European has appeared, of a type totally distinct from the Asiatic. Whence this change? Is it due to the European territory? Is it the land—*i.e.* the soil, the climate, and the physical configuration—which has created the European? But the European differs in Greece and in Germany, in Italy and in England and Scandinavia. And yet the European type is seen equally throughout all Indo-European nations. It is not Europe which has made the European; it is the European who has made Europe. He has become European during his time of migration, not only because it lasted over a long period, but because the conditions of the migration necessitated his energy. The peaceable Aryan herdsman became changed into a warrior compelled to fight for every foot of soil until

he found the land where he settled permanently; this perpetual readiness for fight created the man who was destined to produce on the stage of Europe the second act in the history of the world. During the hidden period of the migration, not enlightened by any rays of information, the future of Europe was preparing itself; it is the darkness of birth. The Hindu and the European of to-day differ greatly, and yet they are children of one and the same mother, twin brothers who originally were exactly alike. But one of them, the elder, heir to his father's estate, remained at home, whilst the next-born, who was thrown upon his own resources, went to sea, crossing every ocean, braving every danger. Should he return after many years he would not recognize his twin brother: life has made such totally different beings of them.

Life at sea requires arrangements as different from those on land as the life of the Indo-Europeans on the march required as compared with that of those at home. Under the guidance of historical connecting-links which, as will be seen, are by no means slender, and are—I hope to prove this—available for my purpose, I will also show the irrefragable necessities which accompanied the migration. I intend to sketch the conditions, arrangements, and episodes of the migratory period, to follow the Indo-European on his march, to consider the moral influences of the period upon his habits and character, to show the type of the European as contrasted with that of the Asiatic, and to prove how this change was brought about. To me personally it is the most valuable result which my researches have yielded. I am indebted to it for the explanation of a

question which I have in vain attempted to solve by consulting historical works: "Wherein lies the origin of the European's individuality, which is undoubtedly the cause of the whole development occurring on the soil of Europe?"

I hope further (in the Fifth Book, "The Second Home of the Indo-Europeans") to demonstrate that the emigrants who until then had formed one solid nation, ignorant of agriculture, encountered another nation which did understand it, which nation they conquered and placed in a condition unknown to the parent-nation, a condition which, after the separation, was maintained amongst all European nations—the condition of bondage. I lay the seat of this nation in the regions between the Dnieper, the Dniester, and the Danube. Here the wandering nation rested for centuries, until, owing to imperfect methods of agriculture (especially insufficient manuring), the land became unfit for feeding the largely-increased population, and there recurred the same necessity which previously arose in the original home—the enforced emigration of a part of the nation. But the relief was only temporary; after a time emigration became again indispensable; and those "blood-lettings" were repeated periodically. Many of the masses of population which migrated may have perished; others succeeded in fighting their way onwards and making a permanent home. Here we are face to face with the fact of the separation of the Indo-Europeans into different nations.

Historical tradition cannot tell us anything about them. In the Sixth Book I will endeavour to trace

whether anything can be adduced to enlighten, to some extent, the darkness which envelops the formation of the European nations, in the first place respecting the succession in which they branched off from the main nation. I have limited myself to the five nations which are of importance in the history of civilization —the Greeks, the Latins, the Celts, the Teutons, and the Slavs; the Illyrians and the Letts are of no interest in this regard. My opinion is that the four first nations detached themselves in the order named, whilst the Slavs stayed at home and only gradually, without separation, spread themselves towards the North and the West.

The second point to which I wish to pay attention is the question, Whence comes the difference between those five nations? (Book VII.) The five national types which they represent cannot be the result of chance; there must have been causes to bring about their diversity, and it remains to be seen whether what we know of them does not suffice to enable us to ascertain those causes.

That is the end of the work. As will appear from this summary, a very great part of it is taken up with a problem to which scientific research has hitherto been scarcely devoted at all, *i.e.* to fill up the existing gap between the departure of the Indo-Europeans from their home and their appearance on European soil as separate nations; in short, the period of their migration. Although some of the arguments I intend to adduce may be very problematical, I feel confident that there will be abundance of them, and that alone will be sufficient to recompense me for my excursion into regions almost entirely unexplored.

No doubt much has escaped me; but I hope my efforts will incite others who have the command of more linguistic and historic knowledge than I possess to follow the path I have taken. It is certain that on that road lies a problem which science cannot dismiss with a single *Ignorabimus;* science must attack it; and if philologists and historians combine for that purpose there will be no lack of results. The pre-history of Europe will not be confined to narrating the fact that the Indo-Europeans are descended from the Aryans, and that they took with them many of the institutions of their native country; but it will, as a second and historically much more important part, give details of the migration-period, and show what that period made of them, viz. the real history of the "culture-nations" of Europe. What the parent-nation gave them was only the dough out of which the migration formed them.

In the First Book I shall devote my attention to the parent-nation. Whilst in the succeeding books I have had to depend entirely upon myself, in this one I have enjoyed the advantage of being able to avail myself of the researches of others; yet I believe I shall from time to time be able to assist and amplify them. So far as lay within my powers I have tried to master them, but I have considered it unnecessary to verify them by quotations. Everyone has a right to use the common property of science without incurring the risk of being accused of appropriating what belongs to others. However, I have duly quoted where I found the matter in question treated by one or a few authors only, and where I wanted the support of expert authority.

First Book

THE ARYAN PARENT-NATION

THE

EVOLUTION OF THE ARYAN

I.

THE NATIVE COUNTRY

§ 2. INDO-EUROPEAN tradition has preserved as little recollection of the migration-period as of its original home. Whatever can be ascertained on this point is derived from learned fabrications of later times, and is therefore without any value.[1] The prevailing opinion is that the original home of the Aryans was in Ancient Bactria (Central Asia), where, according to the accounts of the ancients, there was a nation called "Arii," and a country known as "Aria." Others suggest the Danubian Principalities, Germany, or Russia, even Northern Siberia, which last suggestion would certainly most simply explain the Aryan emigration from their original home.[2] I follow the prevailing opinion. The testimony derived from the ancients as to the original home of the Arii is, to my mind, confirmed by many strong proofs, amongst which I would mention, firstly, the climate, and, secondly, the fact that the sea and salt were unknown to the Aryan nation.

[1] For instance, the North Germanic fable in which Odin is supposed to have come with the Asen from Asia (Asen, Asia!); and the Roman Æneas legend. The tradition that the Germans came from Russia to Germany is the only one to which I attach any value. See Book V.

[2] A careful selection of these different views and the grounds for their acceptance will be found in O. SCHRADER'S *Sprachvergleichung und Urgeschichte* (pp. 117–149). Jena, 1883. [English translation, *sub. tit. Prehistoric Antiquities of the Aryan Peoples.* Lond. 1890.]

THE CLIMATE.

The ancient Aryans lived in a hot zone. If this can be proved, we must exclude Europe. It has already been proved by others that their cattle wintered in the open, which is possible only in a hot zone. In a cold zone cattle require a stable for protection, hay for food, and straw for litter. These expressions, however, are wanting to the Aryan mother-tongue, which is a positive proof that the things themselves did not exist. It was only when the parent-nation came to colder regions that shelter for the cattle and hay and straw for their sustenance had to be provided. The Greek fable of Hercules carries the stable back to remote times (stable of Augeas); but among the Aryans we search for it in vain.

Three further proofs, which hitherto have escaped notice, I venture to add to this argument. The first I take from the dress of the Aryans, which consisted of the leather apron.[1] The second is the time of the year when they left their homes —the beginning of March. And the third is their limitation of the time of their wanderings to the three vernal months—March, April, and May.

1. *The Leather Apron.*

I take the fact that this apron formed the dress of the ancient Aryans from the description given by the Roman lawyer Gaius (iii. 192, 193) of the house-search for stolen articles — "*furtum licio et lance conceptum.*" An astonishing number of early customs and habits has been preserved in Roman ceremonial usages, as will be shown by a variety of examples. In my opinion, this ceremony of the house-search is one of them. It consisted in the following: The person who had been robbed, clad only in an apron (*licium*),[2] and carrying an empty dish (*lanx*), proceeded to the house of the accused in order to institute the search. The dish is of no interest

[1] I have mentioned this conclusive proof regarding the original home of the Aryans in *Geist des römischen Rechts*, vol. ii. (3rd edition, 1874), p. 159, note 209. In the text I give my reasons more elaborately.

[2] GAIUS, iii. 193, "*Consuti genus quo necessariae partes tegerentur.*"

here—its object was obviously to show that something had to be fetched, and this could not be more clearly represented than by an empty dish or an empty basket, and it is met with only in the Roman form of house-search. The apron is found also amongst the Greeks, but in somewhat altered shape, viz., as a long hairy shirt, just as with the North Germans.[1] It appears, therefore, that we here have a custom well known to the Indo-Europeans before the separation. It is impossible that the North Germans could have taken the shape of their apron from either Greeks or Romans, or *vice versa*. It is equally certain, I take it, that the Græco-Roman was the original shape, which the North Germans adapted to their colder climate. Had the shirt been the original shape, the Greeks and Romans would have had no necessity to exchange it for the apron.

But what had the apron to do with the house-search? The common idea (which I too at first held) was that it prevented the wearer from secreting the stolen article under his clothes. If it was found upon him, the accused had, in accordance with Roman law, to pay a fine of four times its value; therefore care had to be taken lest the searcher himself should bring the supposed stolen article, hidden under his own clothes, into the house, in order to find it there again.[2] But was it necessary to appear naked for this purpose? Why was it needed where the theft was of something that could not possibly have been hidden under the clothes, as, for instance, stolen cattle or a lance? According to the general terms of Roman law, the custom had to be observed in that case as much as in others. But even where it concerned articles which could be hidden under the clothes—the ancients hardly possessed any: jewels, gold and silver articles did not yet exist—wherefore, even then, this nakedness? They might have secured the same certainty of detection by carefully searching the person. The best proof

[1] In Old-Slavonic Law I have, with the limited means at my disposal, been unable to discover it; this point I commend to the historians of Slavonic law.

[2] According to GAIUS, iii. 193, the dish was supposed to be connected with this: "*Ut manibus occupantis nihil subjiciatur.*"

that this latter proceeding was considered sufficient by the Romans lies in the fact that yet another form of house-search was known to them. I will call it, in contradistinction to the former (the Aryan), the Roman form; in which, by permission of the accused, the accuser appeared clothed. To make him readily compliant a premium was granted, reducing the fine from four times the value of the stolen article (as in the Aryan form) to three times its value. It was a "feeler," thrown out with true Roman shrewdness. A man who feared discovery gladly accepted the proposal; as, at the worst, he would get off with the threefold fine. If he were innocent, he rejected it; in return for the unjust accusation, he had the satisfaction of seeing his adversary depart without having effected his purpose—of seeing him naked, jeered at, and laughed at by an expectant crowd; and it may be supposed that in this case the house-search, being fruitless on the face of it, would be abandoned at the outset. Imagine a noble Roman compelled to appear naked before the eyes of the populace! All Rome would have hastened to the spot to witness the spectacle.

The fact also that the person in quest of the missing property brought with him witnesses, for whom the obligation to appear naked did not exist, shows how little was thought of the danger of secreting the articles under the clothes. Had such danger really existed, the witnesses also would have had to appear naked; for what would it have availed to prevent the principal from hiding anything, if his assistants had not been similarly treated? If it were considered unnecessary for the witnesses to appear unclad, a personal search being sufficient guarantee, why did not this course hold good for the principal as well?

I believe I have now sufficiently shown that no definite object was to be gained by retaining the old form of house-search. In no way supported by practical means (the second form of house-search fully answering every purpose), it could only have increased the difficulties of the search to an extent which virtually excluded persons of rank, and rendered the

application of the law to them practically impossible. The true view is this: The leather apron was the usual dress of the ancient Aryans, as it still is of the common Hindu.[1] This form, therefore, belongs to the class of the "residuaries," as I usually call them[2]—institutions primarily necessitated by actual circumstances of life, and preserved merely as empty forms for certain occasional usage after the progress of civilization has long discarded, as fossils of antiquity, their employment in ordinary life.

If I have hit upon the correct view, the apron acquires the dignity of a certificate of origin of the Indo-European; and it is as strong a proof as the wintering of the cattle in the open. Should it be asked in which climate a nation has lived where the people went naked and the cattle spent the winter in the open, the reply would, of course, be: In a very hot climate.

2. *The Time of Leaving their Homes.*

The Aryans left their homes in the beginning of March, as I will prove later on (§§ 37, 38)—according to the Roman tradition of the Vesta worship, on the 1st of March. This settles the question of the climate of their original home. Had their homes been situated in a moderate zone, the Aryans would never, of their own free will, have made their exodus so early; they would have delayed it, if not until May, at any rate until the middle of April. At that time the weather in the moderate zone is still very raw: the snow has scarcely melted; the cattle have a difficulty in finding food; the damp soil would considerably increase the difficulties of the march and the struggles with the enemy. Camping out with wife and child, as the majority would undoubtedly have had to do, would have been quite impossible.[3] At the beginning of March,

[1] *Vide* RICH. GARBE'S *Leben der Hindus:* WESTERMANN'S *Monatshefte*, Vol. 68 (1890), April, p. 114.

[2] *Geist des rom. Rechts*, iii. p. 50, where several instances are given.

[3] We know from the rite of *servare de coelo* (§ 50) that the general slept at night in a tent; the same may have been the case with others occupying prominent positions—*e.g.*, officers, priests, augurs, &c.; but the common people certainly would not have burdened themselves with tents.

therefore, the weather must have been warm enough to enable them to travel; the snow long since melted; the roads dry; and camping-out made possible without risk to health. Let us for a moment imagine the home of the Aryans to have been in one of the European countries so often suggested—Germany, Russia, the Danubian Principalities—and ask if there they would have commenced their wanderings with the first days of March. No,—their migration was feasible only in that climate which limited their dress to the leather apron, that of Central Asia.

3. *Restriction of Migration to the three vernal months.*

During their migration the Aryans always terminated their wanderings at the end of spring, which tradition, according to the Roman Calendar, fixed for the last day of May (§ 42). Then commenced the building of the huts, under shelter of which the hot summer and the cold winter were spent; and the wanderers did not again set forth until the following 1st of March. The year was divided into two parts: campaigning in spring (the *ver sacrum* of the Romans), and resting in summer and winter. Autumn was as yet unknown. Why this suspension of the march during summer? I can find no other reason than that the heat was too great to permit of travelling. But that again applies only to a hot climate. In a more temperate zone the inclement month of March would certainly have been replaced by the month of June. What the heat of summer meant to them we see plainly expressed in the Aryan myth of the fire-spitting dragon—*i.e.*, the scorching sun—against whom Indra, the Rain God, does battle. As this myth is found also amongst the Scandinavians in the far North (with whom, however, it cannot possibly have originated), it shows that it came to them from the Aryans; and this alone is sufficient proof that the home of the Indo-Europeans was situated in the hot zone.[1]

1 The merit of having first drawn attention to this proof belongs to Hans von Wolzogen, in the *Zeitschr für Völkerpsychologie*, viii. p. 286. Reviewed by Schrader, *loc. cit.*, p. 135.

The four facts enumerated, viz., the wintering of the cattle in the open, the leather apron, the commencement of the wandering on the 1st of March, and its suspension on the last day of May, all tend to the conclusion that the home of the Aryans was in the hot zone; there is consequently no ground for doubting the credibility of the accounts of the ancients upon the question of the original home of the Arii. One very strong argument respecting the exact determination of their home is, I think, the ignorance of salt among the Aryans. According to Victor Hehn,[1] this has been indubitably proved. To the Aryan mother-nation, as also to the Iranic daughter-nation, salt, in name and in substance, was unknown. It is evident from the terms used amongst them (ἅλς, *sal;* Goth., *salt;* Germ., *salz;* Slav., *slatina;* Old Slav., *soli;* Old Irish, *salaan*), which they evidently learnt from the original inhabitants, that they became acquainted with salt only during their wanderings.[2] It is clear from the fact that the Aryans did not know anything about salt, that their home could not have been situated in the neighbourhood of the salt mines west of Iran; otherwise they must necessarily have been familiar with it. The home of the Aryan nation must therefore be sought several degrees to the east. But even this considerable distance would not, I think, have been sufficient to prevent salt from penetrating thither. There must have been some other natural insurmountable barrier which prevented its progress; I can imagine only some lofty mountain range which from time immemorial surrounded the Aryans as with prison walls, and cut them off from all intercourse with the outer world. This territory is found on the northern slope of the Himalayas, in what is now called the Hindu Kush. Here the Aryans have lived for many centuries, thrown upon their own resources, and cut off from all communication with other nations of different languages and different civilizations. That they did not dwell, as some maintain, upon the heights, where the temperature is low, but rather in the lower districts, among the valleys, hills,

[1] *Das Salz: eine kulturhistorische studie.* Berlin, 1873.
[2] Where? *Vide* HEHN, *Das Salz*, p. 19.

II.

CIVILIZATION OF THE ARYANS

§ 3. It is of far greater interest to ascertain the degree of culture possessed by the Aryan mother-nation, the external institutions, and the moral views held, than to attempt to find its original home. I do not hold the often-asserted theory which attributes to the mother-nation a high degree of development, technical as well as intellectual and moral. Were it so, the mother-nation would have understood agriculture; would have understood the working of metals; would have dwelt in towns, and surpassed all other nations in civilization—all of which a close investigation disproves. A desire to find for ourselves most worthy ancestors seems to have influenced many writers. It is a kind of learned Chauvinism. In direct opposition to this, I fully agree with the other theory, which is strongly maintained by Victor Hehn; and I hope to be able to adduce some further arguments in support of it.

In one particular, however, the mother-nation shows a high degree of mental culture, which deserves our genuine admiration, and that is in its language. According to philologists, it is the most developed language of which we have any knowledge.[1]

This striking intellectual genius of the people, of which the Indian philosophy of the Vedic period and the later poetry give most brilliant evidence, is placed beyond all doubt. It appears, therefore, all the more strange that, where practical

[1] Words of A. Schleicher in HILDEBRAND'S *Jahrbücher für Nationalökonomie*, i. p. 404. He adds that, "according to the laws governing the life of speech, the people speaking this language must have existed at least ten thousand years."

matters were concerned, they were so little advanced. In this respect the Semites and the Egyptians were far ahead of them. At a time when the latter peoples had already a rich culture behind them, the Aryans still lived in their villages, knew nothing about towns, agriculture, or the working of metals for technical purposes, even for coinage. There was no commerce, no definite jurisdiction; they had not even a word for "law." The sea, which might have brought them into contact with foreign and more cultured nations, they had never even seen, according to the view which I hold. The conclusion drawn from the fact that ships, or rather boats, were known to them, and that this proved that they had acquaintance with the sea, is a hasty one; for boats are used also for river navigation. Powerful rivers, such as the Tigris and the Euphrates, which became the vital source of the most flourishing commerce for the Babylonians, nature had not given to the Aryans in the mountain district which they inhabited.

I mention here categorically the different points characterizing the mother-nation, which I will subsequently work out more fully:

1. The mother-nation was ignorant of agriculture;
2. The Aryans were shepherds;
3. They were settled and very numerous;
4. They did not live in towns;
5. They were unacquainted with the art of working metals;
6. Their law was exceedingly undeveloped.

1. *No Agriculture.*

§ 4. The grounds upon which the prevailing opinion denies the absence of agriculture seem to me untenable; in my opinion, only a few of these reasons deserve our attention.

Firstly, as to their acquaintance with certain cereals. The hypothesis that these must have been acquired artificially by cultivation is a false hypothesis; they may have been gathered wild, as we pick berries that grow in the woods.

Secondly, as to the similarity between the Sansk. *ajras;* Gk., *ἀγρός;* Lat., *ager;* Goth., *akrs;* Germ., *Acker.* But the assumption that *ajras* meant arable land is unfounded; it meant pasture land (§ 5).

Lastly, the derivation of the Gk. *ἀροῦν;* Lat., *arare;* Goth., *arjan* = to plough, from the Sansk. root *ar.* This root, however, has not the meaning of ploughing, but of dividing; the two nouns in the mother-tongue (*aritra* = oar, *aritar* = oarsman, preserved in the old Swed. *ar* = oar or rudder) do not apply to the division of land, but of water—navigation; which, as the similarity of the Sansk. *nau, nav,* with *ναῦς, navis* = boat, shows, was at that time already known to the mother-nation. In this sense of rowing, these two expressions have been preserved in *ἐρέτης* = oarsman, *τριήρης* = trireme, *ratis* = raft.

The plough became known to the Aryans only after the separation of the daughter-nation. They themselves trace their acquaintance with it back to the subjugated people, the Açvin, who, according to the Rig Veda, "by sowing cereals with the plough brought great prosperity to the Aryans.[1] This is confirmed by the fact that the expression for it, *vrka* = wolf, *i.e.*, the wild animal tearing up the ground, is not found in any of the daughter-tongues. But the expression is familiar to all the daughter-languages;[2] and this shows that the Indo-Europeans became acquainted with the plough at a time when they had not yet separated. They described it by using the expression which, in the parent language, stands for *oar:* as the oar divides the water, so the plough divides the land. In addition to this expression, we find amongst the Slavs and Germans *plugu, pliuges, Pflug;* this must have been the term used by the people from whom they learnt agriculture. Just as the language of the Aryans possesses no expression for "plough," so it has none either for "autumn"; of the seasons,

[1] HEINRICH ZIMMER, *Altindisches Leben.* Berlin, 1879, p. 235.

[2] Gk., *ἀρότρον;* Lat., *aratrum;* Old Norse, *aror;* Celt. (Irish), *arathar* and *plaum-orati* (for the two-wheeled plough with iron cutter later introduced into Gaul). HEHN, *Das Salz,* p. 457.

it distinguishes only "summer" (*sama*)[1] and "winter" (*hima*). Autumn has no meaning to the shepherd; there is nothing to induce him to separate it from the other seasons; it brings him nothing special. In a hot climate, where the cattle winter in the open, no particular season has any predominance; all are alike. But to the farmer it is different: he recognizes two quiet seasons without much occupation, summer and winter; and two busy seasons, spring and autumn, the time for sowing the seed and for reaping the harvest. The introduction of a word for autumn is a sure sign of the introduction of agriculture; its absence, with a people of such cultivated speech as the Aryans were, is an equally sure sign of a mere shepherd-life. Autumn is the time of blessing, of joy, and festivity; a nation that knows it possesses a separate expression for it. The expressions for "autumn" in the Indo-European languages, as their variety shows, have been developed, after their separation, amongst themselves.[2]

Another argument for the hypothesis that agriculture was unknown to the Aryans will be pointed out (§ 39) when I come to speak of the character of the sacrifices celebrated at the *ver sacrum*. Such sacrifices were limited to the flocks; had the Aryans been versed in agriculture, it would also have included the fruit of the land, which, wherever agriculture is known, is found in the form of the unbloody sacrifice side by side with the bloody animal sacrifice.

[1] From the Old High-Germ., *sumar;* Middle-Germ., *sumer;* present, *Sommer;* from *hima;* Lat., *hiems;* Gk., χειμών, there is nothing to indicate spring or autumn in the parent language. The Aryans reckoned by summer and winter, which system was continued by many of the daughter tribes. It was only with the introduction of agriculture that autumn (*çarad*) was added; and afterwards more seasons, up to five or six. The influence of the climate of the new home of the people is very noticeable in this. As to this see ZIMMER, *Altind. Leben*, p. 371.

[2] The Latins took their expression for autumn from their idea of fulness (*autumnus*, from Sansk. root *av*, to be full; VANICZEK, *Griech.-Lat. etymolog. Wörterbuch*, i. 67; ii. 1235); the Germans from the idea of gathering, picking. (*Herbst*, from a lost Germ. root; *harb* from *karp;* Lat., *carpere;* Gk., καρπός, fruit. KLUGE, *Etymol. Wörterb.*, p. 133.)

2. *The Mother-Nation was a Pastoral Nation.*

§ 5. The first thing we have to consider is the designation of land by *ajras*. The expression is derived from the root *aj*, to drive; *ajras*, therefore, pictures to us the land upon which something (the cattle) was driven—the cattle-drove. This meaning of driving has been adapted to agriculture, and developed into meaning any kind of active work. The present German expression, *Was treibst du?* also the Latin *Quid agis?* points back to its historical origin, the pastoral life of remote antiquity. In the driving of the cattle man first became conscious of the fact of motion. Illustrative of this is the German proverb, *Wie man's treibt, so geht's*, which could have originated only in its application to cattle.

In ἀγρός and *ager*, *ajras* is simply extended into meaning "land in general," while in the Germanic tongues it denotes the land under the plough (*Acker*, Old High. Germ. *acchar;* Goth., *akrs*, etc.), a certain proof that the transition from the pastoral to the agricultural life took place after the separation of the daughter-nation from the mother-nation.

The pasture-land was common property; personal property in land was unknown to antiquity[1]; all land was common property. The Germans and Slavs clung to this institution long after they went over to agriculture, while the Roman legend carries the introduction of private property in pasture-land back to Romulus; he gave each freeman a *heredium* = property: (*heres* in the oldest language = owner, as in the *lex Aquilia*). For many centuries community of property in pasture-land was maintained by the Romans (*ager publicus* = *populi*, in contradistinction to *ager privatus* = *privi;* hence also *proprietas* = *quod pro privo est*); similarly among Teutons and Slavs. The assumption, therefore, that pasture-land was common property in the mother-nation is unquestionable.

The driving together of flocks belonging to different owners

[1] It is sufficient to refer to the well-known work of DE LAVELEYE, *De la Propriété et de ses Formes Primitives*, 1874. Germ. adaptation by K. BUCHER, *Das Ureigenthum*, 1879. [Eng. Transl., *sub. tit. Primitive Property*, 1878.]

on the same pasture-land is unfeasible, unless care is taken to distinguish between their individual ownerships. With the Romans this was done by marking them *(signare)*, each animal having the mark of the community and that of the individual owner branded upon it.[1] This institution not only prevented any uncertainty as to the ownership of stray cattle—anyone finding it knew where it belonged, for it carried its home-mark with it—but it also lessened the danger of theft; the mark announced, for the benefit of anyone to whom the cattle might be offered for purchase, that it was "stolen from so-and-so; buy it not." Two legal institutions—the claim of ownership and the *ususfructus* in a flock—could not, without this, have been practically maintained.[2]

[1] *Notam inurere*, Virg. Georg. iii. 158: "*continuoque notas* (mark of owner) *et nomina gentis* (that of the community) *inurunt.*" With sheep and goats, where the mark would be concealed by the growing wool and hair, it was done in colours. This explains GAIUS, iv. 17: ". . . . . *ex grege vel una ovis aut capra in jus adducebatur vel etiam pilus inde sumebatur.*" *Pilus* does not mean a tuft of wool, or hair in general; this would have served no purpose in the statement of the formal claim which was to take place at the first hearing; it meant that special portion upon which the mark of ownership was painted in colours, and which might be cut off without necessarily bringing the animal before the court of justice. With animals which had the mark burnt into their skins, there was no other way than to bring the animals themselves before the court.

[2] Our theory has here, as in so many other cases, carelessly overlooked the question of evidence, confining itself to stating the abstract possibility of the two circumstances, without demonstrating their concrete realization, *i.e.*, with reference to the evidence. How could the claimant, supposing his flock had got mixed up with that of another owner, have proved which were his, and how could the other state his *contravindicatio* (1, 2, de R.V. 6, 1)? Their marks of individual ownership obviated this difficulty. The claim upon the flock was reduced to a contest as to the marks of ownership; when that was once decided, the separation of the separate animals followed as a matter of course: the specification of the latter was not a matter of *intentio*, but of *condemnatio*. The numerical relation between the several animals and the flocks of the accuser and the accused, upon which Paulus (in 1, 2, de R.V. 6, 1) lays such stress, cannot possibly have been taken into account; this would have meant that the accuser, supposing 100 animals of his flock had got amongst 110 of the flock of the accused, would have had to vindicate, not the flock as a whole, but each individual animal in it; *i.e.*, he would have had to bring all the 100 sheep or oxen before the tribunal. To avoid this absurdity, ancient law had wisely ordained the identification of the flock. This would take effect, therefore, also, even as the *hereditatis petitio* (I. 5 *pr.* 1, 10 *pr. de her. pet.* 5, 3), when only single

In the same way the Teutons proceeded with their home-mark; and it cannot have been different with the mother-nation in primitive times—only, as it was not then possible to brand the cattle with iron, they painted them in different colours instead. These marks of possession, painted on the skin of the cattle by means of colours, were the first written characters; the hide of the live ox was the first writing-tablet of the Aryans. This application of colour lies at the root of the meaning of the word *literae*, which is derived, together with *li-nere*—to smear, brush; *li-neae*, the article smeared, stripe—from Sansk. root *li*.[1] Much later than this the application of colour made room for scratching in, cutting in, engraving, on wax, wood, stone, metal (*scribere*).[2] The putting-on of the mark to the hide of the live ox led to the use of the hide of the dead animal for the purposes of writing. We find it turned to this use by the Romans in the earliest days. It was the *clypeum* of which Paulus Diaconus, according to Festus,[3] says: "*clypeum antiqui ob rotunditatem etiam corium bovis appellarunt, in quo foedus Gabinorum cum Romanis fuerat descriptum.*" The ox-hide was the first Roman writing-tablet;

animals had strayed. The fact that the claim could be made upon the flock relieved the accuser from the necessity of stating the exact number in the *intentio*. If he had been compelled to do so, he would, in case some of the cattle had strayed elsewhere, have had to lose his suit on account of *plus petitio*. This danger, and the necessity of bringing all the cattle before the court, were obviated in the *vindicatio gregis*. This view of Paulus is another argument in favour of my verdict against him (*Besitzwille*, p. 274).

The same service which the mark of ownership rendered at the identification of the cattle, it rendered also in the *ususfructus* upon its termination. The ususfructuary was bound to make a separation between the old and worn-out and the young cattle (*summittere* I., 68, § 2, 1; 70, *de usu*, 7, 1). This separation was made by burning or painting the mark on the beast (Virgil, I., c. iii. 159: *quos malint summittere*). Those which the ususfructuary excluded from his own flock as worn out he marked with his own sign; those bequeathed by *ususfructus*, with the sign of the testator. This simplified the proof of the separation made, which otherwise, under certain circumstances—*e.g.*, the case when the two flocks shared the same pasture-land—could not possibly have been accomplished; without the distinguishing marks of ownership the relative proprietorship of the two flocks could not possibly have been ascertained.

[1] VANICZEK, *loc. cit.*, ii. p. 800.

[2] VANICZEK, ii. pp. 800, 1106.

[3] Ed. OTFR. MÜLLER, Leipzig, 1839.

national contracts were the first records written thereon, until, much later, copper took its place for this purpose. The Jews in David's time also testify to the use of the ox-hide for writing purposes. Out of this first raw material, its improved form, parchment, afterwards developed itself in Pergamon.

The Romans transferred the branding of cattle also to human beings (slaves [1] and calumniators). This marking placed the man on the same level as cattle. This idea is derived from the expression in Roman *nota* = stain, corresponding with the German *Brandmark*, and the expression "marked" with regard to persons. The idea of something "special" has also in language frequently been connected with cattle; as, for instance, in the Latin *egregius, eximius* (separated out of the flock for a special purpose—*e.g.*, for sacrifice, "elect"), and the German *ausgezeichnet*. The period of pastoral life has left indelible traces in the language. Besides those quoted and those mentioned above (p. 14), regarding the metaphorical meaning of "driving," there is also the name of "milkmaid" as synonymous with "daughter," and of "money" as synonymous with "cattle," of which we shall speak presently.

The word for cattle in the mother-tongue was *paçu*, preserved in the Latin *pecus;* Germ., *faihu, fihu, fëhu, feeh, vihe, Vieh*. The fundamental Sanskrit root is *pak* = to catch, to tie; hence the Sansk. *paça* = the snare, fetter, sling.[2] This word calls to our mind the cattle grazing in freedom, which have to be caught in order to be milked,[3] killed, harnessed, or, if sheep, fleeced.[4] The South American catches his cattle on the prairies by means of the lasso. *Paçu* is the cattle caught by

[1] The expression used in the *lex Aelia Sentia*, which debarred such slaves from Roman freedom, is *stigmata inscripta*, GAIUS, i. 13, Ulp. i. 11; it was performed compulsorily by retrieved fugitive slaves, Quint. *J.O.*, 7, 4, 14, *fugitivo*; Petronius Satyr, 103: *notum fugitivorum epigramma.*

[2] VANICZEK, *loc. cit.*, pp. 456, 460.

[3] The milking is done by the daughter, who consequently bears the name of milkmaid (Skr., *duhitar;* Zend., *dugdar;* Gk., θυγατήρ; Germ., *douhtar, dotar, tohtar*, from the Skr., *duh* = to milk), VANICZEK, *loc. cit.*, p. 415.

[4] Shearing was as yet unknown, owing to the absence of knives.

the *paça*. From cattle Romans and Germans derive their conception of wealth. In Latin, from *pecus* is derived *pecunia* (wealth of the householder), and *peculium* (small cattle, *i.e.*, the possession of children and slaves); in Gothic *faihu*, and in Anglo-Saxon *feoh*, means cattle and wealth.[1] This points again to the shepherd, whose wealth consists of flocks; but it does not apply to the husbandman, with whom the value of the land far surpasses that of the cattle necessary for farming purposes.

On this subject the old Roman law is particularly instructive. It distinguishes, as will be shown elsewhere, two kinds of property standards—the *familia* and the *pecunia*. The *familia* represents to us the Roman homestead, with everything belonging to it—slaves, draught oxen, and beasts of burden. These articles are matters of *mancipium* (*res mancipi*); *i.e.*, a special form for the conveyance of property in them (*mancipatio in jure cessio*) is needed, and they can be claimed by the owner who has lost them from any possessor of them. The *pecunia* comprises all the remaining property which the law of *mancipium* does not control, and accordingly such matters are specified as *res nec mancipi*. For their conveyance the informal surrender (*traditio*) is sufficient, and the protection of the law is limited.

The law for the *familia* is essentially Roman, and developed only on Italian ground with the transition from the pastoral to the agricultural life (*dominium ex jure Quiritium*), the one for the farmer to house and farm (*familia* = house; *famulus*, *familiaris* = inmate; *paterfamilias*, head of the house); the other for the shepherd (*pecus*, *pecunia*). The full protection which the former enjoy has labour for its foundation. Labour was necessary, not only for reclaiming and preparing the soil, but also for the training of the animals for agricultural purposes.

From mere cattle they are made into draught-oxen and beasts of burden (*res mancipi* = *quadrupedes quae dorso collove domantur*, Ulp., 19, 1); not only are they taken from the flock,

[1] The expression "sheep" is also connected with the idea of money. I remember hearing it at my home in Eastern Frisia, where the long-lease contracts of the settlers on the fens contain the phrase "by gulden and sheep."

but they must be tamed and trained;[1] until then they remain *res nec mancipi*. The shepherd leaves the animal as nature made it; the husbandman turns it into something different from what it originally was. The same process takes place in the animal as in the land. The shepherd feeds on the pasture-land that which nature produces without his assistance: his business is merely to take what nature provides; like the hunter and the fisherman, the husbandman comes to nature's assistance, and compels her, by his labour, to yield to him what of her own free will she refused to give.

3. *A Settled and very Populous Nation.*

§ 6. We shall find later whether it was a settled nation; but in any case it must have been very populous, as the three following arguments prove:

Firstly, the inference from language. Its high culture indicates a national existence of many thousands of years (p. 10). With the prolific tendency of all people living in a state of nature, they must have increased and multiplied greatly; and as a pastoral nation requires for its existence an area at least ten times larger than an agricultural one, it must have covered a vast tract of land. That, notwithstanding this, the language has preserved its unity is not surprising if we consider other parallel historical cases—the Arabian language, for instance. Moreover, according to the view of some recent Sanskritists, several idioms[2] were developed amongst the Aryan mother-nation in its original home.

Secondly, the inference drawn from the composition of the people. They divided, like the Germans in the days of Tacitus, into single, politically independent tribes, not united by any firmer link. These tribes were subdivided into provinces, the provinces into villages. This affords us a view of a very numerous people, covering large tracts of land.

Thirdly, the inference that the strength of the daughter-nation was numerically greater than that of the mother-nation.

[1] GAIUS, ii. 15, *non aliter, quam si domita sunt.* [2] SCHRADER, *loc. cit.*, p. 155.

The surplusage of population which, at the separation, the mother-nation surrendered to the Indo-Europeans, must have been very considerable; otherwise they would never have fought their way victoriously on their long march to Europe, surmounting all the obstacles which they encountered.

This relinquishment of the surplus population was not the only instance of the kind. Philology tells us of a second case—the separation of the Iranian tribes (Persians, Armenians, etc.) from the mother-nation, and even this second overflow was sufficiently numerous and powerful to overrun India.

The Aryan mother-nation must have had a population of some millions at the time of the separation of the Indo-Europeans. If, however, this had not been the case, then they must have been a *settled* people. A people numbered by millions, or even only by hundreds of thousands, cannot be nomads. One has only to reflect for a moment to realize its impossibility. An entire nation may exchange its abode for a new one, as has happened during the lifetime of many nations; but such a hegira of a whole nation has nothing in common with the nomadic life of pastoral tribes, which consists of periodical changes of pasture-land. The nomad knows no home; he wanders homeless from place to place. Only firmly-settled nations have a home, and they leave it only to gain a better one than the old, which has nothing further to offer them. Such nations break up, not to wander, like shepherds, but to emigrate.

4. *The Mother-Nation knew neither Towns nor Stone Houses.*

§ 7. The endeavour of Indologians to attribute the highest possible degree of civilization to the mother-nation has also led to representing them as living in towns. I am fully convinced that the view lately promulgated in opposition to this theory[1] is the correct one. That view is founded on the fact that the Germans, in the time of Tacitus, knew nothing of towns;

[1] ZIMMER, *loc. cit.*, pp. 145–148; confirming SCHRADER, *loc. cit.*, pp. 197, *sqq.*

neither did the Slavs down to historic times. It is impossible to imagine that such an immeasurably important advance in civilization as is comprised in the foundation of towns (§ 21) could have been neglected by a people which had already been acquainted with them in the past; therefore the mother-nation cannot have possessed them, or we should not miss them from the records of the Germans and Slavs in historic times. In the case of the Greeks, Romans, and Celts, the knowledge of town-building can be traced back only to their intercourse with more civilized nations. As a further argument, the author previously mentioned asserts that nowhere in the songs of the Rig Veda can the name of a town be traced with any degree of certainty.

To the above I may add another linguistic argument, which, however, I am not sure has not already been employed by others. The very name "town" was unknown to the mother-nation at the time of the separation of the Indo-Europeans. The Sanskrit *vastu*, which has been preserved in the Greek *ἄστυ*, means merely "abode, dwelling-place." The word for "town" appears first in the Indo-Germanic separate languages, and the fact that it differs in every one of them,[1] as also that each of them is based on a different notion, shows that the Indo-Europeans first became acquainted with towns after their separation from each other. The shepherd has to live in the neighbourhood of his herds and pastures, but this does not facilitate the dwelling of many shepherds in the same town; the distance of the pastures and of the flocks would be too great.

The mother-nation knew only villages *(grâma)*, not towns. The stone house, also, was unknown to them. They lived in

[1] Gk., *ἄστυ*, *πόλις*; Lat., *urbs*, *oppidum*; Celt., *dún*, as last syllable of the town—for instance, Lugdunum. The Ang.-Sax. and Scand., *tun*, the Armenian *dun*, house, which was carried about, meant originally only an enclosed space; and until the present day it is preserved in Low-German, and stands for "garden." The expression for "town" in the German language was originally *burc*; *statt*, *stadt*, follows later. PICTET, in *Les Origines Indo-Européennes*, 2nd edit., vol. ii. p. 375, mentions also Old Slav., *gradu*; Russ., *gorodŭ*; and Cymr., *pill*, fortress.

huts and tents, which could be easily taken to pieces and removed. Even in historic times the Germans carried them on their bullock-carts. All this has been ascertained (with sufficient certainty) by the researches of others, so that I may take it for granted.[1]

5. *The Mother-Nation was ignorant of Working Metals.*

§ 8. Metal itself (especially copper, *ayas*), iron alone excepted, was known to them, as the language indicates; but to conclude therefrom that they were familiar with the working of it is on a par with the unfounded assumption that they were acquainted with agriculture merely because they had a knowledge of some cereals. None of the Indo-European nations has preserved more carefully than the Romans the institutions of antiquity for occasional use, even after they had long been supplanted in practical life. These remains of antiquity possess the same incalculable value for the historian as do fossils for the palaeontologist: they give him information about a time concerning which historical tradition reveals nothing. We shall often meet with such remnants. In this instance it proves that the working of metals was unknown to antiquity. At a time when in Rome spears with iron points had long been known, the Fetiales, in their solemn declaration of war by throwing the spear on to the enemy's land, were for many centuries obliged to use the *hasta praeusta*. This was a spear made entirely of wood, the point hardened in the fire and then soaked in blood.[2] It is found again in the *hasta pura*,[3] which was awarded as the prize for valour; and in the *festuca* of the procedure for recovery. The custom admits of no other inter-

[1] SCHRADER, *loc. cit.*, p. 404. Its shape even is mentioned here.

[2] It appears again in the *cranntair* of the Gauls, in the Scottish Highlands, and in the *bodkefli* of the Scandinavians, in the shape of a staff burnt at the point and then dipped in blood (cross), which, as a sign of war having broken out, is sent round with the invitation to meet at a certain place. In Sweden this custom was kept up as late as the sixteenth, and with the Gauls until the eighteenth, century. See GRIMM, *Rechtsaltertümer*, pp. 163, 164. The origin of the *hasta sanguinea praeusta* during the time of migration is hereby put beyond all doubt.

[3] *Servius ad Aen.*, 6, 760: *sine ferro*, SUETONIUS CLAUDIUS, 28.

So we see that in all acts of religious significance the use of iron was absolutely forbidden to the priesthood. We notice the same thing among the Jews. At a time when they had been long familiar with knives and tools, they were not allowed to use them in circumcision or in the building of stone altars; they had to employ the primitive sharpened flint. That the prohibition of iron could not be founded on any religious tradition need hardly be stated. If so, the aversion of the gods to iron would have declared itself; but we know, on the contrary, that there was a God of Iron, Vulcan. There remains, therefore, no alternative but the historical ground that, iron being unknown in primitive times, the people clung to the old institutions in their religious acts, even after they had become acquainted with iron. A parallel case may be found in the present day in the retention of candles for the lighting of altars instead of using gas.

All evidence which has so far been given from Roman antiquity proves that the mother-nation knew nothing about the forging of iron. If this were all I wanted to prove, I could have spared myself the trouble of the argument, for it has been established philologically that iron itself became known to the mother-nation only during the Vedic period.[1] But my purpose in mentioning the matter is to draw from it the conclusion that the use of copper for technical purposes was also unknown. Had the Aryans been familiar with this they would, like other nations—*e.g.* the Jews and the Persians before the iron period—*have adopted copper, in the absence of iron,* for the manufacture of nails and weapons. That this did not happen is clearly evident from the *hasta praeusta* and *pura*, and the wooden nails in the *pons sublicius.*

Nevertheless, Roman antiquity shows us that metal was used for household furniture. It was a brass pot (*cribrum aeneum*), in which the Vestal Virgin brought the fire into the Temple of the Goddess (see above), while, for cooking purposes, she had to use vessels of clay (Fest. *epit. Muries,*

[1] SCHRADER, *loc. cit.*, pp. 268, 288.

(b) International Intercourse.

§ 10. The place occupied by the Aryan nation in respect of international intercourse is shown by the absence of the institution of hospitality in its legal sense, *i.e.*, the legal protection secured to foreigners by those from whom they receive hospitality (safe escort).[1] The Aryan mother-nation had not yet passed that stage which fails to include strangers within the pale of the law, and which with all nations has been the beginning of jurisdiction.

This is in the first place proved by the language. The mother-tongue has no expressions for "hospitality." These expressions first appear in the daughter languages, and their variety justifies the assertion that the thing itself became first known to the individual Indo-European nations after their separation, and not immediately upon taking possession of their second home. Secondly, it is proved by Greek mythology. The generation washed away by the Deucalionic flood knew nothing of hospitality; and the national hero of the Greeks, Hercules, killed Iphitos under his own roof. Lastly, it is proved by Roman law, which, down to its latest days, sanctioned in principle the non-protection of strangers who were not by any national compact legally entitled to it. The institution of hospitality in the above sense of the word is a system introduced by the Phœnicians in the interest of their commerce, and from them it came down to the Greeks and Romans. Its absence from the mother-nation is equivalent to the absence of protected international intercourse, and is a striking proof of the low state of civilization of the people. The Greeks regarded those who did not practise the laws of hospitality as savages; and this was one of the traits by which Homer characterizes the Cyclopes.

[1] I refer for this and the following statement to my article on the Hospitality of Antiquity in the *Deutsche Rundschau*, vol. xiii., part ix., pp. 357, *sqq.* Berlin, 1887.

(c) Domestic Law—Woman.

§ 11. According to many, domestic law formed the brightest spot in Aryan law. The institution of monogamy and the sacrifices offered for the dead are quoted as examples. The former is said to show a civilized conception of the bond of marriage, which raises the Aryans high above all other Asiatics; the latter to prove that piety was the basis of family union.

The first statement is incorrect.[1] Polygamy was lawful, if not universal; it was, as a rule, practised only by princes and by the wealthy, as it is wherever it is customary. The poor man cannot indulge in the luxury of many wives. But the conclusion for which the supposed institution of monogamy is quoted is quite correct. The state of married life among the Aryans was far higher than that of any of the Asiatic nations. The wife did not occupy the low position (scarcely differing from that of the slave) of a being merely for indulging the sensual pleasures of man, but lived rather on an equality with, and as a companion to, man.[2] It is true she was, as with the Romans, legally subject to the power (*manus*) of man; but this, as in their case, did not in the least influence her position in ordinary life. She was mistress of the house; and even parents and younger brothers and sisters had to respect her as such, when the management of the house had passed into her hands.

The religious marriage ceremony, which was compulsory only in certain cases, but was optional in others, though generally observed, affords another striking proof of the legal and moral estimation in which marriage was held; and herein is rightly sought the connecting link for the *confarreatio* of the Romans, while its form and its reference to agriculture clearly reveal its more recent origin, of which I shall later on speak again. For the rest the Aryan marriage-forms offer nothing worthy of special notice. The purchase of the wife—one of

[1] According to Zimmer, *loc. cit.*, pp. 324, *sqq.*

[2] Roszbach, *Untersuchungen über die römische Ehe*, p. 200. Zimmer, *loc. cit.*, p. 320.

these forms—is found among all nations; the connection of the Roman *coëmtio* with this form of the mother-nation is no doubt historically correct, but without interest for us. In like manner the home-bringing of the wife to the man's house is such a natural consequence of the marriage relation that it seems needless to refer to a similar custom among the Aryans for the purpose of explaining the *deductio in domum mariti* of the Romans.

On the other hand, the Aryan marriage law reveals two phenomena to which the above does not apply, and which deserve prominence, not merely because they repeat themselves in Roman law, but also because they give further evidence of the moral ideals they embody.

In the first place there is the prohibition of marriage between near relations. It is well known that there were many nations in antiquity, and amongst them a cultured nation of such prominent importance as the Egyptians, which took no exception to such marriages, not even those between brothers and sisters. What this meant for the morals of the family needs as little comment as does that which the Aryans had in view by its restriction. Be it said to their great honour that they rightly appreciated the dangers to which such licence amongst the opposite sexes exposed the chastity of family life. It was to protect this that they prohibited marriage between near relations. Purity and chastity in family life were the ultimate end they had in view by this prohibition.

The second phenomenon is the dowry which the daughter received from her father at her marriage.[1] Here we get the historical connection with the Roman institution of the *dos*. With the Germans it is the husband who brings the dowry to the bride (*Brautgabe*); the presents which she brings him are without value.[2] With the Romans the bride brings the *dos*

[1] ZIMMER, *loc. cit.*, p. 314. "The sisters fasten up the chest which contains the dowry, and as a motive of the husband's suit the name *Herrliches Gut* is given to the gift which she brings."

[2] TACITUS, *Germ.*, 18. GRIMM, *Rechtsalterthümer*, p. 429.

to the husband. The Romans have preserved the Aryan institution; not so the Germans, who have exchanged it for another, which we may presume they derived from the people of their second home. With the Russians we find the custom observed in later times still.

Vladimir the Great, who married a Byzantine Princess, A.D. 988, although he had forced the marriage with the sword, obtained no dowry with her, but paid her relations for her.[1] The Slavs could not realize that the bride should bring anything to her husband. The idea of buying the bride is incompatible with this view. The Germans, who, of all the Indo-Europeans, lingered longest in the second home, have adopted the institutions of the subjugated nations. The Italici preserved that of the mother-nation, while the Celts[2] and Greeks have combined both institutions in the *ἀντίφερνα* (given by the husband to the wife), which was also customary amongst the Romans during the regal period. From a social point of view the Aryan-Roman institution is far superior to the Slavo-Germanic one, especially when one thinks of the principle inherent in it. The latter was founded on the idea of buying the bride; the dowry represented the market-value of the woman, with this difference—that the father or relations who gave her away did not receive it, as in remote antiquity, the woman herself getting it. The former, however, expresses the beautiful idea that the bride enters the husband's house free, and on an equality with the man; she brings him what she has. How could she withhold the lesser—her possessions—when she gives herself wholly to him? If she has nothing herself, her father comes forward, and it is his duty to see that his daughter leaves his house in a worthy manner. Thus she occupied from the very first a higher and more respected position than when she entered the husband's house empty-handed. The Romans looked so much down upon a *uxor sine dote* that it was a point of honour with the relatives to give a *dos* to a portionless girl. The idea of perfect equality

[1] EWERS, "*Das älteste Recht der Russen*," p. 226. Dorpat, 1826.
[2] CÆSAR, *De Bello Gall.* vi. 19.

between husband and wife, which a later Roman jurist (Modestinus, in L. i. *de R. N.*, 23, 2) renders in the words: "*Consortium omnis vitae, divini et humani juris communicatio,*" could not find a fitter expression than in the fact that the wife contributed her share towards making the home; and when we meet with this institution amongst the old Aryans we see in it again the same moral conception of the marriage laws which we have already been able to deduce from the religious form of the same, and which places them so far higher than all contemporary nations of antiquity. In this respect the Aryans are proved to have been a civilized nation of the first rank.

With this tallies also what we are told about married life, about the wife's faithfulness and the tender love between husband and wife.[1] It is true that our information does not date farther back than the Vedic period; but it warrants us in applying it to earlier times. Literature echoes the praise of conjugal love; it affords examples of the deepest affection, tenderness, and power of endurance, on a par with the best specimens which the poetry of any other nation can show. The Aryans expected chastity, not only in the wife, but also in the unmarried woman, and seduction of the same ("the brotherless girl") was deemed a great crime, the punishment for which was very severe.

After the husband's death the wife had to seal her faithfulness to him by mounting the stake—the well-known custom of widow-burning, which in India was kept up until this century, when it was prohibited by the English. It is a matter of dispute whether this is an invention of Brahminism or an ancient Aryan custom.[2] It is unknown to the Rig Veda: there widows are allowed to marry again. The opinion of the author already referred to is, that it was an ancient Aryan custom, which civilization led many of the tribes to abandon. It was, however, preserved by others, and was later raised by the Brahmins into a settled institution. This seems confirmed by the fact that the custom is found in use amongst the Slavs and

[1] ZIMMER, *loc. cit.*, p. 331. [2] ZIMMER, p. 329.

thousands of years to develop, has been slowly built up. The reality cannot be hidden from any one who approaches the subject with open eyes. That a later period accepted institutions which originated without any regard to these ideas of morality, and in accepting them viewed them in the light of their civilized notions, and so put an entirely new meaning into them, is a phenomenon as unquestionably true as it is generally overlooked in the historical development of civilization. It is the filling of the old vessel with new contents, with noble wine instead of foul water. Civilized notions have not existed from the beginning; it is not they which have made the world—they were established when the world was ready for them. The relationship between them and reality is the opposite of the ordinary course: they have not nurtured reality; reality has nurtured them. The real generators were necessity and selfishness. Looking back upon this fact, it cannot be accounted strange that this act of widow-burning, which had its origin in the consummate egotism and uncharitableness of man, should appear in later times as a sacred duty, prompted by true self-forgetfulness, love, and womanly devotion. In this custom the lowest and the highest conception of conjugal relationship are placed opposite each other. Only in their inhuman consummation do they meet, in the one as excess of egotism, in the other as excess of love.

(*d*) Domestic Law—the Children.

§ 12. The worthy counterpart to conjugal love among the Aryans is said to have been the devotion of children to their parents. As a proof of it we are referred to the Ahnen-Kultus, or sacrifices for the dead, one of the most solemn duties of children. This might pass, if we knew nothing beyond it of the relationship between parents and children; but what we do know not only suffices to totally invalidate such conclusions as to filial devotion drawn from this institution, but justifies the assertion that the true interpretation of filial relationship, so far from shedding brightness on Aryan domestic life, is, on the contrary, a dark blot upon it.

With the marriage of the eldest son the father's possessions and the household government pass into the son's hands. Brothers and sisters, even parents, henceforth have to respect him as the head of the house. The origin of this custom with a people living in a state of nature is very simply explained on the basis that dominion belongs to him who has the power to uphold it. When the father becomes old and weak he must make way for the stronger son, who, in the natural course of things, is the firstborn, he being in the full possession of strength before those born after him, the physiological basis for the privileged position of the firstborn, which we find among so many nations in justification of birthright, and which has caused the name of firstborn to be converted into a title of honour.[1]

This deposition of the parents in favour of the firstborn is found also among the Teutons, where it assumes the character of a legal institution, established thousands of years ago, and maintained until now, in the "parents' dower" on landed property. Amongst the Greeks also we find traces of it. During the lifetime of Laertes, Ulysses appears as ruler in Ithaca; the father has only his "parent's dower"; and in the Greek Mythology Kronos dethrones Uranus and Zeus Kronos—a myth which, whatever its meaning may have been, could have originated only where the social ideas of primitive times saw nothing revolting in such proceedings; it would have been impossible to attribute anything to the gods that would have disgraced humanity. What the gods do men must first have done. Mythology is a rich source of information for the social institutions of primitive times—the oldest of all.

Of two of the Indo-European nations, the Teutons and the Slavs, and also the Iranians,[2] we know that children cast out their parents, or even put them to death. As far as I

[1] With the Romance nations from *Senior: seigneur, monseigneur, signore, señor, sieur, monsieur, sir, sire;* also with the Hungarians and Chinese. See my *Zweck im Recht*, 2nd edit., vol. ii., p. 674.

[2] On the latter see GRIMM, *loc. cit.*, p. 487; on the former, ZIMMER, *loc. cit.*, p. 328.

know no mention is made among the Aryans of the putting to death of old people in general (we first meet with it in the migratory period), nor of the putting to death of parents by their children; but their casting out is mentioned.[1] If filial piety had really been one of the characteristics of Aryan domestic life, as some would have us believe, on the ground of the sacrifices for the dead, this proceeding would have been out of the question, and there would have been no need for the prayer offered over the cradle of the new-born son, that he, when grown up, might not strike his father, and might not with his teeth, tiger-like, wound his father and mother.[2] With the Romans to strike was to forfeit the esteem of gods and men; they essentially broke from the Aryan acceptation of the relationship; the father until his death retained possession and rule over the house, and the children remained, even when advanced in years, subject to his power, which, as is known, extended over life and death. Filial affection is not one of the characteristics of the Aryans. In this respect they are surpassed by all other nations; for instance, by the Jews (amongst the commandments in the Decalogue one is devoted to the honouring of parents),[3] and above all by the Chinese, with whom filial affection is not only the first commandment, but the basis of the whole moral law.

[1] ZIMMER, *loc. cit.*, p. 328. [2] *Ibid.* p. 327.

[3] The addition "that thy days may be long, and that it may go well with thee upon the land," must have reference to the relationship which explains why this "promise" is added only to this commandment, and neither this nor any other to another. I find the explanation in the following reflection:—"If thou dost not honour thy parents, thy children will do the same by thee; thine example will influence them; then thou shalt not prosper, and thou shalt not live long upon the land. . . . They will give thee thy bread grudgingly, as thou didst to thy parents, and so they will shorten thy days." In this way a close connection is established between the commandment and the promise linked together with the observance thereof; which otherwise we shall fail to find. In the same way prosperity and a long life upon the land would hardly have been referred to if the Jews had not had its opposite before their eyes—the miserable existence of parents amongst other nations, and even amongst themselves in the past. The suggestion made to me that this commandment was not given to individuals, but to the nation, and that the long

Another relationship in which the alleged domestic affection of the Aryans is supposed to have shown itself is that of brothers and sisters. As far as I know fraternal love is nowhere mentioned in the literature of the Indians; nowhere is it extolled; nowhere is any beautiful feature of it revealed; rather the reverse. In "Nal and Damajanti" the eldest brother gambles away all that he has to the younger, even his crown; and the latter drives him away stripped of everything.

As to the intimacy of friendship, that worthy counterpart of family love, which is not only fully developed amongst many civilized nations, such as the Greeks, but is found amongst many nations living in a state of nature in their institution of blood-brotherhood—of this there is no trace amongst the Aryans.

My investigations into the domestic life of the Aryans, from which I have purposely excluded the modifying influence which the worship of ancestors may possibly exercise over it, leads to the following conclusions: absence of parental, filial, and fraternal affection, as also of friendship; one-sided development of conjugal love—the heart of the Aryan has no room for any other. Let us compare with this the picture which Greek mythology gives us, apart from any other features of filial and fraternal affection as portrayed, for instance, in the Œdipus legend, of the household of Agamemnon. Here we find the different phases of family love; also the two kinds of friendship—hospitality and friendly intimacy; not, however, in the shape of a sweet, peaceful idyll, but in the form of a thrilling tragic episode brought about by the conflict of the individual family relationships, and causing the passionate reaction of outraged family-love. The drama opens with the violation of hospitality and the faithlessness of the wife to her husband. The brother takes up the cudgels for the offended husband; the ruler smothers his paternal feelings, and sacrifices his daughter to the common cause. But maternal affection shows itself in another light. It is stronger than her love for her husband;

the mother revenges the daughter's sacrifice in the blood of her husband, and in Cassandra the wife cools her jealousy against her rival. In her own son she finds her avenger; in him the love for his father conquers the love of his mother. He, hunted by the Erinyes (Fates), is followed by his faithful friend, not deterred by the curse of matricide which pursues him, sharing all privations and dangers with him, until at last the self-sacrificing love of the sister brings salvation to the brother.

In a small compass we find here all the different relationships of domestic love crowded together—those of husband and wife, parents and children, children and parents, brothers and sisters, hospitality and friendship. One might say that the object of the legend is to bring into relief all the different manifestations—their conflicts, their errors, the superiority of one over another in the adventures of one single family, a phenomenology of love and friendship. The love of the father for the daughter does not stand the test of general approval: it is on the lowest step. Then follows that of the wife for the husband; it gives way to that of the mother for the child; then that of the son for the mother is tried—it succumbs before that of the father. The last test is made of fraternal affection and friendship, and they stand it triumphantly: they remain to man when father and mother fail. What there is of historic truth and what of fiction in the legend is not material to my present purpose.

With the old Aryans this drama could not have been enacted in reality, neither could it have assumed the guise of either legend or fiction; their impressions were too widely removed from those of the Greeks. Both fact and fiction represent a largeness of heart and an intensity of feeling totally foreign to the Aryan; his heart has room only for love for his wife.

The disparaging verdict which I herein pronounce upon them has yet another test to stand.

(e) Sacrifices to the Dead, and Maternal Right (Matriarchal Theory; Matria Potestas).

§ 13. According to the current view, the sacrifice to the dead bears testimony to the deep affection of children for their parents. This might be conceded did we not know how the son treated his parents during their lifetime. But what is the sacrifice to the dead—the mean gift of food and drink which from time to time is placed upon the grave—when compared with the fate to which the son submits his parents during their lifetime, and to which he is legally entitled to submit them? A strange love, indeed, which needed to be kindled by death, and which offered to the parents on the other side of the grave the bread which was either denied or given grudgingly to them on this side! It is not love, indeed, but fear, which prompted the sacrifice to the dead. According to the Aryan view, which has been preserved in all Indo-European nations, deceased persons still exist after their death as ghosts, as "shades"; therefore they take with them into the grave, or on to the funeral pyre, the things to which they were most attached; and they also needed food and drink.[1]

At the Sacrifice of Ulysses in Orcus the Shades eagerly crowded round to drink the blood. In Walhalla the Germanic hero regales on mead. It is the duty of the descendants to bring food and drink to the grave of their departed; should this be neglected, the dead will avenge themselves, and appear as threatening spectres to inflict all kinds of trouble and evil upon those who neglect them.

This is, I believe, the original motive of the sacrifice to the dead; it is not the outcome of filial devotion and love, but of egotism, *i.e.*, fear and dread. The worship of ancestors has the same origin as, from a religious point of view, the worship of the gods which we find among the ancients; "*timor fecit*

[1] How could the idea that they partook of it have arisen and continued? As regards the food presented, the wild beasts and birds took care of it, and paid nightly visits to the graves. As regards the drink, the hot temperature caused it to evaporate quickly. Beasts and birds took the place of the departed; even as the priests of Baal, who by night secretly crept into the Temple to consume the sacrifice, took the place of the Deity.

institution. But it also warrants another conclusion of far more importance—the non-acquaintance of the people with maternal right. We stand at the present moment on the brink, as it were, of discovery respecting maternal right; on all sides evidence abounds. One of the latest discoveries in this respect is that the Teutons, before they reached the stage of paternal right, passed through a stage of maternal right,[1] and such a period has recently been generally accepted as proved. In maternal right all the members of the household are grouped round the mother. The children are hers; the father has no share in, or power over, them; parentage is traced by descent from the mother; descent from the same or another father is quite immaterial; in short, it is the same legal aspect of the relationship as that of unmarried sexual intercourse, according to Roman law, in which, legally speaking, there was no father. Maternal right is analogous to absence of marriage. With the introduction of marriage it made way for the paternal right, which, in its original historical aspect, is as partial to the father's position as maternal right is to that of the mother. He is the lord of the house; to him belong the children: the mother also is subject to his dominion, just as the children are; and all parentage is centred in him. The children of the wife by a former marriage are not in any way related to his own progeny, nor her relations to them. Such is the aspect of paternal right in Old Roman law. Later on paternal right was raised into parental right, the reconciliation of paternal and maternal right. Mother, father, parents—herein are the gradual stages of the history of domestic development made known. The relation of children to parents was consequently modified according to the views held with regard to parentage.

Now there cannot be the slightest doubt that maternal right, although very probably once in vogue among the Aryans, must have given place to paternal right long before the Indo-Europeans separated from them. The scene of maternal right is the house of the mother, in which the men go to

[1] This view has been adopted by Lamprecht, in his *Deutsche Geschichte*, vol. i. 1890.

belong not, according to maternal right, to the mother, but to the father; and as the children stand, so also the wife stands, with the Teutons as with all the others, under the power of man (*mundium*). But upon the question as to whom the children belong hangs the principle of paternal and maternal right; its influence upon the parentage is of secondary importance.[1]

Greeks and Romans, according to the French scholar above named, did not rest satisfied with the institution as handed down to them. The thought underlying the religious veneration of their ancestors must have been the starting-point and lode-star for the whole of their social organization. Nothing is alienated from it: state, religion, law, even the law of property—all are comprised in it. With ancestor-worship the whole of the Greek and Roman world is clear and intelligible to us; without it, it remains an unravelled mystery. "La cité antique" is to him the ancient community, with its all-pervading consciousness of the deity, glorified and consecrated by religion, in contradistinction to the godlessness of modern times; and the worship of ancestors is the source from which this religious spirit was poured out over that world. It is this latter statement only with which I am concerned, and that only in so far as it affects the Romans. I cannot but disagree on this point, as I have made it my object to point out what the Romans owe to the Aryans. That the sacrifice to the dead and the worship of ancestors were part of it has, of course, long since been known. With the Aryans it appears as an obligation left to the conscience of the individual; in Rome the sacrifice to the dead, in the shape of the *sacra*, adopted the form of a moral law under the protection of the *Pontifices*. The obligation can be enforced by the chief authority, and with the death of the one bound to fulfil it, it falls to the heir as a burden on the inheritance. "*Nulla hereditas sine sacris*" is a well-known maxim in the *jus*

[1] See SCHRÖDER'S *Lehrbuch der deutschen Rechtsgeschichte*, pp. 60, 321. Leipzig, 1889.

existed during their lifetime in the legal attitude between parents and children should also have to be maintained in the inheritance after their death. The conclusion that because the children, during his lifetime, are under the father's dominion, they must also, after his death, of necessity become his heirs, is a rash one. Here again, the sacrifice to the dead provides the explanation; the children were bound to bring sacrifices only to the father, not to the mother, *i.e.*, in the heirship they took with regard to her the position of *heredes extranei*, the same as collateral relations; and so the strange phenomenon is explained that in the old civil law the inheritance of the maternal property comes under the category of the law of inheritance of collateral relations.

I cannot admit any other interpretation in *private law* of this institution (comp. p. 56). Everything else concerning it that has been handed down to us—for instance, the problematical *detestatio sacrorum*—concerns the official actions of the *Pontifices*, or their outward form, which latter belongs to the domain of archæologists.[1] Not even Roman domestic law has been influenced by it, much less the law of property. When the obligation to the *sacra* lapsed with the departure from the family, this was based on the Roman conception of domestic relationship, according to which all power was centred in the master of the house. It is not the *sacra* which determine domestic government—rather the converse. And this also proves that we have no right to deduce the Roman conception of family relationships from the obligation to the *sacris*—here again the causal connection is the same: the former determines the latter, not the latter the former, quite apart from the fact that this obligation did not exist at all for collateral relations, and could, through inheritance, also pass to non-related persons. The explanation of how this applied to the law of property I reserve till later; and first, I will call attention in a few words to the alleged connection between the sacrifice offered to the dead, Roman government, and public worship.

[1] See M[illegible]dt in BECKER's *Handb. der röm. Altertümer*, vol. iv. p. 259.

the Vesta worship, were not even allowed to enter the temple, and that the sacrifice was brought by females to a female goddess, ought to have prevented any idea of sacrifice to the dead, which is confined to the male descendants in the first degree, towards their male ancestors, quite apart from the fact that the person to whom the sacrifice was made had to be deceased.

But it is chiefly with regard to the law of property that the above-mentioned author is carried away by his imagination. He has discovered that the Roman law of personal property (land and soil) originated of necessity in the religious rites of the hearth. The hearth is the altar of the household gods; the household god takes possession of land and soil, and makes them his own (p. 70); from which it is evident that the theory of common property in land is untenable (p. 72). Once erected, the hearth, apart from unforeseen circumstances, cannot be again moved. The gods desire not only their special, but also their fixed, abode (p. 69); but the stone house alone is suited for this purpose (p. 72). Not to the individual, but to the household god, belong home and hearth; the individual has but the care of them. The household gods are for all time inseparably linked together with the household (p. 81). If private property depended on labour, the owner might dispossess himself of it; but it depends on religion, and therefore he cannot (p. 81). It is true that the Romans sanctioned the transfer of landed property, but it necessitated a religious rite (*mancipatio*) and the assistance of a priest (*libripens*). The author shall in his own words show us the great value of his discovery: "Sans discussion, sans travail, sans l'ombre d'une hésitation, l'homme arriva d'un seul coup, et par la vertu de ses seules croyances, à la conception du droit de propriété (p. 77); supprimez la propriété, le foyer sera errant, les familles se mèleront, les morts seront abandonnés et sans culte" (p. 76).

In truth the simplest conceivable genesis of the Property Act (land and soil), granting the claim of the household godhead, is given us in this forced manner. The pity is that it is contradicted by history in each and every particular. The

shortly before their departure, brought the last sacrifice to the dead. The departure took place in March; the last sacrifice at the end of February (§ 38). During the migratory period the dead were disposed of in this way: where a stream had to be crossed, the old folks were thrown from the bridge into the water (§ 49) as tribute to the river god.

The most edifying thing which Fustel de Coulanges has brought to light in the way of inevitable results is the elevation of the sober Roman *mancipio* into a religious act, and the conversion of the humble *libripens* into a priest. The land and soil belong to the household god; consequently, if a transfer of property has to be made, it must necessarily be clothed in religious forms. That the same ritual occurs also at the mancipation of all other *res mancipi*, and even in the *nexum*, has escaped his notice. Oxen and asses were blessed by the priest when they passed into other hands. The priest dragged in to sanction the usury of the Aryan by a religious rite—what more do we need to exclude all necessity of tracing the rite of mancipation back to religion? How great the number of priests would have had to be (it is known to have been a very small one) if at every mancipation and at every *nexum* the function of *libripens* had to be performed by a priest!

The conclusion we arrive at is that, of all the points which this scholar brings forward, not one is confirmed! The meaning of the Aryan sacrifice is, for the Romans, confined to the *sacra popularia* and *privata*, correctly estimated by the science of our day.

Here I conclude my remarks upon Aryan domestic law, in order that I may turn my attention to the law of property.

(*f*) The Law of Property.[1]

§ 14. In the whole range of jurisprudence no question necessitates a knowledge of the peculiarities of law to such a degree as that of "mine and thine." It demands a definition of

[1] The right of inheritance, which comes under the head of the law of property, I have not taken into account in the following exposition, as it does not at all concern my present purpose.

what is understood by law, and what by custom, morality, and religion. The family can exist without this definition; it is in that condition of moral *naïveté*, in which law and morality are not yet separated, and the maintenance of public relationships is also conceivable without it, for there still remains another factor, which lies outside the pale of the law, namely, *force*. But, when the question is of "mine and thine," such indefiniteness is fatal. The strict lines of demarcation set by the law must be observed, and history proves that here they have been in all cases first traced out. The law of property is the first developed of any part of jurisprudence; we must not, however, lose sight of the fact that this development is not so noticeable in the compilation of legal maxims as in the production of certain forms for the establishment and execution of the law in extra-judicial and judicial cases.

In Old Roman law the above statement is fully exemplified: in Aryan law, not even for the later Indic time. The law relating to property is very poorly developed here. At first this surprised me, and I tried to find the reason for it in the poverty of our sources of information: in that case language ought to supply us with a few links; but here again absolute silence is observed as to everything connected with the law of property, as, for example, personal property, possession, lien, claim of debts. I believe, however, that I have lately discovered the real reason.

A people to whom agriculture, towns, and money are equally unknown cannot possess a developed law of property. Lack of agriculture means lack of landed property; lack of money means lack of commerce; and thus two of the most important sources of the law of property are disposed of. It is true that, viewed in the light of the present-day abstract theory of property, it is impossible to understand why the law of property, even if, with the Aryans, it could not be applied to immovable goods, could not have been developed like movable goods, as with the Romans. But much is possible in the abstract that is not real, because, to make it so, it

needs some special hypothesis or specially forcible proofs. One has to turn to history to get information on this point, and this I hope to do at the proper place in dealing with the development of the Roman law of property.

The question of property presented no great difficulty to the Aryan. There was no such question as regards the pasture land, which was not his private property, and his flocks bore his mark of ownership (p. 15); so there remained only what he had in his house, and the sole danger that threatened him there was robbery. The protection which the law afforded him against this was, as we know, the house-search after stolen goods.[1]

(*g*) Jurisdiction and Criminal Law.

§ 15. The authority I have hitherto followed[2] states that "what we know of law and jurisdiction is very inadequate"; but suggests "that well-developed jurisdiction, no doubt, did exist." The student of law, however, thinks differently about the evidences which he furnishes. He demonstrates that *dharmann* decrees the fixed order of heaven and earth; *âgas*, the violation of *dharmann*, offence against gods and men, and *rna*, sin, are synonymous in a social, a criminal, and a private-property sense.

The wide scope given to these three expressions, which encompass law, custom, and religious rite, proves that the difference between these three spheres had not yet come into the consciousness of the Aryans. I have searched in vain for any expression denoting only law or only custom, like the Latin *lex*, *jus*, or even for some principle for the distinction which from all time has been recognized in Roman law between divine and human law (*fas* and *jus*), and between divine law and religion. This, however, is to the student of law tantamount to saying that the details of the law were not yet defined.

[1] In order to gain information as to the whereabouts of stolen goods one referred to the soothsayer or sorcerer. Zimmer, *loc. cit.*, p. 182.

[2] Zimmer, *loc. cit.*, p. 180.

The author previously mentioned gives us very scanty information concerning isolated institutions. He mentions divine judgments and two kinds of punishment; but we are not told to which offences the different kinds of divine judgments—there were nine at least, of which the ordeals by fire, water, and poison were the most severe—were applied, nor who had to pronounce sentence—whether a specially-appointed judge, or the head of the village or province, with or without the participation of the community; nor do we learn whether there was any difference in the treatment of civil and criminal offences, as was the case in Rome from the very beginning. The same phenomenon presents itself here which we observed in the law of property, and again in the fundamental principle of law in general—great indefiniteness. There is no trace of the alleged advanced conceptions of law.

As only "corrective," Zimmer mentions the rod, to which he adds the remark that it continued during the whole of the later Indic period to be the symbol of Justice; as a second punishment (p. 181), he mentions expulsion from the community of the Aryans. According to this statement, capital punishment was unknown. Instead of imprisonment, which was not yet instituted, they had the stake (*drupada*), to which the criminal was bound by ropes. Here is an opportunity for the student of law to lend a helping hand to the philologist and the historian.

For the stake stands in a peculiar relationship to the rod. I take it that behind it lurks capital punishment. The rod can be applied simply in corporal punishment, and to this use it has been limited since the introduction of capital punishment, *i.e.*, decapitation, as well by modern nations as by the Romans. The *fasces*, or bundle of rods, was the symbol of corporal, the axe that of capital, punishment. In the earliest times these two were united; later, after the right to pronounce sentence of capital punishment upon citizens was withdrawn from the magistrate, only that upon soldiers continuing in his hands, he had to remove the axe from the *fasces;* only when going to war was he allowed to

resume it. This clearly shows the legal meaning of the rod, as being used merely for corporal punishment. Capital punishment was restricted to the axe. In one case, however, even in Rome, the rod was used for the administration of capital punishment, viz., in the hand of the *pontifex maximus*, for the most severe religious offences of any of the priests under him.[1] This proves two things. First, that in remote ages capital punishment was administered by flogging; and secondly, that it was personally performed by the judge who had pronounced sentence. The *pontifex maximus*, who himself did the flogging publicly in the Forum, would thereby have called forth the greatest derision from the people if he had not been simply conforming with a very old custom.[2] An example had to be made that would be talked of for long times to come, and no better means could be found than that the *pontifex maximus* himself flogged the culprit to death, only the fastening to the stake being done by his subordinates (see below).

This sufficiently proves that capital punishment by means of the axe was not the custom of primitive man, but rather its execution by the rod or scourge. But we have a special witness which shows this method of execution to have been the one adopted in remote ages.[3] For clerical jurisdiction the primitive custom everywhere remained in force, and in this instance also the prescribed method; it was only in secular jurisdiction that the rod, or scourge, was exchanged

[1] LIVY, xxii. 57 (in the year of the city 536), "*L. Cantilius scriba pontificis, quos nunc minores pontifices appellant, qui cum Floronia stuprum fecerat, a pontifice maximo eo usque virgis in comitio cæsus erat, ut inter verbera exspiraret.*" LIVY, xxviii. 11, ". . . *ignis in æde Vestæ extinctus, cæsaque flagro est Vestalis.*" The execution reminds one of the former custom of flogging through the line, which, according to the quantity of stripes administered, might also be equivalent to capital punishment.

[2] We must not regard this institution from our present standpoint. Primitive man saw no more harm in this than we do now in seeing a father whipping his own child; in their eyes the award and the execution of punishment were one and the same thing, and this custom contributed not a little to impress the people with the actual—*i.e.*, the visible—power of the judge.

[3] SUET., Nero 49, where the "*corpus virgis ad necem cædi*" is specially mentioned as "*mos majorum.*"

for the axe. But in the beginning of the regal period the old custom still prevailed. In the oldest execution upon record, in the Perduellion[1] suit of Horatius, the execution contemplated was by flogging.[2]

The conclusion from all this is that the stick, or rod, was, with the Aryans, the instrument not merely of correction, but also of capital punishment. This is the only way whereby we can explain how it was that, according to the above-mentioned scholar, "it constituted the symbol of justice throughout the later Indic period" (corresponding in Rome to the rods in the *fasces* before the introduction of the axe); and so the absence of capital punishment from our sources —the real absence of which would be quite incomprehensible in Aryan law — is explained: capital punishment was comprised in the rod.

The stake, again, which was a public institution in every community, had quite a different use from that ascribed to it by our author. It was not a kind of prison in which the malefactor was detained for some definite time; this would not agree with what he himself testifies as to the "thousand deaths" which threatened the fettered man. I rather incline to the following conclusion: The stake had a twofold purpose, penal and corrective. In the first capacity I will call it the Penal Stake; in the second the Corrective Stake.

The Penal Stake.—When the sentence of corporal or capital punishment pronounced by the judge had to be executed upon the offender, he was tied with ropes to the stake — above, below, and in the middle—to make all resistance impossible. Such flogging took place in Germany as recently as the eighteenth century. The scourge (*stûpe*), subsequently replaced by the pillory, for the public exhibition of the malefactor, was the *drupada* of the old Aryans, the *block* of the Teutons

[1] *Perduellio* = the term for all acts whereby a man within the State showed himself an enemy (*perduellis*) of the established constitution.

[2] LIVY, i. 26, "*lictor colliga manus . . . caput obnube . . . arbori infelici suspende, verbera.*" The culprit is not hung or crucified, as has been wrongly surmised—in that case, *verbera* would have to precede *suspende;* but he was fastened to the stake (*arbor infelix*), and then flogged to death.

and Slavs,[1] and the *arbor infelix* of the Romans.[2] From the strapping (*ligare*) to the Penal Stake is derived the name of the functionary charged with the performance of the punishment, the *Lictor*.[3]

The Corrective Stake.—The Aryan debtor, like the malefactor, was also fastened to the post till he redeemed himself by payment of the debt, either personally or by his friends. Thus it was ordained, the thief and other debtors being put on a par with him.[4] It was a cruel means of pressure, and cruelty was its primary object. There he stood, unable to move, exposed day and night to all weathers—burning heat by day, cold by night, and rain—and no doubt the creditor, or if more than one each one of them, had full license to slake their vengeance by flogging him, without taking into account the amount of the debt[5]; and if his friends did not compassionately supply him with food and drink he must assuredly have starved. This explains the "thousand deaths" of the man at the Stake; the most terrible view we get of the

[1] It was here not merely the binding together of the feet, as with King Lear; the neck and body were also bound in old Aryan fashion. Respecting this, see explanations by ZIMMER, *loc. cit.*, p. 182, note.

[2] Livy uses the word *furca* as meaning the same, which has led to the erroneous idea of gallows and hanging; but it can be understood to mean only a forked shaft to hold the head. VANICZEK, *loc. cit.*, vol. ii. p. 604, originally divided (split), a divided instrument; *furcæ cancrorum*, the scissors of the crab.

[3] Both the Romans and our modern etymologist, VANICZEK (p. 920). MOMMSEN, (*Röm. Staatsrecht*, i. p. 300) derives the word from *licĕre* = to summon; for other derivations see VANICZEK, p. 922. When we realize that things were called by their distinguishing characteristics, we need not long be in doubt as to which derivation to choose. In the function of the lictor the summons takes quite a secondary place to the strapping; while the latter is in close connection with the meaning symbolized by the *fasces* for the administration of corporal and capital punishment. In ancient times, when the judge who pronounced sentence also administered the punishment, the connection between the lictor and the strapping was much more obvious. The lictor strapped the malefactor; he then handed the rod out of the *fasces* to the judge, who himself administered the flogging; for which fact I refer to the example of the *Pontifex maximus*.

[4] ZIMMER, *loc. cit.*, p. 181, *rna*, guilty = thief; and *rna* is also the meaning of debt = loan.

[5] Which is specially defined by the XII. Tables when the *in parter secare* took the place of the flogging to death: "*si plus minusve secuerint sine fraude esto.*"

Aryans.[1] No one would endure it who possessed the means to pay. If he himself had not the wherewithal, the creditor counted upon relations, friends, or kindly-disposed persons to redeem him. That was why he was publicly exposed; the exhibition of him was to make them realize his plight, and to give him the opportunity of appealing to their mercy. And as a rule the creditor did not miscalculate. If the debtor were worth redemption it would be granted him; only if he were a ne'er-do-well, whom everybody was glad to get rid of, was he left to his fate—the verdict of the people.

But even death did not end his disgrace. The creditor threw the corpse away in the open, where it remained (as he certainly would not be compelled to give it burial) the prey of wild beasts, if no one came forward to bury it. But in order to bury it the body had first to be redeemed from the creditor, for, in death as in life, the body was his. The idea of a right of the creditor to the corpse of the debtor, which we find amongst so many savage peoples,[2] has too close a connection with his right to the living body to make us hesitate to credit the Aryans with it also.

We find it, too, among the Romans. The popular mind was loth to give up the idea that the body of the debtor

[1] It has struck me that perhaps the martyr's stake of the Aryans may have been the prototype of the Stylite's pillar. Through Alexander's march to India an acquaintance with it may have been brought to the domains of the Ptolemies and the Seleucides. The object, self-inflicted, voluntary punishment, excluded the strapping to the stake; but the stake itself, with all its physical horrors, and also the moral stigma of disgrace which it bore in the eyes of the people, remained. It is such a strange hallucination of the human mind that one would gladly accept any historical connecting link that offers itself.

Long after my text was completed in manuscript as above, I received gratifying confirmation of my theory (suggested therein) in reference to the stake of the Aryans, in the lately-discovered writing of ARISTOTLE on the *Constitution of Athens* (translation by Georg Kaibel and Adolf Kieszling. Strasburg, 1891), where Aristotle (pp. 16, 17) quotes from Solon's poem:—"So many a tithe-post I have erected. Thou wert in bondage; now have I redeemed thee—made thee free." The Aryan stake was in use by the Greeks until Solon's time.

[2] KOHLER'S *Shakespeare vor dem Forum der Jurisprudenz* (pp. 19, 20). ESMEIN, "*Débiteurs privés de sépulture,*" in *Mélanges d'histoire du Droit* (inaccessible to me).

belonged, even after death, to the creditor—the *actio in personam* in its full consequence—and the law which, according to our knowledge, was first brought into effect by the *lex Julia de vi publica* against the preposterous act of the creditor refusing burial,[1] has had to contend, until a recent period, with these monstrous notions.[2] With the Aryans the cruelty caused by this non-burial of corpses was still further aggravated by the impossibility it involved of bringing sacrifices to the dead; and if the debtor left behind him children so inhuman as not to redeem him during his lifetime, or who, owing to absence or lack of means, had not been able to do so, the moment had now come to sacrifice all, in order to redeem the body. The possibility of offering the sacrifice to the dead depended upon the burial. Upon the sacrifice to the dead depended the rest and peace of the survivors. The creditor might be sure that all within the children's power would be done to satisfy him; his last anchor of hope was the sacrifice to the dead, which in this case affected the law of property not only in the law of inheritance (p. 43), but also in that of debt.

The law of debt of the old Aryans has its embodiment in the Corrective Stake. We can trace the Penal Stake as far back as the earliest Roman criminal law, but we look in vain for the Corrective Stake both amongst the Romans and the other Indo-Europeans.[3] There must have been some reason for supplanting this institution. The cause cannot be connected with the circumstances of the migration—that there could not be a stationary stake, or post, during the march—for the pillory has been preserved, but not the Corrective Stake. What can have been the reason?

The Corrective Stake brought with it the risk that a third party might unbind the debtor, who was then set at liberty. Of course, there must have been some punishment for the

[1] L. 5 *pr. ad leg.* Jul., "De vi publ." (48, 6); l. 1 § 6, "De injur." (47, 10); l. 8 "De sepulcro" (47, 12). Paul., S.R.V. (26, 3).

[2] JUSTINUS in l. 6, "Cod. de sepulchro" (9, 19). JUSTINIAN in Nov. 60, l. § 1, 115, 5 § 1: "*Nulli penitus esse licentiare corpora defunctorum debiti gratia detinere.*"

[3] [See what IHERING himself says (p. 55, Note 1).]

offence committed by the debtor. I presume it was the same as with the Roman *vindex*—his own bond. Both bar the way to the vengeance of the creditor—commit an assault upon his rights. But the introduction of the *vindex* only postpones the vengeance—if he cannot prove his innocence of the debt, the punishment takes its course; in the other case, the interference ends in total defeat. That he should have to undergo the fate from which he wished to save the debtor is so little to be wondered at that one might well ask how it could have been otherwise. In the *vindex*, the punishment of personal bond would have nothing surprising in it if it were merely putting him in the place of the debtor. But there is more; the creditor receives, in the event of a violation of the *vindex*, double the amount of the debt. It is clear that some punishment has to follow the violation of the *vindex*, otherwise anyone might without risk have stopped the creditor's action; but that it should be rated so exorbitantly high does not tally with other forfeits in Roman law for litigious interferences. I think the matter may be explained on historical grounds. The personal bond of him who freed the debtor from the Corrective Stake—we might call it the Aryan *vindex*—was transferred to the Roman. With the discontinuance of the Corrective Stake this infringement of the creditor's rights lapsed; but the *vindex* also encroached upon his rights; it also sought to release the debtor from his bonds,[1] and therefore the old punishment was retained for this. Detection proved his guilt. If the freeing of the debtor from the Corrective Stake took place by night, without anyone having seen it, the creditor had to pocket his disappointment. The institution, therefore, was incomplete. The creditor, in order to guard against this danger, must needs have had the debtor watched day and night. I believe I have here hit upon the cause of the disappearance of the institution. To avoid that danger the creditor must keep watch over him in his own house, and

[1] FESTUS (p. 376) characterizes him as the person, who *vindicat, quominus is, qui prensus est ab aliquo teneatur*, which, word for word, applies to his Aryan predecessor.

this was done in Rome. According to the XII. Tables, the creditor takes the debtor who cannot pay on the day of payment into his own house (*secum ducito*) and locks him up (*vincito aut nervo aut compedibus*). This exchange of public exposure for private detention had this serious drawback for the debtor: that there was no longer any possibility for him, by the display of his misery, his lamentations, and his entreaties, to transform compassion into active sympathy, so that food and drink might be vouchsafed to him, if not redemption from his debts. The law met this point by a twofold stipulation. In the first place it compelled the creditor to provide the debtor with a sufficiency of food, if the debtor did not prefer to keep himself; and secondly, it imposed upon him the duty of bringing the debtor publicly forward on three market-days and stating the amount of the debt, while the country people passed by him into the city.

Thus was guaranteed the certainty that the report of his fate was made known in all directions. No one who was at all kindly disposed towards him could fail to hear of it; the public exhibition was, therefore, as much in the interest of the creditor as of the debtor. And so the certainty of private detention was coupled with the privileges offered by the public fettering to the Corrective Stake; and we gather from it that its object was not only to punish the debtor himself, but also to put pressure on third parties.

In place of death at the stake, the law appointed the well-known *in partes secare*, the laceration of the debtor, the meaning of which is unjustly questioned. I seem to detect in it a new proof for the stake by its connection with the "thousand deaths." Even as in the fulfilment of criminal law by capital punishment the rod by which the malefactor was flogged to death was replaced by the iron axe (which meanwhile had been introduced), and in private executions by the iron knife; and even as the number of strokes administered by each individual creditor could not be measured by the amount of the debt, but rather every one was allowed to cool his wrath to his heart's

content, so also with the laceration: "*si plus minusve secuerint, sine fraude esto.*"

And so the early Roman debtors law is in all particulars connected with the Stake. I do not mean to say that it could not equally well have established itself independently, but I have sought to trace the connection—hitherto ignored—between early Roman and Aryan debtors law, and to prove that in early Roman law we see but the continuation of the Aryan law.

In language, as in matter, the Roman debtors law is connected with the obligation (bond) of the debtor. Roman law designates the extreme measures taken against debt by the earliest jurisdiction as *nexum* (from *nectere*, to bind), the newer (the obligatory) bond (contract) as *contractus* (from *contrahere*, to clench the bond), and *pactum* (from the Sanskrit *pack*, to bind, and *paça*, the fetters: see above, p. 17), and the natural normal liquidation of it by payment as *solutio* (from *solvere*, loosening the fetters) and by acquittal of the creditor as *liberatio*, liberation from bonds.

With these expressions the true original aspect of the construction of the Aryan debtors law is described. Strike out the word "*juris*" in the well-known legal definition of obligations in the *Institutes* [*vinculum juris, quo necessitate adstringimur, alicujus rei solvendae*], and we see the Aryan debtors law clearly before our eyes: the *vinculum*, the *adstringi*, and the *necessitas solvendi*. Of course the fettering of the debtor does not take place until the stage of execution is reached; but language describes the situation according to its objective perceptibility, and guilt does not become objectively perceptible until the moment of fettering has come. The same characteristic feature of this obligation, as regards the form of its liabilities, may be found in the identification of obligation and *actio* in Roman law; as with the fettering, so also it does not come to *actio* until the debtor refuses to pay. The objection that the Romans use *solvere*, *solutio* only in its objective sense for the actual fact of paying the debt, not subjectively as applying to the person set free,

is confuted by the simple cross-question, "How could it have applied primarily to the object, as that was neither bound nor freed, whilst the debtor was?" That this objective meaning of the expression *solvere rem* has, through later usage, come to replace the original subjective meaning (*solvere debitorem*) is proved by the formula *nexi liberatio* in Gaius III., 174: "*quod ego . . . . me eo nomine solvo liberoque.*"

As in Latin, so also in German, the linguistic reminiscence of the fettering of the debtor in primitive Aryan times is still preserved in *Verbindlichkeit*, liability; *verbunden sein*, to be liable; as also in the combinations of *lösen*, to loosen; *ablösen*, to reclaim (a mortgage of land); *einlösen*, to ransom (the pledge or prisoner); *erlösen*, to redeem. The Christian representation of the Redeemer, who frees the world from the bondage of sin by taking its sins upon Himself, refers objectively, as well as linguistically, to the Aryans, who redeemed the debtor from the Corrective Stake by ransom.

The Remission of Sin points also to this representation; the debtor was *ent-lassen* (released), and the debt *er-lassen* (remitted).

So the Aryan Corrective Stake has left its trace in the language down to the present day in the same way that the pastoral life of antiquity still survives in the metaphorical meaning of "driving" and "marking" (pp. 14 and 17), and the real yoke which in antiquity was put upon husband and wife at their marriage, in the Latin *jugum*, *conjugale*; *conjux*, and our marriage-*yoke* of to-day. In order to understand many of our modern expressions we have to go back to an antiquity which lies many thousands of years behind us.

I now return to Aryan law, not in order to add anything more to what has already been said (for I have brought to bear upon the matter all the information at my disposal), but to conclude with that which is the sole object of my investigations—my opinion as to its stage of development. I gather it all together into the one statement that the Aryan mother-nation had not got beyond the first beginnings

of law. Jurisprudence was not the strong point of the Aryans—their talent lay in another direction; and this total lack of genius for law is also undeniably confirmed in the later Vedic period.[1]

[1] For example, there are no less than eight different wedding ceremonies in the *Laws of Manu* (see ROSZBACH's *Untersuchungen über die römische Ehe*, p. 200. Stuttgart, 1853); which alone would sufficiently prove the entire absence of juridical power of discrimination.

III.

CONCLUSION

§ 16. So far, I think, I have collected sufficient evidence to enable us to form a fair estimate of the degree of civilization attained by the mother-nation at the time of the separation of the daughter-nation. Far from having been a high one, as some would have us believe, it was, for a nation that had thousands of years behind it, a surprisingly low one.

Ignorance of agriculture, absence of towns, non-acquaintance with the working of metals for technical purposes and for the coining of money, ignorance of the most elementary development of jurisprudence, even of the conception of law not yet even reduced to words, nor distinguished from custom and religion—what more do we need to justify this conclusion?

This also denotes the character of the people. It was a people without the least practical aptitude—the diametrical opposite of the Romans. Highly gifted intellectually, they turned their tastes and thoughts to the inner world—to speech, religion, poetry, and in later times also, with great results, to philosophy—without feeling the necessity of applying their knowledge to the amelioration of their external conditions. They were satisfied with the humble lot of the herdsman's life. A wooden house, extensive herds, a wife, and male descendants were all that the Aryan desired. The monotony of his life was relieved by gambling and drinking. He gave himself over to gambling with the same ungovernable passion which Tacitus attributes to the Teutons.

When the public meeting was ended, it was followed on the

same spot by dice throwing,[1] and many a one, after having lost his all, like the old Teutons, gambled away his freedom; in *Nal and Damajanti* the prince gambled away all he possessed, even his crown, and then turned into the woods with his wife, beggars. In the matter of drink, too, the Aryans were the worthy predecessors of the Teutons. They knew two intoxicating drinks, *soma*, our wine, and *sura*, corresponding to our brandy; and there were even private distillers, who prepared these drinks, and public drinking-booths.[2]

This characteristic of unpracticality has adhered to the Aryans until now, and it is because of this that, in comparison with their high gifts and their extraordinary expansion, they have played so unimportant a part in history, and are at present under foreign rule. A small body of foreigners suffices to keep in check a host a thousand times larger than itself. What a light this throws upon the political minority of a nation! And what does their social position at this present time reveal to us? The curse of caste, laid upon them by their sages, the Brahmans, whereby, however, these latter secured the best places for themselves, and which continues to this day in an altered and much more aggravated form.

In place of the three lower castes innumerable castes have arisen, the distinguishing features of which surpass in

[1] ZIMMER, *loc. cit.*, p. 172. The public hall (*sabha*) was the rendezvous of gamblers. *Sabhasthanu* was the game of the village. As to the alleged honesty and strict morality of the people, we may gather their state from the fact that gambling and cheating were regarded as equivalent. "No vice," says Zimmer, "was so universal as deceit and gambling. Perjury also was not uncommon, and there was no lack of robbers and thieves." (pp. 177–180.)

[2] ZIMMER, pp. 272–281. I cannot refrain from borrowing the following edifying products of Indian poetry concerning drinking from this author: "We attain to immortality, we rise to glory, we find the gods . . . . gone are all ailments and sickness." As men are, so is God Indra. "Continually," it is said of him, "the hero desires to drink *soma* . . . . when these (100 to 1000 draughts) are in his belly he assumes the proportions of the Samudra . . . . These draughts flow below, like the stream in low ground." No wonder that God Indra had too much sometimes, and extended on all sides (swelled out), and was lost to sense and to the enjoyment of *soma*.

absurdity anything upon record,[1] and cause separation to be carried to such an extent that their members may not eat or drink together, or intermarry. "The laws of caste," says Zimmer, "are to the Hindu more binding than any moral institution. It is not going too far to say that the laws of caste *are* their religion. The highest principle in life of the Hindu is to eat well, to drink well, and to marry well: all other doctrines and commandments fall into the background. The man who is thrust out of his caste is in most cases a lost man. Many such unfortunates have ended their days in misery and despair, in voluntary banishment, and many have come to an untimely end." Even the absence of all imputation does not exonerate a man from the consequences of the crime. Once an adventurous Englishman forced a Brahman to swallow meat and to drink a forbidden beverage. The man was thrust out of his caste, and for three years he tried in vain by all available means to re-enter it, until at last he succeeded only by paying a fine of £20,000. The native sages have no eyes for the fundamental principles of law and morality: guilt and innocence, wisdom and unmitigated ignorance, are hopelessly mixed up together. Let us complete our picture of the Hindu of the present day by a few more traits, *e.g.*, his miserable clay hut, which often collapses in the rains; the isolation of the women in their apartments *(zenana)*, and their scanty education; the pernicious institution of ceremonial gifts;[2] and our conclusion that the modern Hindu, as regards the practical status of his worldly circumstances, is the worthy descendant of the old Aryan, cannot be controverted. In

[1] RICHARD GARBE, "Indisches Leben," in Westermann's "*Monatshefte*," vol. lxviii., April, 1890, p. 107. "In one part of India marriage is prohibited between those fishing tribes which, in making their nets, lay their meshes from right to left, and those which lay them from left to right. A certain class of milkmen have turned out of their caste those of their trade who make butter without having first boiled the milk, and give their daughters to wife only to those who make the butter in the same way as they themselves do. In Cuttack, the most southern part of Bengal, the potters who turn their wheel sitting down, and who make small pots, may not intermarry with those who turn the wheel standing, and who make large pots."

[2] R. GARBE, *loc. cit.*, p. 110.

this respect he has not advanced beyond the condition of the childhood of his predecessors. I would have passed him by unnoticed if I had not required him as an illustration of his ancestors. And from this absolutely unpractical nation arose the eminently practical Roman nation. How has this come about? The following chapters will, it is hoped, supply the answer.

Second Book

ARYANS AND SEMITES

I.

PROBLEM OF THE ORIGIN OF NATIONALITIES

§ 17. If no more importance attached to the habitat of nations than that of the stage on which they, obedient to their national character, had to play their parts, the first question dealt with as to the habitat of the Aryans would have no connection with the next one as to their character and degree of civilization. What has it to do with the rôle and the skill of the actor where the stage on which he has to appear lies? It does not alter his rôle one jot, nor is his skill in the least affected. The artist remains an artist—the bungler remains a bungler. The same would hold good for nations if their rôles were fixed for them by their innate national character. The Greek would be a Greek everywhere; the Teuton a Teuton: the different habitats of the two nations would not have had the slightest influence upon their national character; their place of abode would have no more significance for them than the stage for the actor; the whole interest of the investigation as to their domicile would resolve itself into the unimportant inquiry as to where the place was in which those things happened that history relates of them.

But this is not the case. If the question of habitat had been of no importance, Greeks and Teutons could not have become separate nations, for originally in their Aryan home as well as during the migration they formed one and the same nation; it is only on Greek and German soil that they became respectively Greeks and Teutons; and the same applies to all branches of the Aryan family—Indians, Iranians, Romans,

Celts, Slavs have been distinguishable as separate nationalities only after they left their original home. That the domicile of a nation has a certain influence upon its national character is generally accepted, and as far as I know it is to Montesquieu that the credit is due for having brought this point prominently forward. But not more than a secondary or modifying influence over character is allotted to it; the ultimate cause to which the destiny of a nation is due is rather to be found in its innate national genius. It is the same with nations as with individuals: each brings with it into the world its peculiar dispositions and various temperaments. The sense of the beautiful is inborn in the Greek; the desire for isolation and migration in the Teuton; the spirit of commerce in the Semite; and so on. For all national peculiarities the same explanation serves — innate national character. Each repeats what another has said without troubling himself as to how it can be. The inevitable hypothesis is that nature sent nations, equipped as such, into the world; and that, in order to create variety, she formed and endowed them in various ways. But nations do not come into the world in a completed state: they are not *born*, they *become*, nations; and therefore there can be no question of heredity in their case. The individual who is *born* can have something *inborn*; a nation that has *become* can only *acquire*, *i.e.* its national character can only be the work of history, not of nature. Nature has merely placed man, the individual being, in the world, and out of him in the course of time nations have proceeded: the family has enlarged itself into the tribe, the tribe into the nation, and when this nation finally makes its appearance in history with a strongly-marked individuality, this can be attributed only to the whole process of its growth. The origins of nations are hidden from our view; but their growth repeats itself before our eyes in the historical records of nations already formed, where, through division or admixture with other nations, fresh ones are formed. All Indo-European nations have come into existence in this way.

Originally all belonged to the one nation, and are therefore of the same nationality; it is only in the course of time that they have developed their different characteristics. History has made them what they now are.

Nationality is the fundamental basis of all influences, whether permanent or transitory, which have beset a nation during the time of its existence. The permanent influences are those of the soil; the transitory influences are those of important political events, *e.g.*, successful or unsuccessful wars, revolutions in State or Church, etc. He who can penetrate the hidden recesses of the past can easily distinguish the share which each of these factors has contributed towards the nationality: as, for instance, in the case of England, its insular position, the battle of Hastings, the execution of Charles I., etc. A glimpse of what preceded this maturing process is denied to us; but we may assert that nationality is the matured product of a nation's past with the same certainty as that with which we maintain that in the galvanoplastic process of gilding the deposit is gold dust, although we cannot perceive its separate atoms as they fall.

The law of cause and effect holds good both in the intellectual and the physical worlds. Things do not change of their own accord, but only under the influence of external causes. Here, as elsewhere, when in the course of time a becomes b, an unknown factor x must have been at work to effect the change. The difference is simply that in natural science x, and the way in which it has operated, can frequently, and with increasing success, be traced; while to spiritual and intellectual science even a glimpse into the past history, individual or national, is denied. But not to *be seen* is not necessarily not to *be*—a plain truth which, however, is often lost sight of in philosophy. When a thing *was* not in the beginning, like the nationality of nations, it can only have *become;* and as the being of nations consists in actions, which in their turn are conditioned by external circumstances, so its nationality, its *esse*, can be the outcome only of its collective historical action, its *operari*, in the widest sense of

the word, denoting not merely the active, but also the passive meaning of bearing and suffering. Scholastics lay down this rule for individuals: "*operari sequitur esse*"; for nations it might be turned round: "*esse sequitur operari.*" Nationality is the matured product of the collective historical action of a nation; it cannot be otherwise if the law of cause and effect hold good also in the world of man.

Amongst the factors which have a decided influence upon the historical action of nations, the soil, the scene of action, their habitat, takes the first place. The appearance on the scene of powerful personalities may cause a total revolution in its circumstances. But the personalities vanish again too quickly to exercise any lasting influence upon the national character: this can be brought about only by long-enduring, steady influences. If their works are effective and continue, a change in the national character may indirectly be attributed to them which directly was denied them. The only unchangeable factor in the life of nations is its habitat; all others—law, morality, custom, religion—are subject to alteration: the domicile alone remains constant. In addition to the superiority which this unwavering constancy alone vouchsafes to it, there is also the unparalleled influence which it exercises over the collective conditions of life, and over the destinies of nations. However paradoxical it may at first sound, it is nevertheless true that *the soil is the nation.*

The Soil.—Not only the soil in the sense in which the expression is ordinarily understood—the constitution of the land which the people inhabit; by the soil I understand each and every detail which attaches to the situation of the nation's habitat in its particular part of the globe. First of all there is the circumstance of latitude, *i.e.*, climate. In the tropics man becomes a different creature from what he is in the temperate zone, and again different from what he is in the most northerly parts. Climate is half the temperament of nations. Then the conformation of the soil must be taken into account: mountains, plains, deserts, woodland—all these imply a special type of man. Furthermore, proximity to or remote-

ness from the sea plays its part. The seafaring man is quite different from the landsman. Habit and vocation develop certain characteristic qualities in man, impress a certain type upon him. If in early life the vocations of servant, journeyman, farmer, sailor, soldier, and scholar had been interchanged, the individual would have turned out quite another being; and what is true of the individual, who brings a distinct personality into the world with him, is even more true of nations, which do not bring it with them. Had the nations been interchanged in their cradles, Semites would have become Aryans, and Aryans Semites. It is with nations as it is with trees. The same tree becomes in a temperate zone different from what it becomes in the tropics; in the extreme north different from in the temperate zone; in poor soil different from in rich; at the seaside different from inland. The same tree which flourishes and yields abundant fruit in one place withers and remains unfruitful in another. The same happens with nations: their soil decides what issues from it.

By soil I do not, of course, mean merely the soil in its natural sense; but the climatic and terrestrial conditions of the land. By soil I also here mean the contact with other nations afforded by its geographical situation: the soil in its civilizing and political, or, to put it more briefly, its historical sense. On this contact may depend the whole destiny of a nation. A powerful nation living contiguous to a weak one may involve the latter's destruction; a warlike nation next to a peaceful one may imply a distressful existence for the latter; a civilized nation next to one in a state of natural existence may elevate the latter to the same level of civilization as itself. The fact that of all Indo-European nations the Greek alone awoke to civilization at such an early date is due solely to the contact with Semitic and Egyptian culture, rendered possible by the position of the land. The fact that Teutons and Slavs ten centuries later had not passed the primitive stage is accounted for simply by their remoteness from the Mediterranean, which rendered this contact impossible, and obliged them to take their civilization at second or third hand. The

advantage gained over them by the Latin races and Celts is attributable to the favourable position of their country, which made contact with the pioneers of civilization (amongst whom the Greeks may also be counted) possible for them. The child that goes to school early in life learns more quickly than the one that enters at a later age; but the child that has only to cross the road to reach the school-house can be sent to school earlier than the one that has to perform a long, toilsome journey before he reaches it. This explains the difference in the time of awakening to a state of civilization in the Indo-European nations. It was not the work of their different national character—which all shared alike when they set foot on European soil—but the work of the position of the land on which they settled; and when in later times their national character differed, the cause is to be found in the one new factor—the difference of their places of settlement.

And so it is quite true, as I have before said, that the soil is the nation. Not, as shown above, in the external sense of the stage on which the nation plays its prescribed rôle, like the actor, prompted by innate national characteristics; but rather in the deeper sense of the law of causality as affecting its national character and consequently history. With nations the *where* decides the *what* and the *how*. The selection of a spot by a nation on the map of nations is, as it were, the casting of the dice for weal or woe, and in this sense we may say that geography is history bound, and history is geography set free.

But not in the sense that they cover each other. Although in the history of nations such preponderating influence is exercised by the soil (the bound element), yet there is, as already remarked, another (the free) element, which depends greatly upon the fateful sway of personalities, whether fit or unfit, called upon to guide the destinies of nations, and which may for a long time determine the fate of a nation. It has been attempted to make them also subject to the law of historical necessity by seeing in them merely the incarnation of the popular mind which had to reveal itself at a given

moment to reap the harvest long prepared and matured by the past. Was Napoleon I., the Corsican, an incarnation of the French popular mind? Was it necessary that he should enter the French service? Can we see in Bismarck an incarnation of the German popular mind? It would be otherwise with us now if that were the case. And if, instead of Kaiser Wilhelm, Friedrich Wilhelm IV. had occupied the throne, Bismarck would have ended his days as a country gentleman, at Schönhausen, as he is now under Wilhelm II. compelled to do at Friedrichsruh. The great men of history are gifts of Heaven, but their greatness alone is not sufficient; hundreds, called perhaps to the greatest heights, have left the world without leaving behind them the slightest trace of their existence. Circumstances have to co-operate; the right man must coincide with the right moment and with the right men who understand, uphold, and support him.

But we need not pursue this question further. I have touched upon it only to guard myself against the imputation of holding a view which I do not share; my sole object was to emphasize as strongly as possible the significance of the soil, in its wide historical as well as natural sense, for the development of national character. If I have expressed the correct view in my assertion that the soil is the nation, it devolves upon the historian to bring out clearly the connection of the national character of a people with the soil upon which it lives. This I propose to do for the Aryans, not only in their original home, but also on European soil.

The double influence of the soil upon national character is further increased by a third—that of migration. For this must also be directly attributed to the soil, the inadequateness of which to maintain the whole nation forces a part of it to leave the old home. The migration period, in consequence of the peculiar conditions which it brought with it and the length of its duration, exercised a very decided influence; it was that which gave to all Aryans in Europe the common type of the Indo-European, which, without destroying the old Aryan type

(it survives in them very strikingly down to the present day), has nevertheless very considerably altered them. With the settlement, which again gives the soil full scope to work upon the national character, the diversities of the various branches of the daughter-nation show themselves, and form the types of the five great civilized nations—the Greeks, Italians, Celts, Teutons, and Slavs.

The task which I have set myself is thus resolved into the following three heads:

I. Proof of the influence which the condition of the soil in the original home exercised upon the civilization, and through it indirectly the national character, of the old Aryans. In illustration of this, I have employed, by way of comparison, the civilization and national character of the Semites—primarily of the Babylonians—from whom Assyrians, Phœnicians, and Hebrews branched off; and I have allowed myself a measure of elaboration which may cause some surprise. My reason for so doing is twofold; firstly, the direct interest of the task itself. The extent to which the conditions of the soil may influence civilization and national character could not be more clearly shown than by comparing two peoples with whom the most essential difference in one connection corresponds to that in the other; and since this correspondence might be a matter of chance, it is my duty to furnish evidence of the action of the law of causality, which was only possible to me by entering into minute details. Secondly, there is the historical interest that exists in the contrast between Aryans and Semites. I have had to trace it very distinctly, and to show clearly who the Semite was, and what he had done for the world before the Aryan replaced him. I have had, as it were, to write out a statement of accounts as to how much of his civilization stands to the credit of the Semite, and how much to that of the Aryan—what he owes to them, and what to himself.

II. Proof of the influence of the period of migration upon the Aryan. He leaves the original home one man, and sets foot upon European soil quite another. The change must

have taken place during his migration; the raising of the type of the ancient Aryan into that of the Indo-European is the work of the migration period. This proof will be given in my Fourth and Fifth Books.

III. To show the influence that the difference of soil upon which the several Indo-European nations settled exercised upon their varying characteristics. It can be accounted for only by the one factor newly introduced with their settlement —the soil. It varied for each one of them. In the Sixth and Seventh Books I shall endeavour to prove the influence of this factor.

II.

CONTRAST BETWEEN ARYAN AND SEMITIC CIVILIZATION

§ 18. According to an accredited philologist, the Aryan mother-nation, at the time of the separation of the daughter-nation, had been in existence for at least ten thousand years.[1] What did the nation produce during this long period? Apart from the language, which is a feat of the first order, very little indeed. It was a nation of shepherds, which, as is shown in my first Book, had made very slight advance in matters of external civilization. It was ignorant of agriculture, of the working of metals, of iron tools, or of arms; and knew nothing but stone axes and wooden spears. Cattle took the place of metallic money. They could not even utilize stone for building purposes; were unacquainted with stone houses, and knew only huts of wood, twine, and straw: there were no towns—only villages, with detached houses. Neither had they any commerce with foreign nations which might have bought their produce; and what they grew was very limited. Legislation did not extend beyond the most urgent necessities; even the name of "law" in contradistinction to "custom" was unknown to them. And merely to reach this low stage of culture ten thousand years had been necessary, while one thousand would have been ample — nine thousand years thus passed over them in a constant monotony of life.

At the same time that their civilization was still in its earliest stage, it had awakened elsewhere (in the plains

[1] See above, p. 10, note.

between the Euphrates and the Tigris) into active life. The credit of having first brought it to life here, and thereby in the world in general, and of having brought it to a certain degree of perfection, belongs to a people which, later, as far as it affects the history of civilization, retreated into the background—namely, the Turks, especially two tribes, which exchanged their original home in the mountains for the valleys of Mesopotamia: the Akkadians in the north, the Sumerians in the south.[1] Subjugated by a people of another tongue, the Semitic, they merged with them to form one nation, which developed the civilization received from them to the highest perfection—the Babylonians; and from them the other civilized nations of the Semitic race—Assyrians, Phœnicians, and Jews—afterwards separated. The primitive history of the Semites exactly corresponds, as far as the separation of nations is concerned, with that of the Aryans, and probably the cause was the same—insufficiency of food for the rapidly-increasing population. We must, therefore, look upon Mesopotamia as the soil which fostered Semitic civilization, and the Babylonians as the prototypes of the Semitic race. Where there is anything specially relating to the Jews it will be notified.

The picture which I have in a few strokes been able to draw of the civilization of the Aryans I will contrast with an equally striking one of the Babylonians. Even before they took possession of the land the Sumerians had, by the construction of canals, reclaimed the marsh land extending from the estuary of the Euphrates and the Tigris, which was once covered by the sea. They had also acquired the plough, which here makes its appearance in history for the first time. The higher districts of the lowland as far as the Taurus, which in prehistoric times had been forest land, would also have fallen under the plough. The whole country was converted

[1] FRITZ HOMMEL'S *Geschichte Babyloniens and Assyriens*, pp. 2 *sqq.*, 237 *sqq.* Berlin, 1883. EDUARD MEYER, *Geschichte des Altertums*, vol. i. p. 157. Stuttgart, 1884. The linguistic evidences which HOMMEL (p. 246) brings to bear upon the Turkish origin of both these nations appears to me quite conclusive.

into arable land, carefully cultivated, and turned to the best advantage by man. Side by side with agriculture commerce and trade flourished. In the very earliest times the working of metals was understood, and metal was used for technical purposes, as well as a means of payment.

Navigation on the rivers and canals increased the inland traffic, and marine navigation on the Persian Gulf promoted trade with the outer world. An extensive traffic involved equally advanced private legislation, which, in fact, bears comparison with the later Roman law. Acquainted from the earliest times with the use of clay for the purpose of making dried and burnt bricks, the people made very wide use of it.

Towns sprang up everywhere, of ever-increasing size; centres of commerce, lofty temples arose. Science had already contributed her share towards helping on the practical affairs of daily life. Mathematics assisted commerce and architecture by providing an elaborate system of weights and measures. Astronomy aided navigation in calculating the course of the stars. Writing was known from the very earliest times; the material was the burnt stone tablet, and to their extraordinarily wide practical acquaintance with the various objects of daily life we must add their written records of all the most important events: to them we owe the direct accounts which we possess of what happened five thousand years ago.

To what is this extraordinary difference of degree between the Aryan and the Semitic civilizations due? We must ascertain the reasons for it.

1. *Herdsman and Husbandman.*

§ 19. A mountain district does not adapt itself to agriculture, since ploughing on sloping ground presents serious difficulties. The right and natural purpose to which to put it is to turn it into pasture land, and this plan has always been adopted down to the present day. All pastoral peoples, or pastoral tribes, have their homes in the mountains. The natural soil

for agriculture is found in the lowlands, where it first saw the light of day, for everything first comes into existence where circumstances most favour its development; and only after it has acquired strength there can it commence to battle with the disadvantages of adverse conditions.

Scarcely any other land than the Valley of the Nile was so well adapted for agricultural purposes as the low land between the Tigris and the Euphrates; for, in addition to the extraordinary natural fertility of the alluvial soil, water could be obtained from these two rivers, and also from others, by the construction of canals and dykes. Accordingly the Semites in the plains of Mesopotamia became agriculturists, the Aryans in the mountains of Persia became shepherds.

Agriculture implies a higher degree of civilization in those who practise it than do merely pastoral occupations; not only because it wrests from the soil a larger return, but also because it forces man to put forth greater energy, all necessity for work being a blessing. A pastoral life requires no bodily exertion. The shepherd watching the cattle can pursue his occupation with folded arms, for the cattle find food for themselves; but the labour of the peasant is arduous. To him, not to the shepherd, applies the command, "In the sweat of thy brow shalt thou eat thy bread." He who earns his living with difficulty holds it precious; he who gets it without trouble thinks lightly of it. Thus the Aryan. He is a gambler. With the dice in his hand, his mania knows no bounds; he gambles away all he possesses—if need be, even his freedom. The Semites, although perhaps not unacquainted with games of chance (this I leave for the better-informed to decide), certainly had not the Aryans' passion for play. If they had possessed it to the same extent, this injunction would not have been missing from the Ten Commandments of Moses—"Thou shalt not gamble"; with the Aryans it would certainly have been included.

This contrast between the two races has obtained down to the present time. In the midst of a hundred players of Aryan origin at the gaming table you will not see one of the

Semitic race.[1] In his passion for gambling, the Indo-European stamps himself to the present day as a descendant of the ancient Aryans. And as we find in him the gambler, we also detect in him the spendthrift. The Jew is no spendthrift —he holds his own securely; therefore it hardly ever occurs that, where wealth has once been accumulated in a Jewish family, it is again lost; while in Christian families often nothing is left of a fortune after a few generations have passed. Economically the Jew steadily advances; the Christian only too often retrogrades.

Whence this contrast in national character, which has existed from the earliest antiquity until the present day? Once present it could be transmitted from generation to generation; but in order to be inherited it had first to be developed. How was this development brought about?

The answer is that the Aryan for many thousands of years found his sustenance as herdsman without any trouble, while the Semite had to till the soil by the sweat of his brow: the life of the former was without labour; the latter involved heavy labour. It is evident that such a difference in life must have considerably influenced the national character in the course of thousands of years. In support of this view, I refer my readers to the picture that Cook draws of the South Sea Islanders: they were the most harmless, brightest little nation that Cook ever encountered in any of his voyages. The reason for it was to be found in the fact that they did not work. What the cattle did for the Aryan, the fruits of their trees did for them—rendered manual labour on their part needless.

Nor does a pastoral life compel a man to use his brains.

[1] I need not explain that gambling on 'Change and gambling at the roulette-table are widely different. The intention of the player in the first instance is not gambling, but speculation. In games of chance everyone is alike; in speculation he who is the cleverest is superior to the ignorant, and extracts his money out of the other's pocket. It would be interesting to ascertain by statistics in what proportion Jews and Christians stand towards one another in the State lotteries. I should rely on finding that the Jews are decidedly fewer in number.

The duties which fall to him are of the very simplest kind: he watches, milks, shears, and slaughters his cattle. But the husbandman is compelled to make use of his intellectual powers. He has to discover Nature's secrets—the right time for sowing and reaping, how to prepare the soil, what kind of crop to grow, and whether a change of crop is desirable; whether he can go on using the land until it is exhausted, or whether it should lie fallow at times. The husbandman had to study the soil—not so the herdsman; and much else fell to his lot which was spared to the other. He had to invent the plough, the harrow, the threshing operation; to conceive the idea of assisting the exhausted soil by means of manure; to substitute an animal for himself in working the plough, and to train beasts for that purpose. It is true that the husbandman of to-day has no great need for original thought; but that is only because others have thought for him: he works with an intellectual capital of experiments and discoveries which a long past has hoarded up for him, the further increase of which is taken out of his hands by the scientifically-trained agriculturists of to-day. But in the past he had to think for himself; everything that agriculture has achieved is due to him — an immeasurably great result in comparison with that of the herdsman, over whom thousands of years have passed without his having made any advance, whilst the husbandman was all along making steady progress.

The mere contrast between the Aryan herdsman and the Babylonian husbandman is sufficient to make us understand the difference in their degrees of civilization and in their national character. A mode of life which combines the necessity of hard work with the obligation to think for oneself, must perforce create a people different from those with whom these two necessities are not combined; both these peoples became what they were from the character of the soil: given plains and mountainous districts, the soil made them what they became.

The Old Testament story carries the contrast between herdsman and husbandman back to the very commencement of

history. Of the two sons of the first man, the one, Abel, becomes a keeper of sheep; the other, Cain, a tiller of the soil; and the latter kills the former. Glance at the agriculturist at the very beginning of history. It was many thousands of years before he appeared upon the scene at all; and the traditions of all nations place him, or the god who gave the plough, at a somewhat late date. What, then, does it mean when we read that Cain was a tiller of the soil? I fancy the legend was merely intended to state the fact (which is true only for the Semites, not for any other nation in the world) that agriculture stands at the very beginning of Semitic history. For the history of the Semites begins in Mesopotamia, where also Paradise (the garden of the Babylonians) was situated, and where the immigrating nation found agriculture already established. Cain means: "We Semites, in contrast to all other nations, have been for all time an agricultural people."

Cain kills Abel. What does that exemplify? If it were a mere act of fratricide, why is emphasis laid on the fact that one of the two brothers was a tiller of the ground and the other a keeper of sheep? The intention is obvious. In Cain the early appearance of agriculture is personified, and the fratricide represents the fact that agriculture, as the more perfect art of utilizing the soil, ousted the pastoral life as the less perfect. On suitable soil the herdsman cannot hold his own with the husbandman: Abel is overcome by Cain.

This, however, does not seem to harmonize with the statement that agriculture was allotted to the elder and a pastoral life to the younger brother. Their historical sequence is indeed the reverse; first the pastoral life, then agriculture. Cain, as the first, ought to have been the keeper of sheep; Abel, as the second, should have been the tiller of the soil. This seems to me to be a nice point in the legend: by reversing the order it shows the true relationship—the greater demands which agriculture, as compared with pastoral life, makes both intellectually and physically upon humanity. In both aspects it is the more matured and the stronger, *i.e.*, the elder brother, who over-

comes the intellectually and physically weaker younger brother; therefore, Cain must be the tiller of the soil, and Abel the keeper of sheep. Cain founds the town, and with this we touch upon another point of difference between Aryans and Semites.

2. *The Town.*

(*a*) Origin of the Town: the Fortress.

§ 20. In the fact that the Old Testament legend assigns to Cain the founding of the town, we have a further example of historical construction, which was possible only on Semitic soil. It emphasizes the fact that, like agriculture, the town belongs with the Semites to the very remotest antiquity; both stand at the very commencement of their history. And this is perfectly correct from the point of view of the history of the Semitic nation. When it first came into existence, agriculture and the town were already extant. Three degrees of development, which in the history of humanity are separated by thousands of years, have thus been crowded together in the lifetime of one generation; herdsman, husbandman, townsman —all appear simultaneously in the history of the Semites.

In addition to the great antiquity of the town, the legend contains another idea, which deserves the greatest attention: *The husbandman built the town.*

The intention to attribute the building of the town to Cain, the agriculturist, is, in my mind, as little doubtful as is the emphasis laid on his vocation when the fratricide is spoken of. The simplest plan would have been to raise up, beside the figure of Abel, representing pastoral life, and Cain, typifying agriculture, a third figure, representing town life. Why should Cain represent both the latter? I can find no answer but this: that tradition sought to express the idea that the founding of the town was the work of the husbandman. Cain, who had already shown his intellectual superiority over his brother in that he became a tiller of the soil, confirmed it further by recognizing that the town was necessary to him.

The town necessary to the tiller of the ground? That

seems like scoffing at all experience. The tiller of the ground lives not in towns, nor could he do so: he resorts to the town only for the purpose of bringing his produce to market; but he must live in the country, near his fields. The tradesman and the merchant, on the contrary, cannot exist in the country; they have to live where the market is, viz., in the town. It is their interests that we have to consider in order to appreciate the life and prosperity of the town.

From our modern point of view this argument is quite correct; but it assumes a different aspect historically. True, the tiller of the soil has founded the town, and not until after he had done so did the merchant and the craftsman settle in it. But he founded it for the purpose of retreat in times of hostile attacks; defence was the end which called it into being, not the interest of commerce. The first towns everywhere have been *fortresses*, not *markets*. That is why all towns were fortified; their essential part was not the *houses*, but the *walls*. Men, cattle, and goods were to find shelter there in time of need, and therefore they required only walls—not houses, for they camped in the open—until the enemy had retired. So it was in the case of the ancient Aryans, with regard to the fortified retreats which they erected in the neighbourhood of their unfortified villages. Such a place is called *pur*;[1] it was erected on a height and surrounded by a fence made of earth, palings, hedges, thorny shrubs, sometimes also stones and ditches. In times of peace it was deserted; it served only as a place of retreat in case of hostile attacks. This *pur* corresponds to the Greek ἀκρόπολις, the Roman *arx*, the Germ. *burug*, *burc*, *burg*, *baurgs*. Security against attack is the object of all, and therefore they were erected on heights.[2] In this sense we may consider the

[1] ZIMMER, *Altindisches Leben*, p. 142.

[2] In πόλις it has been attempted to discover *pur*, and to argue therefrom that the Aryans possessed towns, of which in reality they were ignorant (see page 20). O. SCHRADER, *Sprachvergleichung und Urgeschichte*, pp. 35, 42, 182. The idea of defence lies at the root of the Latin *arx* (from the Sansk. *ark* = to secure, guard, restrain. VANICZEK, *Gr.-Lat. Etym. W'bch.*, i. pp. 54–56); the Germanic *burc*, from *bergen*, to keep safe (see F. KLUGE, *Etym. W'bch.*, p. 43, 3rd ed.,

pur[1] of the Aryans to be the historical starting-point of the town of the Indo-Europeans; it was originally designed as a fortress. Later on to ἀκρόπολις was joined the πόλις, to *arx* the *urbs*, to *burg* the town; and it also was regularly fortified. In choosing the site for a town, the prevailing purpose has always been to find the most easily protected place, not only with the Indo-Europeans, but with all nations. The coast towns of the Phœnicians, for instance, were erected on steep rocks; similarly those of the Iberians in Armorica; and those of the Italians were on the tops of mountains. They were particularly anxious to secure the double protection by water on the one side, and by mountains and hills on the other.[2] The primitive mode of protection we see in the construction of the lake-dwellings in lakes, swamps, and rivers.

And so the town, if we may employ such a term for these primitive settlements, was planned not so much as a permanent abode for the populace as a place of retreat for the country-people in case of hostilities. The people lived in the country, near their fields and flocks, and were obliged to live there; only those would live inside the town who either had their landed property in close proximity to it, or who followed a trade. Thus we must imagine Old Rome to have

Strasburg, 1884); hence *Berg*, mountain, the place of safety, and *Burg*. With the Gk. πύργος = tower, *burg* has no connection (KLUGE). "Town" is of much later origin; ULFILAS translates πόλις by *baurgs* (see KLUGE).

[1] Also the Cymric *pill* for town. PICTET, *Les Origines Indo-européennes*, 2nd ed., vol. ii. p. 375.

[2] *E.g.*, Rome. The Celts did the same; Alesia is an example; also the Slavs, *cf.* the description contributed by a Russian historian (ZIMMER, *Altindisches Leben*, p. 146). "The older Gorodists are, with few exceptions, built on the highest points of the high banks, and are therefore protected on two or three sides by natural declivities or steep inclines towards the stream; but on the side towards the plain they are surrounded by artificial fortifications, walls, and ditches. The few Gorodists which form the exception are in the low land, in valleys, and in this case are always so situated that they are, or can be made to be, surrounded on all sides by water. I have nowhere found Gorodists at any distance from the water." It was not customary to build towns at the mouth of a river running into the sea, or on the open sea-coast, on account of the danger from pirates; they were placed somewhat inland, as Rome, Athens, and many cities built in the Middle Ages. Seaports were safe only in bays with narrow entrances, or with harbours which could be protected artificially.

been. The taxation, by means of the *tribus rusticæ* and *urbanæ*, which continued down to the latest times, leaves us in no doubt about this. He who was settled in Rome without landed property inside the boundary (which latter was equivalent to living in the country) ranked under the *tribus urbana*, and was little regarded; only the farmer in the country—townsmen, as such, he respected not—felt himself to be an object of importance. He went to the town only on market and "assize" days, public festivals, etc., and on occasions when sudden hostilities forced him to take refuge, with his household and his cattle, within the precincts of the town. To admit of this, however, the town had to be sufficiently large. We may regard it as a certainty that this was taken into account when the town was originally planned, viz., that it covered more ground than was required for the erection of houses; that therefore the size of the town was fixed, not merely by the number of townspeople, but also by that of the country population. A confirmation of this may be found in the fact that Vercingetorix in Alesia[1] was able to accommodate, in addition to his own numerous horsemen (which were first lodged there, but afterwards dismissed), no less than 70,000 foot soldiers, besides a large number of cattle,[2] together with stores of provisions for at least a month. To make this possible, Alesia must have been originally built, not so much as a town for townspeople, but as a fortified camp for the whole population; and this, too, must have been the case with Rome and innumerable other cities. The town was intended, not as a place of habitation for the townspeople, but as a fortified bulwark for the whole populace.

The above evidence shows that the Old Testament story of

[1] The description which CÆSAR (*De Bello Gall.*, vii. 69) gives of their situation furnishes striking evidence in favour of what I have above said respecting a regard for fortifications in the founding of towns: *Ipsum erat oppidum in colle summo, admodum edito loco ut nisi obsidione expugnari non posse videretur. Cujus collis radices duo duabus ex partibus flumina subluebant . . . . reliquis ex omnibus partibus colles . . . . pari altitudinis fastigio oppidum cingebant.*"

[2] CÆSAR, vii. 71: "*Magna pecoris copia compulsa.*"

Cain is historically quite correct in making the tiller of the soil found the town.

An interesting counterpart to this is the Roman rite, borrowed from the Etruscans, of the foundation of a city. A bull and a cow were harnessed to a plough: the bull, being the stronger, on the outside, exposed to attack of the enemy; the cow, being the weaker, on the inner and safe side, towards the future city. Then the lines of demarcation of the town were traced by the plough. The furrows denoted the ditches, the clods of earth thrown up towards the inside the walls; where the gates were to stand the plough was lifted.[1] This rite gives a clear insight into what the intention in founding the town was. It stamps it unmistakably as the work of the farmer; and the walls and ditches to which he confined his labour teach us why he built it—for safety's sake. The interior of the town, which alone in our modern system of building is of importance—the streets, open squares, spaces for public buildings and churches—is not even named. The only things to which he devoted his attention were the walls and ditches, behind which he could withdraw in case of hostile attack, and the gates, which opened to receive him, and shut to oppose the enemy. If the town had been planned with a view to commerce, let us say as a market-place, and not as a stronghold, the market-place or forum would have been marked out first of all.

Jews and Romans agree in accepting the view that the tiller of the soil founded the town; it could not have been conceived by either nation had it not had historic truth to guide it. This, therefore, is evidence of the fact in prehistoric times.

The strongest fortified city cannot ensure absolute security. All the cities in the world have at one time or another been captured—in antiquity Babylon, Nineveh, Jerusalem, Athens, Corinth, Syracuse, Rome, Carthage, Alesia. But something

[1] VARRO, *De L. L.*, v. 143. . . . . *junctos bobus, tauro et vacca interiore, aratro circumagebant sulcum . . . . ut fossa et muris essent muniti. Terram unde exculpserant, fossam vocabant et introrsum jactam murum.*"

else it can ensure, and over and over again has ensured in history. What Clausewitz says of our modern fortresses, that they have frequently been the last pledges of the existence of a state, applies equally to the fortified cities of antiquity. They have enabled the people to hold themselves together in critical situations, in which, otherwise, they would have succumbed. In this sense we can say that the prospect they afford of security, the stability of the people and of the state, date from the foundation of the town; as indeed the Romans date the existence of the Roman nation and State from the foundation of Rome. Politically the fortified town indicates the turning-point in the life of the nations of antiquity, while the transition from the pastoral to the agricultural life can be of significance only with respect to domestic life and the history of civilization.

(*b*) The Town as a Condition of Civilization.

§ 21. The Aryan race has managed to exist throughout thousands of years without towns; their absence, therefore, from the point of view of fortifications above emphasized, has had no injurious effects upon them. Nature had provided them other bulwarks to replace towns—the mountain ranges. Steep mountain-sides afford a more efficacious protection from an invading enemy than the strongest walls can supply. All wars which have exterminated nations have been fought in the plains. War does not venture among the mountains, before which natural fortresses the most powerful enemy invariably pauses in the conflict, even with an adversary numerically far inferior to him (Basques, Montenegrins, Swiss), and thus it is explained how the Aryans were able to continue their retired life for thousands of years unmolested by external foes. A war which throws an entire nation or the public well-being into the balance, such as the Semites and the Egyptians had constantly to face, was never experienced by the Aryans in their original home.

But in other respects they have had to pay dearly for their ignorance of towns: they lacked the impetus to attain to a

higher civilization, which is the indispensable accompaniment of the town. No nation entirely devoted to agriculture, but minus the town, has done much to promote culture: the history of civilization is everywhere connected with the town; often a single town forms a landmark of itself. The reasons for this are so obvious that I should run the risk of losing myself in platitudes were I to explain them.[1] There are three points, however, which I can confidently bring forward without incurring that risk. The first is perhaps outside the meaning of civilization in the sense of what industry, commerce, art, and science have done for humanity; but indirectly it has a remarkable significance for the civilization of nations. It may be thus summarized: the town is the strongest tie which binds people to the soil.

The more man puts into the ground the more attached he feels to it. The herdsman puts nothing in, and can therefore quit it without leaving anything behind him; also the farmer, so long as agriculture is in its first stage, where the annual labour and the annual produce balance each other, and where labour which bears fruit only in the course of years is as yet unknown. This was still the case with the Teutons in the early centuries of our chronology, and thus it is explained that the thought of abandoning the land they had cultivated had nothing objectionable in it for them. Greeks and Latins never left the land on which they had once settled. Why? They put too much into it; they had dug trenches and erected dykes; they had planted olives and vines, and fruit trees—their labour bound them to the soil.

Most of what man puts into the soil, however, is not in the country, but in the town. Not our modern town only, in which on an equal area the wealth amounts to a thousand times the labour and capital of the agriculturist, but in a

[1] I cannot refrain from recommending that these reasons should not be withheld from our youths, as is generally the case. I, at least, cannot remember ever to have been told at school a single word about the immense value of the town for the history of civilization; and I must confess to my own shame that it is only on the present occasion that I have realized it to its full extent.

lesser degree the town in the first period of its existence. Even if the houses in their original form of timber represented ever so small an amount of time and labour, the construction of walls, banks, and ditches had cost all the more time and labour—too much to leave behind in order to start work afresh elsewhere, quite apart from the defencelessness of the people during the march. With the introduction of stone as building material instead of wood, which, historically speaking, has probably been very gradual (walls of the town, temples, public buildings, private houses, paving of streets), the relation between man and his soil assumes still larger proportions, the highest of which it is capable. Of all the ties which bind mankind to the soil stone is the strongest. A town of stone is a stone clamp which for ever rivets the inhabitants inextricably to itself. I know of no instance in history in which a city has been abandoned by its inhabitants of their own free will; a fragment might emigrate in case of over-population, but the rest remained in the town. No city in the wide world has gone to ruin through the inhabitants forsaking it, but only because the fire and sword of the enemy have swept them off the face of the earth, or the force of the elements—earthquakes and the violence of the waters—has destroyed them. In this sense we may say that every city is built for eternity. Even the smallest modern towns have this lot of the "eternal city" in store for them. Rome has the advantage over them only in a longer past: the future prospect is the same; the storms which once threatened the existence of cities belong to a martial period which lies far behind us.

So it is that the town forms the chief definite cause of the settlement of a people. If the Teutons had known towns, history would have nothing to relate of the emigration of whole German tribes, with their old men, their women, and their children; but they did not know them, and therefore it was easy for them to forsake a land in which they left nothing behind. Their wooden houses were so constructed that they could be taken to pieces and packed into their

bullock-carts. The Greeks, Italians, and Gauls did not leave their homes when they had once obtained them—they could not, because they were tied to them by the cities which they had built.

Secondly, I wish to emphasize the importance of the town for the realization of the law of the division of labour, which has historically reached perfection only with and in the town, since it alone affords the requisite conditions. The agriculturist of remote ages himself provided all his own necessaries; but in course of time domestic industry gave rise to certain handicrafts which required special skill, such as that of the blacksmith, who, historically, was the first artizan (Vulcan!). But the existence of the artizan in rural districts was and always will be a precarious one; he begins to thrive only in the town, which secures to him, in addition to the possibility of certain and increasing work, facilities for procuring the necessary utensils, tools, materials, the manufactures of merchants and other craftsmen, whose competition gives him an incentive to perfect himself as far as possible: an incentive which the countryman lacks; he knows nothing either of division of labour or of competition. Thus the artizan of necessity settles in towns, his appointed place. The same applies to the tradesman, who in ancient times, as pedlar, hawked his goods from house to house: from him have developed the established merchant of our city, the tradesman with his shop, and the wholesale dealer with his warehouse. Handicrafts and commerce seek customers no longer—they are sought; and for them, as for the nation, the town implies settlement—migration is at an end. Experience leads them to branch off more and more; the law of division of labour fulfils itself in ever-increasing proportions. From the material handicraft with which it started, it rises to the intellectual, and finally includes all branches of combined human effort: commerce, art, science, and statesmanship.

The ancient Aryan knew no towns; neither did the Germans at the time of Tacitus: therefore neither of them ever got beyond the first principles of civilization. Babylonians and

Egyptians were acquainted with towns in the very earliest times; hence the flourishing state of their civilization: and so we need no longer remain in the dark as to whence came the extraordinary advance in civilization amongst the Greeks, Latins, and Celts over the Teutons: they had towns. Their possession of them at such a very early period was due to their intercourse, direct or indirect, with the two Eastern civilized nations, which intercourse was denied to the Teutons and to the Slavs.

A third feature must be added to complete the picture of the town, one which is of special interest, as it is the only one which the Greeks and Romans make prominent: the town as the seat of refined manners. According to both nations the town produces a different man from that produced by the country. The townsman is well-mannered: the countryman unpolished. The contrast between these two is clearly exhibited in the Greek and Latin languages: ἀγρεῖος and *homo rusticus* (=boorish, uncouth, clumsy, coarse), and ἀστεῖος[1] and *urbanus* (*urbanitas* = polite, well-mannered, courteous). Aristophanes gives us a lively picture of the bearing of the countryman—his brawling and shouting when he comes to town, and his uncouth manners. The ancient conception which attributes the origin and home of courtesy to the town is confronted in modern languages, both Romance and Germanic, by another, which makes the Court the historical centre of good manners: *cortesie*, *courtoisie*, *cortesy* (from *curtis*=court), etc., courteousness[2] from court, gallantry from *gala*=court-dress. Which of the two statements is correct? Language cannot lie; in matters in which the people have a voice it always hits the truth; and this is so here. Both statements are correct: each for its own time. With the Greeks and Romans it has in fact been the town to which they owe the origin of their refinement.

[1] From the two names for towns (ἄστυ and πόλις) the Greeks employed the one in the form of the adjective in the above sense, and the other in πολιτικός in the sense of political culture of the townsman.

[2] That derived from the idea of knightly courtesy (*cavalleresco*, *cheveleresque*) points more to sentiment than to outward manners.

But not an ordinary town, although no doubt even this stamps its people with a type different from that of the country folk—stamps even the educated, who, like the country clergyman and surgeon, have no intercourse except with each other. Bœotia had towns, and yet the Bœotian was an ill-bred, boorish rustic compared with the Athenian. It was therefore not the town, as such, which exercised this influence; but the town in question was Athens—Athens, the city of the world, the metropolis of intelligence. Similarly with regard to Rome. Which of the residential cities of the Middle Ages has been able to compete with them in these two respects? Compared with them the other cities were but country towns, whilst these two deserved the name of republican capitals and residential cities. There was only one residential city in the Middle Ages which could compare with them—Constantinople; and from Constantinople the Western countries have obtained their courtly manners: in not one of their courts have they originated—all have either directly or indirectly borrowed them from the Byzantine Court.[1]

The first to do this was Theodoric, who had been educated at the Byzantine Court, and presented his Ostro-Goths with the Byzantine Court ceremonials. By the same route, and by marriage with Byzantine princesses, good manners reached the other Courts of the Middle Ages; Constantinople was the High School of good breeding—a place of education for the "unlicked cubs" of the North. But even in Constantinople Court ceremonial was not original; its history dates back to the Imperial Court of Rome, from that to the then Persian Court, which, in its turn, received it through Cyrus and Darius from the Babylonian Court. The spirit which animates it stamps it as a Semitic growth; it is the spirit of submission and self-abasement; while the social forms of the Aryans are founded on the idea of self-esteem and equality. Our modern forms of submissiveness in social intercourse are of Oriental origin; not emanating from the people, but artificially incul-

[1] I give in the following the results of my historical researches concerning social forms as treated in the second volume of my *Zweck im Recht*.

cated by the Court. For a second time the influence of the East upon the West with regard to the forms of social intercourse has been witnessed in Spain by means of the influence of the grave punctilious demeanour of the Moors. The Spanish *grandezza* is the offspring of Byzantinism mingled with Arabism. But everywhere it is the Court which has influenced the style of the people, not changed it. Courtly manners must not be regarded as the essence of the good breeding of the people which has forced itself into the higher classes of society; but they were matured at Court, and thence have descended to lower classes, with whom they had business transactions, and through them to the people at large.

In this manner the Courts have become the High Schools of good breeding: one might almost lay down the maxim: *As the Court, so the people.* In the habits of the common people may be detected how the Court, to which in this respect they owe their training (both in temporal and spiritual matters), has been occupied;[1] just as we may detect the absence of that influence with nations which never possessed a Court (the Swiss and the North Americans). Most Courts have derived their refined manners from other Courts—during the last century and a half from the French Court, where princes and noblemen's sons were sent to be polished, as they were once sent to Constantinople. Only the Italian Court during the time of the Renaissance, and in conjunction with it the French Court —especially that of Louis XIV., who prided himself upon being the most polished gentleman of his kingdom, an opinion which he never renounced—retain an independent position in this respect. These two Courts—thanks to their knowledge and appreciation of art and science—have freed courtly manners from Byzantinism, under which they as well as national manners would otherwise have languished much longer; they mark a turning-point in the history of courtesy: the transition of the submissiveness of Byzantine-Oriental manners to the Old Aryan idea of self-esteem, which was

[1] I must deny myself a closer examination of this subject. Anyone wishing to test it by examples will find my statements confirmed.

never lost sight of by Greeks or Romans in their time of prosperity, and which forms an element in the good breeding of the present day.

All this shows that the more modern languages, with their derivation of "courteousness" from "Court," are historically quite correct. When Greeks and Romans speak of the "town" instead of the Court, which at the time of their zenith of fame was unknown to them, the difference is not so great as appears at first sight. The "town" which they had in view was not a town of the ordinary kind; it was either Athens or Rome, which, for the time being, occupied in every respect the same position as one of the largest capitals and residential cities occupies now—the centre of all authority, of all political power, the *rendezvous* of the master-spirits in all spheres of life, national as well as foreign, the metropolis of intelligence, the seat of luxury, of social representation, and of high life. We may, therefore, look upon them as the capitals and residential cities of antiquity, a counterpart of Monarchy on Republican soil; and, viewed in this light, the ancient conception of the Town and the modern notion of the Court as the school of good breeding join hands—they amalgamate in the capital of the realm.

3. *The Wooden House and the Stone House.*

§ 22. Our inquiries have so far revealed two contrasts in the outward life of Aryans and Babylonians (1) pastoral and agricultural pursuits, and (2) village and town life, both of far-reaching influence in respect of civilization and national character. With the second is closely connected a third, which at first sight appears of but little importance, and yet, as will be shown, is of very considerable significance—the contrast between the Wooden House and the Stone House. The latter two contrasts are not synonymous: there are *towns* which in reality consist only of wooden houses—as, for instance, in Siberia; and even in Constantinople they occupy a large area. On the other hand, there are *villages* built entirely of stone houses. Whether, however, there be not some connection,

if not between the village and the wooden house, at any rate between the town and the stone house, the following will disclose, its object being to answer the question: Why did the Aryans know only villages, whilst the Mesopotamians were acquainted with towns?

If the question were raised: Where was stone most likely to be first used as building material?—where Nature provided it ready to hand, or where she withheld it? who would have any doubt as to the answer? And yet it would not be the correct one. Nature furnished the Aryans with stone, in the stony rocks of their mountains, but withheld it from the Mesopotamians in their stoneless plains; and yet the Aryans built of wood, the Mesopotamians of stone. It is easier to cut down wood than to break stone, and this gives us the key to the problem why the Aryans employed wood and despised stone.

If the Mesopotamians had had the same choice, the result would have been the same; but Nature denied it to them. In the southern part of the land, which at one time had been covered by the sea, no forest ever existed, and in the northern part, where doubtless it had existed in remote ages, it had at an early date yielded place to the plough. In the fruitful plains—and no more fruitful land could be found than the alluvial soil of the Tigris and Euphrates—no forest could have long remained; it was driven more and more towards the mountains before the plough, which could not follow it there. Only fruit trees and date palms, which by their produce pay for the ground they occupy, could hold their own;[1] but of timber, which the forest alone can supply in adequate quantities there was none;[2] woodlands did not exist in those regions.[3]

[1] Oil and dates are often quoted as matters of legal transactions in Babylonian law. How important a part in the estimation of the people the fruit tree played in primitive times is shown in the Old Testament story of Paradise, in which the first man fed on fruit. The prototype of Paradise is the fruit and pleasure-garden of the Babylonians.

[2] As to how the demand was supplied for building and other purposes, see page 163 *sqq.* For large public buildings, of which I shall speak later, no wood was used—they were built entirely of stone; but in private houses it was needed to construct the floorings between the different storeys (in Babylon regularly 3—in Tyre and Carthage 5–6) and the roofs. "Wood did not come to be applied for

But stone also was withheld from them by Nature. In the low lands there were no rocks from which it could have been hewn. The traveller of to-day meets with hardly a single stone there. And yet it was at this spot that stone-architecture first saw the light thousands of years before it appeared amongst the Aryans, not only the Aryan mother-nation, but also the Aryans of Europe (see below). The Semites, when they entered the land, found it already known to the Akkadian-Sumerians, and from them the Egyptians seem also to have received it. And so the name of a people, with which we became acquainted but a few years ago, is coupled with the glory of having contributed one of the most important advances in the progress of civilization, and that at a time when the rest of mankind was still buried in sleep.

The means by which they attained it was the employment of clay for the preparation of an artificial stone, of bricks, and of asphalt as mortar. Mention is made of this in the Old Testament at the building of the Tower of Babel. There was no lack of asphalt springs in the country. And so the stepmotherly treatment of Nature, which had withheld from mankind the natural building materials, wood and stone, became an incentive to them to use their intellect, and artificially to provide themselves with what was necessary. Nature's disfavour became a blessing to the Semite, even as her favour became a curse to the Aryan—Nature had made life too easy for him!

artistic purposes, such as columns, wainscotings, statues, costly doors and gables, until the time of the Phœnicians, who had a material provided for them in the cedars of Lebanon, which could not be rivalled elsewhere. How deep an impression these edifices, in which timber-work predominated, must have made upon the Assyrian kings, the inhabitants of districts destitute of wood, is clear from the circumstance that they, regardless of the difficulties attending the transport of wood, immediately sought to construct similar buildings at home" (THOMAS FRIEDRICH, *Die Holztechnik Vorder-Asiens im Altertum*, p. 5. Innsbruck, 1891). [For a more detailed account of the applications of wood by the Phœnicians see the same book, pp. 9–19.] The work also affords testimony as to the wide diffusion which this Phœnician style of architecture obtained (Asia Minor, Greece, Italy).

[3] Evidence of the same, not hitherto noticed, is found in the Babylonian account of the Deluge, when reference is made to the "beasts of the *field*" (not of the *forest*) (see § 28).

Bricks were manufactured in two ways — by a process of drying in the sun, and by burning in the oven (fire-brick). The former method, as being the simpler, easier, and less perfect, is thought to have been the original; the latter, as the more artificial and more perfect, the later; but it is certain that it was also known in the earliest times.[1] What was requisite was a suitable oven or kiln, and we may presume that such kilns were found in every city; they were needed, not merely for the burning of bricks, but also for the clay tablets on which all business-records were inscribed (§ 25). In the Old Testament they are frequently mentioned: the well-known "fiery furnace," large enough to hold three men, could have been nothing but a brick-kiln.

The stone baked in the oven had the advantage over the sun-baked stone in hardness, firmness, and durability. To what degree these qualities were secured is shown by finds in Babylon, Nineveh, and elsewhere: up to the present day they excite our admiration for their indestructibility. The process of burning had a further advantage — it made it possible to give the stone a glaze, and, by means of the different colours used for that purpose, to produce a certain decorative effect.[2] On the other hand, the manufacture of fire-brick in these regions, destitute as they were of wood, was handicapped by the necessarily high price of fuel, rendering it considerably more expensive than that of the sun-burnt stones, which anyone could make for himself by drying his bricks in the sun. The former was, therefore, used only for public buildings, and even here the intervening spaces were filled up with sun-burnt stones, while the dwelling houses in Babylon were,

[1] The Old Testament makes mention of them in connection with the building of the Tower of Babel (Genesis xi. 3): "And they said one to another, Go to, let us make brick, and burn them thoroughly. And they had brick for stone, and slime had they for mortar." For the correct translation, see FRANZ DELITZSCH'S *Neues Kommentar über Genesis*, p. 230. Leipzig, 1882.

[2] An example of this is found in the records of the ancients as to the temples of Nebuchadnezzar. In this temple of the seven spheres of heaven and earth, each storey was decorated with differently coloured bricks from bottom to top—black, orange, red, gold, white, dark blue, and silver. (HOMMEL, *loc. cit.*, p. 116.)

like those of the Jews, no doubt constructed of sun-stones. We find fire-brick work in the earliest times also amongst the Egyptians. From the Old Testament we know that the people of Israel, during the Egyptian bondage, had to perform task labour (Exodus i. 14: "And they made their lives bitter with hard service, in mortar and in brick"); and the oldest extant Egyptian pyramid (that of Sakkara) is built of fire-brick.[1] The use of fire-brick in a country so rich in natural stone as Egypt is too remarkable a phenomenon to be passed by without seeking some explanation of it. Why was fire-brick employed when the natural stone was ready to hand? No other explanations offer themselves excepting the one suggested by Hommel, who sees in it "the remains of a former habit contracted in a place of abode where no other material was available," or the assumption that the Egyptians obtained the art of fire-brick building from the land where Nature herself ordained it, and where it was familiar from the very earliest times—that is from Mesopotamia; and this seems to me the more likely of the two hypotheses. From the earliest times, intercourse took place between Egyptians and Semites.[2] The art of brick-burning might in this way have been brought by means of the Jews from Babylon to Egypt;[3] and during the time of their Egyptian bondage, it was they who had to make and burn the bricks for their masters (Exodus i. 14). This view is confirmed by the earliest shape of the Egyptian pyramids as preserved in that of Sakkara; it was that of the Babylonian tower or temple-tower; thence the straight-lined pyramid issued later, the protrusions of the different storeys being sloped down.[4] Thus the first period of Egyptian architecture is characterized by its similarity to the Babylonian in two important points—in the use of bricks, and in the temple-tower. In the second period quarry-stone takes

[1] HOMMEL, *loc. cit.*, p. 18.

[2] The Old Testament story relates how Abraham went into Egypt (Genesis xii. 10); and again the children of Jacob (Genesis xlii. 2; xliii. 2).

[3] The Old Testament story transfers it from the building of the Tower of Babel (Genesis xi.) to the time of their first separation from Babylon, *i.e.*, before Abraham's journey into Egypt.

[4] Illustrated by HOMMEL, *loc. cit.*, p. 16.

the place of brick, and the pyramid that of the storeyed building. If, in addition to this, we take into account that our extant Egyptian records date back only to about 2700, whilst the Babylonian go back to about 3800,[1] we can scarcely doubt the historical priority of Babylonian over Egyptian architecture, and accord to the Babylonians (Akkadian-Sumerians) the glory above claimed for them (p. 99), of having in architecture become the teachers of all the nations of the world, without any exception. The people were fully aware of their surpassing ability in this direction, evidence of which I find in the Old Testament story of the building of the Tower of Babel. The tower (a storeyed temple) had to "reach unto heaven, and let us *make us a name.*" (Genesis xi. 4.)

The idea evidently was to construct a building which should excite the astonishment of all nations, and show them that in architecture the Babylonian was not deterred by the most difficult of problems. God Himself comes down to view the work (xi. 5), and He is wroth over the presumption and arrogance of mankind, and resolves to put a violent end to the building by confusing the tongues of the children of men, so that they may no longer understand one another.

Legend is not a mere "baseless fabric"; it starts from concrete facts, from historical events, existing institutions, linguistic expressions, which it explains, embellishes, and remodels in its own way. Let us consider the building of the Tower of Babel with this in our minds: the legend must contain the germ of a historic fact. Of its three prominent features—the height of the contemplated structure, the fact that it remained unfinished, and the confusion of tongues—the first is historically beyond all dispute; structures of such height as those in Babylon were nowhere to be found in the then known world.[2] The second feature we are enabled to

[1] According to HOMMEL, *loc. cit.*, pp. 12, 13.

[2] On the fortifications see § 24. With them the height is obviously an object. But why this extraordinary height of the temple (estimated by Strabo for the Temple of Belus at 600 feet)? This question I hope to answer in § 24.

verify by a recent discovery—the account by Nebuchadnezzar (grindstone) in which he states that he has accomplished the building of a structure commenced in remote antiquity by some ancient king, and left unfinished,[1] and "in later years" fallen into ruin—it is the seven-storeyed glazed and coloured temple-tower referred to above (p. 100, note 2), the only one which history records as uncompleted. The fact that such a mighty piece of work should have been abandoned after it had been commenced was so remarkable a fact that it is no more to be wondered at that the remembrance of it remained fixed in the mind of the Jewish people (who, according to the Old Testament version of the national tradition, soon after left Babylon), than that the legend should seek to explain its cause. With this purpose it made use of the divinely-decreed confusion of tongues. This feature of the legend must also be founded on some historical fact, and I think it may be detected in the multitude of languages which were then spoken in Babylon, and which at a common work of this kind, in which the whole population had to take part, would naturally be prominently noticeable, and consequently inseparably connected in the mind of the people with the memory of the building. Even the native population of Babylon spoke different languages—the Semite a different one from the Sumerian, and the Sumerian from the Cossaer.[2] Now it is exceedingly probable that the Babylonians had the drudgery of the building executed by subjugated tribes (§ 23), just as the Egyptians utilized the Jews, and thus there were added to the languages of the native free population their own peculiar idioms; so that in very fact a confusion of tongues reigned at the building of the Tower. According to the naïve popular view to which

[1] Even now the structure, with only four extant storeys, reaches 150 feet above the plain (HOMMEL, *loc. cit.*, p. 116). This author does not regard this as the tower of the Old Testament legend, but finds it in another even more imposing structure (that of Sagilla), (p. 117); but this view misses the crucial point—the historic reference to the cessation of the building; in the former structure we can find it, but not in this one.

[2] HOMMEL, *loc. cit.*, pp. 6, 7.

the Mosaic record (Genesis xi. 1) on this occasion gives expression, the whole earth till then was "of one language and of one speech." (Genesis xi. 1). This indicated the way the legend had to deal with the contradictory fact that at the time of the building several languages were spoken: God confused the tongues of the children of men, to put an end to the work which they had planned in their presumptuousness, and which had called forth His wrath. In this way not only the multitude of languages, but also the cessation of the building, are explained, and the one explanation meets both points.

For the present I will leave the architecture of the Babylonians, intending later to enter more fully into a description of it: for my immediate object the testimony so far obtained will suffice. In remote antiquity the Babylonians were already acquainted with the art of masonry. We might assume that the Aryan mother-nation was ignorant of it in the original home, even if it could not be traced in a direct way (p. 22), from the fact that the daughter-nation, when it settled in Europe, was not acquainted with it—some branches not even well on in historic times. The fact is too important for me to omit proving in detail. The contrast between timber work and masonry is for many thousands of years closely connected with the distance in civilization between the Aryans and the Semites. It has so wide a bearing that one could hardly believe it at first sight, and, to my mind, this has so far not been duly acknowledged.

It was with the Greeks that timber work first gave place to masonry. They learnt it from the Phœnicians and the Egyptians, with whom they were the first Indo-Europeans to come into contact. According to the opinion of competent judges, the influence of timber work can be clearly noticed, even in Greek architecture of later times, in the columns and beams, which were designs of timber work executed in stone.

The oldest sanctuary of Delphi was a hut made of laurel branches; and even in historic times, according to Pliny

(*H. N.* xxxvi. 15, 23), the town hall of the Cyzicans (βουλευτήριον) was a wooden structure after the plan of the Germanic houses, which admitted of being taken to pieces.

The Latins knew nothing at the time of their migration but timber work; in the remains of their underground settlements which have been discovered in the plains of the Po there is not a trace of the use of stone or brick;[1] and the same is true even of the Romans during the regal period. The Temple of Vesta was originally a hut, with walls of wicker-work and roof of straw.[2] The *casa Romuli*, the *curia Saliorum*, and the Roman chapels of the *Lares compitales*[3] are the same. How long a time wood prevailed in Rome is proved by the well-known statement of the XII. Tables, which identifies the foreign building material then in use with *tignum*, *i.e.*, beams of wood; and I do not consider it at all improbable that the wooden house was at that time counted by Romans, as by Teutons, among their movable goods. In this way we might explain why the law, which is otherwise so correctly expressed, mentions only the *fundus* in the well-known decision upon the *Usucapion* of immovable goods, when it would have been so simple a matter to add *aedes*.[4]

Rome at the time of the invasion of the Gauls could

[1] W. HELBIG's *Die Italiker in der Po-ebene*, p. 12. Berlin, 1879.

[2] HELBIG, *loc. cit.*, p. 53. [3] *Ibid.* p. 52.

[4] CICERO (*Top.* iv. 23) is therefore right when he remarks: "*at in lege aedes non appellantur et sunt ceterarum rerum omnium, quarum annus est usus.*" The analogous extension of the law as defended by him had at the advent of the stone house been anticipated by jurists long before him; and hence the fact that during the period of wooden structures some other building had to serve for the house (*i.e.*, the same as in the case of 1.60 de A.R.D. (41, 1): "*ex tabulis ligneis factum mobile*") seems never to have struck them; and thus it happens that GAIUS (II. 42, 52) places the equivalence of *aedes* and *fundus* as far back as the XII. Tables. Etymologists find the derivation of the word *aedes* in the root *idh* (*aid*)=to enflame, to burn (VANICZEK, *loc. cit.*, i. 85), and this might lead to the supposition that the representation of the inflammability of the wooden house has originated the word — the Teutons count it amongst the things consumed by the torch—but the derivation from the hearth (*aedes*= fireplace) is more probable.

scarcely have fallen a victim to the flames if the town had not consisted mainly of wooden houses.[1]

The Celts of Strabo's time still lived in round huts made of planks and plaited rushes covered with straw.[2] They employed stone only for their fortifications; but of entire stone walls they were ignorant, even in the time of Cæsar.[3] The framework was made of wood, and stone and earth were used to fill it up. The Teutons remained one stage behind the Celts. When the latter had reached the stage of large fortified cities,[4] the Teutons were still living in open hamlets and in wooden houses, which were so arranged as to admit of being taken to pieces and carried on bullock-carts during their march. The example of the Cizycans, quoted above, confirms the view that this custom, unknown to the mother-nation, dates from the period of migration of the daughter-nation. This is why the Teutons include the house among their "movable goods." The house of the Teutons is the counterpart of the tent of the Nomads; it recalls to our minds a people in whom the desire for wandering is always strong. Had the Teutons been acquainted with the stone house, they would not so readily have exchanged their place of abode for another, and the whole of German history would wear a different aspect, for stone is (to repeat my former statement) a clamp which chains mankind to the soil. A people that has got as far as stone houses, or even as far as stone fortifications, does not lightly desert all the labour that these represent. A portion of them may emigrate through over-population; but a whole nation, or a whole tribe, never emigrates. If acquaintance with the art

[1] It is evident that masonry was at that time already in use for private houses from the fact that all citizens, according to LIVY (v. 55), had permission to erect stone houses: "*saxi materiaeque caedendae, unde quisque vellet,*" and that the State provided them with bricks for the purpose. The demolition of the city by fire about that time no doubt marks the transition from timber work to universal masonry.

[2] HELBIG, *loc. cit.*, p. 2.

[3] CÆSAR *De Bello Gall.*, vii. 23. According to Helbig they constructed their fortifications merely of wood and earth; but Cæsar expressly says "*intervalla grandibus in fronte saxis effarciuntur . . . . singulis saxis interjectis.*"

[4] I refer to Alesia, p. 88.

of masonry be assumed on the part of the Teutons, the whole chapter of the migration of nations would be absent from history.

With the wooden house of the Teuton is connected his isolated living, which Tacitus[1] emphasizes as a peculiarity of his. The reason for it has been sought in the desire for isolation inherent in the Teutons above all other nations. On the same principle we ought to accept it for the Greeks, for they also, like the Teutons in ancient times, lived in open hamlets; and this custom, according to the account of Thucydides, continued to prevail amongst the tribes backward in civilization, dwelling in the north-west of Hellas, until the time of the Peloponnesian War. The true reason was indicated by Tacitus when he attributed it to the danger of fire.[2] The most casual consideration shows, as a matter of course, that, owing to this danger, wooden houses should not be built close to one another where space permits otherwise;[3] and even at the lowest stage of intelligence man has sense enough to guard against this danger and to make his arrangements accordingly. It has therefore nothing to do with the alleged desire for isolation on the part of the Teuton; and if this

[1] *Germania*, 16: *colunt discreti ac diversi;* he adds further: *ne pati quidem inter se junctas sedes*—in modern language: "it was a police order that no house might stand immediately next to another."

[2] "*Adversus casus ignis remedium.*" When he adds "*sive inscitia aedificandi*" he may have hinted at the neglected application of stone.

[3] The result of the close proximity of wooden houses in a town is seen in the terrible examples of the destructive fires in Constantinople and the Russian towns. In Constantinople, according to a paragraph which has just gone the round of the newspapers, the German *Handwerker-verein* has been burnt down three times in the course of thirty years. In Moscow, during a fire in the year 1834, more than 1000 houses fell a prey to the flames. In St. Petersburg fires used to be, and to a scarcely less extent are now, the order of the day; consequently the police have ordered a water-barrel to be placed on the coping of every roof; the barrel, however, is generally empty, as it is too much trouble for the police to ascertain whether the water is really there or not. SAMSON-HIMMELSTIERNA, *Russland unter Alexander III.*, pp. 12, 288. Leipzig, 1891. An example from antiquity is afforded by Xanthus in Lycia, which was twice burnt down, whence THOMAS FRIEDRICH, in his *Die Holztechnik Vorderasiens im Altertum*, p. 3 (Innsbruck, 1891), rightly infers that it must have consisted of wooden houses.

were really a peculiarity of his, the law of causality between himself and the detached dwelling should be reversed: it is not *he* who is the cause of *it*, but *it* of *him*. Again, isolated living was the result of the wooden house, and we may take it that the old Aryans did not act differently in this respect from the Greeks, Teutons, and probably all other Indo-European nations of antiquity. Conclusive evidence of the dread the Teutons had of fire appears to me to be contained in the linguistic fact that the meaning of *Ansteckung* (contagion) in a metaphorical sense, viz., in sickness, is derived from the natural *anstecken* (to set fire to: Weigand, *Deutsches Wörterbuch*). Through fire, speech (*i.e.*, the people) first became conscious of the meaning of *Ansteckung*, *i.e.*, the transfer of an evil from one to another by touch.

The Babylonian did not know this danger. His stone house protected him from it. The only contagion he dreaded was that of the pestilence, which is named first amongst the plagues decreed against the Babylonians by evil spirits; after it come floods, earthquakes, failure of crops, etc.;[1] fire is not even thought of. Nor in the two lists of visitations, with which God threatens the people if they will not keep His commandments (in Levit. xxvi. and Deuteron. xxviii.), is fire mentioned. All conceivable evils are enumerated: pestilence, barrenness, famine, wild beasts, enemies, destruction of cities, poisoned air, locusts, vermin, worms; but of fire no mention is made. I do not remember having read of any case of fire in the Old Testament; neither do Babylonian-Assyrian accounts refer to any. How expressive is this twofold silence, illustrating, as it does, in a striking manner the contrast between the stone house of the Semite and the wooden house of the Aryan!

By none of the Indo-European nations has the wooden house been so long retained as by the Russian. Until the present day, timber-work is the general rule in many parts of the Russian Empire (for instance, in Siberia), excepting only churches and public buildings; even when founding

[1] HOMMEL, *loc. cit.*, p. 254.

St. Petersburg, Peter the Great, who in everything else copied Western European institutions, adhered to the national tradition; and the wooden house which he built for himself may to this day be seen, protected by a stone house built over it.

What can be the reason that of all other Indo-European nations the Russian alone has not renounced the old Aryan timber-work? It cannot have been the difficulty of procuring stone (brick) materials, for timber-work has been maintained where quarry-stone was easily available, apart from the possibility of procuring bricks, which are obtainable almost everywhere. Nor can it have been for lack of knowledge of masonry, which was, on the contrary, promoted by the long-established intercourse between Slavs and Byzantines. No other reason seems to remain (for we can hardly advance the easier heating process of the wooden house as an advantage over the stone house) than the greater ease and cheapness of its construction, which, considering that an entire nation allowed itself to be influenced by such a motive in favour of employing the inferior material, is synonymous with a tendency to indolence, a dread of heavy labour, which are indeed characteristics of the Russian people (Book VII.). The Church alone has understood how to enlist for itself the working faculties of the people; all buildings belonging to it, both churches and monasteries, were from time immemorial built in stone. And they have well repaid the people.

During the oppression of the Mongols, the monasteries, fortified according to the pattern of the old fortresses, rendered inestimable services; they were the only bulwarks which resisted the invaders, and formed the centre of the nation's struggle for independence. Stone has gloriously vindicated in Russia the virtue ascribed to it as a means of fortification (p. 90). It shattered the onset of the Mongols; without it they would have prevailed.

I will sum up the results of my discussions in one sentence: For thousands of years the distance in the degrees of civilization

between Aryans and Semites turns upon the difference between timber-work and stone-masonry; where the former gives place to the latter, it is through the direct or indirect contact of the Aryans with the Phœnicians and Egyptians, and it has become a guide to determine the chronological order in which it takes place (Greeks, Romans, Celts, Teutons, Slavs). The following view reverts to the stone-masonry of the Babylonians. This is in order to add to the above-mentioned technical side of architecture the other side, which alone justifies me in bringing this matter within my horizon: that of civilization.

The wooden house of the Aryan is not of the slightest interest in the history of civilization; it has hindered rather than helped it on its way. But for the Babylonian, masonry is a civilizing factor of the first importance. Stone, we might almost say, has become the corner-stone of the Babylonian world. Everywhere the historian is bound to refer to it, as will be shown more fully hereafter.

4. *Architecture in Babylon.*

(*a*) Building Trade—Sabbath Rest—Measurement of Time.

§ 23. The construction of the Aryan hut demanded neither heavy labour nor skill. Anybody could easily make it for himself. But it was another thing with the mighty structures of the Babylonians; there both labour and skill were needed in the highest degree. Each of those buildings contained more sweat than the Aryans shed in a thousand years!—the scorching Mesopotamian sun took care that it trickled freely down the labourers' brows, and thousands of hands had to work together for years to complete such structures as the temple-towers, the palaces, and hanging gardens of the kings, and the walls of Babylon (see below), which put even the former into the shade.[1] The art of building was an addition to the heavy labour which agriculture laid upon the people,

[1] According to the Biblical account of the building of Solomon's Temple, three thousand officers were employed to survey the work of eighty thousand builders in stone and wood and seventy thousand labourers. The building took seven years to complete.

against which the Aryan had nothing to set beyond the arduous task of watching and tending his flocks. It is surely not too much to say that the work performed by the two peoples in the course of a thousand years stands in the ratio of a hundred to one. And those who realize what labour means for a people will understand why I grant to the extraordinary difference in the manual performances of the Aryans and Semites a proportionate influence upon their respective national characters.[1]

But zealous hands alone were not sufficient for the accomplishment of these structures. The plans of the building had to be made, the measurements fixed, the weight of the enormous masses of stone which the ground had to bear in order to make the foundation sure had to be calculated, and the execution of the work had to be superintended and surveyed by competent persons; in short, there was need of the expert as well as the labourer to whose share the rough work fell, and by the side of the builder the architect. And so architecture in Babylon necessarily led to division of labour. This is the earliest historical instance we know of the separation of head and hands, of the realization of the law of division of labour on a large scale, and of the contrast between building proper and architecture.

In the first place I will consider building proper. The points which I have to bring forward are somewhat problematical, since I can supply no direct proofs for my statements; and the question therefore will be whether the intrinsic reasons offered outweigh the absence of positive historical evidence.

We learn from the Old Testament that during their bondage in Egypt the Jews were employed by the Egyptians to execute the rougher parts of their building operations. Task-masters were set over them to supervise their work (Exodus i. 11), and of the seven days of the week one was granted to them as a day of rest (Deuteron. v. 15). Herein we get an idea of the organization of the building industry among the

[1] I will revert to this again (§§ 35, 36).

Egyptians, and I have no doubt it took the same form in Babylon.

It has been proved above (p. 101) that the Egyptians acquired the art of brick-building and the original shape of their subsequent pyramids, the temple-towers, from the Babylonians; and, bearing this in mind, a high degree of probability must be granted to the assumption that the same was the case with regard to the organization of the building industry. The Babylonians must also have employed for their rough building work conquered tribes, which they imported for the purpose, and then compelled to work under the survey of taskmasters in exchange for the bare necessaries of life. The advantage of laying the burden of rough labour upon foreign tribes instead of having it performed by free men for wages, which in the case of these gigantic buildings might have exhausted the richest treasuries,[1] was too obvious to escape the notice of the practical Babylonians. The removal of the Jews during the time of the Babylonian exile is a well-known example of the transportation of whole tribes to Babylon.[2]

[1] My less well-informed readers will gain some idea of these structures from the walls of Babylon and the waterworks, not to speak of several other public buildings. As to these I follow HIRT, *Geschichte der Baukunst bei den Alten*, vol. i. pp. 134–158. Berlin, 1821. The circumference of the outer walls amounted, according to Herodotus, to 480 stadia (=nearly 60 English miles). In addition to the town proper, which again was surrounded by inner walls not much inferior in strength, it encompassed an area set apart for fruit and pasture land, for the purpose of supplying food in case of a siege, the circumference of which was about twenty times as great as that of the city itself. The height of the walls, according to the lowest estimate of the ancients, measured 300 feet; according to the estimate of Herodotus, which is scarcely more trustworthy, 200 yards, which Pliny alters into 200 feet. As regards the width, the estimates vary from 32 to 100 feet. Four four-horse chariots could pass each other on it. Besides this there were 250 towers, each 10 yards higher than the wall, and 100 gates of bronze. In order to throw a bridge over the Euphrates, which divided the city into two parts, beneath which there was a tunnel leading from one fort to the other, they had temporarily led the river into an artificial lake, which had the double object of collecting the superfluous water in case of unusually high floods, and of letting it out into the canals in case of scarcity of water.

[2] But they were not employed in hard labour; at any rate the Old Testament makes no mention of it; and this is not to be wondered at, since only the more distinguished were brought to Babylon, while small folk remained in the country.

Possibly this had already been the lot of the primitive inhabitants of the country, the Akkadians and Sumerians, subjugated by the Semites; but in any case it is more than probable that a powerful nation, such as the Babylonian at the time of its zenith, should have thrown the burden of their building operations on to the shoulders of others.[1] Hard labour has throughout the whole of antiquity been performed by captives; the acquisition of cheap labour was once the principal motive of war (man-hunting), as it is at the present day in Africa.

The labourer could not work every day throughout the year. He would have succumbed under the burden of his toil: he needed a periodical day of rest. The seventh day was chosen for this purpose, the familiar Jewish Sabbath. The derivation of the word from the Assyrian *sabbattu* = rest, celebration, shows that the institution of a day of rest was originally Babylonian, not Jewish. Six days a man shall labour, on the seventh he shall rest. It has been attempted to bring this saying of the seven days' week of the Babylonians in connection with the seven planets, only it is not clear what the planets have in common with the organization of labour. However, even assuming that the days have been named after them, the institution that six were for labour and one for rest cannot in any way be connected with them. To explain the institution we must, I think, abandon the number seven, and, starting from the number six, try to discover the reason why the Babylonians fixed the number of working days at six. I believe they were guided in this—as they were in their division of the day into twelve hours (see below), of the year into twelve months, of the *mine* into sixty *shekels*—by the duodecimal system. Twelve, and even nine, working days were too many;[2] therefore they chose six. A nation with the decimal system would have chosen five.

[1] This was done by the Assyrian King Sennacherib with the war-captives of the land of Chatti when building warships. F. DELITZSCH, *Wo lag das Paradies* (?), p. 76. Leipzig, 1887.

[2] In the time of the French Revolution it was proved that man cannot work uninterruptedly for nine days. When they made the attempt with the ten-day system they had to come back to the six working days. In the railway system the same experience has been gained.

It is beyond doubt that the seven days' week was a Babylonian institution; and it is equally certain that the seventh day was set aside as a day of rest,[1] proof of which lies in the fact that it was so fixed for the labourers.

No direct proof of this can be given; but the conclusions derived from what we know of the Jewish Sabbath are to my mind sufficiently convincing to place the fact beyond dispute.[2] We first meet with it among the Jews during their bondage in Egypt as a day of rest from compulsory labour, and this meaning it has always retained for them. When Moses presented its continued observance to the people when released from bondage, he referred expressly to the former institution by saying: "Remember that thou wast a servant in the land of Egypt." (Deuteron. v. 15.) It was thought of only as a day of rest from labour, not as a day of religious worship. The Christian Church has made it into the Sunday: to the Apostles this idea was still foreign. Nowhere does Moses pretend to devote the day to religious observances—merely to abstinence from labour; and when he says: "Thou shalt keep holy the Sabbath day" (Exodus xx. 8), this means nothing more than to follow the divine example, for God also rested on the seventh day (Exodus xx. 11); "wherefore the Lord blessed the Sabbath day and hallowed it"). To defile the Sabbath day is synonymous with "doing work." (Exodus xxxi. 14.) Even ox and ass shall rest on that day. (Exodus xxiii. 12), which has as little to do with the idea of worship as the injunction to follow the example set by God, who could

[1] Besides *sabattu*, DELITZSCH, p. 72, brings forward a special argument derived from a gloss—that the seventh day, according to Babylonian-Assyrian usage, was a day of "delightful, festive rest." I hope later on (§ 27), when speaking of the Babylonian flood, to contribute another argument, which, so far as I am aware, has not yet received notice. The flood comes to an end on the seventh day (the Sabbath); the gods who brought it about took their rest on that day.

[2] The prevailing view which connects it with the seven planets is incorrect. Compare WELLHAUSEN, *Reste arabischen Heidentums*, part 3. Berlin, 1887. The hypothesis that the planets were worshipped is not sufficiently confirmed. The week is older than the names of its days. The names taken from the planets were afterwards distributed over the days upon a most ingenious principle.

not worship Himself. In short, the Sabbath was a purely social institution, not appointed by God, but by men; an institution of a social and political kind, like our present labour regulations. The same applies to the seventh year of rest, or Sabbath year, instituted by Moses.[1]

Now, if the Sabbath had a social and political meaning amongst the Jews, it cannot possibly have had a religious one in Babylon, where it originated as stated above. Had it been so, considering the religious tendency which underlies the whole of Moses' legislation, he would certainly not have neglected it in this commandment, changing the day into an ordinary civil day of rest. The only connection he establishes between it and religion is by enforcing its observance by the command of God, and probably he thereby introduced an innovation into the form which the Sabbath took in Babylon. The opposite view, which seeks to attribute to the Sabbath of the Babylonians a religious meaning, rests, to my mind, solely on the conclusion that because it was so with the Jews, it must also have been so with the Babylonians. From the above it is clear that these premises are incorrect.

The day of rest with the Babylonians was, then, a purely social institution, its sole intention being cessation from work on the seventh day for the recuperation of strength after the exertions of the six working-days. The injunction to cease from toil on certain days is also met with amongst other nations: with the Greeks and Romans work had to be stopped on public feast days and on holidays—not for the sake of the

[1] Its religious meaning is quite a secondary one. It is limited to this—that the law should be read. (Deuteron. xxxi. 10–13.) The motive which led Moses to the institution of the Sabbath year was also purely social and political. It was intended as a benefit for the poor and needy. The field was not to be sown (Levit. xxv. 3–7); not, according to the year of rest, to recover itself, but "that the poor of thy people may eat." (Exodus xxiii. 11.) Debts were to be released in this year (Deuteron. xv. 1, 2); men and women servants were to be freed (Deuteron. xv. 12), which, in legal terms, means that the time of servitude may not be fixed for longer than six years. This condition reminds us of the Roman *mancipium*, which also was limited in time. The contrast between the Roman, *i.e.* Aryan, decimal system and the Semitic duodecimal system may be observed again in the fact that the period of Roman servitude was fixed for five, and that of the Jewish servitude for six, years.

labourers, but on account of the religious feeling and the festive frame of mind of the people, who would have taken offence at having to work on days consecrated to the worship of the gods or to festivity. To give the labourer a periodic day of rest for his own sake never entered the mind of either of these two nations, or any other nation of antiquity except the Babylonians, and the Egyptians and Jews, who took it from them. This provokes the question, Why only with the latter; why not also with the former? The reply is, With the former it was neither necessary nor practically possible; with the latter it was both imperative and feasible, owing to circumstances for which I believe it to have been solely instituted, viz., the labour done by the task-labourers at the public works.

It was *imperative*. The human body is not proof against an undue expenditure of strength; it needs renovation by means of relaxation and recreation. The free labourer can look after this for himself, but the task-labourer is unable to do so; his lord dictates the times appointed for his work. But it is in his lord's own interest not to tax his powers of work unduly, not to use it up and exhaust it, but rather to give it time to recover itself; and the harder the labour the more imperative becomes the necessity of moderating it. Imagine six days of hard physical labour under the burning sun of Babylon, and it will be evident why work was suspended on the seventh day. The Egyptians knew no mercy for their Jewish task-labourers (Exodus i. 13, "And the Egyptians made the children of Israel to serve with rigour"), but the seventh day of rest they granted to them for their own sakes.

It was also practically possible. In building operations, the maintenance of a fixed sequence of working days and days of rest offers no difficulties. The builder can arrange his labour for any time he pleases without detriment to his work.

If we now glance over the Aryan world, it will be evident why the institution of a periodical day of rest remained

unknown to the Aryans until the introduction of Christianity, nd with it of the Christian Sunday. Firstly, as to the ancient Aryans. A shepherd cannot perform his duties otherwise than continuously; the cattle must be watched constantly, and milked daily. The idea of applying the Sabbath rule to him is a foregone impossibility. On the other hand, the shepherd has no need whatever of the day of rest, which is indispensable to the artizan; for his occupation causes him so little exertion that he can pursue it all the year round without any injury to his health. Even the change from pastoral to agricultural life, the result of the Aryan settlement on European soil, was not calculated to call into existence the institution of a periodically recurring day of rest. It is not compatible with the interests of agriculture, which is dependent upon seasons and weather. There are times when the agriculturist can postpone his work without detriment; there are others when he is so pressed for time that he cannot miss a day without serious loss; and it is only a relic of the most rigid Judaism, declared valueless even by the apostles, to prescribe the absolute observance of the Sunday rest for him, and at the same time it is a flagrant inconsistency, for no one has ever thought of imposing it upon doctors, chemists, postmen, railway officials, etc.

The result of the foregoing discussion is summed up in the proposition that the seventh day or day of rest, or, what is the same thing, our division of the week, is a Babylonian institution, calculated simply to afford the artizan working on the public works a short holiday in which to recover himself, in order that his powers of work may be preserved. Derived from the Egyptians, Moses extended it for the Jews into an abstention from all work whatsoever, without thereby connecting the commandment with the worship of God; this last step was taken by the Christian Church, which converted the Jewish Sabbath into the Christian Sunday, set apart for the service of God; this again the Puritanical rigidity of the English and the North Americans has transformed into the very opposite of the Jewish Sabbath, which, far from being

a day of rigid religiosity, was a day of joy and exuberant mirth, as unlike an English Sunday as a sunny day in Jerusalem is unlike a foggy day in London.

The necessity for economizing the power of labour, which involved the seventh day or day of rest, demanded also intervals of rest during the course of work. Work could not, without prematurely exhausting the strength, be maintained the whole day uninterruptedly. Time must be allowed for recuperation. Its duration, however, could not be left to the will of the overseers, since this would have allowed free play to despotism, partiality, corruption, and inhumanity; it had to be fixed by rule. The assumption that there were fixed relays of workers and intervals of rest in Babylonian building operations is by no means confirmed.

And at this point the Babylonian division of time, the division of the astronomical day into two equal halves—day and night, each of these divided into twelve equal hours—comes within our purview. All other nations of antiquity derived it from the Babylonians. Before they came into contact with them they were ignorant of it. The credit of it has been attributed to the Chaldean astronomers; but long before there could be any question of the existence of a science, building operations were being carried on in Babylon: and for building purposes the introduction of a fixed measure of time was, for the reasons given above, indispensable. All that the Chaldeans did was to scientifically develop and turn to account an institution which had long existed. It was a civil, thoroughly practical institution; the day was thought of as a *working day;* the hours were regarded as *hours of work* or of rest; time was the regulator of *labour.* A fixed measure of time was necessary only where the labourer worked by time, as do day labourers, journeymen, and factory hands. He who has the regulation of labour (be it his own or that of someone else) in his own hands has no need of a fixed division of time; he works and lets work according as interest, inclination, and strength demand or permit. This explains how it was that the Aryan could get on for thousands of years without a fixed

measure of time: neither as shepherd nor as farmer did he need it. Like all nations in a state of nature, he reckoned the day by the rising and the setting of the sun. Similarly the Romans, at the time of the XII. Tables, concluded the legal day at sunset (*sol occasus suprema tempestas esto*). The day was consequently of varying length. The sub-divisions of the day were also calculated by the position of the sun—morning, forenoon, noon, afternoon, and evening. That such an imperfect division of time could be continued so long by the Aryan, until it was replaced by the Babylonian method of calculation, proves that it had no disadvantages for them.

But it was totally inadequate for the builders of Babylon. They needed an adjustment by measure of the working day, and a division of the same into accurately measurable parts, wholly independent of the position of the sun. For this object they used the clock, two kinds of which were known—the sun-dial[1] and the water-clock. The former had the disadvantage that it sometimes failed during a day of clouded sky, and was altogether useless at night. But for the night the division into hours was also a necessity, for equality of the day could not be attained without equality of the night. The clock had to work at night as well as at day to show when the twelve hours of the night had expired and the day had begun; in short, the night had to be measured, not for its own sake, but because of the day. This, however, was possible only by means of the water-clock. The idea was exceedingly simple, yet very ingenious. The quantity of water which from sunrise of one day till sunrise the next ran through a narrow tube was divided into two equal parts, giving the day and night; twenty-four divisions marked the hours. The idea was the same as that of our clock, to measure time by motion in space—with us it is the pendulum, with the Babylonians it was water, with the hour-glass it is sand. If I am right in my statement that the origin of Babylonian time measurement (which was impossible without a clock) can be traced back to the Babylonian builders, the invention of the clock—one of

[1] Mentioned in the Old Testament in Isaiah xxxviii. 8.

the most important inventions ever made by man—must be added to the list of their benefactions to mankind. In any case the credit of having, for the first time in history, solved the difficult problem of bringing time and space within measurable relation to each other belongs to the Babylonians.

The day, as I have said above, was thought of as the working day. Therefore it began at six in the morning and ended at six at night. It was light enough at this hour even in Babylon, in the shortest days, to proceed with work.[1] That the work could not be continued all day without intermittence has already been shown. Besides time for eating, time for recuperation was necessary. According to their duodecimal system, the Babylonians must have calculated their time for work and rest ternately: three sets or relays of working periods, each of three hours; after the first and the second a rest of an hour and a half each; or the first of one, the second of two hours. Confirmation of this theory of three-hour working periods is afforded by the equal duration of the Roman night-watch (*vigilia*). It is a known fact that the Romans took their division of time from the Babylonians; with them also day and night always had twelve hours; the day began at six in the morning and ended at six in the evening. What is simpler than to accept the same origin for the three hours' working period of the soldier, his night-watch corresponding to that of the artizan builder?

According to the above, the Babylonian division of time as a whole could be reduced to the *organization of artizan labour in the public buildings appointed by Government.* That there was a necessity therefor can be as little a matter of doubt as that all details in connection with it correspond in a most

[1] Even in our degree of latitude, where the light of day varies, the twelve-hour working-day of the Babylonians has been preserved for the day-labourer in the country, and also for foresters. In Sweden it commences as early as five o'clock, and ends at seven. According to the opinion of experts *less* work is accomplished there than with us, the hours of labour being too great for the powers of endurance. The Babylonians, in their week of six working-days and their day of twelve working-hours, duly considered the right proportion which cannot be exceeded without exhausting the powers of work.

natural way with this view: the week with its six working-days and one day of rest; the division of the astronomical day into two equal halves, the one beginning with the approach of light, the other with the approach of darkness; the division of the day, and hence necessarily of the night also, into twelve equal hours.

These remarks do not confirm the view that the Babylonian system of time owed its origin to the Chaldean astronomers. Certainly not the division of the week: for though the planets may have given their names to the days, what has it to do with them that six of these are for work and one for rest? Nor the division of the astronomical day into two halves: the astronomer knows it only as one undivided whole—halves have no meaning whatever for him. Nor the beginning of day at six in the morning, and of night at six in the evening: his astronomical day is regulated by the height of the sun, and when he wishes to distinguish between day and night he does it by sunrise and sunset; for him, therefore, the day is of ever varying length. The idea of an equal length for day and night is a thoroughly social institution, and not less so is the fixing the commencement of each for six o'clock, morning and evening, instead of the astronomical and only correct one of noon and midnight. If the Babylonian division of time had to be traced back to the Chaldeans it would have to take quite a different aspect—the aspect which it really presents proves that it is not a product of scientific soil, but was called into existence for practical reasons; that it was a government institution, concerning which we have to inquire—as with all government institutions—into the object which it was intended to serve. Of all purposes which we can think of in connection with the significance of time to mankind none occupies so prominent a place as labour, that is to say the function of time as a labour standard is all-important to man; and as experience teaches us that all institutions first come into existence where they are most needed, I base thereon the argument that the Babylonian division of time was designed for labour, in particular for

artizan labour. The free labourer did not need a fixed period of time for his work, nor the appointment of a day of rest; but for the captive and the task-labourer both were indispensable, and the bestowal of the day of rest upon the latter, as evidenced by the Old Testament, is proved beyond all doubt in the case of the Jews during the Babylonian captivity.

The prevailing view which attributes the origin of the Babylonian division of time to science has nothing to offer for itself in comparison with the reasons so far enumerated by me in favour of its practical origin. It is an hypothesis, like mine; but it has no historical evidence to support it. Like mine, it is deductive; but the conclusion which it draws, viz., that, because the Chaldeans applied chronology scientifically, they must therefore also have originated it, is on a par with the assertion that, because a nurse has brought up a child, therefore she must also have brought it into the world; and it is confuted by the certainty that under the alleged circumstances Babylonian chronology would have assumed quite a different aspect.

Nothing now seems to remain but to adopt a practical origin, and I am waiting to see if a more forcible one can be arrived at than that suggested by me—the determination of working-time for the task-labourer at public buildings in the interest of the preservation of his powers of toil. The whole plan of the Babylonian division of time—the week, the civil day, and the hour—can be focussed from a single point of view: organization of labour on public buildings.

(*b*) Architecture.

Linear Measurement—Political Significance.

§ 24. The Aryan hut required neither heavy labour nor skill in its construction. Anyone could build it for himself. But the gigantic buildings of Babylon presupposed a very large measure of skill. In addition to the artizan, they required the skilled mechanic and the architect. The plan had first to be conceived, the dimensions drafted, the proportions fixed, the enormous weight which the ground had to bear calculated, and

the foundations laid accordingly;[1] in short, the claims made upon the architect in Babylon were similar to those demanded of the architect of to-day. He was the first in the world to boast of an art—the ἀρχιτέκτων, as the Greeks call him, the progenitor of the arts; for architecture is historically the oldest of all the arts; and it was in Babylon that it first saw the light.

In devoting my attention to the architecture of Babylon I do so, not so much as a tribute to its artistic merits, for in this respect it presents nothing worthy of notice, and stands far behind Greek architecture. Apart from a marvellous aptitude on the practical side of architecture, chiefly in the technical parts, the Babylonians never attained more than a very low standard in art. The thought that inspired their buildings was not the idea of the beautiful, but of the vast; their architecture was not calculated to excite æsthetic enthusiasm, like that of the Greeks, but rather to inspire a feeling of awe at what can be accomplished by man. As the Old Testament legend of the building of the Tower of Babel rightly represents it, it is the mirror in which the people see reflected the image of their own greatness and superiority over all other nations on the face of the earth.[2]

In reference to one point only must I bring the architectural side of Babylonian building under the reader's notice. It is with regard to the shape of the Babylonian temple-tower. It departs from all notions of temple-building previously adopted by other nations. The temple is supposed to be the house of the Deity. There one realizes His presence; there, upon the altar, in the shape of the sacrifice, His meal is spread; the altar is the symbol of the hearth. And thus the house furnishes the architectural motive for the temple: the temple is the house of man raised to the highest architectural perfection, testifying to the supremacy of the Deity. Language

[1] By way of example, the tower of the royal castle was 80 feet high, the foundation 30 feet deep.

[2] The Old Testament speaks simply of tower-building in Babylon; *Herodotus*, i. 181, more correctly of eight towers built one above the other.

is an eloquent testimony to this, in calling both by the same name; thus the Greek ναός = habitation, especially that of the Deity; Latin, *aedes* (ditto); German, *Gotteshaus* = house of God; the Hebrew *bajit* = house and temple; also the so-called tabernacle of the Jews, *i.e.*, the holy tent *(ohel moëd)*, bring before us their own form of habitation during the time of their sojourn in the wilderness.

How, then, came the Babylonians, in contradistinction to all other nations—even to their own brethren, the Jews—to depart from the model of the house for their temples and to choose that of the tower, which did not serve them for a habitation? I can find no answer to this in the works which treat of Babylonian architecture; they simply state the fact that it was so, but that we cannot tell why. And yet we may with certainty say at the outset that there must have been some reason for the deviation from this rule, which was adhered to by all then existing nations and justified by the object of the temple itself. What can it have been? Can it have been to symbolize the idea of the soul lifted up in adoration to the Godhead; that as the soul aspires to heaven, so also do the stones? The people would have to have been very different from what they were if such an interpretation were possible. Their matter-of-fact disposition is, to my mind, incompatible with symbolism so abstruse; and another reason must be looked for more in accordance with their nature.

It is a familiar belief, found amongst many nations in the time of their infancy, that the Godhead dwells on the mountains; therefore mountains are the fitting places on which to offer worship. Thus it was, according to Herodotus i. 131, with the Persians, who chose for the purpose the highest mountains they could find; with the Jews, who were kindred to the Babylonians, and who, not only before the building of Solomon's temple (1 Kings iii. 2), but also afterwards, sacrificed on the mountains (1 Kings xxii. 44; ii. 14, 4; ii. 15, 4, 35); and with Chasis-adra, the Noah of the Babylonian flood, who erected an altar on the height of the mountain-top after his deliverance.[1]

[1] The words of the text of the original Babylonian account of the Deluge.—Column iii. 46 (see § 27).

This must also have been the case with the Babylonians (Akkadian-Sumerians) before they descended from the mountains into the plains. How could they maintain their old way of worshipping the gods in their new home, where there were no mountains at all? What nature withheld art supplied. They built an artificial mountain in their temple-tower, in which, after the manner of mountains where one crag of rock towers over another, they placed one stone quadrant above the other. At a distance the temple-tower must have given the beholder the impression of a conically shaped rock in the midst of the plain. This supposition of the imitation of the mountain in the temple-tower is confirmed by a counterpart of the same, in which this intention is placed beyond all doubt—the (incorrectly) so-called Hanging Gardens of Semiramis. They are distinguished from the temple-tower only in the fact that the different platforms were planted with trees. One of the Babylonian kings had it made for his Persian consort, to bring before her mind a picture of her home—a wooded mountain. The temple-tower or storey-temple represents a bare mountain, the Hanging Gardens a wooded mountain. On the highest summit of the temple-tower there was, according to Herodotus i. 181, "a large temple with a large, well-appointed resting-place and a golden table, and no one might spend the night there save the one woman elected by God." Here on the height, far from the noise and turmoil of the street, and in the same pure atmosphere as that which breathed on the mountains, God would take His rest with His elected, without being disturbed by anyone. This same belief, that the Godhead frequents the mountains by night and that no one may disturb Him, is met with in Strabo's account (iii. 1, § 4) of the "holy promontory" (Gibraltar), where, according to popular belief, the gods took their rest at night, and where no one might disturb them; ascent was allowed only in the day-time. Now when we consider that this holy promontory was situated within the dominion and sphere of civilization of Gades,[1] the mighty city of the Tyrians, and

[1] The name "*fretum Gaditanum*" for the Straits of Gibraltar is significant.

was continually visited by Phœnician sailors, who anchored there before passing the straits, I believe I shall be justified in attributing this popular belief to the Phœnicians, that is indirectly the Babylonians.

The meaning of the Babylonian temple-tower, summarized in a word, would be "Mountain of God." This is the name given to the Temple in the Old Testament; the Temple is "the holy mountain" (Psalm xlviii. 2; Ezra xxviii. 14); the Hebrew *bama* signifies both "sanctuary" and "mountain." Perhaps the deciphering of Babylonian inscriptions will one day bring this name to light for the Babylonians also; in any case, the meaning which I have tried to put upon the temple-tower, and which I will render by the well-known words, "Glory to God in the highest," cannot be subject to any doubt. The thought which led the Babylonians to the building of these temples was to furnish the Godhead with an artificial substitute for his accustomed mountain. In this sense, therefore, it may be said that the same motive which guided all other nations in their temple-building, viz., the making of a habitation for the Godhead to dwell in, was present also with the Babylonians, the difference being that with the latter it was not the habitation of man (the house) but that of the Godhead (the mountain) that was chosen for model.

I have brought the building of the Babylonians within the scope of my investigations, not because of the immediate interest that it has as such, but rather in the indirect interest that it has for all things upon which it has a bearing, that is to say, shortly, upon all things Babylonian. One department, the building trade, I have already treated (§ 23): and I will now deal with architecture. The demands of the architect are different from those of the builder. His first and foremost requisite is a fixed measure of length, in order that he may determine beforehand the size of his building, and be enabled to control the builders in the execution of their work. Here, as elsewhere, I am guided by the conviction that all institutions have first seen the light where they

first became indispensable, not where their need was less urgent; and I conclude that the Babylonian system of linear measurement must have had its origin in the building-craft.

The Greek, Latin, and German languages unanimously attribute the introduction of it to the measurement of land (*γεω-μέτρης, agri-mensor, Feld-messer*). Linear measure must, therefore, have been first applied by them to that purpose. But it is far more indispensable to the art of building than to matters relating to land.[1] A piece of land can be tilled, farmed (or rented), and sold, without previous exact measurement of its superficial area. A building, on the contrary, cannot even be commenced without a previous decision having been come to as to its proportions. A linear measurement was indispensable to the Babylonians in their building operations; the erection even of private houses, which in Babylon were three or four storeys high (Herodotus i. 180), the height of the different storeys having consequently to be previously fixed, rendered it a *sine quâ non*, to say nothing of the huge public buildings. That the system of linear measurement was employed in the sale of land, we know from Babylonian legal documents preserved to us. But from the above there can be no doubt that we have in them a later, and perfectly natural, application of an institution originally called into existence by the craft of the builder.

The introduction of linear measurement[2] solved for the architect the same problem with regard to the measurement of *space* that the division of the labour day had solved for the builder with regard to the measurement of *time*. In both cases it was to the builder's craft that these needs of the Baby-

[1] It was only in Egypt that, owing to the flooding of the Nile which annually destroyed the boundary lines, land measurement was inevitably and perennially requisite; and STRABO (xvi. 2, § 24) is certainly right, as far as Egypt is concerned, when he refers the origin of geometry to this fact. That the Babylonians also made use of the field-measure for measuring their arable land need hardly be said. See examples by OPPERT and MÉNANT, *Documents juridiques de l'Assyrie et de la Chaldée*, pp. 99, 13; 100, 26; 102, 16; 118, 14. Paris, 1877.

[2] See account of the same with the Babylonian names, in J. OPPERT and J. MÉNANT, *loc. cit.*, p. 347.

Ionians were due; and it is to this craft that he is indebted for the glory of having been the first to conceive the idea of *measuring time and space.* Whatever subsequent nations may have contributed in this direction concerns only the practical application and more exact adaptation of the idea first conceived by them. The prevalent notion is that it was the Chaldean philosophers who first occupied themselves with, and solved the problem of, the measurement of time and space. But the only merit that belongs to them is that of having made the subject-matter of scientific investigation and knowledge that which was originally discovered on purely empirical lines and calculated solely to meet practical ends: mathematics as a *science* may be put to the credit of their account; as an *art* it existed long before them: the art of building would have been impossible without it. Empiricism in this case, as in every other all over the world, preceded science. The same is true, as I hope to show later (p. 175), of the astronomy of the Chaldeans; its origin dates back to the sailor who for practical purposes studied the course of the constellations. The art of drawing is a necessary complement to architecture. The architect must be able to figure on his tablets the plan of the building he is designing: he must be able to draw. Later on the professional draftsman, the painter, comes to his assistance to add colour and artistic touches to the drawing. Some of their productions have come down to us which reveal no small degree of artistic merit.[1] To the art of painting sculpture was added, as it would appear exclusively in the service of architecture.

I will now turn my attention to a side of architecture which so far has scarcely been duly appreciated, but which seems to me to be of far greater importance than all the others: I mean the relation between Babylonian architecture and politics. The temple-tower represents to us

[1] Hommel gives several illustrations in his work which I have frequently mentioned. Special attention should be paid to that on p. 482, which is of great interest also for its sketch of the head, which unmistakably gives us the type of the Semite as we see it in the Jew of to-day.

architecture in the service of *religion*—the fortification works of Babylon architecture in the service of *politics*. To these Babylon owed the greatest blessing in which she rejoiced—*security of the State*. She endured throughout thousands of years, defying all dangers which generally threaten governments, dangers from without and dangers from within. Stone guaranteed her security; nothing could destroy it; every attack recoiled powerless before it.

Never since the world existed have there been seen such fortifications of a city as those of Babylon. It is only in quite recent years that the fortifications of Paris have furnished a parallel to them; nothing of the kind produced up to that time, in antiquity or in modern times, can at all compare with them. Babylon was surrounded by double walls, an outer and an inner, built square; their relative size is wholly without parallel.[1] According to Herodotus, the circumference of the outer town wall was 480 *stadia* (=about 60 English miles); according to the lowest estimate of the ancients, 360 *stadia* (=about 45 English miles); the vast area thus enclosed, which in modern language we might call the precincts or boundary of the city, was calculated to grow fruit and cereals as food for the entire populace in case of siege. The statements of the ancients differ widely as to the height of the walls; but, taking the lowest estimate, they far surpassed in height anything else of the kind that the world has ever seen. The same is true of the width, or thickness, of the walls. In front of the wall there was a ditch, the width and depth of which were determined by the quantity of earth needed for the construction of the work. The inner wall enclosed the city proper: according to Herodotus, it was not much less strong than the other, and was also surrounded by a ditch corresponding in depth and width to the earth thrown out of it.

In addition to these fortifications a wall was built in the eastern part of the town of Babylon, intended for protection

[1] For more detailed information, together with the original sources, *cf.* A. HIRT, *Geschichte der Baukunst bei den Alten*, i. pp. 135 *sqq.*

against the invasions of the Medes, many Egypt [illegible] have had a barrier less high, than the barrier of the Great Wall of China.

Thus was Babylon secured against the outside enemy in a way which put any thought of capturing it by storm hopelessly out of the question. The height of its walls defied all attempts at scaling them; their strength made it impossible to overthrow, or even to approach, them, as all assailants would meet with certain death from the missiles and stones which could be hurled down upon them from above. Large enough, in time of hostile invasion, to shelter within its walls the whole population of the land, and thus to augment the number of its defenders indefinitely, Babylon represented an armed camp able to maintain hundreds of thousands of warriors. Babylon was invincible: she could be forced to yield only by famine; but even this eventuality was provided against. During the siege of Cyrus the besieged had, according to Herodotus (i. 190), victuals "for very many years," and Cyrus would have had to abandon the enterprise if he had not (as described by Herodotus) by surprise, made possible by the almost incredible neglect and carelessness of the people, captured the city from the water side. Their feeling of security and unwavering confidence in the impregnability of the place resulted in the destruction of the inhabitants. The second siege of the city (by Darius), which had lasted a year and seven months, and which, instead of alarming the people, only excited their ridicule (Herodotus iii. 151), would also have ended unsuccessfully if the treason of Zopyrus had not given the besiegers access to the city (Herodotus iii. 152–159). Here, too, it was the blissful confidence of the Babylonians which led to their overthrow.

Besides the two fortified works whose object was the protection of the township and of the town, the outer and the inner wall, there was, in addition, the royal castle. Built on both sides of the river, which were united by a tunnel, it constituted two fortresses inside the town. The larger of the two was on the west side of the stream, where we may safely

imagine the principal part of the town to have been. The circumference of the three concentric walls is given by Diodorus: for the outer, 60 stadia (=7½ English miles); for the second, 40 stadia; for the third, 20 stadia; for the eastern castle, the greatest circumference 30 stadia. Wherefore these two fortresses inside the city? Perchance as a last stronghold against the enemy after he had taken the city? In that case it surely could not have maintained itself. On the contrary, the idea which prompted the kings to erect their citadels cannot have been security from the external enemy, but from the internal foe. I fancy it must have been a *Zwingburg* of the king for the purpose of keeping the people in check in case of revolt. Hence its erection on both sides of the river, which would have had no meaning in the case of a royal palace.

In connection with this matter I have three more structures to mention. One is the subterranean passage under the bed of the river—a tunnel, as we should call it—which connected the two castles.[1] It must have been constructed while the water was temporarily drawn off for the purpose of building the bridge. The bed of the river was thus dry: it had only to be made deeper to suit the height required for the underground passages, and they could build there as on *terra firma*. When both the passage and the bridge were finished the river was led back again to its bed.

The second structure is the covering of the bridge with wooden planks, not permanently fixed, but laid across so that they could easily be removed. According to Herodotus (i. 186), they were removed every night, and the reason for it he gives is: "that the Babylonians might not cross it by night to rob each other." As if those bent on robbery had not an equally good opportunity on the one side of the river as the other! I believe the only reason there could have been for it was to enable the ships to pass through. In the day-time, owing to the lively traffic, the planks could not be removed for that purpose; therefore it was done by night.

[1] Herodotus does not mention it. For the evidence of the ancients who do refer to it, see HIRT, *loc. cit.*, i. p. 138.

In the daytime the bridge was for pedestrians and vehicles; at night it was open to navigation—each had its time. If a ship came that way by day it had to wait till nightfall, and similarly pedestrians and vehicles had to wait till daybreak.

The third structure is the walls, which stood on both sides of the river, and which admitted of being closed by means of gates.

In what connection do these three structures stand with the above-mentioned object of holding the people in check? Let us imagine the case of a revolt. What would have happened? The planks of the bridge would have been removed, and the river gates shut up. Thereby all communication between the two parts of the city would have been cut off, all reinforcement from one side of the river to the other made impossible: not even intelligence as to the position of affairs could have come across. This appears to me to have been the object of the two walls along the side of the river. They were intended, in case of emergency, to coop up the people on each side of it as in a cage. I cannot believe that they were intended for the external enemy. The thought of seizing Babylon from the riverside was so preposterous that it was needless to make provision against it; but even granted that it had been considered necessary, they would surely not have neglected, in case of revolt, to make use of these structures in the manner I suggest. The same thing would apply to them as to the bridge, which, without having been intended for this special purpose, would nevertheless render most valuable service if need be, while by this means all communication between the two sides of the city could be cut off. Access was secured by means of the subterranean passage to the armed force, which was thus enabled to fight the insurgents on each side of the town separately. First, they could fall with their full force upon the one side, and then, after subduing that, upon the other. This also explains why the two royal castles had such an enormous circumference (9 and 4½ English miles). For the palace as such it would not have been necessary: it is explained, however, by the fact that (to put it in modern language) it

had to serve as barracks for the royal bodyguard. Within the walls of his fortress, defying all attacks of the populace, and surrounded by his bodyguard, the king might well rejoice in a full feeling of security. History makes no mention of revolts in Babylon. The royal *Zwingburg*, the *Trutzbabel*, as I might call it, together with the above-mentioned structures, which would nip in the bud the mere thought of revolt, kept the people in check. Security from the enemy from within as well as from the enemy without; and therewith the stability of government, which was maintained for thousands of years: must I fear contradiction when I maintain that Babylon owes these to her buildings? Ignore them, and what would have become of her? Her lot would have been the same as that of so many nations which, not having reached the stage of established cities, had succumbed at the first attack of an enemy—perhaps inferior in strength: swept off the face of the earth without leaving a trace behind. A mountain-tribe can maintain itself, even against a superior enemy, without artificial fortifications. Their mountains and rocks are their fortresses; but a people of the plains, such as the Babylonians, who, in addition to this and in contradistinction to their kindred, the Assyrians, were an eminently peace-loving nation, devoted to the peaceful arts, agriculture, trade, commerce, and navigation; who only took up arms in self-defence—such a nation would have been lost without them. And when we find that through thousands of years she braved every danger which warlike and powerful neighbours from without and risings and revolutions from within can bring to a community, where shall we find the explanation of it if not in the application of stone as a means of defence? The political significance of stone for the Babylonian state is, in my opinion, to be rated higher than its significance for Babylonian civilization, since the first thing in the life of a nation is security from without, peace and order within. Civilization comes next, and as this was able to pursue its course unmolested in Babylon, and blossom forth into the highest perfection, I feel confident that I have pointed out the true cause which rendered it possible.

5. *The use of Stone and Wood with the Semites and Aryans for purposes other than building.*

§ 25. The use which the Babylonians made of stone is not exhausted with its employment for building purposes; there are many other ways of utilizing stone, which, in view of affording a complete presentation of the significance of stone for the Babylonian world, I must not omit to mention. As was the case in architecture, so also do we here find the contrast between stone and wood, as used by Semites and Aryans. The first place in the list is taken by the use of stone for writing-tablets.

(*a*) The Writing-Tablet.

Stone formed the writing-tablet of the Babylonians;[1] it supplied the place of our paper. All things which had to be transferred to paper were written by them in stone, and the newest discoveries amongst the ruins of the cities of Mesopotamia have disclosed a quantity of these tablets, affording us a most extensive insight into their law (§ 30).[2] The simplest method of record consisted in scratching the writing on a soft clay tablet and drying it in the sun. This, however, involved the risk of falsification, not only while the clay was soft, but also after it had become dry; it had only to be softened again, and the inscribed characters—*e.g.*, the figures of the amounts of loans, rents, or prices—could be replaced by others. This danger could be obviated only when, as was the custom in Babylon, the inscription was made before a notary (the "*scribe*" of the document, always mentioned therein) and witnesses, and was burnt before it was given back to the party concerned. The existence of a public oven (p. 100, § 30) is a necessary hypothesis of Babylonian writing. In addition to the burnt archives, basalt stones were also used, into which the writing

[1] Amongst the Jews in olden times we find also the ox-hide.

[2] It was already previously known that the Phœnicians made use of the stone tablet for recording hospitable contracts with kindred nations, and some of them have come down to us. There was the "potsherd of hospitality" (*chirs aelychot*, also simply *chirs*, *cheres*), the *tessera hospitalis* of the Romans.

was incised; in what relations these stood to each other will be shown below (§ 30).

A second use of the stone tablet is its employment for state purposes. When Moses commands the people that, as soon as they have entered into the Land of Promise, they shall set up stones and write upon them all the commandments which he has given them (Deuteron. xxvii. 2–4), I believe he was only maintaining an institution already known to the people previous to their leaving Babylon, and acquired there. In Babylon all political decrees of a lasting character were also written in stone and publicly exhibited. Even royal instructions to absent officials, where communication by word of mouth was undesirable, either because of its precariousness or of the intended secrecy of the message, would be made known to them by this means.[1]

Thus it was in Egypt—we possess the writ issued by an Egyptian Pharaoh to his vicegerent in Palestine (clay-tablet of Tell-el-Amarna)—and as the Egyptians acquired the art of burning bricks from the Babylonians (p. 101), it is pretty certain that what we find done by the pupils may also be assumed to have been done by the masters. Of these public proclamations none have been preserved, so far as I know—neither those of the Babylonians nor of the Assyrians. But recent discoveries have furnished us with valuable historical material in the personal accounts of kings respecting their own deeds, military expeditions and buildings, which have been recorded partly outside the buildings themselves, partly on cylinders erected inside. In them we possess the earliest records kept not only in Babylon, but in the world at large. By their help history can be traced back on Babylonian soil to a time which antedates the records of all other nations, excepting only the Egyptians, more than three thousand years, viz. to about B.C. 3800.[2] Of all the things recorded by the

[1] As to how the stone tablet was fastened up, see § 30.

[2] For the Egyptians it is about B.C. 2700. The responsibility for the correctness of these calculations I must leave to my authority, HOMMEL, *loc. cit.*, pp. 12, 13.

Greeks and Romans long after they had raised themselves into historical existence, none has come down to us. The reason of this difference lies in the perishable writing material used by them: it was wood. The contrast of stone and wood between Semites and Aryans has for both nations been no less important for their historical tradition than for their historical development. The wooden tablet of the Greeks and Romans has either rotted away[1] or been burnt, but the stone tablet of the Semites has been preserved. The oldest material on which characters have ever been inscribed is the ox-hide (p. 16); in Rome it was still used for *one* purpose well into historic times (p. 32); for the rest, it gave way to the wooden tablet,[2] as well for commercial intercourse[3] as for public use, in which capacity it still served for the edicts of the Praetors down to Imperial times. The laws were in ancient times also inscribed on wooden tablets; the first law known to have been written on metal is the XII. Tablets; since then metal was no doubt used for all—according to the characteristic Roman idea that that which lays claim to be of lasting importance, such as legal statutes, should be entrusted to the strongest material, metal; that which is temporary, like a praetorial edict (of a year's duration), to perishable material, wood. For durability stone cannot compete with metal; yet the tablets which have been handed down to us from the Romans cannot be compared with those of the Babylonians and Assyrians, either as regards their plentifulness or the age of their records; none of them go back beyond the seventh century of the city. The reason is that with its durability metal unites another property, which is truly fatal to the preservation of the metallic tablets of Roman antiquity, viz., its fusibility and its capability of being

[1] A few have been preserved in Pompeii and in the Transylvanian mines, where all putrefaction was excluded.

[2] The fact that the Germans also inscribed their Runic characters on wooden staves justifies the conclusion that the use of wood for writing purposes was known to the Aryans of Europe before their separation.

[3] One ordinary use to which it was put, familiar to all jurists, is the will, with its well-known formula, "*in his tabulis cerisque*" (GAIUS, ii. 104), and the "*bonorum possessio secundum*," and "*contra tabulas*."

turned to other accounts. The metallic tablets have been melted down—how many old Roman laws may not be hidden in the bells of Christian churches? how many may not have been turned by the Teutons, in their repeated captures of Rome, into tools, arms, etc.?—while the wild hordes, which laid Babylon and the other cities of the land level with the earth, left the stone as useless! Its worthlessness has saved the stone; its value has been fatal to the metal.

Side by side with the legal and political history of Babylon there is still a third object, the records of which have been preserved for us in stone, viz., literature. Amongst the most valuable discoveries of late years, the full deciphering of which is left to the future, is the library of the Assyrian King Asurbonigal [668–626]. In the form of an enormous mass of stone tablets, partly broken, partly entire, each of which gives the name of the collector, the description of the work and the number of its pages, it contains within it all that literature up to that time had produced worthy of notice in the shape of scientific (including linguistic) and poetical literature. The national poem of the Babylonians, the epic of Izdubar, stretching far back into the past, and already deciphered, with its accounts of the Flood, is part of this collection. Of the extraordinarily great historical value of this poem I will speak later (§ 27). It is certain that the further deciphering of this library will reveal other and equally valuable particulars concerning the history, the life, the thoughts, and the national character of the Babylonians; and the sciences of history and philology possess a mine of untold treasures in it.

(*b*) The Road.

Amongst the mountains man does not need stone to make himself an artificial road with; his only labour is to remove such pieces of rock as obstruct his path. But in the plains the ground is so marshy and swampy that an artificial road is an absolute need, no matter how low the degree of civilization to which man has attained. The construction of roads first began in the plains, not amongst the mountains. Not

until after it had perfected itself below did it work its way up the mountains.

The nearest material to hand for road-building was wood. Man made his house of wood and he made his road of wood. He placed the trunks of trees next to one another on the marshy ground; where wood was scarce he made fascines or hurdles of logs and faggots. That was how for many thousands of years the Teutons made roads in their richly-wooded home —it was their celebrated "log-road." The bridges over the rivers were constructed in the same manner: they were of wood. Amongst the Romans we find the wooden bridge as late as the *pons sublicius* in Rome, which has been preserved as a relic of prehistoric antiquity down to quite recent times. In place of wood, which they lacked, the Babylonians turned naturally to stone for the construction of their roads and bridges. The marshy land which they inhabited made the building of strong, raised highways, able to resist all weathers, and fit for passage even in the rainy season, an absolute necessity; and thus the "king's roads," as they were called, reach back into remote antiquity.[1]

According to Isidorus,[2] the merit of having first used stone for road-construction is due to the Phœnicians. It is evident how this impression arose with the ancient writers, from whom he took it. It was from the Phœnicians, who built the first roads in the districts in which they settled, that the Western nations first learnt road-construction; therefore it was regarded by them as a peculiarly Phœnician institution. But if we compare the circumstances of the stony coasts of Phœnicia with the moist and muddy soil of Mesopotamia, there can be no reasonable doubt as to which of the two most urgently called for the construction of a road. The Babylonians, who were the first to use stone for all other purposes, were also the first to use it for the purpose of the road. The first roads in all the world were built in Babylon and Mesopotamia; after-

[1] MOVER'S "*Die Phönizier*," ii. p. 278; iii. p. 132.

[2] ISIDORUS, *Orig.*, XV. 16, 6: "*Primum autem Poeni dicuntur lapidibus vias stravisse, postea Romani eas per omnem pene orbem disposuerunt.*"

wards, through the medium of the Phœnicians, the art of road-construction became known to the Western nations. None of these have shown their appreciation of its vast importance as the Romans have.[1] In addition to the commercial highway, to which road-building in Babylon owes its origin, they also had the "military road" (*via militaris*), and it is to be attributed to the combination of these two that their efforts so considerably overshadowed those of the Babylonians. The bridges also were built of stone. That over the Euphrates, which united the two parts of the town, has been described for us by the ancients.[2]

The two remaining uses to which stone was put by the Babylonians are considerably less important than the two already mentioned; but I must mention them, because they finish off the picture which I have drawn of the stone-world of the Babylonians, and show how stone runs through the whole of the Babylonian world, and completes the parallelism between the wood of the Aryan and the stone of the Babylonian.

(*c*) Stoning to Death.

This forms the peculiarly Semitic method of capital punishment at the hands of the people, familiar to all readers of the Old Testament. If a man had to suffer death, the Semite seized stone:[3] he stoned him to death. The Aryan used wood: he fastened the culprit to a pole or tree, and beat or flogged him to death with a cudgel or rod; or he fixed him to a cross.[4] Both remain faithful to stone or wood, even in their executions.

[1] Amongst the Aryan nations the Russians are at the bottom of the scale in this respect. It is only within our century that the first *chaussée* has been built (in 1822, between St. Petersburg and Strelna). The same phenomenon that we came across (p. 109) with reference to their wooden house—their shortcoming in the use of stone—is again met with here.

[2] See above, p. 167; also Hirt, *loc. cit.*, i. p. 137.

[3] Not only the Jew, but the Carthaginian also did the same. See Herodotus i. 167, where the Carthaginians stone all their prisoners of war to death.

[4] This happened to Phraortes in Ecbatana after he had been conquered by Darius.

In the practice of stoning to death, we may perhaps find the key to the peculiar method of outlawry which, according to Roman jurists, was in use amongst the Arabs of their time. The men who had decreed it laid stones upon the plot of land belonging to the outlaw, in token that anyone who should venture to cultivate it should be put to death.[1]

Why this placing of stones? As far as I know, no one has answered this question; yet the answer is close at hand. The placing of the stones conveyed a symbolical threat of death by stoning. The stones warned him who might seek to cultivate that plot of land that death by stoning would follow ("*res mortem minatur*"); hence the stones were laid by those who had decreed the proscription ("*plerique inimicorum*"); and the stoning was not carried into effect by one man, but by many: it was the form of Semitic popular justice. That the subsequent execution of the threat took place in a different way, which may be accepted as certain, does not in the least invalidate my hypothesis as to its *purely symbolical* meaning: everyone knew what, according to old Semitic popular custom, was the use of stones in an act of popular justice.

(*d*) The Coffin.

Just as during life the Babylonian lived in a stone house whilst the Aryan occupied a wooden one, so at death the former was presented with a stone coffin,[2] made of burnt clay, unless his body were cremated, as was customary with the poor (in which case the ashes were preserved in a clay

[1] i. 9, "*De Extraord. Crimin.*" (47, 11) . . . *in provincia Arabia σκοπελισμὸν crimen appellant, cujus rei admissum tale est: plerique inimicorum solent praedium inimici σκοπελίζειν, i.e., lapides ponere indicio futuros, quod si quis eum agrum coluisset, malo leto periturus esset insidiis eorum, qui scopulos posuissent; quae res tantum timorem habet, ut nemo ad eum agrum accedere audeat, crudelitatem timens eorum qui scopelismon fecerunt. Hanc rem Praesides exsequi solent graviter usque ad poenam capitis, quia et ipsa res mortem comminatur.*

[2] For a picture of a stone coffin and its contents, a skeleton and clay vessels for food and drink for the deceased, see Hommel, *loc. cit.*, p. 214. For receptacles for the ashes, p. 210. Brick-vault, p. 215.

vessel), whilst the latter received a wooden coffin,[1] made from the hollow trunk of a tree (*vrksha*). The contrast of stone and wood amongst Semites and Aryans extends throughout life into the grave.

In conclusion, I may sum up all that I have said in the two preceding paragraphs in these words: *Brick is the corner-stone of the Babylonian world.*

6. *The burning of the first brick—Parallelism between plough and stone.*

§ 26. All that I have adduced in the above paragraphs as to the importance of stone for Babylon, was dependent upon the artificial manufacture of the same by the burning of brick. The burning of the first brick—an act hardly worthy of notice from a historical point of view—is to my mind one of the most important achievements ever accomplished by man upon this earth; an invention with which no other, not even the plough, can be compared as regards its influence upon the history of civilization and politics. Up to now we have been accustomed to give the plough the first place, and there is no doubt that it has marked a turning-point in the history of mankind—the transition from the pastoral to the agricultural life, the greatest step as regards agriculture ever taken. The plough has increased at least tenfold the benefits previously derived from the soil, and this increase has assumed even larger dimensions as the plough gained in perfection and agriculture progressed, so that the plot of land which formerly sufficed for only ten families is now able to nourish hundreds. By means of this increase of nourishment which it drew from the soil, and by the bond which it made between the soil and mankind (pp. 83, 91), the plough has materially influenced progress from the nomadic life of primitive antiquity to the settled life of nations —the commencement of all history, for history begins with the settled nation.

But the importance of the plough for the history of the

[1] ZIMMER, *Altindisches Leben*, p. 407.

as they are foreign to the plough: co-operation in labour, unity of purpose, submission of the individual to a superior. In these we have three of the elements which form the basis of every political union, of the community as well as of the State. It needs only a fourth to complete the connection between the State and stone—unity of purpose. In a private building the purpose of all concerned is the same (equality and identity of purpose); in a public building the identity is intensified into community of purpose: the building is for the common good. In its public buildings the State becomes a reality; town fortifications, temples, meeting-places for the masses or the authorities, belong to the first acts of the State, are the first signs of its vitality. The *res publicæ* taken in this sense made the *respublica* in the political sense a tangible, visible thing to the Roman mind; it made clear to all what their united efforts had achieved and what belonged to them in common—the sensuous embodiment of the idea of the State.

To sum up the above in a sentence: stone has a political importance in history; the plough has none whatever, and the State owes nothing to it.

To co-operation in labour stone adds the benefit of community of dwellings, and thereby the possibility of concentrating the greatest number of people within the smallest possible compass, while this is not compatible with the plough. Upon an area which in a large town can accommodate a million inhabitants, scarcely a thousand could find livelihood in the country. The great importance which community of dwelling has, not merely for the development of civilization, but also in a political sense, I need not dwell upon, after all I have already said upon the subject.

To this second element, in which stone has the advantage over the plough, must be added a third—its durability. The work of the plough is transitory; it has to be renewed each year; it leaves no permanent trace. But the work of stone abides; thousands of years afterwards the buildings of the past speak of the generation that called them into existence. Stone links the present to the past; it sets before us not merely a

building, but all the historical memories connected with it. Hence the hatred of later generations, otherwise wholly incomprehensible, towards dead stone, exemplified in the destruction of the buildings of the past, where the recollection of the circumstances recorded on them has let loose the blind fury of the mob; as, for instance, during the time of the French Revolution, the Bastille—every memory of the past, in the shape of the stone which embodies it—must be swept off the face of the earth.

To sum up the above from this point of view: Stone has a *historical* importance: it carries along the continuity of popular consciousness.

The fourth and last element is the importance of stone for the law of the division of labour. This law cannot be applied to the plough; the most ordinary peasant is able to accomplish his ploughing quite by himself. But in building this is impossible: a division of labour between the workman and the architect is imperative, and here, if anywhere, it must have been first carried out. I must refer my reader to what I have said above (p. 111) on the subject of building in Babylon. The division of labour in building is not only of a manual kind, but it is between head and hands—building art and building trade; and thereby it attains a significance in the history of civilization which it could not have if merely applicable to manual labour. The very first attempts in art and science are closely connected with stone in Babylon. The plough has never called forth any art or science; history has never had occasion to mention it in connection with these; what it has to say about it is confined to itself, its invention and its gradual perfection. Any influence upon the history of civilization, such as stone has exercised in so high a degree, has at all times been foreign to the plough.

To sum up the results of my parallel between stone and plough in a sentence: The plough cannot at all compare with stone in importance for the development of mankind; it is essentially confined to the question of food, whilst the function of stone has been to alter the whole aspect of the earth.

The history of stone commences, as we know, in a region where Nature had withheld it, and man was forced to find an artificial substitute; it has, in the form in which it commenced its work here as brick, this point in common with the plough, that it was a human invention. From this region where it first saw the light, it has, after having accomplished the most brilliant performances—the first act of its history—entered upon its pilgrimage through the world—the second act. All civilized nations of antiquity (the Phœnicians and Jews need not be mentioned) owe the art of stone-building to the Babylonians; even the Egyptians. In the earliest times they also used the brick of the Babylonians for their buildings (p. 101), until later on they replaced it by the natural stone, as has been done by all other nations when they passed from timber to stone building. With every one of them this transition is due to either direct or indirect contact with the Babylonians. Directly for the Aryans of Asia—the Indians and Persians; indirectly for those of Europe, who became acquainted with masonry through the Phœnicians.

All this—the whole history of stone in the Babylonian world as well as in the world at large—presupposes that man, who in remote antiquity settled in Mesopotamia, conceived the idea of making bricks. He had to do it—nature left him no choice. If he wished to live there, he was obliged to look round for a substitute for wood and stone, which were not to be had there. This substitute was ready to hand; he had but to cut up the clay, shape it, and dry it in the sun. Up to the present day the same thing is done in a similar way on the moors by the North Sea. The settler who establishes himself there, and who too lacks wood and stone, builds his first house, if one may call his miserable hut by that name, from the pieces of peat which he digs up and dries in the sun, until he has got on so far as to have wood and stone brought to him from abroad. But only after brick-drying was supplanted in Mesopotamia by brick-burning did the inhabitants acquire a building material

corresponding in hardness and durability to the natural stone. This was the decisive step for the development of masonry in Babylon, as well as in the world at large: it led the way to all the rest; the one succeeds the other of necessity. For not only that is necessary to which nature compels mankind, but also that to which man's own intelligence and purpose compel him. The law of purpose has the same compelling force over man as the laws of nature.

Let us glance at all that I have stated above (§§ 23, 24) about Babylonian building from this standpoint, and try if it will stand the proof. With this end I will briefly review the above points from the point of view of teleological necessity.

1. Division of building labour between workmen and masters. Not required as long as it concerned only the construction of ordinary houses, but imperative when the stage of temples and fortifications was reached.

2. The working day, with all that necessarily followed in its wake: the subdivision of the day into hours; the measurement of time (water-clock); and the periodical day of rest. Whatever may be thought of my view that the work was done by task-labourers is immaterial, for even if it were performed by free labourers, all these three things—the working day, the division into hours, and the day of rest—would have been equally necessary. The supposition that the Babylonian followed the duodecimal system is based on its suitability to the purpose for which it was needed; it is more easily divisible than the decimal system, which is divisible only by 2 and 5, while the other can be divided by 2, 3, 4, and 6.

3. The Babylonian linear measurement, which is indispensable to everyone who has to make measurements, such as the architect; if anywhere, it was absolutely necessary that it should make its first appearance amongst builders.

4. The technical side of architecture—mensuration, arithmetic, and the art of drawing. The least educated architect cannot do without these. He must fix the size of his building, calculate the weight which the foundations and the walls will

have to bear, and draw the outlines of the building before he can start on his work.

5. It was only a step from this first purely empirical or practical contact with mathematics to its scientific treatment by the Chaldeans. Without the incentive and impetus given by building they would hardly have taken that step or the other with regard to the scientific treatment of time, which also had been mapped out for them by the practical importance of time for builders.

6. The fortifications of the town. Their necessity to a people dwelling in the plains, and constantly exposed to the attacks of the inhabitants of the mountains or of the desert, needs no confirmation. With regard only to their dimensions, which surpassed all existing proportions, does the idea of absolute necessity not apply. If what I have said above is correct, then the Babylonian temple-tower would also come under this category. There was a necessity for its existence, not of an external, but of an internal, a religious, character.

7. The supplanting of timber work by brick work amongst all other civilized nations. Timber work, excepting under very special circumstances, could as little hold out in the long run against brick work as could the bow and arrow against the gun. What is imperfect of necessity yields to what is more perfect: the gun beats bow and arrow, stone beats wood.

All this was preordained in the burning of the first brick. The germ was laid, and it needed only time for it to spread over the whole world. And it has had plenty of time to do so. History knows of no other civilized nation which has enjoyed such an infinitely long period of undisturbed development as the Babylonian, shielded from all storms, external molestations, and bloody wars; also from internal disturbances and revolutions. If we include the time of their predecessors, the Akkadians and the Sumerians, it embraces a period of more than six thousand years.

Those who hold national character to be innate will take into account as a second factor the eminently practical endowment, which is the most prominent trait of the national

character, and which, according to their view, must also go to nature's account. What I think about the matter I have already stated elsewhere (p. 70). My conviction is that no nation has from the beginning been equipped by nature differently from any other: all have come out of her hands equally moulded. Their subsequent variations are simply the work of the historical development fixed for them by the differences of their soil (in the larger sense of the word, as explained before). If the determining influence of the soil upon the historical development of a nation is anywhere clearly marked, it is in Babylon. The law of causality between the soil and all that has taken place upon it—the political history of the nation, its civilization, its institutions, its national characteristics,—displays itself as it nowhere else does. All that is connected with the art of building has been described above; what is connected with their waterworks will be described below.

The above remarks apply also to the eminently practical skill of the Babylonians, which was not nature's gift, but the ultimate outcome of their intellectual activities, extending over thousands of years, inevitably preordained by the circumstances in which they were placed, and in this sense therefore enforced by nature herself.

I now take leave of stone, to turn my attention to the second factor in the Babylonian world—water.

7. *Water in Primitive Times.*

(*a*) The Deluge.

§ 27. Nature withheld stone and wood from the Babylonian, but in their place she bestowed upon him another gift of inestimable value which she had not granted to the Aryan—large rivers and the sea. This possession was as efficacious for him, as an incentive to civilization, as its absence was an obstacle for the Aryan.

The Babylonian fully realized this, as his god Nun bears witness: he personifies the idea that water is the source of all life, that historically the earth came forth from the water, as

well as that water is the source of all blessing, the quickening element of creation. He lives in the depth of the sea, in the great primeval water (also called *Nun*), from which the earth at one time came forth.[1] Originally the water covered all the earth; then earth and sea separated—the familiar cosmogenetic representation of the Old Testament. How is it that man came to picture it to himself? The palæontologist attributes it to the fossil remains of marine fauna upon the earth; but it can hardly have reached the understanding of a people at the lowest step of development by means of scientific investigation. In the valley of the Tigris and the Euphrates another and apparently far more probable means was open to him: that of direct personal observation. In primeval times the whole of the lowland which he inhabited had been covered by water, and at the time when the Sumerians and the Akkadians had settled down in part of it the separation between land and water still continued, nor has the process ever stopped down to the present day.[2]

The first inhabitants of the land—the Sumerians and the Akkadians—saw enacted before their very eyes those processes of nature from which they derived their cosmogenetic idea of the formation of the surface of the earth: all land has emanated from the sea, and this formed a part of their religion, of their personification of the primeval water, which once contained in itself the whole earth, in the god Nun. The Jews, on their separation from the mother-nation, carried this idea, like so many others, away with them; only they replaced the god Nun, enthroned in the depth of the waters, by the Lord God, who held sway *over* the waters. It may have been conveyed by them, with many other things, to the Egyptians, with whom it is also found.[3] With both nations—the Jews

[1] HOMMEL, *loc. cit.*, pp. 19, 197, 255.

[2] HOMMEL, *loc. cit.*, pp. 181, 182: "In primeval times the Persian Gulf reached much further inland than in later times, and down to the present day the recovery of submerged land slowly but steadily proceeds—in olden times at the rate of one English mile in 30 years, now of one in 70 years."

[3] HOMMEL, pp. 19, 20. He assumes also a transmission from the Babylonians to the Egyptians.

as well as the Egyptians—the conditions of the land were much less likely to originate the idea than Mesopotamia, where it was only necessary to open one's eyes to become aware of the fact that the inhabited soil had once formed the bottom of the sea and had become dry land through the retreat of the waters.

But the sea has not always receded before the land; there was a time when it temporarily poured forth its floods upon the land, overflowing and devastating all around. It was the Deluge, familiar to us from the Old Testament. According to the Mosaic account, it took place before the building of the Tower of Babel—that is, before the Jews had left Babylon; they therefore carried the remembrance of it with them. But the fact that the sea, which had played an essential part in it, was no longer present to them was the cause that their idea of the occurrence assumed a shape of its own, very different from reality. Our knowledge of the true facts of the matter is due to a recently-discovered Babylonian account, contained in the eleventh chapter of the old Babylonian national epic of Izdubar,[1] in which he makes the just man of the legend, Chasis-Adra, chosen by the gods, the Noah of the Jewish account, relate the story to him. It corresponds with the Old Testament account in a single point only, viz., that of the whole sinful generation which, according to the divine decree, was to be destroyed, but one man, together with those belonging to him, should, on account of his godliness, be saved, to whom God had previously revealed the forthcoming event and prescribed the way in which he was to effect his deliverance. In all other respects the accounts differ, and it appears to me quite clear how this variation arose. While the event, as will presently be shown, actually took place in the neighbourhood of the sea, and *could* take place only there, the Old Testament account has fashioned it in such a manner as might appeal to the imagination of the inhabitants of the

[1] Translation by PAUL HAUPT in his excursus to SCHRADER, *Die Keilinschriften und das alte Testament*, p. 55. Giessen, 1883 [English Trans., 2 vols. London, 1885–86]. The quotations in the text *infra* give the columns and lines.

interior; the characteristic features of the old Babylonian account, which refer to the sea, have thus been obliterated.

I will now indicate the variations of the two accounts. They are four in number.

The first point consists in the fact that the Old Testament account refrains from mentioning any spot, whereas the Old Babylonian account indicates most minutely the scene of action—the "city of Surippak, on the bank of the Euphrates" (i. 11), which even at that time was very ancient (i. 12). This proves two things: (*a*) that the event took place at a time when civilization had already attained a considerable age, which is further evidenced by the fact that Chasis-Adra took gold and silver with him (ii. 25, 26), a circumstance to which I shall revert in its proper place (§ 29); (*b*) that it was enacted in the plain, where the overflowing sea would have full play.

The second point lies in the description of the event. According to the Old Testament account, "all the fountains of the great deep were broken open, and the windows of heaven were opened." Sea and earthquakes find no place therein. According to the Babylonian account, not only "the heavens rain destruction" (ii. 31) and "the canals overflow" (ii. 46), but "the whirlwinds are let loose" (ii. 45) and "the *Anunnaki* (=the gods of the great waters) bring floods" (ii. 47), and "make the earth to quake by their power (ii. 48), Ramān's surging billows rise up to heaven (ii. 49), and the light gives way to darkness" (ii. 50).

On the basis of this account, Suesz, the geologist,[1] endeavours to ascribe the cause of the event to the meeting of earthquakes and cyclones in the Persian Gulf (and I am of opinion that his view is the correct one). In consequence of this the sea overflowed the land, which is undeniably proved by the fact that the ship was driven inland until it rested upon the mountains (of Armenia); while if, as the Old Testament has it, the floods came only from above and from below, the ark

[1] *Das Antlitz der Erde.* Part i., vol. i.: *Die Sündflut*, pp. 25, *sqq.* Prague and Leipzig, 1883.

would of necessity have been driven into the sea.[1] In this way the "whirlwinds," the "floods," and the "billows surging up to heaven" of the account can be explained; they bring most graphically before our mental view the sea scourged by cyclones and earthquakes, to which must be added the "darkness," which in cyclones can reach such an intensity that, in one instance narrated by Suesz, one was unable "to see the end of the ship" (p. 46).

The third point refers to the duration of the event. The Babylonian account speaks of six days and seven nights, the Old Testament of forty days and nights. In neither case do I think that there can be any doubt as to the intention with respect to the length of time. Why does the one fix the number of days at six only? Why are they not, as would seem more natural, equal in number to the nights, seven? Because the god who had let loose the elements rested on the seventh day, even as Jehovah rested after the Creation—that is on the Sabbath, on which even the gods do no work. It is the idea of the labour-week of the Babylonians (p. 114) transferred to the gods. It had commenced with the evening of one Sabbath, and ended with the end of the night before the second; until then, however, the god, as distinguished from frail mankind, who needs the rest of night, had to labour day and night.

The reason why the Old Testament account so largely increased the number of days and nights is not far to seek. It had to be made clear to the people how it happened that the waters increased to such an extent that even on the highest mountains no one could find safety, and that the mountains themselves stood upwards of fifteen cubits under water (1 Moses vii. 20). It needed a much longer space of time than the six days and seven nights of the Babylonian

[1] When DILLMANN, in *Die Genesis*, p. 135 (Leipzig, 1886), regards this explanation of Suesz as only possible, but an internal inundation as equally possible, and, judging by the other flood legends, as more probable, he quite overlooks the following important point in Suesz's argument. Where was the water to go to, when the flood was over, if not into the sea? The ark, however, would also have been driven into the sea with the waters.

account, which, by the way, was itself more than sufficient, as a single day would have sufficed; the increase in both numbers must be attributed to tradition, which strove to make the whole process plausible to the people. In both cases tradition has diverged widely from the truth: there are no cyclones and earthquakes which last six days; there is no rain of the kind mentioned in the Old Testament which lasts for forty days; the fiction is palpable in both instances.

The fourth point of variation between the two accounts concerns the species of vessel in which the just man saved himself: in the Babylonian it is a ship; in the Old Testament a wooden ark—the familiar Noah's Ark. The ark speaks of the inhabitant of the interior, who has no idea that a vessel, to be secure on the water, needs a keel.

My final conclusion is that the Old Testament account relates an event (which has the sea for its basis) adapted to the imaginative faculty of the inhabitant of the interior, who is ignorant of the sea and of everything connected with it.

(*b*) Waterworks of the Babylonians.

§ 28. Water presents two problems of a precisely opposite nature to the farmer—how to convey it to his plot of land, where there is a dearth of it; and, where it threatens him with damage, how to turn it.[1] Nature can solve both problems for him. In the one case, in the temperate or cold zone, where the atmospheric deposits are distributed over the whole year, and the sun has not enough power to cause the water to evaporate quickly, heaven spares the agriculturist the necessity of supplying himself with water by artificial means. This is true also with regard to the second problem, where the character of the soil is not such as to make him fear any danger from excess of water. It is otherwise with reference to the first problem in the hot zone, where the atmospheric

[1] Legal form of this opposition of *aquam ducere* and *arcere* in Roman law, in *servitus aquæ ductus* and *aquæ haustus* and in *actio aquæ pluviæ arcendæ*.

deposits occur only during the rainy season, or very seldom, and soon evaporate under the scorching sun. Without provision for a regular supply of water during this time of drought, the agriculturist is a lost man; his land becomes impoverished; the construction of artificial aqueducts is forced upon him so imperatively that it has formed one of his first cares. We find, even amongst nations at the lowest stage of civilization, attempts to organize the water supply, which would astonish men of the more northerly regions, and which are far in advance of all their other contrivances.[1] The same applies to the second problem, where, in mountainous districts, mountain torrents, and in plains, the sea, or rivers which overflow their banks, compel man to protect himself against the destructive element. Here dykes, dams, artificial channels, and conduits are as indispensable for the purpose of keeping back the water as aqueducts are under the opposite conditions.

In Mesopotamia both problems existed, each so urgent and imperative that the people were compelled to face them. The river, in the spring and during the rainy season, overflowing its banks and inundating the plain; drought and impoverishment of the land at all other seasons of the year. Such were the conditions which nature had prepared for mankind. But the Babylonians, as usual, contrived to turn nature's apparent disfavour into a blessing by forcing the rivers to remain within their beds. They made them subserve their own purposes and supply them with water in time of drought.[2] This they effected in the first place by means of strong embankments, with which they surrounded them, and then by artificial tortuous river beds in place of straight natural beds. In the

[1] As in parts of Central Asia conquered by the Russians, where they found a fully developed, detailed system of irrigation, that had existed for thousands of years. How great the importance of this system was, was soon to become apparent under the rule of the Russians, who were wholly ignorant of the science of irrigation. The result of this neglect and carelessness was that, according to the testimony of the Russian naturalist and traveller, Middendorf, in the space of two years whole districts, some numbering as many as forty villages, were laid waste.

[2] For what follows, see HIRT, "*Geschichte der Baukunst bei den Alten*," i., pp. 148–155.

second place they conducted the water into broad canals and artificial lakes, which were so extensive that on one of them Alexander's fleet was in peril during a storm. There were sluices everywhere to shut in or let out the water as required. Hydraulic machines raised the water from the canals on to the higher land. Brick was useless in the construction of irrigation works; they therefore employed natural stone, which they imported from abroad (§ 29) and used for no other purposes. The quays of the rivers and the pillars of the bridges of Babylon were built entirely of hewn stone.

In this way Mesopotamia was perfectly secured by her masterly system of waterworks against the double danger which threatened it, viz., the overflowing of both her rivers and a scarcity of water for the land in times of drought. They evoked the admiration[1] even of the Egyptians, their only rivals in this respect in the old world. A close network of canals—the larger ones fed directly from the river, and the smaller ones supplied by them—extended over the whole land, and carried the blessing of water to the most distant parts. If, in the event of drought, the rivers ceased to afford the necessary supply of water, the great reservoirs of the artificial lakes came to their assistance. In this way the Land of Twin Rivers was secured, even in times of extreme drought, against the peril of impoverishment. By means of the artificial water system it had been converted into a flourishing garden: afterwards, owing to neglect, it became what it had been before—waste land.

Horticulture vied with agriculture. A garden was the pride and the delight of the Babylonians; and the Old Testament idea of Paradise is borrowed from this fact. Horticulture achieved a marvel which excited the astonishment of the old world in the Hanging Gardens of Nebuchadnezzar.[2] Two

[1] Whether the famous Lake Moeris of the Egyptians (which, according to Herodotus, was artificially made) served as model for the Babylonians, or whether the Egyptians imitated them, is still a moot point. But I, for my part, do not hesitate to decide in favour of the former view, seeing that the priority of the Babylonians in the matter of building has been well ascertained.

[2] Described by HIRT, *loc. cit.*, i., p. 142 *sqq.*

things which first saw the light in Babylon are specially noticeable: the art of raising water by means of the hose and the artificial fountain. On the top of the storeyed structure there was an enormous reservoir, from which the plantations and fountains on the separate storeys were fed by pipes.

The waterworks of the Babylonians therefore need not fear comparison with their structures on land—as regards their grandeur of conception, I should award the palm to them. What audacity of purpose, for instance, lies in the conception of temporarily leading a mighty river like the Euphrates out of its course in order to throw a stone bridge across it, or to dig artificial lakes! For thousands of years the world did not again behold waterworks comparable with these, either amongst the ancients or amongst more modern nations. Not until our days has a work been produced that can be compared with them, viz., the Suez Canal. We look in vain on European soil for an artificial system of irrigation carried out on a large scale, even in places where it would have been of great value. The State has left the care of irrigation to the individual. The Aryan has never risen high enough to share the Babylonian view that this is a question of public interest, which the State itself should take in hand. The Arab, when he settled in Spain, was the first to bring this idea into Europe, and by him it was carried to perfection, without, however, finding imitators elsewhere. The Arab thus proved himself to be the worthy successor of the old Babylonian, with whom he also shared the art of brick-building and a love for the garden and the fountain. The system of irrigation may be called the "monogram" of the Semite, by which his presence has been evidenced wherever he has settled. The Romans also produced magnificent aqueducts, but their object was merely to supply the population with a sufficiency of water, not to feed the land. Even they never contemplated the idea of an irrigation system organized by the State: this is one of the distinguishing features between the Semite and the Aryan.

I have previously (pp. 82, 111) emphasized the significance of labour for the formation of national character, and pointed

out the enormous distance there is between the work produced by the Semites and that produced by the Aryans. To the two previously-mentioned divisions of labour of the former, viz., agriculture and architecture, a third was added, their system of irrigation, which leaves the first far behind, and is at least equal to the second. The incalculable amount of national labour this represented needs, after what has already been said, no further explanation. But the question of quantity is in this instance not the only one which should occupy our attention; it is, indeed, to my mind, far outweighed in importance by another consideration, that of the co-operation in labour which was involved by a whole nation working for a common end. The common pursuit of one and the same object, through the union of the strength of the whole body, constitutes the decisive step by which a nation raises itself from its primitive low stage of purely natural existence into that of State existence; it is, as it were, the first quickening of the State; each fresh achievement implies another step forward along the road of State development. The highest point that is attained by a nation depends upon the energy with which, and the measure in which, it has realized the idea of co-operation in labour for a common end. Such co-operation has for the State the same significance that individual labour has for private property; both the State and private property are the productions of labour, and have labour for their historical starting-point as well as for their permanent foundation. State authority exemplifies the one, the produce of a nation the other: the latter is social, in contrast to political, activity.

This is the standard by which I propose to judge of the degree of political development to which a nation has attained, and which I will now proceed to apply to the Aryans and the Babylonians. But the motive which has led me to this, the enormous amount of co-operative labour involved in the irrigation works of the Babylonians, might lead to the misapprehension that by co-operative labour I mean merely manual labour, which is the most obvious element in such

structures. I understand by it rather the union of strength of the whole community in pursuit of one and the same end. Protection against the external enemy was, historically, the first motive that forced a people into united effort. Self-preservation takes the first place, both with nations and individuals; this, and not jurisdiction, was the first inducement for the formation of a State. Not, however, in that first stage when the union terminated as soon as the cause which called it into existence came to an end, but only after it had gained stability, *i.e.*, where it led to the formation of a regularly organized army. In the army the State first saw the light of day; its organization is the standard by which to judge of the first development of the State. A further step along the same road is the construction of fortifications by which the enemy might be kept at bay. The second motive for co-operation was divine worship. Originally confined to the house and the family, the sacrifice on the domestic hearth and ancestor worship at the grave, it became in course of time the common concern of the whole nation; priests were appointed and temples erected to the gods. Priests and temples have the same significance for this question as the army and fortified towns: they are a criterion of political development and community of public life; the funds for their support or construction have to be supplied by the people. With the Aryans in their original home we find none of this; neither organized army nor fortified towns, neither priests nor temples existed. A political constitution, *i.e.* a lasting combination with common objects in view, was unknown to them. They were a nation, not a State. If a war necessitated combined action on their part, their agreement was terminated as soon as the motive for it ceased. The Aryans attained to an organized army only after the daughter-nation had separated from the mother-nation. During the period of the migration, which was synonymous with uninterrupted warfare, an army was inevitably necessary. It was the first beginning of a political institution; in the army the Aryan State first saw the light of day. Our

modern theory of State would, it is true, deprive them of any claim to this designation, for they lacked the rudimentary essential factor—a fixed domicile, the State territory. This, however, is an abstraction which we have deduced from the State as we find it in historical times, where it occurs in a perfect form, but which does not hold good for the migratory period of nations. It shows us the possibility of a wholly different form of government: the migratory State. Closer observation of the conditions of the Aryan nomads during their migration (Book IV.), shows that we have to do, not with a mere nomadic tribe, but with a nomadic State. All settled nations which they encountered during their march were overcome by them; they alone held their own throughout—history affords no more impressive example than this of the independence of the idea of State from the territorial element, and at the same time its supremacy over it.

I will now revert to the Babylonians, and apply to them the point of view which I have established as a standard whereby to estimate the degree of the political development of a nation: combination of national strength in pursuit of one and the same object.

Judged by this standard, their political constitution shows an exceptionally high development. It took the Aryans of Europe thousands of years to attain the same level. Their architecture brings before us two achievements of the very highest order—the one intended for defence, the other for divine worship. Both the fortifications of Babylon (p. 129) and the temples (p. 125) far surpass everything that any other nation of antiquity, with the exception of the Egyptians, can show. To these must be added two other similar institutions, the constitution of the army[1] and the endowment of worship, with publicly-appointed priests.

Defence and divine worship constitute with all nations the starting-point of combined action, *i.e.*, elevation into a State; their characteristic feature in the Babylonian world is the

[1] I consider it indisputable that there must have been efficient military organization in Babylon, although I can bring no positive evidence to prove it.

amazing expenditure of national strength with which the were brought about. But the work of government was nc confined to these two objects; there were two others, to whic it devoted the greatest care—agriculture and commerce. Th former it fostered by means of the widespread canal and wate system described above; the latter by levelling the waterway and the roads—the waterways by the construction of channel and a canal connecting the Tigris and the Euphrates; th roads by means of paving (p. 137).

Such are the achievements of which the Babylonian govern ment can boast, and they are eloquent witnesses to it efficiency. How far superior is this to the view entertaine in comparatively recent times, which transferred the solutio of this State problem to the law! What would history hav to relate of Babylon if the State had accepted this view Without government the land would have remained wha it had been in primeval times, and what it has agai become since government disappeared — swamp and deser That it became the most fertile country in the world wa owing solely to the magnificent conception and the tireles exertions of the combined population in the execution of thei canal and water system. This, however, necessitated a authority who planned the work, supervised its execution, an brought it by coercion to a successful issue; such an authorit however, which by coercion impels a whole nation to pursu one common end, we call Government. Every one of the grea works to which Mesopotamia can point testifies to it, an as far back as we can trace them—that is, as far bac as the pre-Babylonian times of Akkadians and Sumerians—th existence of the State can be dated. On this spot the Stat first appeared in history, and all the achievements sinc effected have for their ultimate cause the fact that the Stat existed; and that it existed has its final cause in the demand which nature laid upon mankind.

Nowhere have the demands of nature upon a people t exert their utmost strength in pursuit of a common end an in a systematic manner been so imperative as upon that regio

of the earth upon which the Babylonians had settled. The State here became a vital question, the condition of human existence; to express it in a paradox, one might say that it was in the water, and came forth out of it, no less so than the earth itself according to the cosmogony of the people. The Aryans owe the establishment of the State to the exigencies of their migration; the Semites to those of the soil. With both it was the essential element in the security of their existence: with the former security against the enemy; with the latter against nature. With both it represented the condition of existence; with both it presented itself in some form, which will for all times remain the criterion of political activity —the form of union of strength (means) of the community for the pursuit of a purpose universally recognized as the condition of the existence of society. These purposes may vary; but the means of attaining them, and the problem for the State of how they shall be attained, remain for ever the same.

(c) Sea and River Navigation of the Babylonians.

§ 20. The Aryans' knowledge of navigation was limited to river-boats and skiffs, made by hollowing out the trunks of trees. A ship, *i.e.* a vessel intended for the transport of goods, and in size and construction (keel) adapted to that end, they never built; even if they had had one given to them they would have had no use for it, for the only articles of commerce which they could have transported by it, their cattle, were much more easily driven. To enable man to conceive the idea of building a ship with the object of avoiding the friction unavoidably connected with transport by land, two things must be assumed—a waterway opened to him by navigable rivers or the sea, and the possibility of a freight. But the only possible freight consists in goods—the product of nature or of industry —which may be lacking in one place and needed in another. In a country where all that the population requires is to be found in all parts in sufficient quantity, and of equal quality, there would be nothing for the transport-ship to do. Want in

one place, superfluity in another, equalization of mutual necessities—in short, the possibility of trade, is a necessary condition of shipping.

With regard to the first of these two conditions, Mesopotamia was abundantly provided for by nature. The Euphrates and the Tigris were inaccessible to ships only in their upper reaches, where they had to wind their way in and out among the rocks, and where the rapids and the rushing falls offered an insurmountable obstacle to the passage both up and down stream. Nothing but a raft was able to pass, and I here add the description which Moltke gives of the construction of these rafts as they are now in use.[1] Trunks of trees are fastened together to form a raft, which is supported by between forty and sixty sheepskins inflated and smeared with pitch. By these means it obtains—to use the words of Moltke, who himself made a passage on one of them—such a "lightness, mobility, and tractability that it curves like a fish, and takes the shape of the wave upon which it floats." The trunks of the trees composing the raft, and the cargo of cattle, are sold at the place of destination; the goods bought in exchange and the sheepskins are loaded on mules or camels ready for the purpose, and taken home by road. This contrivance in a slightly different form is described by Herodotus (i. 194) as, after the city of Babylon, the "greatest wonder" of the land. It is quite certain that we may date it far back into antiquity. Babylonian inventiveness must indeed have fallen grievously short on this particular point if they had not hit upon this convenient device for procuring for themselves from the mountainous districts the wood for building and for burning which they lacked, and cattle for slaughter, to which, according to Herodotus, wine should be added. The fact that cattle could be transported in this manner is evident from the account of Herodotus, according to which the captain of the raft took donkeys on board with him, which on the return journey carried the skins and the goods purchased.

[1] MOLTKE, *Briefe über Zustände und Begebenheiten in der Türkei*, pp. 241, 290. Berlin, 1841.

At the point where the Tigris and Euphrates left the mountains they became navigable, and whatever nature had left to be desired art supplied, by means of diverting the channel of the stream and of large navigable canals.[1]

Nothing but the ship was lacking, and this the inhabitants of the district had learnt to build in the earliest ages—at a time, in fact, when all other peoples on the face of the earth were still making shift with rafts, hollowed trunks of trees, or vessels made of matting and scantily protected from the water by skins. The high antiquity of the ship, even of the sea-going ship, amongst the Babylonians is put beyond all doubt by the following facts. Their shipbuilding dates back at least four thousand years B.C. The objection that, owing to the absence of building materials, the Babylonians can have known nothing of ocean navigation, falls to the ground in face of what has been said above. We here meet with the same startling phenomenon which we have already come across once before (p. 99). Just as the stone house was first built where nature had withheld stone, so the ship was first built where she withheld wood—in other words, architecture and the art of shipbuilding originated in places where suitable materials were absent, not where nature had abundantly supplied them for the purposes of man.

The ship is, to my mind, one of the most marvellous works ever produced by man; it seems as though he must have pondered over it, experimented, and improved upon it for thousands of years, until he found the right and proper construction for it. How did he hit upon the keel? How upon the other parts of the ship upon which her easy movement in the water depends, her oblong rounded shape, her hull tapering at both ends[2] and downwards? And how

[1] Special mention should be made of the canal connecting the Euphrates and the Tigris. The difficulty occasioned by the unequal height of the water in the two rivers was overcome by sluices.

[2] The ships of the ancients were exactly the same shape at bow and stern, and the rudder was not fixed, which had the advantage that the ship could go backwards as well as forwards without turning. BREUSING'S *Die Geschichte der Nautik bei den Alten*, p. 97. Bremen, 1886.

of the ribs of the ship which ensure her firmness? We can only realize, by considering what we know of Noah's Ark, which lacked all these points, and could have been devised only by a nation which had no conception whatever of the requirements of a ship, how mistaken we should be if we regarded them as a mere matter of course. Did the Babylonian gather all this knowledge piecemeal over the course of long experience, or was there not a model for him to copy?

I have shown above (p. 125) that the Babylonian in his storeyed tower imitated the mountain. In the ship, I think, he imitated the fish, which seemed to him to solve the problem of safe and light floating upon the surface of the water; he had only to copy the fish in his ship in order that it should swim as well as he. All the characteristic features of the ship are to be found in the fish. If we picture to ourselves the skeleton of a ship — the keel, with the ribs inserted — we see that of the fish with the back and the side bones. Add to this the external shape of the ship — the oblong rounded form, the tapering hull—and the fish is complete; nothing but the fins are wanting, and their place is taken by the movable rudder. The sail is an element in the ship which has not its counterpart in the fish; for the rest, the similarity between the two is so striking that in my opinion one must wilfully close one's eyes to reject the theory of the intentional imitation of the fish in the ship. Man has learnt more from brute creation than we of the present day dream of. In the course of my work I hope to quote several examples, besides that of the dove, which I give below; and I am convinced that anyone giving his special attention to this subject, man in the school of brute creation, would find no inconsiderable mine of wealth opened to him.[1] The problem of aërial navigation will, perhaps, be satisfactorily solved only after man has copied the bird, even as he has copied the fish for aquatic navigation.

The neighbourhood of the Persian Gulf was of incalculable

[1] *Cf.*, however, J. G. WOOD'S *Nature's Teachings: Human Invention Anticipated by Nature.* Lond. 1877 [Tr.].

value for the development of navigation in Mesopotamia, for to it the people owed the transition from river to sea navigation which was of such extraordinary importance to them.

Marine navigation has always begun with coasting expeditions, which share with river navigation the advantage that the mariner keeps always the land in sight, whereby he can at all times obtain water and food, and in case of necessity find shelter; moreover, it guarantees him against the danger of losing his way, which threatens him in mid-ocean. His course is as clearly defined by the coasts, even when it extends a great distance, as it is by the banks of the river; he can be certain of finding the way back to the point whence he started. Coasting is partly river navigation, but at the same time partly sea navigation. Against his will, storms and currents may drive the coaster out of her course into mid-ocean, and he may even see fit to take that course voluntarily when the coast offers dangers which he need not fear in the open sea. Given the choice of seeing his ship dashed to pieces upon the cliffs or foundering on sandbanks, or of committing himself to the care of the open sea, he will choose the latter as the lesser evil. The coaster who has once ventured into deep water soon discovers that the "deep sea offers fewer dangers than the shallows";[1] and so coasting leads imperceptibly to ocean navigation, and "the timid coaster develops into a bold mariner."[2] Thus it came to pass with the Babylonians.

The Babylonians would not have been the enterprising people they were, never deterred by even the greatest difficulties on land, if they had not undertaken the small risk of penetrating from the estuary of the Euphrates and the Tigris into the Persian Gulf and voyaging along the two coasts. Whoever doubts this can have no true conception of the people. Once upon the sea, however, a knowledge of the ocean could not long remain hidden from them—the transition from the coasting expedition to the ocean voyage was unavoidable.

[1] BREUSING, *loc. cit.*, p. 1. [2] BREUSING, *loc. cit.*

The ancients name only the Phœnicians as mariners; they do not so refer to the Babylonians. It was through the former that they became acquainted with ocean-navigation; to them they owe their first instruction in it. From their silence as to the knowledge of navigation of the Babylonians it is inferred—incorrectly, as I think—that they had none. In Babylon things that were found nowhere else attracted the attention of foreigners so fully that they did not feel it necessary to make special mention of navigation, of which at that time the Phœnicians were the undisputed masters. Foreign informants emphasize those features in a nation which appear to them the most conspicuous. An Eastern Asiatic wishing to convey to his countrymen his impressions of travel in Europe would probably not waste any words over the English army, but would dwell all the more upon the navy and upon the industry and commerce of the country. In Prussia, on the contrary, it would be the army, in Italy the art, that he would dwell upon, perhaps not even mentioning the other matters: are they, therefore, unrepresented in these three nations merely because they have not been specially mentioned?

In what follows I hope to be able to prove not only that marine navigation was generally known in Babylon, but also that it was known in the earliest times, at least as early as four thousand years B.C. If, as for my purposes I will assume was the case, but about which everyone may think as he likes, the Phœnicians[1] and the Jews had not at that time separated from the mother-nation, then they would have carried away with them the idea of traffic by sea and the ship, and would have been specially familiar with the use of the dove and the observation of the stars for the purposes of navigation (see below). With the Jews, who with the loss of the sea lost the opportunity of turning this knowledge to account, it became extinct, whilst the Phœnicians, who settled upon the most

[1] Sidon, the oldest Phœnician city, is supposed to have been founded about the year 3000 B.C., that is at a time when navigation had long been carried on in Babylon.

favoured sea-coasts of the whole world, preserved it and even surpassed the mother-nation in this respect.

Most modern writers who have had occasion to approach the question of the navigation of the Babylonians have passed it over in silence; it is only when speaking of the Phœnicians that they adopt the view that they were the first mariners.[1] Two writers only, as far as I know, have expressed a positive opinion on this question: Eduard Meyer, in his *Geschichte des Altertums* (vol. i., p. 225), who concludes upon very inadequate grounds[2] that it is "fully established" that shipping was never carried on in Babylon; and Götz, in his *Verkehrswege des Altertums*, p. 66 (Stuttgart, 1888), according to whom maritime traffic existed in the Persian Gulf as early as about 3500 B.C. His evidence consists of the inscriptions on several works of sculpture, which expressly mention the mountains of Magan (=shipland) as the source of supply of dioritic stone blocks needed for this purpose. The "coast-land of northern Arabia," as being nearest in point of situation, "must be meant, where even now such masses of stone are to be found." I am in a position to offer several hitherto neglected arguments

[1] Also BREUSING, *loc. cit.*

[2] His first reason is the alleged express statement of an inscription (in FRIEDRICH DELITZSCH'S *Wo lag das Paradies?*, p. 76 (Leipzig, 1881), which, however, gives no further information than that an Assyrian king in Nineveh built tall ships, and manned them with sailors from Tyre and Sidon. DELITZSCH himself (p. 99) disputes the very possibility of the Babylonians having been able to reach India without the help of Phœnician seamen. But the basis upon which he founds his conviction that the Babylonians cannot have been a seafaring nation, and had their sea-ships built for them by Phœnician shipwrights, involves an assumption of what has yet to be proved. The view that the inscription of the Assyrian king in Nineveh bears upon the question of Babylonian navigation is without rhyme or reason. MEYER'S second argument is the fact that "Alexander sent out expeditions from Babylon to explore the Arabian coasts, which would have been quite superfluous if Babylonian merchants traded there." As if the same thing does not happen nowadays—government sending out an expedition by land or by water to places long since open to commerce! This quotation respecting Alexander shows rather that the sea-route from Babylon to India was well known in his time. Who would dream of the Nearch and his fleet setting out to sea from the mouth of the Indus if there had been no certainty of his reaching the Persian Gulf and Babylon, the object of his voyage?

in support of his theory. The most convincing one I must reserve for a future occasion—I mean the sea-loan (*foenus nauticum*) of the Babylonians, which places the fact of their navigation beyond all dispute. Two other arguments which I think of value for my purpose need closer examination. I allude to the Babylonian account of the Deluge and the great age of astronomy in Babylon.

The Babylonian Account of the Deluge.

Let us consider how this can serve us in connection with the question of the maritime navigation of the Babylonians.

Chasis-Adra takes his own pilot with him on his ship.[1] This at once stamps the ship as a sea-going vessel. For river navigation there is no need of a pilot; the course of the vessel is indicated by the river itself, and the purely mechanical management of the helm is so exceedingly simple that it can be managed by any ordinary sailor. But it is quite another thing at sea, where the course to be taken has to be determined by the captain, and requires special qualifications, not to be found in the man who simply understands the management of the rudder, and is without nautical knowledge. He must know which direction the ship has to take in order to reach the point indicated; where it concerns coasting merely, how the coast is situated—where are headlands, bays, rocks, and sandbanks; which places he has to avoid, and where, in case of need, he may effect a landing. When he ventures out into the open sea he must know where to look for the nearest coast in order to take refuge if need be; he must know the position of the stars, in order to ascertain his bearings. In short, seafaring, even coasting pure and simple, requires nautical knowledge, and it is this, not the purely mechanical management of the rudder, that makes the pilot. Without the pilot a ship is lost at sea: he is quite indispensable to her.

[1] The fact that his name is mentioned (*Burzurkurgal*) leads me to suppose that this name had a special meaning; perhaps Assyriologists may one day be fortunate enough to find it out.

But there was no need of a pilot in the river traffic on the Euphrates and the Tigris, or on the canals, for there were no cliffs, no shallows to avoid. The waterway, as we know, was so perfectly constructed that an ordinary boatman could manage the craft. The circumstance that Chasis-Adra had his pilot on board shows that, even at that time, there were people who had studied the art of steering and made it a profession; which is equivalent to saying that seafaring was even then a trade. In navigation the same distinction was made, as in the building trade, between the ordinary labourer (builder, sailor), who needed only physical strength, and the professional, who required special technical knowledge—for the building trade, to superintend the building; for navigation, to manage the ship.

In the Mosaic account of the Deluge the pilot is wanting. The Jews had lost touch with the sea and seafaring (p. 150); their ignorance is as clearly proved by the absence of the pilot as by the transformation of the ship of Chasis-Adra into the ark of Noah. The absence of the pilot in the Mosaic account must open our eyes to the importance of his presence in the Babylonian account.

A second confirmatory example, taken from this account (in this corresponding with the Mosaic), is the despatch of the dove. According to both accounts the dove is to discover if the waters have abated; in only one respect do the accounts differ, viz., that Noah three times sends forth the dove (previously to that, the raven); Chasis-Adra sends the dove only the first time—the second time it is a swallow, the third time a raven. Criticism has not so far paid sufficient attention to this circumstance; we will now do so.

It is obvious that this method was not a necessity to ascertain the condition of the land. Through the same opening through which the dove was sent forth, a human eye could have looked out to ascertain if the ground was dry, and the account makes even special mention of the little window through which Chasis-Adra looked (iii. 27). Through it he noticed, *before he sends forth the dove*, a "piece of land

twelve measures high" (iii. 31). The method, therefore, was not only superfluous, it was also altogether deceptive. What inference were they to draw if the bird did not return? Only that *somewhere* it had found a foothold where it could rest. But of what avail was it to the inmates of the vessel to know that somewhere—for instance, on the highest mountain peaks—the waters had abated? For them the question was whether the nearest surroundings were dry enough to admit of their leaving the vessel, and this they could ascertain only for themselves; they might have sent forth a hundred birds without obtaining any certainty on this point. The account is, moreover, contradictory in itself, for before Chasis-Adra sent forth the dove he had himself already discovered the above-mentioned "piece of mainland"; and yet the dove is supposed to have gone to and fro and returned to him because it found no resting-place (iii. 38, 39), though it was there. The sending forth of the dove must have had some other meaning.

The dove was the marine compass of the Babylonians. Every ship going to sea had doves on board, which were let loose if they wanted to ascertain anything about the neighbouring coasts or islands; the direction the dove took, after it had risen sufficiently high to command an extended view, gave the desired information.[1]

A third feature may be added to these two, the pilot and the dove, to characterize the ship of Chasis-Adra and its extra-

[1] PLINY, *Hist. Nat.*, vi. 22. The sending forth of the dove had no sense, except for purposes of marine navigation. There was no meaning in it as regards river navigation; it therefore fully justifies our opinion about sea navigation. As far as I know, there is no explicit evidence to prove that the Babylonians used this means for the above-mentioned purpose; but from what has just been said, it is clear that the sending forth of the dove (swallow or raven) by Chasis-Adra was quite useless for the purpose assigned to it, and leaves only the alternative that the carrying and despatch of doves was a Babylonian institution, which consequently was not, as the ancients thought, invented by the Phœnicians, but had come to them from the mother-nation. Possibly the Babylonians made use of the swallow and the raven as well as of the dove, which latter was exclusively employed by the Phœnicians; in any case, the sending forth of birds from Chasis-Adra's ship allows of no other interpretation than the one I have adopted.

ordinary size. The ship is large enough, following the account (i. 42–44), to contain, in addition to Chasis-Adra, his family, his manservants and his maidservants, his relations, his provisions of corn, and all his goods and chattels, also the "cattle of the field" and the "wild beasts of the field." A people accustomed only to river navigation with small boats could never have conceived so enormous a vessel; but a nation acquainted with sea navigation could get at least an approximate idea of its size from their sea ship. The sea ship must of necessity be large, in order both to stand a high sea and to carry sufficient merchandise to make a long voyage remunerative. How, then, could Chasis-Adra, if at that time the people were quite familiar with the sea ship, be afraid lest by following the instructions of the god Ea in the building of his ship, he might bring upon himself the derision of the people (i. 29–31)? This can easily be explained in reference to one point well calculated to call forth ridicule. Chasis-Adra, be it understood, ostensibly to protect himself from the rain, was told to cover his ship with a roof (i. 27), and this not being found on any other ship and being contrary to all preconceived notions of propriety, was quite sufficient to call forth their ridicule.[1]

Perhaps a fourth argument, in itself conclusive, might be derived from the account, if the passage in question were not deficient. The god Ea, in his injunctions as to the building of the ship, mentions the sea (i. 27); unfortunately the words describing the relation of the ship to the sea cannot be deciphered. I can think of no other meaning than that the destination of the ship was the sea, otherwise it could not have been taken into account in the description of the ship.

The results of my researches so far may be summed up into the one proposition that the Babylonian account of the Flood puts it beyond all doubt that, at the time of its occurrence, maritime navigation was already in existence.

[1] The fact that Jehovah deems it necessary to give Noah special instructions to smear the ark with pitch both within and without is, moreover, peculiarly characteristic of the ignorance of the Jews. This is not found in the Babylonian account, because such an act was a matter of course to a people skilled in seafaring.

Did the event really take place as described? It is obvious that the legend has arranged and adorned it according to its own views. By way of example, I refer to what I have said about the six days and seven nights (p. 153), and about the sending forth of the dove. But legend does not invent at random; it always contains a germ of historical truth, and it belongs to the duty of historical criticism to bring this to light. As regards the Flood, this has already been done (p. 152); there remains only the deliverance of Chasis-Adra. Is this pure invention, or has it some historical foundation? I do not for a moment doubt that it has. The deliverance of Chasis-Adra is to my mind based on the fact that at the time when the event took place seamen actually on board their ships were safe from the danger, while all others perished. The legend has chosen to represent this deliverance in the person of one typical man —Chasis-Adra. Chasis-Adra is the personification of the sea-faring man, who saved his life in the great Flood. All that the legend tells us about him is connected with the sea-going ship. He has the pilot (ii. 38) and the dove (swallow or raven) on board with him (iii. 37–44); also wife, children, and relatives (ii. 28, 29), who accompany him on his wearisome voyage; gold and silver (ii. 25, 26) for the purchase of merchandise, cereals, fruit, and live cattle (ii. 27–29) wherewith to maintain himself and those with him during the voyage.

This is, in my opinion, the historical basis of the Babylonian account; all the rest must be credited to the legend; nor is it difficult to understand how it arrived at it.

If it were the will of the gods that all life on earth should be exterminated (i. 22), even the highest mountain tops had to be covered, and, in order to bring this about, the fury of the elements—earthquakes, cyclones, and waterspouts—had to continue incessantly for a week, until the dawning of the Sabbath put a stop to it. The distance from the sea to the mountain Nizir,[1] where the ship is supposed to have landed, was more than 100 geographical miles. The superficial area in the

[1] East of the Tigris, somewhere between 35 and 36 degrees of latitude. F. DELITZSCH, *loc. cit.*, p. 105.

plains alone (Mesopotamia, the Syrian Desert, etc.), which the water must have covered, would not be too highly estimated at 15,000 sq. German miles; and this level, in order that the highest mountains might be reached, would have had to be submerged several thousands of feet deep—an absolute impossibility. The fiction and the motive which prompted it are clearly discernible. If, after all life had been destroyed from off the face of the earth, new life was to come forth, this could be brought about only in the manner indicated by the legend in which god Ea instructs Chasis-Adra "to bring into the ship two of every kind, to keep alive the seed" (i. 23). If the ship were not driven back into the sea by the retreating waters, it must of necessity be stranded on a mountain. If the living creatures it contained were not to be drowned in the deluge of rain which uninterruptedly poured down from the skies, the ship must of necessity have been protected by a roof. And, lastly, that the deliverance of Chasis-Adra was not due to his being accidentally on board ship, but to divine inspiration, was no less dictated by popular religious belief. God Ea, "the lord of inscrutable wisdom" (i. 17), *i.e.* he who knows all things before they are, and who can send help in all difficulty, had sent him a dream which foretold to him all that should happen (iii. 22).

However much fiction may have added of its own, and however much it must of a certainty have exaggerated the dimensions of the ship of deliverance,[1] the historical trustworthy germ of the account lies, to my mind, in the fact, which alone is of importance for my present purpose, of *the existence of maritime navigation* at the time that this event took place.

The account does not afford any information as to the time of the occurrence, but we can gather this much from it—that civilization had already attained a considerable footing. The city of Surippak was already very "ancient," and the statement that Chasis-Adra took gold and silver with him shows that even at that time there must have been foreign commercial

[1] The numbers in i. 25, 26 can no longer be deciphered. HAUPT, *loc. cit.*, p. 68.

relations, as this is the only way in which gold and silver could have come into a country of which it was not a native product; and traffic by sea at this time, far from being surprising, adds only another feature to the two previously mentioned to complete the picture of civilization they afford us. Gold and silver were presumably imported even then by the sea route, for its importation from India in later years is a fact beyond all doubt. No less certain is it that as early as about B.C. 3500 dioritic stone blocks were brought by this route from abroad (p. 168). Would it be likely that the Babylonian tradesman despised gold and silver? However, be that as it may, the great age of maritime navigation with the Babylonians is placed beyond all doubt by the twofold evidence brought to bear upon it—the stone blocks of the "shipland" Magan, and the sea ship of Chasis-Adra.

The Antiquity of Astronomy in Babylon.

According to the communications made by the Chaldeans to Alexander, the written records of their observations of the celestial bodies dated as far back as the year 1903 before he came to Babylon, *i.e.*, as Alexander died in Babylon in 323, at least as far back as the year 2226 B.C.[1] How did it arise that the Chaldeans instituted observations of the skies? This question, so far as I know, has not hitherto been raised even by astronomers. It is naturally supposed that they were led to it by the same scientific interest which actuates the astronomer of the present day; and it is undoubtedly true that, when once they had started, they were influenced by this interest. But what first attracted them to it is quite another matter, and upon this point I have my own opinion. Babylon was not the right soil for *pure* science, *i.e.*, science for the sake of finding out the truth apart from its practical value. The Babylonians never ventured into philosophy, not even into its most rudimentary parts. In the eyes of the Babylonians the only knowledge that had any value was that which could be

[1] MÄDLER'S *Geschichte der Himmelskunde*, vol. i., p. 23.

applied to daily life: a tendency towards the practical is the chief characteristic of the Babylonian mind. As shown above (p. 128), it was to their practical tendencies that they owed the birth of arithmetic. The Chaldeans were the first to raise it to a science, long after it had been in practical use amongst builders. And I infer that exactly the same thing happened with regard to astronomy: in the former case the *architect* led the way, in the latter the *seaman*.

Let us imagine his situation on the high seas. A knowledge of his bearings was indispensable for steering; he had to know which was North, South, East, and West. By day the position of the sun informed him of this; but what about the night? The stars alone could tell him, and in order to steer by them he had to be acquainted with their position and their course. Without this knowledge he would be lost in mid-ocean, and might steer in exactly the opposite direction to the one intended.

And he did possess this knowledge. When Ulysses, the pious sufferer, started from Ogygia on his long sea voyage, Calypso instructed him how to regulate his course by the position of the stars.[1] Thus the Greeks in the earliest times; they, however, got it from the Phœnicians,[2] and according to ancient authorities[3] it is they who first applied astronomy to navigation. I have already (p. 166) expressed my opinion about the way in which they are supposed to have attained it.

Just as the Phœnicians obtained the marine ship and the dove from the mother-nation (p. 170), so also they obtained astronomy. If the statement is correct that as early as about B.C. 3500 the mother-nation possessed the art of maritime navigation, while the earliest settlement of the Phœnicians in Sidon does not date back earlier than the year 3000, and that the mariner without a knowledge of the starry heavens would be lost at sea, the conclusion is obvious that even at that early time this method must have been adopted by mariners for ascertaining their bearings. And the high

[1] HOMER, *Od.*, v. 272-275. [2] STRABO, xvi. 2, 24.
[3] PLINY, *Hist. Nat.*, vii. 56.

antiquity of Chaldean astronomy confirms this. Before it occurred to them to form a science of astronomy a long study of its empirical application must have preceded it. Long before they had begun to observe the skies from the summit of their temple-towers the mariner had done the same from his ship. He was the first astronomer in the world, and he was so because he had to be: necessity forced him to it. His observations at sea were the first contributions to the first beginnings of scientific astronomy; the questions he addressed to the learned of the land, who laid claim to a knowledge superior to his, above all to a knowledge of mathematics—in the language of the ancients, the Chaldeans—awakened in them a desire to carry their investigations further in order to assist him with their more exact knowledge. The astronomy of the Chaldeans was the offspring of seamanship, just as their mathematics was of architecture. The sum total of the knowledge acquired by the Chaldeans was applied to the sea. Science in Babylon, called into existence for practical purposes, ever remained subservient to them; never did the Babylonian pursue any subject of which he could not see the practical utility.

This practical connection between astronomy and seamanship continues to the present day, and will never undergo any change. The only calling with which it is intimately connected, and to which it is absolutely indispensable, is that of the seaman; and this necessary connection existed in antiquity. It is very significant that the Greek astronomer, Thales, wrote a handbook of seamanship.[1] Am I right, then, in assuming that the origin of Chaldean astronomy is to be found in the practical interests of the Babylonian mariners?

But my object was not to prove this, however valuable the result may be in other respects. It was merely to find the connecting link between the astronomy of the Chaldeans and the precise age of maritime navigation amongst the Babylonians. I do not think this needs any further explanation. And if the extant written records of the Chaldeans reach back

[1] See DE BREUSING, *loc. cit.*, pp. 13, 6, 8-10.

beyond B.C. 2200, their non-chronicled observations must surely be of much greater age still; and if the mariner preceded the Chaldean in the observation of the skies, we land, however moderate a space of time we may allow for it, right back in a period in which there could be no question of Phœnician navigation, *i.e.*, about four thousand years B.C. The view of the ancients that the Phœnicians were the earliest seafaring nation in the world is therefore incorrect. Long before them the Babylonians navigated the sea, and were familiar, as has been shown, with all its accessories—the sea ships, the pilot, the dove as sea compass, and the application of a knowledge of the heavens to find a ship's bearings on the open sea. The only question which still awaits an answer is with respect to how far their voyages extended, or rather, as it has already been established that they came to Arabia by the west coast of the Persian Gulf (p. 168), whether they reached India by way of the east coast?

I have no hesitation in giving a decided affirmative answer to this question, and I am confident that I shall be able to prove it beyond all doubt by the facts which I can bring to bear upon the subject.[1] Coasting on the east coast of the Persian Gulf is singularly favoured by nature; it is one of the easiest and safest coasts imaginable. The sea is deep close to the shore; there are everywhere places suitable for anchoring, in the bays or on the islands, and the skipper profits by the periodical currents of the gulf, which from October to May carry his ship outward, and from May to October landwards. Even outside the Persian Gulf as far as the mouth of the Indus coasting does not offer the slightest danger or difficulty. And is it to be supposed that the Babylonians did not voyage along these coasts? In order to estimate the full importance of the question, let us remember that other nations of antiquity, such as the Arabians, Egyptians, and Phœnicians, to whom nature had aggravated the obstacles in the same degree as she had eased them for the Babylonians, did not

[1] With regard to the objections raised by E. MEYER and F. DELITZSCH on this head I have already explained myself (p. 168, note 2).

shrink from venturing by the sea-route to India. The Red Sea, through which they had to take their course, is one of the most perilous in the world. Being for the greatest part shallow it has either a sandy shore or naked rocky coasts, with many most dangerous cliffs, added to which are innumerable coral reefs. Emerging from the Gulf of Aden into the Indian Ocean, the navigator has to pass through the "Gate of Mourning," the death-trap of innumerable vessels, the Straits of Bab-el-Mandeb. Then he finds himself on the high seas, and the distance he has yet to accomplish to the mouth of the Indus or to India is as long again as the distance he has just traversed, the whole distance being more than double the length of the route which the Babylonians had to take. In the former case, double the distance, a coast-route of the most dangerous kind, and a long passage in the open sea; in the latter, half the distance, and a coast-route throughout, without any dangers of any kind. Can it still be a matter of doubt whether the Babylonians ever came to India, a seafaring nation long before the Phœnicians were so distinguished for their inventive power and spirit of enterprise? How, then, did the other nations get to know that there was an India at all? Did they launch out into the deep at haphazard from the Gulf of Aden or from some other point of the Arabian coast in quest of a land as yet totally unknown? They owed their knowledge of India to the Babylonians, and in order to become independent of them and to insure for themselves the advantage of direct commerce with India, that land of most precious products, unequalled anywhere, and where gold abounded, they undertook the hazardous enterprise, and ventured upon the sea-route notwithstanding their less favourable conditions.

An unbiassed consideration of the circumstances in point leads to the conclusion that it could not have been otherwise than that the Babylonians were acquainted with the sea-route to India. And they *did* know it. Four facts bear witness to it, proving beyond all doubt that Babylonians and Indians were in communication with one another. The suggestion

that this communication might have taken place by the land-route I will answer later on in its proper place. The only point which we cannot ascertain from these facts is the period at which this intercourse took place; but as products of India are mentioned in the Old Testament, and as the Babylonians must necessarily have known of them before the Jews, who (as stated above) could have procured them only through the Arabs or the Phœnicians, it is clear that the period of their first intercourse must in any case have been long before Alexander established the communication between Babylon and India.

The facts are:

1. *The adoption of the Babylonian division of the week, together with the corresponding names.* What induced the Indians to adopt such a specifically Babylonian institution? There was certainly not the slightest practical or scientific necessity to do so. I explain the phenomenon to myself as follows. The Babylonian seamen in foreign lands naturally reckoned by their own days. If they had to specify any given time to the natives—with regard, for instance, to the shipping of the goods or the departure of the vessel—they would do so in their own language. In this way those who transacted business with them in the seaports—tradesmen, carriers, etc.—would get to know the names of the Babylonian days of the week, and through them those appellations would gain currency amongst other sections of the people, and even find their way into the documents to which we owe the mention of them. In the Middle Ages many maritime expressions were introduced into the vernacular in the same way by means of foreign sailors.

2. *The similarity of the Sanskrit mana* (= Lat., *mina*; Gk., *μνᾶ* = goldmine) *with the Babylonian* (originally Akkadian-Sumerian) *mana*, the expression for the gold unit of the Babylonians.[1] That the Indians derived their gold measure

[1] ZIMMER, *Altindisches Leben*, pp. 50, 51. He rightly sees herein "signs of an ancient connection of civilization between India and Babylon, the home of the first rational system of weights and measures."

from Babylon, and not *vice versâ*, is evident from the fact that in this, as in all Babylonian measures, the duodecimal or sexagesimal system was adopted,[1] whilst the Aryans originally had the decimal system, which was afterwards replaced by the duodecimal scale.[2] As regards the relation of money to trade, there can be no possible objection to the statement that its distribution was effected by means of trade.

3. *Agreement of Indian and Babylonian architectural style.* The oldest temples of the Indians (*dagogs*) were temple-towers, corresponding exactly with the Babylonian in the six lower storeys, and differing only in the three upper circular erections and the cupola.[3] Even in the more modern temples (*pagodas*) we recognize above the entrance gates the pyramids rising in a broken ascent.[4] Such buildings as have been preserved to us date from quite recent times;[5] but the fact that at the time of their erection Babylon had long been in ruins quite excludes the idea that they could have been copied from Babylonian buildings, and we are therefore bound to believe that the imitation of the Babylonian style of architecture began to take place when their originals were still in existence in Babylon. Other Indian structures built after that pattern must have preceded those preserved to us.

[1] The mine was divided into sixty *shekels*, and the *shekel* into thirty parts; sixty mines making one talent.

[2] JOHANNES SCHMIDT, *Die Urheimat der Indogermanen und das europäische Zahlensystem* [Abhandlungen der Akad. der Wissenschaften]. Berlin, 1890. Philos.-histor. Klasse, Abt. ii., pp. 24 *sqq*. On p. 54 he concludes his investigations with the remark: "Wherever the sexagesimal system obtained (referring to the Indians; see p. 51), the rest of civilization cannot have remained far behind . . . Even at this early period we may ask how much of common European civilization is due to Babylon." To answer this question is the task I have set myself in this Second Book.

[3] SCHNAASE, *Geschichte der bildenden Künste bei den Alten*, vol. i., pp. 159 *sqq*. Berlin, 1843. He gives his impression of the building in these words: "The whole pyramid . . . is, in fact, nothing but a hill made regular in shape by means of an enclosing wall." In Babylon the mountain—here the hill!

[4] SCHNAASE, *loc. cit.*, p. 165.

[5] SCHNAASE, p. 160.

It is true that there is another, but less direct, way of accounting for the transplantation of the Babylonian style of architecture into India, *i.e.*, through the Persians. The colossal Indian structures bear a striking resemblance to those of Persepolis.[1] But these in their turn are merely an imitation, or, more correctly, the continuation, of the Babylonian. They have manifestly been built by Babylonian architects, or by natives educated in their schools. Why not accept the same explanation as regards India? Why take refuge in a transfer at second-hand, where there is not the slightest objection to assume imitation of the original or direct transplantation? As a matter of fact, however, this does not express the case strongly enough; the second alternative not only has nothing against it, but has the greater probability to recommend it. For not only do the two facts just mentioned prove beyond all doubt the influence of the Babylonians upon the Indians, whilst Persian influence cannot be traced (except in the art of building, and even here it is not yet definitively ascertained), but there is still a further point in favour of the former, viz., that the sea-route opened to the Babylonians a much easier, more convenient, and safer way to India than the land-route did to the Persians. The importance of the latter we gather from the accounts of Alexander's return from India to Persia: he brought back only a fourth part of his army. This involves the question started above (p. 178) whether communication between the Babylonians and the Indians took place by sea or by land. I have reserved it until the present, because we are now in a position to supply the answer with the fullest certainty attainable.

All that a Babylonian architect required to enable him to erect a magnificent building ordered by an Indian Prince could be quite easily transported to India in a ship, or, let us say, in a fleet: a large number of competent workmen, the necessary tools, and models of the building in burnt

[1] R. PIETSCHMANN, in his edition of PERROT and CHIPIEZ's *Geschichte der Kunst im Altertum*, p. 799. Leipzig, 1884. [Engl. Transl. 1883 *sqq.*]

clay for the employer to select from, bitumen, etc. Let us compare with this the difficulties of the land-route: its slowness in comparison with that of the sea-route, where the ship, according to the statement of the ancients, travelled about 1200 *stadia* in 24 hours (=120 knots, 30 geographical miles),[1] while transport by land took, perhaps, ten times as long; the costliness of it (draught cattle, carriers, presents, tolls for the privilege of a free passage), in comparison with the inexpensiveness of transport by sea; the danger of robbers, etc.; and then consider which of these two routes to India the Babylonians are most likely to have taken. The decision cannot be doubtful.

I will now return to the above question as to the buildings of the Indians. I think I can summarize the results of my deductions in one sentence: The impetus to Indian architecture and Indian style is attributable not to Persepolis, but to Babylon. The Babylonians became the common teachers of both Persians and Indians. As Aryans both nations till then were acquainted only with timber-work (p. 21), as was the case with their kindred in Europe until they came into contact with the Phœnicians (p. 104).

4. *The Deluge in India.* We meet with the legend of the Flood amongst the Indians, as amongst so many other nations of antiquity. The form which it bears with them offers such a striking resemblance to the Babylonian form that we cannot deny that it has been derived from it. No doubt similar catastrophes to that in Mesopotamia have taken place in many other parts of the world, and even the deliverance of the Chasis-Adra of the Indian version, Manu, by means of his ship and the motive power that impelled him—the inspiration of the god Brama, who tells him what is about to take place and instructs him to build a ship—is not sufficient to warrant an assumption that the legend was borrowed. But there are two more features of the legend which complete the similarity between the Babylonian and the Indian forms in so striking a manner that it would be hard to understand

[1] BREUSING, *loc. cit.*, p. 11.

how two nations wholly independent of each other could have arrived at it. Just as the god Ea tells Chasis-Adra, so the god Brama directs Manu to take seed of all kinds with him into the ship; and Manu's ship is also driven inland, and finds a safe resting-place on the Himalayas. On the basis of these facts Burnouf was the first to express an opinion that the Indian legend was borrowed from the Babylonian, a belief which seems to have been universally accepted in France, though it has met with opposition in Germany.[1] I, for my part, fully share his view. All the evidence that I have produced respecting the influence of the Babylonians upon the Indians may perhaps contribute to secure a more favourable reception for his views.

From all the facts I have enumerated the intercourse between Indians and Babylonians is placed beyond doubt; and it has also been shown that such intercourse could not have taken place by way of the land. The science of language offers a not less striking proof in the fact that the two nations employ the same names for certain things,[2] *e.g.*—

		Primitive Indo-Germanic.		Primitive Semitic.
steer	...	*staura*	...	*taura*
horn	...	*karna*	...	*karnu*
lion	...	*laiwa, ljawa*	...	*labiatu, libatu*
gold	...	*gharata*	...	*harudu*
vine	...	*waina*	...	*wainu*

The mention of certain kinds of animals which are not found

[1] See DILLMANN'S *Die Genesis*, 5th edit., p. 137. Leipzig, 1886. ZIMMER alone has expressed himself more cautiously in this respect, by saying that he considers the borrowing "somewhat likely."

[2] In this I follow HOMMEL'S *Die Namen der Säugetiere bei den südsemitischen Völkern* (Leipzig, 1879), and omit only the problematical examples. The passages may be found at pp. 289, 290, 414, 415. According to experts (see V. HEHN'S *Kulturpflanzen und Haustiere*, 4th edit., p. 286 [English transl., *The Wanderings of Plants and Animals*, 1885, new edit. 1888] the Hebrew *tukkijim* (peacock) is analogous to the Sansk. *cikki*; HOMMEL accepts the same (p. 415) for the Primitive Semitic *tarpu* (silver) and *sirpara*, preserved only in the Letto-Slavonic-Germanic, and therefore necessarily Primitive Indo-Germanic.

among the Semites, and which they could have obtained only from India, such as peacocks, monkeys, and elephants, also points to commercial dealings between the two peoples;[1] and to these may be added sandal-wood and cinnamon, used in the preparation of incense.[2] To say that the Babylonians have been influenced by the Indians in matters of civilization is preposterous, considering the very low degree of culture to which the latter had attained even as late as the time of Herodotus.[3] All the evidence I have so far collected can be summed up in two sentences:—

I. The Babylonians carried on maritime navigation at a very early period, at least as early as about 3500 B.C.

II. They undoubtedly reached India—whether at that early period or later remains yet to be decided—by way of the coast route, and left behind them many traces of their presence there, whilst at the same time evidences of the fact may be found amongst them.

8. *Commerce—Transport by land and by sea—Commercial Law.*

§ 30. Babylonian commerce stood in the closest relationship to Babylonian shipping; and to commerce Babylon primarily owed her marked predominance, even in very early times.

Commerce is the transfer of goods from one hand to another; traffic is the process of transportation of goods from one place to another. Each act of transport necessitates a certain expenditure of force, dependent upon the weight of the goods, the distance between the points of departure and arrival, and the condition of the roads. The amount of force thus required may be so great that the cost of transport exceeds the profits, in which case trade is impossible.

The problem of commerce, therefore, depends upon the feasibility of overcoming distance. The distance itself cannot be shortened, nor can the weight of the load to be transported

[1] HEHN, *loc. cit.*

[2] Jeremiah vi. 20: "To what purpose cometh there to me incense from Sheba [the land of Arabia], and the sweet cane from a far country? [India]."

[3] LEHMANN, *Geschichte des alten Indiens*, p. 3. Berlin, 1890.

be lessened; the two points over which man has control are the roads along which, and the locomotive power by which, the load is to be transported. Upon the solution of these problems one of the most important parts of the history of civilization turns. It is only in the course of many thousands of years that mankind has succeeded in raising these two problems to the height which they have continued to occupy throughout antiquity and down to modern times—until our century, when the application of iron railways and steam power for locomotion has transformed the conditions of transport.

This height the Babylonians had already reached in regard to the conveyance of goods; no subsequent nation added anything to what the Babylonians knew. We have already mentioned (p. 137 *sqq.*) what the Babylonians contributed to the construction of practicable roads on land. To them belongs the glory of having constructed the first highways, and no less valuable were their services in connection with the waterways—the regulation of river beds and the construction of canals. They also took the lead in the application of animal power to locomotion by land—the only method at their disposal until the discovery of the locomotive power of steam. The lowest, and therefore the most primitive, form thereof was the employment of man as carrier of burdens; in the interior of Africa this method is still in use. Subsequently beasts of burden took the place of carriers; and they again were replaced by draught cattle, which necessitated a superior training of the animal and presupposed the invention of the waggon. It was only in the mountainous regions and in the desert, where draught-cattle and carts were not available, that beasts of burden, donkeys, mules, and camels were still retained. The first of all draught animals were horned cattle, and in local traffic they are used even now. In commercial intercourse, however, cattle could not compete with the horse, owing to their want of speed. With the introduction of the horse the gradual progress in the employment of animal strength for the transport of goods came to a standstill. Of all domestic animals the horse was the most difficult to break in. Perhaps

the Aryan in his original home employed the horse for his war-chariot, but for drawing the freight-waggon (*anas*) he exclusively used oxen; hence their designation as *anadvah* (drawing the waggon);[1] the same observation applies to the Teutons at the time of the migration. Whether the Babylonians used the horse for drawing freights I am not in a position to state; I must leave the decision to Assyriologists. If, however, Strabo's statement, that several four-in-hands could drive past each other on the walls of Babylon, may be accepted as accurate, the question would, to all intents and purposes, be settled. But as the Babylonians would scarcely walk a distance of several hours to get from the interior of the city to the outer walls, there to drive for pleasure—a sort of *corso* for the Babylonians—and four-in-hands were equally unsuitable there for military purposes, it only remains, therefore, to suppose that the freight-waggon referred to was the vehicle which was to convey provisions and water to the guards and soldiers upon the walls.[2]

The waste of power which necessarily attends transport by land, owing to the double friction of the wheels against the axle and against the ground, almost disappears in transportation by water. The inestimable advantage of the latter over the former lies chiefly in the considerable reduction of friction which the ship has to overcome. But we must set against this the resistance of an adverse current which may have to be overcome. On smooth water and down stream on rivers, water offers but little resistance, in both of which cases the whole of the motive power goes almost exclusively to the benefit of locomotion. Only when going up stream and against the ocean tide is the larger part of a vessel's motive power wasted in opposing the current. Nature, however, has provided winds

[1] ZIMMER, *loc. cit.*, p. 226. I will presently quote the words of the authority he refers to: "Horses were never harnessed to the freight-waggon." (p. 226, note.)

[2] The Ihering MS. here refers in a note to the Assyrian expression rendered by *currus longus* in the work of J. OPPERT and J. MÉNANT, *Documents juridiques de l'Assyrie et de la Chaldée* (Paris, 1877); the rest of the contents of this note could not be ascertained with certainty.

explanation as to its origin is required. It originated, no doubt, in the necessity of some person who, in momentary need of money, applied to the nearest person for temporary assistance. From the point of view of the borrower it is a loan of necessity; from that of the lender a courtesy loan. On both sides it is a mere matter of friendliness, the same as any other service rendered or asked, and the thought of profit or payment is equally absent in both cases. The courtesy loan, or, as it might be called, the loan of neighbourly intercourse, is of necessity free from interest.

In contrast with this stands the commercial loan. Here the two parties stand on a business footing to each other. It is not a question of goodwill which decides the lender to grant the loan, but his own advantage; he wants to profit by the transaction, and this profit he obtains in the interest. The commercial loan by nature bears interest; the courtesy-loan by nature does not. This difference is repeated in Roman law in the form of *mutuum* and *nexum*. The only obligation involved in the former is the restitution of the capital, and so little was there a question of interest that, for its recovery, a special stipulation was requisite, interest being recoverable by legal suit not under conditions of the loan (*condictio certae pecuniae*), but merely under the conditions of this special agreement (*actio ex stipulatu*). The *mutuum* is a gratuitous loan, similar to the *commodatum* (the loan of tangible things, *e.g.*, a book). In contrast to this stands the *nexum*, in which the same law provides for the restitution of the capital and the payment of the interest, consequently one suit (*legis actio per manus injectionem*) covers both.

I think it may be inferred from this that interest did not originate with the Romans from the relations arising out of everyday life, but from their business transactions. But the business life of Rome was long preceded by that of Babylon; before Rome was even founded, and when the predecessors of the Romans, instead of metallic money, which is presupposed when speaking of interest, still used cattle for their transactions (pp. 18, 25), Babylon had a flourishing trade,

and had long been acquainted with metallic money. Both these facts assume the institution of money interest. Interest is a Babylonian institution, which, as I subsequently hope to point out, reaches back to a very early date; all other nations of antiquity obtained it from them, I need hardly add, through the intervention of the Phœnicians.[1]

Guided by the conviction that all institutions first saw the light where they were imperatively necessary, not where they could easily be dispensed with, I conclude that Babylonian interest owed its origin to the want of capital on the part of the wholesale dealer, who, from what I have said above (p. 189), may be regarded as equivalent to the charterer of a ship. To charter a whole ship requires a large sum of money, to which must be added a good stock of gold and silver coin, as "cover" in case the nett proceeds of the sale of the goods should not be sufficient for the purchase of the fresh goods. Possibly the means of a few may have been considerable enough to supply this; but all who are acquainted with the Babylonian character must be aware that those who lacked the means would in all probability find a way of obtaining them. They turned to those who possessed them, and in return for the loan offered them a share in the profits. Their relationship legally expressed was a partnership (*socii*), or, more exactly, that of sleeping partner and acting partner. It is evident that this kind of relationship had serious disadvantages. It would be absolutely impossible under the circumstances for the sleeping partner to control the actions of the acting partner, who might defraud him in his accounts of the prices of the goods, either purchased or sold.

This consideration must necessarily have led to the system of sharing in the profits in proportion to the capital deposited. The lender was thereby precluded from any further claim, whether the undertaking yielded small or large profits. Herein we have the system of interest. Originally it represented a share in the profits of a commercial under-

[1] I have looked in vain for positive evidence to this effect; if there were any, it would be found in SALMASIUS' *De Usuris*, who, however, adduces none.

taking; instead of participating in them in the shape of partnership, it was taken in the form of interest on the loan, the loan-contract acting as a deed of partnership.

This I believe to be the explanation of the origin of interest, to which a high degree of probability cannot be denied. If the question were raised, Where is the system of interest most likely to have first come into use, in mercantile or in social circles? the answer would not be far to seek.

The disfavour with which interest has had to battle, after it had been long in use, is evident from its prohibition in the Mosaic and Canonical law, to which I will return presently. Its first appearance, therefore, was by no means so natural as it might seem to our modern notions of commercial intercourse; it needs explanation, and I can find none other than the above, that the system of interest owes its origin to commercial intercourse, chiefly Babylonian, since it was an everyday occurrence in Babylon long before it had developed in any other nation. I have searched for positive confirmation of this fact in Babylonian sources of information. I was, of course, not likely to come across a direct statement of the first appearance of interest in Babylon; nevertheless my endeavours have not been wholly unsuccessful, as I have been enabled to find decided confirmation of the fact that in Babylon the system of interest occupied a special place in commercial intercourse, more particularly with regard to the sea.

I must now leave the question of ordinary interest on commercial loans, to which my discussion has so far been confined, and direct my attention to one peculiar variety of it, the marine loan.[1] The generally prevalent view that traces everything relating to nautical affairs of antiquity to the Phœnicians

[1] For the sake of my non-legal readers, I add a few words of explanation. The marine loan differs from the ordinary or land loan, as it might be called, not because the seafarer takes it up in order to obtain the means whereby to purchase goods either at the place of departure or of destination, but because his capital and interest are secured to him only in case of a prosperous passage. Should the ship be wrecked, the money-lender has no claim whatever. The sea-loan, therefore, is a kind of intermediate thing between the partnership and the

attributes also the invention of the marine loan to them, and from them it is thought that it came down to the Greeks and Romans (*foenus nauticum, pecunia trajectitia*). Nevertheless here, too, the current view is incorrect—the honour of it belongs to the Babylonians.

Two facts to prove this are to be found in a vocabulary preserved to us,[1] in which, in the left-hand column, the Turanian expressions are found; and on the right-hand the corresponding Assyrio-Babylonian. The vocabulary consists almost exclusively of legal terms, and has evidently done duty as a law lexicon. Amongst them, in the right-hand column, there are four expressions (No. 7, 8, 9, 10) relating to the sea-loan.

Of the two last-named, No. 9 is translated by "*foenus una cum mercatore periit,*" and No. 10 almost equivalently by "*foenus una cum mercatore extinctum est.*" What does this convey to us? Clearly not the report of a *historic fact*, but a *technical* term for an important *legal precedent*. Both expressions affirm that the obligation of the loan disappears with the merchant. The fact that the disappearance of the liability is limited to the merchant shows that we have here to do with a clause which applied to him alone, with a clause of Babylonian *commercial law*. In what way are we to assume the loss of the merchant to take place which cancels his debt? Clearly not ordinary death, nor bankruptcy; such a law would be wholly inconceivable with a mercantile nation, quite apart from the fact that this law, if valid for him, would be so in still greater measure for the ordinary debtor. There only remains one kind of loss applicable to him, viz., his loss together with his ship at sea. "*Mercator*" therefore represents to us the merchant who has taken up a sea-loan:

ordinary money-loan at interest: in the former case the lender shares the element of risk, in the latter he secures a certainty of interest; in the case of the sea-loan, since the interest has to guarantee the money-lender an equivalent for the loan of his capital and the risk he runs of losing it, such interest is naturally rated very high. (Insurance premium; *pretium periculi* of the Romans.)

[1] OPPERT et MÉNANT, *loc. cit.*, pp. 11-21. The passage is to be found at p. 19.

"*foenus una cum mercatore periit* (*extinctum est*)" therefore means that, if his ship be wrecked and he has found a watery grave, the claim against his heirs is extinguished. This formula would have become a sort of legal maxim for the Babylonian judge.

Of the two first-named expressions No. 7 reads as follows: "*foenus sicut imposuit*"; No. 8 "*foenus una cum frumento imposuit.*" "*Imponere*" in the second quotation no doubt means the loading of grain on board ship; in the first instance also "*imponere*" is probably to be understood in the same sense. With regard to an ordinary loan the expression would be linguistically impossible: such a loan cannot be "loaded" or "stored," but is "paid down." But the sea-loan, however, is actually "loaded," put on board; and it would appear from the clause "*foenus sicut imposuit*" that the fact of loading goods on board ship is of legal significance. The lawyer will understand its full import; with this act the risk was transferred to the money-lender. Both these terms accordingly denote the moment of the *completion of the marine loan.*

We gather from the second expression that the sea-loan was not necessarily made in money but might be paid in corn, which no doubt might be replaced by other merchandise. But as it was impossible to calculate interest upon these, they must, legally speaking, have been estimated at their money value. The sea-loan, even when made in goods, ranked always as a money loan, except that the cargo, whether furnished by the sender or the consignee, always sailed at the risk of the former.[1]

In the bi-linguistic vocabulary, as a counterpart to the formula in the right-hand column, "*foenus una cum mercatore periit* (*extinctum est*)," there figures in the left (Turanian) column the expression "*foenus mercatoris instar.*" How can this be a counterpart to the other? The answer is to be

[1] Thus in Roman law, if the loan were made in money, but on condition that the goods purchased therewith should sail at the money-lender's risk. I. 1, *De Naut. Foen.* (xxii. 2) (*ut*) *merces ex ea pecunia comparatae . . . periculo creditoris navigent.*

found in the so-called *foenus quasi nauticum* of the Romans. On behalf of my non-legal readers I would observe that this means a loan advanced for a perilous undertaking in such a way that the remitter, as in the case of the sea-loan, takes all the risk; if it succeed, the recipient, over and above the stipulated interest, has to pay an additional indemnification for the danger incurred; if it turn out a failure, he pays nothing.[1] That the above expression must be thus understood is proved by two circumstances: in the first place by its standing as counterpart to the sea-loan of the right-hand column, and furthermore by the fact that in both columns the ordinary loan is not designated "*foenus mercatoris*," or "*mercatoris instar*," but merely "*foenus*" (No. 18–21), and in which the contrast to the sea-loan is particularly striking, as "*foenus secundum consuetudinem urbis*" (Nos. 16, 77), and "*foenus secundum usuram urbis*," *i.e.*, *land*-loan in contrast to the *sea*-loan. "*Urbs*" here does not mean "the town" in contrast to the country, but in contrast to the sea; "*consuetudo urbis*" means the law applicable to the ordinary loan in which the borrower takes the risk, in contrast to the *foenus mercatoris*, *i.e.*, the sea-loan, in which the lender takes it; "*usura urbis*" signifies the interest which attached to the former, but which did not exist for the latter because interest was here always calculated on the merits of each individual case, according to the amount of risk involved. The reason why the *foenus mercatoris* itself does not occur in the Turanian column, but only the *instar mercatoris*, is easily explained. The Turanians did not live on the coast, and therefore there could be no question of a sea-loan in the exact sense of the word; but the *foenus quasi nauticum* was possible for them, and this does not necessitate the supposition of any developed mercantile intercourse; it may, for instance, simply denote participation in the equipment of some piratical expedition,

[1] This is treated in I. 5 *ibid.*, in which the lawyer quotes by way of example, "*si piscatori erogaturo in apparatum plurimum pecuniae dederim ut si cepisset, redderet*," to which may be added, "*et insuper aliquid praeter pecuniam.*" The compensation is strikingly called "*pretium periculi*" (insurance premium).

under guarantee of a share in the booty. *Foenus mercatoris* and *instar mercatoris* differ from one another in actual matter of fact, but legally they are equivalent; both refer to an undertaking in which the capital advanced to the undertaker (*mercator*) is at the risk of the lender, and bears interest in proportion to the danger incurred.

If this be the right interpretation of the legal expression in the Turanian-Babylonian legal vocabulary, of which, I think, there can be no doubt, we have a most valuable proof that the *foenus nauticum* must have been known to the Babylonians: valuable in my eyes not so much for the actual fact, a contribution to the history of the *foenus nauticum* in antiquity to assist the legal historian, but because of the deductions it enables the historian of civilization to draw from it.

The *foenus nauticum* presupposes maritime navigation. In the *foenus nauticum* of the Babylonians therefore we possess infallible evidence of their navigation; and this I here offer as supplementary to what I stated above (p. 169).

The *foenus nauticum* is also found amongst the Phœnicians. Let us remember that Babylonian navigation dates back about 4000 years, *i.e.* before Sidon was founded, and we must come to the same conclusion anent the *foenus nauticum* as we did in the use of the dove and the starry heavens as a guide to the seafarer (pp. 171 and 176), viz., that it was an original Babylonian institution which the Phœnicians, when they separated from the mother-nation, took with them and preserved. "What!" I hear someone exclaim, "the *foenus nauticum* 3000 years B.C.?" Let anyone see if he can weaken my proofs as to the indispensability of the loan for ocean commerce. If the loan were imperative its suitable form was, as it were, ready made in the *foenus nauticum*. Legally quite distinct from the ordinary loan, its ultimate result in ocean trade was very much the same. If in the former case the borrower had suffered shipwreck, the same thing happened practically as in the latter case: the lender had to suffer—"*foenus una cum mercatore periit.*" The *foenus nauticum* differed only in this respect, that it put the actual result into legal form, and it seems to me to require no

specially legal mind to come to the conclusion that the sea-loan, historically speaking, preceded the ordinary loan. If this be the correct view as to the first appearance of the loan in Babylon, viz., its application to ocean commerce, it would follow as a matter of course that the money-lender would also share in the risks of the undertaking. His exemption from all risk under the ordinary loan can, contrary to the accepted historical view, be regarded only as the very last stage with which, after the share in the profits in the shape of interest had been definitively arranged, he freed him, so far as this was concerned. The marine loan has at least one point in common with partnership, but the ordinary money loan has none.

The evidence thus far collected in proof of the acquaintance of the Babylonians with the sea-loan places beyond all doubt the fact which (p. 191) I had to leave undecided, viz., that from the earliest times the money-loan was connected with their sea trade. There I took this connection with the ordinary loan into account, and I now proceed to give two instances in which I fancy I can trace the relationship. In the bi-lingual law-vocabulary we find a *foenus anni* (n. 14) and a *foenus mensis* (n. 15). As the two are placed opposite each other as technical terms, we can but see in them the two typical forms of the loan in which the whole system of loan transactions were comprised. They do not bear upon the actual difference in the length of the terms of the loan, for in that case mention would have been made of other terms besides two or three months, a half or three-quarters of a year. The legal meaning of the *foenus mensis* is evident; the Babylonians calculated interest by the month (regularly 1 *shekel* $= \frac{1}{60}$ of a mine). The Romans followed their example even in this detail, and of course this mode of reckoning would also be applied where the terms of the loan exceeded the month—where, for instance, arranged for a whole year; just as we, on the other hand, having the year for our standard of interest, base shorter terms upon it. According to this, the yearly loan of the Babylonians must have been a typical loan, adapted to special conditions. We need not look far to discover its practical employment. It

was the loan of the seafaring man. He went to sea at the beginning of October, when the current drove him out to sea, and returned somewhere between May and the end of September, when the current favoured his homeward voyage. The regular duration of his voyage was therefore a year, certainly for the Indian trader who wanted to make the most of his time. But this necessitated the prolongation of his loan for the term of one year. It was not till after his return that he could repay the capital and interest; it would have been impossible for him to have done it sooner. The only kind of loan, then, which suited him was the *foenus anni*. But it was quite a different thing for the borrower who remained at home. He could pay his interest monthly, and this he was bound to do, no matter for what period the loan was granted.[1] A *foenus mensis* did not change into a *foenus anni* by extending the terms from the month to the year; neither was the *foenus anni* of the mariner changed into a *foenus mensis* when the payments of interest were based upon the monthly principle.

The second trace of the connection between the loan and maritime trade—and with regard to this I may add the *original* connection—I believe I have discovered in the extraordinarily high rate of interest in Babylon. It was throughout 20 per cent., and rose even to 25 per cent.[2] I can account for such a high percentage for ordinary business transactions only on the supposition that the capitalist had the opportunity, apart from this investment, of putting out his money at very large profit, and this opportunity he had in his dealings with the export and import wholesale merchants to an extent compared with which the usual rate upon which the ordinary loan was based might be considered quite moderate. In the case of the sea-loan and in the ordinary (land) loan as applied to the sea, where the trader in his dealings with ignorant

[1] The formula of the law vocabulary, quoted above, "*foenus secundum usuram urbis*," no doubt refers to this. We have no knowledge of any legal maximum interest amongst the Babylonians, and we know that the regular rate of interest of 20 per cent. could be exceeded. (See later in the text.)

[2] KOHLER, in the above-quoted work of PEISER, p. 39.

natives, who had no notion of the commercial value of their natural produce, doubled, or even trebled, the capital he had with him, interest must of course have been higher in proportion. The borrower could easily pay it, for he amply recouped himself.

In the home trade and overland trade with neighbouring tribes such profits would have been utterly impossible. The high rate of interest in Babylon is to be accounted for only by the extraordinarily profitable character of the foreign trade by sea, and this gives us the clue to the original institution of interest, and how it was made available for ordinary life, as also how the very high rate of interest followed in its wake.

The history of the development of the Babylonian loan at interest might be pictured as below:—

1. Interest is a Babylonian invention: all other nations owe their acquaintance with it to the Babylonians.

2. Interest was originally intended in Babylon as a share in the trade profits of a foreign maritime enterprise, but owing to the difficulties involved in controlling these, it was subsequently—

3. Converted into a fixed share of the capital invested.

4. Thereby money became goods, out of which, by temporarily relinquishing it, money could be made: it became an article of trade, like all other articles of value—money came on the market.

5. From this it followed as a necessary consequence that everyone who needed money, whether private individual, retail merchant, or wholesale trader, had to pay interest for it.

6. This put a stop to the gratuitous loan; side by side with the business loan the courtesy loan could not thrive in a commercial nation. This is apparently contradicted by the fact that though in very many of the records preserved to us[1] no mention is made of interest, yet in two instances

[1] PEISER, *loc. cit.*, Nos. 1, 2, 7, 17, 36, 53, 60, 136.

(Nos. 1, 2) fines for non-payment of a debt are stipulated for. The real facts of the case we learn from one of these documents (No. 136), in which the capital is six talents, a sum so considerable (based upon the Greek talent = about £1350) that the idea of a courtesy or friendly loan is wholly out of the question; and the stipulation of fines Nos. 1 and 2 is also difficult to reconcile with this view. I need hardly say what would happen in all cases in which no interest was arranged for. The creditor deducted it from the capital in advance, as is done at the present time by many money-lenders. The doubtful credit of this invention belongs therefore to the Babylonians.

The later history of all other nations of antiquity confirms the history of the development of the system of interest as here described. They all derived it from the Babylonians: the Phœnicians and Jews when separating from them, the Greeks and Romans through the Phœnicians; and the same may be accepted for the Celts by means of their connection with them through Gades; while the Teutons and Slavs first became acquainted with it through the Greeks and Romans.

To a commercial nation like the Babylonians interest was a matter of course. To an agricultural nation, unacquainted with commerce, it would appear in quite another light. "How" (they would argue) "can anyone stipulate to be remunerated for a temporary loan? One does not risk anything, and one will get it back in due course to the last farthing." This view was held by the Jews.[1] The Mosaic law forbids the taking of interest in the first place from the poor and needy, and subsequently from everybody without distinction, strangers alone excepted. The Jews, after they became an agricultural nation, gradually lost sight of the meaning of interest, which, without a doubt, must have been known in Babylon long before they left it. It could hardly have originated with themselves under their totally altered

[1] The Cretans denounced the taking of interest as equal to robbery. PLUTARCH, *Qu. Gr.* 53, p. 303 B.

circumstances, *i.e.* absence of commerce, not only of sea trade, but of trade generally. The case is exactly the same here as it was with that of the ship, with which the question of interest is so closely connected. Thus it was possible that the ship became converted into an ark, and the system of interest (usury) into a morally objectionable institution, and therefore not to be tolerated by the law-giver.

When in time they became a commercial nation, they made full reparation for their former want of appreciation of the principle of interest. The Old Testament view of usury may be summarized in these words; they viewed a loan merely as an act of courtesy, of goodwill, of friendliness. This view of it is also taken by the Canonical law, which denounces the taking of interest as a sin, and simply prohibits it. In the Mosaic law the prohibition can be accounted for; in the Canonical it can be excused only on the plea that, according to the views of the Christian Church, the law of Moses, in so far as it did not refer to purely ritualistic precepts, was binding upon Christians also. The Church, therefore, was in a dilemma. Placed between two alternatives, conformity to the law of Moses or to the secular law, she thought she could not do otherwise than declare for the former. Experience has proved that she tried to accomplish something totally impracticable. Commerce is inconceivable apart from interest: no commerce without interest; no interest, no commerce. As it existed in the Middle Ages it is evident that this fact was acknowledged, and that the restrictions of the Canonical law were ignored.

Interest enables the merchant to operate with foreign money. But for this purpose he has still other means at his disposal, nearer to hand. He buys his goods on credit; their sale provides him with the means wherewith to pay their cost when payment becomes due. Credit is only a concealed kind of loan at interest: the seller adds the interest to the price, and therefore for cash payments deducts it (discount). Interest and credit are as indispensable to the movements of commerce as are wings to the bird in its flight.

Even if we knew nothing of the commercial organization of the Babylonians in detail, the mere fact of its flourishing condition would place the existence of usury (or interest) and trade on credit[1] beyond doubt. If, as is most probable, the latter, like the former, had its origin in commerce—in which sphere it certainly was particularly useful—it must have occurred only in the transactions of the *mercator parvus*. The *mercator magnus* had to pay cash for the goods bought in foreign lands; the credit system could not apply to him. There was, accordingly, all the more room for it in his dealings with the *mercator parvus*, to whom he sold his goods; and the interest of both parties concerned went hand in hand. In order to buy goods in large quantities, the one needed credit; in order to secure purchasers, the other had to make certain concessions. The difference between the two kinds of merchants shows that the wholesale dealer did not personally dispose of his goods to the consumer: that was the business of the retailer. If the case had been reversed this difference could not have existed.

Foreign trade—wholesale merchant, retailer, interest, credit—such are the leading features so far revealed of the organization of commerce in Babylon. Two more points demand our attention: these are necessities without which trade cannot exist—money and commercial law.

Money.—The ultimate form of money which has necessarily replaced all other kinds formerly in use, is, of course, metal money. Were the earth to be made anew a thousand times over, metal money would always gain the ascendancy, just as is the case now. Gold would occupy the first, silver the second, and copper the third place. Money would be coined, and the most precious metal would be alloyed with the baser metal on account of its greater durability.

Babylon is the spot where, as may be historically proved, metal was first employed as money. It was not discovered in the Babylonian soil, but they found the means of procuring it

[1] For an instance of this see the Babylonian legal documents in PEISER, *loc. cit.*, no. 45.

from other nations amongst which it was found,[1] and from the very earliest times they recognized its value. The first instance in which, to my knowledge, metal of this description is mentioned is in the Babylonian account of the Flood: Chasis-Adra takes gold and silver on board with him (p. 152). The second is in the Old Testament: Abraham, when going into Egypt, was rich in silver and in gold (Genesis xiii. 2). According to the tradition of the Semites, therefore, their knowledge of the precious metal dates back to remote antiquity. Copper was added for smaller coins.[2]

Stamping of the metal does not appear to have been known to the Babylonians; the art of alloy, on the contrary, is of primeval antiquity.[3] According to the accounts of the ancients it originated in Lydia,[4] and this coincides with the fact that up to now no stamped coins have been found in the ruins of Assyrio-Babylonian cities.[5] The metal was cut into pieces of a certain size (the *mine* into 60 *shekels*[6]), which is always expressly emphasized. How could they be sure that the pieces were of the right weight? No other means was available than the scales, which the Romans also made use

[1] Their principal source of gold must have been India rather than South Arabia. The West of India (Chawilah), surrounded by the Pishon (*payasvan* = milky Ganges), is described as the land "where there is gold" (LEFMANN'S *Geschichte des alten Indien*, p. i. Berlin, 1890). It was found there in the greatest abundance in the gold sand; see HERODOTUS iii. 94 (annual tribute to Darius 360 talents of gold sand), 98, 102, 106 (how obtained and in what quantities). That the Babylonians derived their gold from India is proved by the similarity of the old Indo-Germanic *gharata* and the old Semitic *harudu* = gold; HOMMEL'S *Die Namen der Säugetiere bei den südsemitischen Völkern*, p. 415. Leipzig, 1879.

[2] See OPPERT and MÉNANT, *loc. cit.*, 348, as to the relative value of gold, silver, and copper.

[3] BRANDIS, *Das Münz-, Masz-und Gewichtswesen in Vorderasien*, p. 163. Berlin, 1866.

[4] BRANDIS, *loc. cit.*, p. 166.

[5] The question depends on the correct meaning of the expression (nu-uh-hu-tu) of the records, which is always added to the statement that the *mine* was divided into separate *shekels*. PEISER translates it by "gemünzt" (minted), but always adds a mark of interrogation. Might it not mean "weighed"?

[6] BRANDIS, on the *mine*, *loc. cit.*, 26; on the *shekel*, p. 72.

of before they minted their money. As far as I know the weighing of metal is not mentioned in any of the records;[1] nevertheless, the fact of its existence is placed beyond all doubt by the technical expression for it in the bi-lingual law-vocabulary (*pecuniam ponderat.*) Perhaps the reason why it was not brought more prominently forward was because it went without saying (as with us the counting out of money, which, for the same reason, is never specially mentioned), if it is not contained in the doubtful expression mentioned in note on p. 203. Upon the same ground the expression in the vocabulary (pp. 13, 49), *pretium suum solvit*, would mean not the "counting over," but the "weighing out" of money. In any case, I cannot imagine that in Babylon metal pieces of nominal weight could have been circulated in all good faith, without previous ascertainment as to whether they came up to the right weight; and I cannot see what other means there were for ascertaining this than weighing them.

Commercial Law.—The records of the Babylonians enable us to get a clear idea of their commercial and financial transactions,[2] which were in no way inferior to what we learn of Roman law at the zenith of its development in the first centuries of the

[1] The often recurring expression, in connection with the sale of a house (OPPERT and MÉNANT, *loc. cit.*, pp. 170, 178, 179), "*domus nummis pensata*," does not refer to the weighing of money—if it did it would be called "*nummis pensatis*"—but to the settlement of the matter by money: we might render it by "matter about money," which also as such occurs in the records. Hereupon see p. 118, "*contra pretium tradidit.*" We find the same expression in the Roman mancipation formula, "*emptus est hoc aere aeneaque libra*" (GAIUS, i. 119). For years past (1858, in my *Geist des röm. Rechts*, vol. 3, 1st edit., p. 567; 4th edit., p. 542) I have pointed out that this does not refer to the first clause of the formula, and I threw out the hint that it might contain an addition to it, added after the introduction of money. The similarity between the Roman and the Babylonian formulæ, which I have only just discovered, and which must also have been the Phœnician, come to the Romans through their business transactions with the Carthaginians, lends unexpected support to my hypothesis. The deed of *mancipatio*, the transfer of property before witnesses, was of Roman origin, the scales and the weighing of money, together with the above, of Babylonian origin.

[2] KOHLER, in his excursus to the above-mentioned work of PEISER, p. 66, and in his work *Aus dem Babylonischen Rechtsleben*, vols. i. and ii. Leipzig, 1890–91.

f the materials employed is
former basalt, for the latter
representation of inner dura-
eminding us of the Roman
ral character of the prætorian
and the permanent nature of
In this case, because the gods
aw, therefore their images were
rd. All imaginable execrations
who should in any way tamper
sturbing the boundaries, laying
the fruits, or legally by con-
rds know no limit to the
h the gods will shower down
ain a sample list of the most
conceivable! I expected I
a point of view for this which
er nations, for instance, the
standing under protection of
l; the divine protection here
ds the boundaries—it is the
general.

aw this form had no signifi-
of in business transactions.
al bond: he had no need of
ntioning it is because I could
the question as to the form
been raised.

Babylonian trade to which I
attention in my researches.
mmerce are by no means
ment is still missing. All
tated, is that the Babylonian
vourable commercial routes
ge navigable rivers and the

FESTUS: *terminus* p. 368: *eum, qui*
sse.

gave it the first impetus, and his example found a fruitful soil in such an eminently practical nation as the Babylonian: the custom of the merchant became the custom of the nation. Through the medium of the Phœnicians the practice of chronicling transactions in writing came down to the Greeks, and with them, too, it became a general practice.[1] The Romans did not become acquainted with it until a good deal later; its first adoption by them must have been in the written wills and account books (*codices accepti et expensi*), to which the records of legal transactions (*cautiones*) were afterwards added. The foreign origin of writing in Rome is clearly indicated by the circumstance that its application to legal matters (*formula*) first came into use in international legislation (*praetor peregrinus*); it was not applied to the disputes of Romans amongst themselves (*praetor urbanus*) until they had become familiar with it.

Written records were made in Babylon on moist clay tablets by "scribes," who are always named in the document—"notary," we should say—and before witnesses, who also are named, and who for greater security impressed their seal upon the tablet. After that, the clay tablet, as we may suppose, before it was put into the hands of the parties concerned, was placed by the notary in the public oven (as to this, see pp. 100, 134)—another Babylonian invention, imitated by all nations of antiquity—and not until it was baked was it handed over to the party or parties concerned. No falsification, one would think, could have been possible after that, as the burnt clay would not permit of any addition or cancellation. Yet this danger must have existed; possibly some alteration might be made in the figures, for instance, or in course of time, through careless preservation or damage, the record might become illegible.[2] In any case provision was made for such a case. It is my opinion that an arrangement, the meaning of which has so far escaped

[1] GNEIST'S *Die formellen Verträge*, p. 421 (Berlin, 1845): "Hence especially in Athens, and subsequently in all lands where Greek civilization obtained, the use of γραμματεῖα cannot be overrated."

[2] An example is given by OPPERT et MÉNANT, *loc. cit.*, p. 185, where it is uncertain whether 16 or 26 should be read.

the notice of Assyriologists, was employed for this purpose:[1] it could not but escape them, since they lacked the key which Roman law offers for its true comprehension. The arrangement consisted in the manufacture of two identically similar clay tablets, which, before being baked, were joined together, one on the top of the other, by a frame.[2] The top one was open to view, the lower one closed up; the former served all ordinary purposes, only when a dispute arose as to its authenticity the frame joining the two was broken open before the court and the duplicate compared with it. If the proprietor of the double tablet, in order to falsify the duplicate also, had broken away the frame, he himself would thereby have destroyed the value of the record as evidence.

We meet with this same arrangement in Rome, where it appears to have first come into use in the matter of wills. It was always drawn up in one record, tied together by means of a thread, upon which the witnesses wrote their names and impressed their seals in wax. But it sometimes happened that the principal contents of the will were repeated on the outside in order to give an opportunity to the heirs and legatees therein mentioned to be present at the opening of the will. This outer will might have been tampered with; but that would have been futile, as a comparison with the inner will would at once have revealed the falsification. By order of the Senate this custom, which first arose in everyday life, became the exclusive form for all records which laid claim to evidential value.[3] Here we

[1] OPPERT et MÉNANT, *loc. cit.*, p. 130: "Nous ne pouvons que constater ici la haute antiquité de cet usage ainsi que sa persistance; mais le but de cette double rédaction demeure encore inexpliqué pour nous."

[2] OPPERT et MÉNANT, *loc. cit.*, p. 80: "Elles (tablettes) sont recouvertes d'une enveloppe extérieure, sur laquelle les termes du premier contrat sont à peu près identiquement reproduits." The many duplicates found amongst the legal records prove that a very extensive use was made of this arrangement. There must have been good cause for it; they must have had to protect themselves in Babylon against falsifiers.

[3] PAUL. *S.R.V.*, 25, 6: *Amplissimus ordo decrevit, eas tabulas, quae publici vel privati contractus scripturam continent, adhibitis testibus ita signari, ut in summa marginis ad mediam partem perforatae triplici lino constringantur atque impositae supra linum cerae signa imprimantur, ut exteriori scripturae fidem interior servet.*

sea for his ships, and well-paved roads for his waggons (pp. 138, 186); that he had recognized at a very early date the great value of precious metals as the basis of exchange, and knew how to make the best use of money for his own purposes; and finally that he was in possession of a fully developed legal system which gave him all possible security in his commercial activity. One need have no great acquaintance with commercial affairs to discover one remaining element missing. In order to obtain a thing, something must be offered in exchange. What did the Babylonian mariner offer to the Indians, Arabs, and other tribes far behind him in general civilization in order to get from them those things which his own country did not produce primarily: first and foremost that upon which their desire was fixed, gold? It could not be either cattle or wood, since he himself would have had to purchase them first. Corn or fruit?—there was an abundance of both; instead of taking these products with him he would rather have brought them away. But there was one thing he could offer which they did not possess, and which in their untutored eyes was of such value that they would gladly pay ten times, nay a hundred times, its real value—the product of industry. It is the well-known trade of Europeans with savages: in exchange for gold, precious stones and pearls, glass beads, many-coloured cloths, defective fire-arms, etc., are given. This is typical of the intercourse between an industrial and commercial nation on the one side, and an uncultured people on the other; and it no doubt occurred in this shape between the Babylonians and the savage tribes. An iron axe, a sword, a lance with an iron point—what cared the Indian for his gold as compared with these? These he could use, but gold had no value for him. And when the Babylonian on his return home manufactured out of this gold an artistic cup, how much gold would not an Indian Prince give in order to possess this wonderful product of art! Or, again, what would he not give to replace his domestic god or fetish, roughly carved in wood, with one of the gaudily painted burnt-clay Babylonian images? If we picture to

ourselves the commercial relations between a primitive and a commercial nation, we shall at once perceive what enormous profits Babylon must have made out of her ocean trade, and also why it was that the rate of interest in Babylon was more than double the rate among any other nation of antiquity. This also explains the prodigious wealth which accumulated there during thousands of years, and which made Babylon the wealthiest city of the world.[1] It is only in Rome during the last century of the Republic and during the Imperial Age that antiquity saw its counterpart. In both cases it was the superiority of the strong over the weak which brought about this stupendous accumulation of riches; on the one side commerce, on the other side warfare. Babylon owed her treasures to genius for trading on the ignorance of uncivilized nations; Rome owed hers to her victorious arms. In both cases their wealth proved their destruction, for it provoked the enemies whom they had subdued to rise up against them—the Persians against Babylon, the Teutons against Rome.

9. *Summary.*

§ 31. My sketch of the Babylonian civilized world has now come to an end, and in conclusion I may be allowed to sum up the result in a few words.

The result is twofold. Firstly, concerning the high stage of development attained by Babylonian civilization. This was known long ago. Why, then, once more make it the subject of such close investigation? I would not have done so, but would merely have taken the evidence of others for granted, if I

[1] This is evident from what HERODOTUS relates (i. 192; ii. 92), to which no doubt many other proofs might be added. Relatively, the wealth of the Phœnician cities may have been on a par with the Babylonian; absolutely, Babylon must have outstripped them all, by reason of her size and population. As to her size, see p. 129. An approximate idea of the number of her inhabitants is given by HERODOTUS (iii. 159), where the number of the men of rank whom Darius had executed after suppressing the revolution in Babylon amounts to 3000, and the number of maidens demanded from the neighbouring tribes to fill the places of those killed during the siege (iii. 150) is estimated at 50,000.

had not hoped to bring to light many details hitherto overlooked. It need hardly be stated that this could be done only in a comprehensive description of the whole, including the well-known facts; in short, by means of a finished picture of the entire civilized world. Secondly, concerning the causal relations between Babylonian civilization and the conditions of the land. This relationship has not hitherto been demonstrated by anyone; nowhere have I found even the faintest allusion to it. I am fully convinced that I have proved it in these pages. As this point is of the greatest importance for the purpose of my present work, I hold it to be essential briefly to review and gather together all that I have said in different places about this matter; the total impression will, I trust, leave no doubt as to the correctness of my view.

I maintain that the Babylonian became all that he was through the soil upon which he found himself. Nature gave him the impulse to perform all that which he accomplished. By denying him wood and stone she impelled him to make an artificial substitute—brick; by giving him large navigable rivers and the sea she gave him the impulse to build ships. By these first two efforts—brick and the ship—the whole future of the Babylonian world was sealed.

The Brick.

1. *Building*, and with it the separation between the builder and the architect (p. 110).

2. With *the builder*, the Babylonian division of time (p. 110), the water-clock (p. 119), the seventh day of rest (p. 113).

3. With *architecture*, the study of geometry, arithmetic (p. 128), and art (p. 123).

4. The *town* (p. 86), and with it

5. *Civilization* (p. 90).

6. *Fortification* of the town (pp. 89, 129).

7. With this the security and durability of the Babylonian *government* (p. 133).

8. With the burning of clay, the *writing tablet* of the Babylonians (p. 134), and

9. Its wide employment in *business* (p. 205), and thereby the security of *trade.*

10. Because of its durability and uselessness for other purposes (p. 136), the preservation of Babylonian legal and other records until our time.

Brick comprehends half the Babylonian world.

THE SHIP.

1. First, *river navigation;* then, *coasting;* finally, *marine navigation* (p. 162).

2. With it the inevitable necessity for a knowledge of navigation on the open sea, the use of the *dove,* and *observation of the stars* (p. 170).

3. With this the impetus to the study of *astronomy* (p. 175).

4. With marine navigation, *foreign trade;* export and import trade of the *wholesale merchant* (p. 191).

5. With this the *sea loan* and the ordinary *loan at interest* (p. 188); and with the extended use for money in transmarine commerce, the high rate of interest also for the ordinary loan (p. 198).

6. The contrast between *retail and wholesale trade* (p. 188).

7. With the flourishing state of trade, the high development of *law* (p. 204), and

8. The influx of *incalculable wealth* into Babylon, and with it

9. The *destiny* in store for the realm: its conquest by the Persians (p. 211).

In this tabular statement one thing follows another in uninterrupted causal connection: called into being by its predecessor, each in turn calls forth the next.

In the whole of history I know of no example where the causal relationship between soil and people is so marked and convincing as here; and perhaps this very circumstance may influence many to mistrust my deduction—it is, in colloquial language, "too much of a good thing!" I, however, await evidence that the causal connection which I claim to have established fails in any single point: proof can be invalidated only by counterproof.

Perhaps someone will confront me with the objection that I have taken no heed of one very essential factor in this chain of cause and effect, the one which first put the whole in motion—man himself. Of what avail are all the impulses proffered by nature if man himself is not a fit agent? If he be too stupid, indolent, or idle, they rebound from off him without effect. Place a nation other than the Akkadians, Sumerians, and Babylonians in Mesopotamia, and the land would always have remained what it has again become at the present day—swamp and desert. Judged by the prevailing view, according to which a nation's individuality is innate in it, this would be quite correct. But this view is fundamentally false. Nations are not born—they become (p. 70); and they become that which they cannot but become under the given conditions. Thus the three nations were bound to become on Mesopotamian soil that which they did become there. Supposing they and the old Aryans had exchanged places at the beginning of their existence, the Babylonians, etc., going to Iran, and the Aryans to Mesopotamia; the former would have become as the latter, the latter as the former. I will presently point out, first for the Semites (§ 35), and then for the Aryans (§ 36), the influence which the condition of the soil indirectly had upon both their national characters—that it implied a certain condition for them; in short, demanded a definite "*operari*," which, in its turn, always resulted in the "*esse*" (p. 71, *esse sequitur operari*). For this purpose I shall have occasion to turn the evidence hitherto given of the causal connection between the condition of the soil and the civilization of the Babylonians to good account; apart from this, it ought not to have found a place in the history of the primitive Indo-Europeans. It will begin to bear fruit when we come to the question of the national character of the Semites, which, for reasons presently to be explained, I could not avoid dealing with, and which refers us to Babylon as the spot where it originated. But, first of all, as applied to the civilization and national character of the old Aryans, it will serve us in the same capacity as some specially suitable animal serves

the comparative anatomist in his investigations into the structure and phases of development of animal life. The results previously obtained will serve him as a guide in his investigation of a subject less adapted to the study of comparative anatomy, and will sharpen his vision for the discovery of less clearly defined phenomena. In short, the Babylonians must render us a "paradigmatic" service for the old Aryan. And he is better adapted for the purpose than any other. The Babylonian nation is the model nation of historic causality. In this respect it stands alone in the world. It might be said that history has chosen it to illustrate the idea of historic causality in a way which leaves no room for doubt as to the validity of the theory.

I must now take leave of Babylon, to give an account of what the Aryans owe to her in respect of their civilization.

III.

TRANSMISSION OF BABYLONIAN CIVILIZATION TO THE ARYANS.

§ 32. BABYLON has long since vanished from the face of the earth; nothing but ruins, which have come to light only in our day, mark the spot where once she stood. But before her fall mankind had profited by all her good works. History does not allow anything of importance, wheresoever produced, to perish, but takes care that it survives somewhere; it is the law of economy in the moral organization of the world confirmed in the lives of nations as well as of individuals, the counterpart of the law of the concentration of energy in nature. New nations and new individuals take the place of those departing; not in the sense in which the soldier in battle steps into the place of the fallen, but rather in the sense in which the heir replaces the testator, *i.e.*, they enter upon their inheritance. In this sense the inheritance of culture has descended from the Babylonians to the Indo-Europeans; and even as Hellas to-day survives in our art and science, and Rome in our law, so Babylon still lives in our culture. We owe her a very great deal more than is generally supposed.

Babylon was the first seat of civilization; thence it commenced its peregrinations all over the world. This statement can be disputed only in the case of Egypt; as regards all other countries convincing evidence can be given. Until recently Egypt was considered to be the oldest civilized country of the world, and, as far as available sources and materials reached, no other conclusion could have been arrived at. The Egyptian records preserved to us date back to a time (the first half of the thirtieth century B.C.) concerning which no other nation had

any information to give. But the recent finds in Macedonia have given us dates for Babylon which precede the Egyptian by fully a thousand years, and, if our conclusion respecting Babylonian civilization be correct, it is evident it must be older than the Egyptian. With regard to one of their most important achievements, architecture, the use of bricks in the oldest Egyptian pyramids settles the point (p. 101). In Egypt, where there was plenty of natural stone to be had, the use of brick is as surprising as in Babylon it was inevitable, owing to the absence of stone. Therefore, brick can have come into Egypt only from Babylon; that is to say, the Egyptians learnt from the Babylonians the art of building, which they had not previously known. And, together with brick, they adopted the shape of the temple-tower for their most ancient pyramids (p. 101), and also the institution of the (seventh) day of rest for their builders (p. 111). According to this view the Egyptians were taught by the Babylonians; therefore, on this one point at any rate, the latter must have been considerably in advance of them. What is true as regards their buildings may doubtless also be accepted for their irrigation works, which with both are identically similar; and perhaps of much more besides—this, however, is for the future to decide.

The original dependence of Egyptian upon Babylonian civilization was followed by its independent development, even in building, where natural stone supplanted brick and the shape of the Egyptian pyramid that of the Babylonian temple-tower; but above all in the domain of intellect, where, in one respect especially, the individuality and superiority of the Egyptian over the Babylonian mind is very conspicuous. The Babylonians never attained to philosophical thought; their desire for knowledge was centred in their practical interests, and did not extend beyond what was immediately useful. Not so the Egyptians. In the Egyptian priestly castes the human spirit for the first time rose into philosophical speculation long before a similar change took place in Greece, and there is every reason to believe that here, as so often happens in history, the priority in time is in keeping with the original relationship. We shall

have occasion in the course of this work to give a remarkable proof of this—elevation to the idea of the one God and the conception of the emanation of the human spirit from the Eternal Spirit at the birth of man and its return into the same at death.

The transmission of Babylonian building to the Egyptians, as above traced, proves that in the earliest times—at least as early as forty centuries B.C.—intercourse had existed between Babylonians and Egyptians, and it can have been only by trade. Commerce is the pioneer of civilization, which the merchant has ever been the first to carry into distant lands. His only object is to dispose of his goods; but, without intending it, he becomes the bearer of civilization—a tool in the hands of history. In this manner Babylonian culture spread over the whole of the then known world; all nations received it through the medium of commerce. Once only was it conveyed by a different means —through conquest—when the Babylonian empire was subjugated by the Persians. Conquest shows us the second channel by which history affects the exchange of civilization between two nations occupying different stages of development, whether the balance of culture be on the side of the conqueror or the conquered. To judge from the experiences of several nations as recorded in history, its effect is quicker and more active in the second than in the first case, and this is easily to be understood. The conqueror who is superior in civilization has no interest in raising the subjugated nation to his own standard—rather the reverse: it will be easier for him to continue his dominion over it. On the other hand, the conqueror, if inferior in civilization, has every inducement to rapidly acquire the superior civilization of the subdued nation. So it happened with the Romans as regards Greek civilization, with the Eastern Goths as regards Roman civilization, and with the Persians as regards Babylonian: the vanquished became the teachers of the vanquishers. Apart, however, from this one case, the spread of Babylonian civilization over all the lands of antiquity was through the medium of commerce.

The Babylonians themselves did relatively little towards it;

it is confined to their previously-mentioned influence over India (p. 178), and over Egypt, as just described. The problem which, for reasons presently to be explained, the mother-nation could not solve, was committed to the daughter-nations, the Phœnicians and Carthaginians.

This opened a third channel for the spread of civilization—migration. What I said above as to the merchant being the pioneer of civilization is even more true of the emigrant. The former comes and goes, only scattering the seeds of culture in a foreign land; what becomes of them depends upon the soil. But the latter remains and lives his civilized life on foreign soil just as he did at home. With him the culture of his home is transplanted to his adopted land. And if not merely individuals migrate, but a sufficient number to keep themselves together as an independent community, they constitute a central hearth from which civilization would propagate itself, as heat to its surroundings, first to the nearest, then to the more distant.

Just as in modern times our European civilization has travelled to North America by means of emigration, so Babylonian civilization reached Tyre and Sidon, and subsequently Carthage; and so the coasts of the Mediterranean Sea were reached and access to Europe was obtained—hitherto impossible to the Babylonians: the transmission of civilization was secured to the Aryans of Europe.

But it was not only its more favoured situation that gave the daughter-nation the ascendancy over the mother-nation in the spread of civilization; another circumstance was most intimately connected with it, viz., the organization of foreign trade. It has left its impress upon the following arrangements calculated to facilitate safe and easy business transactions in foreign places. I have been unable to discover any trace of it amongst the Babylonians, and must leave Assyriologists to pursue the question further. The arrangements were as follow:

1. The institution of *contracts of hospitality*.[1] These were

[1] See my article on *Die Gastfreundschaft im Altertum*, in RODENBERG'S *Deutsche Rundschau*, 1887, vol. ix., p. 382 *sqq*.

written down on clay tablets (*chirs aelichoth* = potsherds of hospitality; also simply *chirs*, or *cheres*), either in the double form, which I wrongly disputed formerly, or in the single, whereby the tablet was broken in two, one piece being retained by each party. Its object was not, as is generally supposed, to ensure hospitality for the foreign trader, but to give him the protection of the law, to which, as a foreigner, he had no claim, being able to obtain it only by the intervention of a native. He did stand in need of this, but not of a hospitable reception, his ship making that superfluous; even if it had been offered (which, considering the length of time his business might take and its continual recurrence, is hardly likely), he would have had to decline it, as he could not leave his ship; he would have run the risk of finding her empty one fine morning, or perhaps gone altogether.

2. *Trade contracts.*[1]

3. *Commercial Consuls.*

4. *Trade Settlements.*

5. *Colonization;* and, as a not unusual sequel to this,

6. The *Subjugation* of entire districts, as, for instance, Rhodes.

In point of the organization of foreign trade, therefore, the Phœnicians outstripped the Babylonians, while, in all other respects, a few inventions in the field of industry excepted, they did not advance beyond the degree of civilization of the mother-nation; and so we can sum up their position in the history of civilization, as compared with that of the Babylonians, in a few words: the Babylonians created civilization, the Phœnicians helped to spread it.

Babylonian civilization gained in Carthage a new and considerably more important centre than it had hitherto possessed in Tyre and Sidon. The selection of the place testifies to the clear insight of the shrewd merchant; it could

[1] I adduce no proofs concerning these; those who want them will find them in MOVER'S work on the Phœnicians, which I formerly read, but have not again consulted on the present occasion.

not have been better chosen, for it brought him into the closest proximity to Europe, and opened out the western basin of the Mediterranean, which the Phœnicians had explored even less than the eastern basin, which lay nearer to them. The excellence of the choice was made manifest by the fact that Carthage soon surpassed Tyre and Sidon. The supposition that this was due to the greater skill and activity of its inhabitants is nowhere confirmed; it was due to nothing but the superiority of its situation.

Yet there is one thing which Carthage accomplished, and which cannot be laid to the credit of its situation, but must be solely attributed to the spirit of its people—that is a political product of the highest importance, a republican constitution. It was in Carthage that the Republic first saw the light.[1] In this respect, therefore, the Carthaginians, as compared with the Babylonians, produced something no less specifically novel than the Phœnicians did with regard to the organization of foreign trade; for the rest (art, science, religion) they have not, any more than the others, increased the capital handed over to them by the Babylonians, so that their importance in the history of civilization is, like that of the Phœnicians, exhausted in the statement that, with one exception, they have contributed nothing worthy of note, having merely distributed what had been matured in Babylon.

Through them it was brought over to Europe by means of maritime trade, and introduced to the Aryans who had immigrated there. The Aryans of Asia—the Indians and the Persians—obtained it directly from Babylon; the Aryans of Europe through them. The appearance of the Phœnicians marks the beginning of civilization on European soil; wherever they are seen civilization awakens; wherever they are not it slumbers; they were needed to arouse Europe from her sleep.

This explains why, at the time that the Greeks and Romans

[1] Of what importance this was I hope to show at a later and more suitable place.

had reached the zenith of their civilization, the Teutons and Slavs were still at the lowest stage. The Phœnicians never visited them; they were beyond their reach. But the Greeks and Romans were in touch with them at a very early date. Their nearest and easiest sea-route brought them to Greece and Asia Minor, and history is a witness to the fact that they went to these places in the very earliest times. Hence the first awakening of civilization there. As the Greeks themselves testify, they derived their civilization from the Phœnicians: Cadmus (=the Oriental) brought it to them. They also went to Spain and Gaul, but apparently without exercising any lasting influence there: otherwise the people would have been on a higher plane of civilization at the time of the Roman invasion, and some Phœnician loan-words would have been preserved in the Celtic tongue, but not a single one can be traced with certainty. The Celts owe their civilization exclusively to the Greeks and Romans.

It is clear from the above that the Aryans of Europe have not to thank themselves for their elevation to civilization. Had the impulse thereto been natural to them, it would have been compelled to declare itself amongst those nations also which did not come into contact with the Phœnicians, and it would have been impossible for the Greeks and Romans to have got so exceedingly far in advance of them. It can be explained only by their having come into contact with some foreign civilization which they were receptive enough to quickly appropriate. And this receptivity they possessed in a very high degree; it belongs, as will be shown later, to the character of the Aryan race in contrast to the Semitic race. Thanks to this characteristic the Aryans have brought the civilization handed over to them from the Semites to a height of perfection which was unattainable to the latter, owing to their exclusively practical nature. It is the case of the pupil surpassing the teacher in intellectual receptivity and versatility, when, equipped with the knowledge received from his teacher, he at length stands upon his own feet, pursues his own course, and far outstrips his instructor.

In picturing the Babylonian world I have in several instances had occasion to lay stress upon the difference in civilization between the Aryans and the Babylonians before their contact with the Semites, and the transmission of Babylonian civilization to the last; but it seems to me advisable that I should here, just as I did previously (p. 212), when dealing with the connection between the soil and Babylonian civilization, give a tabulated statement of it, with a view of showing the civilization inherited by the Aryans from the Semites (Babylonians, Phœnicians and Carthaginians). Historical evidence as to when, where, and how it came into their possession cannot be obtained; the proof of the transmission lies in the conclusion that the Semites did possess it whilst the primitive Aryans did not possess it; that later on it appeared amongst the Aryans; and consequently it must have been transmitted in the way suggested. I must, however, admit that this inference is not always a safe one as regards all matters to which it might be applied. For some matters I hold it to be irrefutable; for others I vouchsafe it only a greater or less degree of probability, and certain matters, such, for example, as the sea-going ship, the utilization of the horse for riding, or of water for irrigation of the fields—I have not included at all, because, apart from the question of transmission, they might have been developed by the Aryan practical genius, or, as in the case of agriculture, which was unknown to the mother-nation, might have reached the Indo-Europeans through some other channel. With these reservations the following list may be accepted:

1. Exchange of the Aryan wooden house for the Babylonian stone-house, and in consequence of this
2. Replacement of isolated houses and village by the town.
3. The application of stone unknown to the primitive Aryans for the fortification of towns;
4. For the construction of roads;
5. For the building of bridges.[1]

[1] As far as I know the Babylonian method of erecting stone bridges by means of temporarily diverting the stream has not been imitated by the Aryans

6. The working of metals, and

7. Their application to money.

8. Money transactions: the loan at interest (*foenus nauticum*).

9. Several other departments of private law, *e.g.*, the *arrha*, the written record of contracts among the Greeks, the duplicate legal records among the Romans, and others.

10. In the domain of public law the Republic.

11. In that of international trade the contract of hospitality.

12. The alphabet and writing.

13. The Babylonian measure of time—days, hours, minutes, together with the water-clock calculated upon them. The division by weeks, brought about by the institution of the (seventh) day of rest, has come down to the Aryans through the medium of Christianity, but the Roman three-hour vigil, on the contrary, seems to have been of Babylonian origin.

14. Babylonian measurement of space, with mathematics.

15. Observation of the stars at sea, and astronomy.

16. Plastic art. Its early awakening among the Greeks, its late development among the remaining Indo-European nations, compels us to the conclusion that they must have received an impetus which was wanting to the others; and, until it be proved that the early inhabitants whom they found in the land had already attained to some degree of artistic perfection superior to their own, I do not see how we can come to any other conclusion than that they derived it from the Phœnicians, who, at a very early period, took up their abode in Asia Minor, Greece, and the Greek Archipelago, and who, in other respects also, for instance in religion (in contradistinction to the other Indo-European nations), have considerably influenced the Greeks.

It is, therefore, true that the Aryans of Europe are indebted

of Europe, nor the building of tunnels under river-beds, accomplished by the same means. It need hardly be observed that the diversion of the course of the Busento on the occasion of the burial of Alaric by the West Goths, cannot be traced back to the example of the Babylonians.

to the Semites for an incalculable amount of their civilization, and, in many of our modern institutions, ancient Babylon survives to a very considerable extent. The Semites became the teachers of the Aryans, as each body in turn becomes the teacher of others whom it excels in education, and with whom it is brought into contact. Without them it would probably have taken the Aryans several thousand years longer to attain to their present standard of civilization. The culture matured in another part of the world, and transmitted to the Greeks and Romans, has shortened the time for the Aryans. The Greeks and Romans have contributed their share as regards communicating their knowledge to the other Indo-European nations. The Aryans have become the heirs of the Semites; they have not needed to commence at the outstart to acquire everything for themselves, but have, without any effort of their own, entered upon their inheritance, which, however, they have honourably done their part to increase, not merely in quantity, but, above all, in quality. They have opened up new paths of civilization which their predecessors never trod, and, because of their peculiar intellectual bent, never could have trodden.

This gives rise to a question of very great importance to us—the difference between the Semite and the Aryan races. This question will next occupy our attention.

IV.

THE NATIONAL CHARACTER OF THE ARYANS AND THE SEMITES.

1. *Necessity of ascertaining the National Character of each.*

§ 33. It was not merely to obtain a bird's-eye view of the entire inheritance which the Aryans received from the Semites —legally speaking, to make an inventory of this bequest—that I have given such minute attention to the world of the Babylonians. My object was more particularly to make use of the unparalleled opportunity it presented to me for illustrating my theory about the causal connection between soil and people in a manner so convincing that, to my mind, no room is left for doubt. Not that this proof would have been needed for the Babylonians themselves; for them it would have been quite sufficient simply to place, side by side, all the different items which stand to their credit in the civilization of the Indo-Europeans. The question need not be raised as to how the Babylonians acquired it, whether spontaneously or whether they were forced thereto by the conditions of the soil. What I had in my mind in making these deductions was not the Babylonians, but the Aryans—I mean the Aryan in his original home. If ascertained for the one, it ought to bear application to the other.

In the Babylonians I want to find the proof which I need for the Aryans—that the native soil is the nation. If the former had not opened my eyes to this fact, I could hardly have come to the conclusion that for the Aryans also their native land had decided their degree of civilization as well as their national character.

When I was showing this influence of the soil upon the civilization of the Babylonians in detail, I availed myself of the opportunity of doing it at the same time for the Aryans. This seemed to me more advisable than a consecutive treatment of the subject for the Aryans, which could only have been inserted in the First Book, in which case it would have been missing in this Second Book, to which it really belongs. Therefore I have chosen the plan of constantly referring from the Babylonians to the Aryans as better fitted to bring out the causal connection between soil and civilization for the latter also. With the answer to the question, Why with the former? the point is really indicated wherein we have to seek elucidation of the question, Why not with the latter?—the soil. The difference in civilization is in both cases accounted for exclusively by their native soil. In the following paragraphs I will attempt, in exactly the same way, to account for the difference in their national character.

The ground which I now have to tread is very slippery, and until now has been carefully avoided. What can historical writers have to tell us of the national characters of the Aryans and the Babylonians? Nothing. It is a historical x, which nature simply leaves on one side. But now comes the question, How was it formed? It is the x to the second power: instead of *one* unknown quantity, *two!* It cannot but look like presumption on my part, when, in spite of this, I declare that I do not intend to avoid the problem, however impossible of solution it may appear. I hope to solve it in the following way:

My method is the method of inference.

First of all, we have the inference drawn from the gods to mankind. Man manifests himself in his gods—as the gods, so the people. The statement "God made man in his own image" might be reversed: "Man made himself a god after his own image." If we want to know how to picture to ourselves the Semites and the Aryans, we turn to their gods; in them we see their image reflected.

Next comes the inference drawn from the difference of their

external conditions of life. Nations and individuals do not stand on the same plane as regards the influence which external circumstances have upon them. The individual, at his advent into the world, brings with him the germ of the future man, and he may be of so tenacious, reserved, and callous a nature that, no matter what vicissitudes await him, they will affect him but little. Nations, however, bring nothing into the world with them: they become; they are blank tablets, and whatever is to be read there, after they have been in existence for thousands of years, is entirely the work of history; while, on the contrary, the things recorded of each individual man's character on the tablet at the close of his life were present in germ at his birth: what has been added are merely the outlines of his external life. With individuals the time that external circumstances have for the exercise of their influence upon them is very limited: the short span of human life is represented in the life of nations by thousands of years, and therefore they have ample time for full development. If the individual were to live as many thousands of years as he lives single years, the influence of external circumstances upon the inner man would not fail to assert itself with him also.

In the manner above indicated I believe I am in a position to explain with tolerable accuracy the internal difference between the Babyloniaus and the ancient Aryans. As they endowed their gods, so must they themselves have been endowed; as they formed the circumstances of their gods, so must they themselves have been circumstanced. Let those who question this "must" try to controvert the principle on which it is based; for my part I consider that this statement expresses one of the most indisputable of historico-philosophical truths.

In contrasting the Babylonians and the ancient Aryans, I will not, in what follows, restrict myself to this; I will rather enlarge my horizon and apply the test to their descendants, to all nations which have issued from them:—from Babylon, the Assyrians, Phœnicians, and Jews; from

Iran, the Indians, Iranians, and Indo-Europeans—that is, in the one case, the Semites, in the other the Aryans in the wider sense of the word. My theme thus assumes the shape formulated at the head of this chapter: the national character of the Aryans and the Semites. The reasons which have induced me thus to extend my theme are as follow:—

How would the purposes of this work have been served if I had merely stated that the Babylonians and the ancient Aryans were very differently constituted nations? In the earliest days of their history on European soil, the Indo-Europeans came into contact with the Babylonian civilization, which thus became an element in their own pre-historic existence—Indo-European history constitutes the post-historic existence of the Babylonians. This post-historic existence, however, extends over all nations descended from them; in it the descendants of the ancient Aryans and of the Babylonians meet, who of their own accord had not thus far come into contact with one another. History does not allow anything really noble or great which she has nurtured in a nation to perish, but passes it on as an inheritance to another. The Aryans became the heirs of the Semites, elected by history to add by their means a second part to the first act of the world's history. Who can suppress the question: How came it to pass that the Semites retired and the Aryans took their place? What else could have been the cause of it but the superiority of the Aryan over the Semitic national character? The early history of the Indo-Europeans has therefore to inform us not only how they were constituted when they made their first appearance in history, but also how the Semites were constituted when they made their exit. This question once answered, we shall know why the hour had struck for the Semites to retire from the history of the world. Within the limits of their powers, as conditioned by their national character, they had performed their part; they were now exhausted, worn out, decrepit with age. History had no further need of them—they might go. In their place came a virgin race in the full vigour of its youth, matured in

obscurity, sprung from other soil, and therefore endowed with a national character wholly different from that of the Semites, as able to accomplish things which to the other would have been impossible.

Hence my inquiry into the national character of the Aryans and the Semites. This inquiry is indeed so little outside the compass of my task that I could scarcely be said to have offered a solution had I not included it. The historical displacement of the Semites by the Aryans can be made clear only by proving the superiority of the Aryan over the Semitic national character.

If I succeed in substantiating certain general traits for the Semites as a whole on the one hand and for the Aryans as a whole on the other, this would be further evidence that they date from the time before the daughter-nations separated from the mother-nation. We have consequently the original character of the mother-nation before us. If we could obtain no information about it in any other way, the inference drawn from the daughter-nations to the mother-nation would in themselves suffice to clear away all doubt about it. And this original character must have been stamped upon both these mother-nations almost beyond power of destruction to have been preserved through many thousands of years in the daughter-nations respectively, which I shall proceed to show was the case. In the Jew of to-day the Semite of antiquity, the old Babylonian and Phœnician, may yet be recognized; in the Hindu of to-day, and in the Indo-European nations, the old Aryan. The lesson to be drawn from this fact is that the process of the first formation of national character is decisive for the whole life of a people; no matter how many fresh traits may be added in course of time, they cannot efface the fundamental basis of its being, which always shines through. The original formation of the national character of a nation is the counterpart of the innate character of the individual; what nature does for the latter in the womb, history does for the former in the first period of its existence. How this has taken place in the present case will be shown presently. With the external con-

ditions of life which nature had provided it was imperative that the Babylonians and the early Aryans should have become what they actually did become. The fact that the typical contrast between them can still be recognized in their descendants after the lapse of thousands of years proves that their respective national characters must have been very clearly defined when the daughter-nations separated from the mother-nations. For the ancient Aryans, this is proved by their language (p. 10); for the Babylonians, by the high degree of civilization to which they had attained at the time that the Phœnicians and the Jews branched off from them,[1] and which can have been the work only of thousands of years.

2. *Renan's attempt to trace the difference between Aryans and Semites back to Polytheism and Monotheism.*

§ 34. The significance attaching to the national character of the Aryans and Semites, as given in the preceding section, is in striking contrast to the attention which science has so far vouchsafed to it. Historians preserve a strict silence on the point; even a writer like Ranke—who has proved his thorough mastery of the science of history by the breadth of his views, by his constant endeavour to find historic unity and by his characterization of prominent historic personages, and who would have been better qualified and more able than any other to expound this problem—nevertheless avoids the subject altogether in his *History of the World.* It cannot be because it escaped his attention. It must have forced itself before him, but he must have put it aside because he did not see his way to a satisfactory solution; and in this he was supported by the only attempt made by any Orientalist up to that time, of which

[1] Proofs of this have been given earlier in this work. I refer, for the Phœnicians, to maritime navigation and the application of astronomical observations and of the dove to nautical purposes; for the Jews, to the building of the Tower of Babel, the gold and silver which Abraham took with him, and acquaintance with the system of interest among the Jews, all of which prove the existence of the three characteristic institutions of Babylonian civilized life—maritime navigation, architecture, and commerce—at a time which can be traced back to at least thirty centuries B.C. (the founding of Sidon, about 3000 B.C.).

he cannot have been ignorant. I refer to that of Renan,[1] which I will proceed to explain and examine.

According to Renan, the difference between the Aryans and the Semites turns on the contrast between Polytheism and Monotheism. The great dissimilarity which exists between them has its ground simply in this—that the former were Polytheists, the latter Monotheists. Let us see how the case really stood.

This theory is, *a priori*, improbable. Religion nowhere absorbs the whole existence of a nation; it forms but one side of it—possibly a very important, possibly an unimportant, one. What do we learn about the difference between the Greek and the Roman national character by merely looking at the religion of the two nations? Practically nothing. How infinitely more do we learn by contemplating art and philosophy in the former, State and law in the latter, revealing to us their dissimilarity, not only in their conception of life, but also in their importance in the history of the world. The Aryans were formerly Polytheists; through Christianity they became Monotheists. If the influence upon national character which Renan attributes to it is due to the contrast between Polytheism and Monotheism, that of the Aryans would have had to undergo a total change. But it remained unaltered. The description which Tacitus gives of the Germans, and Cæsar of the Gauls, holds good in its essential points for all their descendants. So, too, with the people of Israel, the prototype of Monotheism, from whom Renan has primarily derived his characterization of the Semite race.

It will be shown later on that they were not Monotheists from the beginning, but in course of time exchanged Polytheism for Monotheism. According to Renan, they ought thereby to have become totally different from the Babylonian mother-nation which adhered to Polytheism. But this did not happen.

[1] E. RENAN, *Histoire Générale et Système Comparé des Langues Sémitiques; première partie*, p. 1 (Paris, 1855); supplement in the *Journal Asiatique*, tom. xiii, pp. 215–282, 417–480 (Paris, 1859), in which he defends his theory against objections. Quoted hereafter as i. and ii.

The Semitic character, their religion excepted, has been preserved in them quite as strongly as in the latter.

It is not easy to see what induced Renan to attribute the difference between Aryans and Semites to the difference between Polytheism and Monotheism. Looked at from the historical point of view, the transition of man from Polytheism to Monotheism was one of the chief turning-points in the whole course of history. The Aryan Polytheists, the Israelites, and the Arabian Monotheists—what is simpler than to determine the difference between the Aryan and the Semitic races from this point of view, which is unquestionably of the greatest significance for their respective influence upon the history of the world?

We have already stated that the contrast between Monotheism and Polytheism is not sufficient to absorb a nation's whole vitality. The standard which Renan fancies to have found herein, by which he can determine the difference between Aryans and Semites, is altogether too limited. It is, moreover, incorrect. It is not true that all Semites have been Monotheists; only the Israelites and Arabs were so, but not the Babylonians, Assyrians, or Phœnicians; and the former attained to it only in course of time. According to Renan, Monotheism was the primitive possession of the Semitic race; nature bestowed it upon them from their cradle. They brought the "conception primitive de la divinité" into the world with them (ii. 418); it is the "gloire de la race sémitique d'avoir atteint, *dès ses premiers jours*, la notion de la divinité" (i. 5). This assertion presupposes that nations, like individuals, have their character inborn in them; and Renan does not hesitate to proclaim his adhesion to this view, which at that time widely obtained.[1] I have elsewhere given my opinion as to the extent to which this view is

[1] ii. 445: "A l'origine l'espéce humaine se trouva divisée en un certain nombre de familles, énormément diverses les uns des autres, dont chacune avait en partage certains dons ou certains défauts." Only in course of time this "fait de la race qui réglait tout dans les relations humaines" has gradually deteriorated, according to the experiences of the nation; "l'idée de race fut rejetée sur un second plan, sans disparaître pourtant tout à fait."

tenable. National character is not a natural product, but the work of history, the reflex of the combined historical vitality of the people. The stream of historical life rushes along, but the deposit which it precipitated in the form of isolated atoms remains. As the history of a people, so its character: *esse sequitur operari.*

I will now proceed to prove that this applies to all nations of the world, and accordingly to the Semites and Aryans. First of all I must substantiate the two statements made above.

Babylonians, Assyrians, and Phœnicians ever were,[1] and have ever remained, Polytheists. Renan has set about maintaining his theory of the Monotheism of the Semitic race in its application also to them in a very peculiar way. The several gods of these three nations are said by him to have been different names for one and the same indivisible divinity, whose several qualities and aspects it was desired to express. Opposition to this view was not long in appearing.[2] In this way Polytheism might be dispensed with altogether; "what is sauce for the goose is sauce for the gander." If the several gods of the Semites are merely so many different names for one and the same divinity, the same would be true for those of the Greeks, Romans, and Teutons. Where it is merely a question of distinguishing between the different properties or aspects of one and the same deity (and this took place in no nation to a greater extent than with the Greeks),[3] this is

[1] For the assertion that the Semites first adopted it through the Akkadian-Sumerians on their settlement in Mesopotamia, see below.

[2] At the hands of German scholars, as far as I know, first by STEINTHAL in the *Zeitschrift für Völkerpsychologie*, vol. i., pp. 328–345. Berlin, 1860. Further literary evidence would here be quite out of place; and I will merely remark that two German scholars (GRAU in his *Semiten und Indo-Germanen in ihrer Beziehung zur Religion und Wissenschaft: eine Apologie des Christentums vom Standpunkt der Völkerpsychologie*, second edit. Stuttgart, 1866; and HOMMEL in *Die semitischen Sprachen und Völker*, vol i. Leipzig, 1883) have supported Renan in his theory as to the Monotheism of the Semites.

[3] Compare the collection in the Index of PRELLER'S *Griechische Mythologie*, under the names of the individual gods.

effected in the form of apposition, or by the addition of an adjective, the name of the deity being retained in the singular. But where the gods are spoken of in the plural, as with the Greeks (*θεοί*), the Romans (*dii*), and the Babylonians (see below), or where several singulars are used as names of deities, this proves that the conception of the unity of the deity is foreign to the people, that, rather, they regard the bearers of the different names as different individuals. The plural of the language is the plural of the thing—Polytheism. Similarly the singular of the language as being exclusive (merely one single name for God:[1] Jahve, Allah, God) denotes the singular of the thing—Monotheism.

It is proved that the Babylonians must have regarded their gods as separate individuals by the above-mentioned (p. 208) damnatory formulæ, in the first place, because here the separate deities, after being invoked individually,[2] are all included in the plural form, "*dei omnes supra memorati*"; secondly, because in the diversity of the functions assigned to them at the punishment of the wrong-doer, each of them inflicts upon him some special evil. The most convincing evidence, however, by which all contradiction is silenced, is found in the Babylonian account of the Deluge, in which the one god thwarts and baffles the plans of the other. The account ends with the narrative that Chasis-Adra, after his deliverance, built an altar on the top of the mountain, and brought a sacrifice there at which the gods were present "like flies."

It is therefore true, as has been said, that the Babylonians

[1] Upon the plural form "êlohim" see below.

[2] OPPERT and MÉNANT, p. 103: *deus Anu, Bell et Ea*, pp. 104, 105: *Nebo . . . Bin . . . Sin . . . Samas . . . Istar . . . Gula . . . Ninip . . . Nirgal . . . Zamal . . . Turda . . . Ishara.* The separate Babylonian deities are of no interest for my present purpose; concerning them see HOMMEL'S *Die semitischen Völker und Sprachen*, pp. 370–397, condensed by Duncker, *Geschichte des Altertums*, fifth ed., vol. i., pp. 267–272. Leipzig, 1878. [English translation by EVELYN ABBOTT. Lond., 1878 *sqq*], and EDUARD MEYER'S *Geschichte des Altertums*, vol. i., pp. 175, 176. Stuttgart, 1884. An Assyrian tablet enumerates seven principal deities, fifty gods of heaven and earth, and three hundred celestial spirits (DUNCKER, p. 275).

were at one time Polytheists, as were also the Assyrians and Phœnicians. According to Hommel (p. 28), who shares Renan's opinion that the Semites were Monotheists from the very beginning, they became so afterwards, and exchanged their original Monotheism for the Polytheism of the Akkadians and Sumerians. He has given us no proofs of this, but merely states it—it remains to be proved. I doubt, however, whether it can be maintained: it would have no precedent in history. Everywhere Polytheism has given place to Monotheism; nowhere has the order been reversed. The statement seems to have been provoked simply by the assumption that the Hebrews were Monotheists from the beginning; because the daughter-nation was this, therefore also the mother-nation. The hypothesis is an erroneous one.

The Hebrews, and likewise the Arabs (to whom I have so far paid no attention) were not Monotheists from the beginning, but became so in course of time. In the case of the Arabs this is beyond all doubt. But their conversion to Monotheism does not date, as has been assumed, from Mohammed. More recent researches have proved rather[1] that the conversion, if not fully completed, was at all events in progress in his time. It seems to me that we may accept the same view with regard to the Hebrews down to the time of Moses. According to Old Testament tradition their ancestors dwelt in Mesopotamia. Their traditional ancestor, Abraham, is supposed to have gone forth from Ur in Chaldea (Genesis xi. 28, 31), and his grandson Jacob returns thither to find a wife of his own kindred. When he again departs one of his two wives, Rachel, secretly takes with her the

[1] WELLHAUSEN'S *Skizzen und Vorarbeiten*, part iii.: *Reste arabischen Heidentums*, p. 184 (Berlin, 1887): "In the sixth and seventh century of our era Allah gained the ascendancy over the other gods. . . . 'The heathens,' says Mohamed himself, 'in case of extreme danger, invariably turn to Allah, not to their idols.'" The way in which the transition has been brought about is here exemplified (pp. 185, 186). The expression "God" (for the principal god of the tribe), who was colloquially said to reign supreme, formed imperceptibly the transition to the conception of an one and only universal God, common to all races. In the Koran the idols of the people are still mentioned.

idols of her father (Genesis xxxi. 19, 32–33). Therefore it is impossible that Abraham could have been a Monotheist; such an Abraham, together with his Monotheism, was a fiction of later times. If, in support of this fiction, he has to be the ancestor of the whole nation, it is imperative that he should be a Monotheist. If he were an idolater, why should not the people have been so too? Therefore it is necessary that Abraham should have been Monotheistic, for so weighty an argument as Abraham's Polytheism would have been unsafe to trust to a nation so liable to fall back into the old idolatry.

That we are here brought face to face with one of those one-sided emendations of ancient history viewed in the light of, and for the interest of, later times is evident from the traces of the former Polytheism of the people which have been preserved to us in the Old Testament. For instance, in Genesis vi. 2, "The sons of God saw the daughters of men." To this may be added the evidence which the language yields in giving the plural form for God: *elohim* (=the gods). It is impossible to imagine that this could have originated with a people which from the beginning believed in *one* God only; it shows that originally they had several gods; when these gave place to the one God the expression remained and was applied to him.[1] It is only with Moses that Monotheism is introduced into the history of the Jews. Until then the people were given over to Polytheism. This, and this only, explains the necessity for the command: "Thou shalt have none other gods before me." If Renan is right in stating (ii. 228), "que depuis une antiquité qui dépasse tout souvenir le peuple hébreu posséda les instincts essentiels qui constituent le monotheisme," this command would have been as meaningless

[1] RENAN declines to admit this; he opposes it with (ii. 218, 219) ". . . les absorptions de divinités dont l'histoire des cultes polythéistes offre de nombreux exemples, se passent d'une autre manière: les divinités absorbés ne disparaissent pas entièrement; elles sont subordonnées aux dieux supérieures, comme demi-dieux ou comme héros." This statement is contradicted by the evidence adduced by WELLHAUSEN (p. 236, note 1) that the several gods of the Arabs have in historic times, without exception, been merged into Allah.

beginning imbued with the spirit of Monotheism is proved to be historically quite untenable. The only two Semitic tribes in which Monotheism was established after they had long been addicted to Polytheism, the Hebrews and the Arabs, did not attain thereto through any innate impulse; it was forced upon them from the outside by Moses and Mohammed, with fire and sword. A nation devoted to Monotheism from the beginning would hardly need to be forbidden, on penalty of death, to fall into idolatry.

Hebrew Monotheism, however, deserves this name only in a very restricted sense. It is not the faith in the One God beyond whom there is no other, but the faith in the racial God of the people of Israel — Jehovah. By his side there are for other nations other gods; Jehovah is only the highest, the mightiest of all. In reality, therefore, we here have an extra-national Polytheism beside the national Monotheism (henotheism, monolatry).

The immeasurable progress made by Christ is thus evident. The God whom he preaches is the God of the whole world, not of a specific nation. His disciples were to preach him to "all nations." Christ is the incarnation of the idea of the universality of religion, the last step which Monotheism had yet to accomplish in the world. Its path which it has travelled through history in order finally to attain to Christianity would therefore be shown by the following stages: Egyptian priests—Moses—Christ—as his successor Mohammed and Buddhism in its later (not original) form.

The advance achieved by Christ can no longer be credited to Judaism. The Semite has never got beyond the idea of the *national exclusiveness* of the deity, which has ever been the starting-point for the conception of a deity; neither has the Jew. But the Greeks had already got beyond this when Christ appeared, and therefore his doctrine was appreciated by them as it could not be by any Semite. The Hellenism of that time is characterized by the trait of cosmopolitanism, which animated it externally as well as internally: externally by the dispersion of the Greeks over the whole of the then

civilized world, internally by their being elevated above the ideal of national exclusiveness: externally no longer bound to their native soil, cosmopolitans, everywhere met with as bearers of culture to all people; internally, raised to the corresponding cosmopolitan conception that on religious territory found expression in deliverance from the idea of the national deity. They paved the way for Christ; and I go further still in accepting the view represented by modern historical science that Christ was influenced by the Hellenic civilization of his time. His doctrine was not the produce of his native soil—Christianity, on the contrary, denotes a victory over Judaism; from the very commencement there is a touch of the Aryan in him. Some have tried to account for this link between him and the Aryans, by accepting his descent from an Aryan father. To me this external connection is of no value whatever: it might be there without producing the internal connection; it might be absent without the other being wanting.

In whatever way it happened to come about that Christ was influenced by Hellenism, it is quite certain that he went a very long way beyond it. Although the doctrine of the one God which Christ preached was not new to the learned Hellenes of his time, the idea that God is Love, and that the salvation of mankind is bound up in love—this highest conception of the deity, beyond which there is nothing higher, was altogether new to them. In reaching this not merely intellectual, but moral, height, the principle of the universality of religion was for the first time practically realized, a true message of salvation was proclaimed to all mankind. The belief in one God is purely intellectual; it is compatible, like every purely theoretically recognized truth, with hardness of heart; but the belief in the God of Love, if not merely acknowledged with the lips, but living in the heart, excludes this. The God of Love means self-abnegation as the principle of the moral order of the world.

I must now revert to the Semites. I think I may thus condense the result of my investigations up to this point, that

Monotheism, so far from forming the heritage of the Semitic race, was fully unfolded amongst the Aryans in the doctrine of Christ. With the Semites, the conception of the deity never broke through the bonds with which their national character had held them bound, not even with the Hebrews; Jehovah existed only for his people;[1] the ultimate motive to which their whole conception of the godhead can be traced is national egotism: God for us, but not for others. That the same God who is for us is also for others—in short, the idea of universality or community in the domain of religion, in contrast to national character or exclusiveness—this idea, without which Monotheism is but an empty name, was first realized by the Aryans; and that this was so has its ultimate proof, not in their superior intellectual endowments—for in this respect they were in no wise superior to the Semites—but in their higher moral elevation, in idealism, which forms the leading trait in their character (§ 36).

This contrast between national character and universality in religion is repeated amongst the Romans in the domain of law. As in the other case, the development begins with the idea of national character and exclusiveness: our law is ours only; the strangers have no part in it.[2] In their own interests, for the purpose of furthering their trade, this principle was gradually set aside, but in reality abolished, that is to say it was first replaced, by the principle of universality in the *jus gentium* of the Romans, which was specially instituted by the side of the national law (which was solely for the use of Romans, *jus civile*), as general law, for the use of all nations trading with them. The *jus civile* stands on a par with the exclusively national Polytheism or Monotheism; the *jus gentium* corresponds to the supra-national Monotheism of Christianity, and Roman lawyers attribute to

[1] "I am the Lord thy God." "Thy" here means, as it so often does in the Old Testament, not the individual, but the people; *e.g.*, "who brought thee out of the land of Egypt." "That thou wert a bond-servant in the land of Egypt."

[2] See my *Geist des römischen Rechts*, i., § 16.

it the same character of universal validity as the Christian Church ascribes to the former.[1] The idea of universality first arises with the Aryans; it has always remained foreign to the Semites.

With this alleged Monotheism of the Semites Renan connects a feature which is supposed to mark the whole race—that of religious intolerance. It is in the nature of Polytheism to be tolerant, of Monotheism to be intolerant. Assuming that he is right in this, as I firmly believe he is, it proves that his hypothesis for the Polytheists amongst the Semites does not hold good, for, according to his own theory, they must have been tolerant. And so they were. The fact alone that the Babylonians did not force their gods upon the Hebrews in the Babylonian captivity, but allowed them to continue their former religious practices, is proof of this. And how could it possibly have been otherwise with the Babylonians, Phœnicians, and Carthaginians? Religious intolerance in a commercial people is a *contradictio in adjecto.* Supposing they had forced their gods upon the people with whom they traded, they would have attacked their highest and holiest things, and instead of a peaceable interchange of goods, and their admission into the foreign land, the result would have been deadly strife. Religious intolerance and religious zeal and fanaticism are found only with the Monotheists amongst the Semites—the Hebrews and Arabs of later times. To the former it was strictly commanded by Moses that when they came into a strange land they were to "destroy the altars (of the inhabitants of the land), break their images, and cut down their groves" (Exodus xxxiv. 12). With the Polytheistic Semites not the slightest trace of this is met with.[2]

[1] 1, ix., *De J. et J.* (1, i.): "*quod naturalis ratio inter omnes homines constituit, id apud omnes peraeque custoditur vocaturque jus gentium, quasi quo jure omnes gentes utuntur.*" Similarly in the Middle Ages, Roman law, as "revealed law" (*ratio scripta*), was placed side by side with Christianity, as "revealed religion."

[2] When NÖLDECKE (*Orientalische Studien*, p. 7. Berlin, 1892) seeks to show this same trait also in the priests of Baal (on the basis of 1 Kings xix. 10), who have "thrown down the altars of the Lord and slain his prophets with the

This statement applies in the fullest sense to the Aryans. None of the Aryan peoples have ever forced their gods upon others; they have not even sought to propagandize for them; as they tolerated other gods beside their own at home, so they tolerated them abroad also, and it was a special principle of Roman State policy to put no obstacle in the way of the native worship in countries which they had subjugated. The Romans, when besieging a foreign city, even went so far as to call upon the tutelary gods to come over to their side (*evocare deos*) and to become theirs.

Twice only, it seems, did the Roman Government prove false to this spirit of tolerance. Firstly at the time of the Republic, in the second century before Christ, with regard to the worship of Egyptian deities, which at that time was gaining ground more and more in Rome, and which the Semate opposed with all its energy, but which nevertheless towards the end of the Republic demanded not merely tolerance, but public recognition: in B.C. 43 the Triumvirs built a temple to Isis for public worship; under Augustus there was more than one of them. Secondly, during the Imperial Age, with regard to Christianity, which for nearly three centuries had been subjected to the most cruel persecutions; in reality, however, it was not the spirit of religious intolerance which dictated this action on the part of the Government, but, in the first instance, the moral impropriety which the worship of Isis entailed in the temple; in the second instance, besides much of which the Christian Church was falsely accused, there was the political danger to be apprehended from a sect which upheld the principle that one must obey God rather than man.

It was Christianity that first introduced the spirit of religious intolerance to the Aryans. While still persecuted itself, as soon as it came into power it called upon the Government to administer the same punishments to heretics and schismatics

sword," this observation must be made, that this concerned not a strange nation, but his own people ("the children of Israel"), and that it was an act of revenge for what Elijah had done to them, by "slaying all the prophets of Baal with the sword."

which were formerly inflicted upon the Christians. We cannot trace this spirit of intolerance back to the founder of Christianity. It was a growth, not out of the New, but out of the Old, Testament, grafted upon the Aryans by the Jews. It was the worst gift that they bestowed upon the Aryans; it was the robe of Nessus, which has poisoned their blood. But the Jews themselves have suffered bitterly for it. In the persecution during the Middle Ages, and in the anti-Semitic movement of to-day, the spirit of intolerance has risen against its author—"the injustice that thou inflictest upon others shall be visited upon thyself." It is the *lex talionis* in the life of nations. Will the Aryans ever exchange the spirit of the Old for that of the New Testament? The time seems far distant yet.

I will now summarize the result of my criticism of Renan's views in the following two paragraphs:

1. It is not true that the differences of character between the Semites and the Aryans were brought about by the contrast between Monotheism and Polytheism. Both were originally Polytheists, as all other nations of the world have been.

2. It is not true that intolerance is innate in the Semite, tolerance in the Aryan. As long as they adhered to Polytheism they were tolerant; not till they became Monotheistic did intolerance enter into their character. Its first occurrence is in the history of the Hebrews, who were inoculated with it by Moses; he was the first to introduce religious intolerance into the world. From the Hebrews the spirit of intolerance has, with Monotheism, passed over to the Aryans and Arabs and all other adherents of Islamism—religion has called fire and sword to her assistance.

3. § 35. *The Semites*
is wanting.

4. § 36. *The Aryans*
is wanting.

Third Book

EMIGRATION OF THE ARYANS

it has for our subsequent investigations, I here quote the most essential passage, *verbatim*.[1] *Rogatus in haec verba populus: Velitis jubeatis ne huc sic fieri? Si res publica populi Romani quiritium ad quinquennium proximum, sicut velim eam, salva servata erit hisce duellis, quod bellum populo Romano cum Carthaginiensi est, quaeque duella cum Gallis sunt, qui cis Alpes sunt, quod ver attulerit ex suillo, ovillo, caprino, bovillo grege, quaeque profana sunt, Jovi fieri, ex qua die senatus populusque jusserit?*

According to the account of Festus, accepted by modern scholars, the *ver sacrum* took the following shape: In times of severe distress the Government dedicated to the gods, for the purpose of moving them to compassion for the people, the entire offspring of both man and beast during the forthcoming spring. The children were allowed to live until they had grown up;[2] then the marriageable youth of both sexes had to leave the town and seek their fortunes abroad, and make a new home for themselves elsewhere. The nation severed all further connection with them, wherein lay the difference between the *ver sacrum* and colonization. The people did not concern themselves as to the fate of the wanderers, who were given over absolutely into the hands of the deity, who might do with them what he would. Hence the name of *ver sacrum*, and for those who took part in it of *sacrani*. Mars was their tutelary god (the *Mamertini* derived their name from him); the animals consecrated to him—the wolf and the woodpecker—were the leaders of the procession of emigrants.

This account contains three points which do not correspond with the solemn formula of the *ver sacrum*, with reference to which Festus has doubtless allowed some inaccuracy to creep in.

In the first place it is not true that the entire birth of the following spring was dedicated to the gods.[3] The dedication would in that case have been unqualified, whereas each

[1] I will revert to a few side issues later on in a suitable place.

[2] In the case reported by LIVY, xxxiii. 44, A.U.C. 557, until they were twenty-one years old; in FESTUS, in his *Mamertini*, p. 158, twenty years.

[3] FESTUS, *Mamertini*, p. 158; FEST. *Ep. ver sacrum*, p. 379: *proximo vere*.

votum was given in true Roman fashion, on condition that the deity would first grant that which had been prayed for. In the case in connection with which Livy mentions the solemn formula of *ver sacrum* (xxii. 10), the time appointed was five years (*ad quinquennium proximum*), thus clearly providing for a future popular decree for deciding whether the conditions had been carried out and regulating the completion of the *ver sacrum* (*ex quo die senatus populusque jusserit*); for the young of the animals, therefore, which alone are mentioned here, the next-following spring only could apply.[1] This is a point the practical significance of which I will presently prove (§ 39). Then, again, not everything born in this spring was "vowed."[2] Children are not thought of in the formula: the connection that it has with them is dealt with in § 38. Among the animals only that was dedicated *quod ver attulerit ex suillo, ovillo, caprino, bovillo grege;* the importance of this restriction I shall also point out.

It is equally incorrect to assert that the animals were dedicated to Mars or even to the infernal deities. In the formula Jupiter is specially mentioned (*Jovi fieri*); Mars acted merely as the tutelary god of the wanderers. As to the manner in which we have to imagine the wolf and the woodpecker as leaders of the departing host,[3] classical scholars throw no light whatever.

The sending forth of the grown-up youth is, according to Festus, supposed to have taken the place in primitive times of the sacrifice of children, and this view is shared by modern scholars.[4] It is certainly incorrect. The sacrifice of children was absolutely unknown to the mother-nation. It was an

[1] Practically of very great importance. It was within man's power so to arrange the pairing time that the animals should bring forth their young either before or after the spring.

[2] FESTUS, *Epit.*: *quaecunque . . . animalia.* FESTUS, *Mamertini*, p. 158: *quaecunque* (which in this case includes also the children born) *vere proximo nata essent.*

[3] Examples in FEST., *Ep. Irpini*, p. 106; PICENA, p. 212; SERV., *ad Aen.*, xi. 785; STRABO, v. 4, 2, p. 240.

[4] According to SCHWEGLER'S *Röm. Gesch.* this can scarcely be questioned.

opens up the possibility of obtaining a satisfactory answer to certain questions in the *ver sacrum* which have not even been raised, and have consequently been passed over in silence by the prevailing view as to the custom.

The Jews never forgot their exodus from Egypt, and similarly the Indo-Europeans had their migration from their original home ever present in their minds; and in times of need they called to remembrance the means by which they had once been delivered, and resorted to the same again—migration of the whole nation, or of a part of it, is as familiar to the Indo-Europeans as it is foreign to any other people of antiquity. It was to this practice that not only the Aryan daughter-nation in its severance from the mother-nation, but also that of the several branches of it in their separation from each other, owed their individual existence as a nation. With a few of them (the Celts, and more particularly the Teutons) the process has been several times repeated in the course of history. The Greeks and the Latin races, after they had once reached the places where we find them in historic times, emigrated no more; they provided against the evil of possible over-population by conquest and the establishment of colonies, whereby the connection with the mother-nation was maintained. The early migration was remembered by them only as a religious custom in the form of the *ver sacrum*.

The *ver sacrum* may be sought for in vain in connection with the Aryan mother-nation. The motive which induced them to emigrate was not of a religious, but of a secular, practical character; it was intended to check over-population (§38), and no doubt it took place much oftener than in the two instances of which we know—the separation of the Europeans and that of the Iranians. Emigration appears to have acted as a periodic blood-letting.

How the religious institution of the *ver sacrum* could have arisen out of this purely secular act is obvious by the fact, accredited by many authentic proofs, as already given, that everything connected with antiquity was viewed in a sacred

light (*religiosum*) by the Romans. If the halo extended even to the wooden nails, the wooden spear, the stone axe, and the production of fire, how much more would the act to which the people owed their entire existence—the separation of the daughter- from the mother-nation—not have been endowed with this religious sentiment during the course of their long wanderings! It was the most important, the most momentous act of their whole national life, the beginning of their existence. If the remembrance of this act could ever have been effaced during their wanderings, the repetition of it during that time would have kept it alive. To the separation from their first home was later on added the severance from the second home (Book V.); and even on Italian territory, of which the Italic race originally took possession as a single body, detached tribes separated from the main body several times. And even though Roman tradition can disclose nothing further concerning it,[1] and learned antiquarians fail to see the historical connection between the *ver sacrum* and primitive antiquity, it is nevertheless manifest that reminiscences of past ages were preserved in this institution, just as in the case of other previously mentioned institutions. They were all retained, even after they had lost all practical meaning and after the popular mind was no longer able to comprehend them, simply because they had belonged to antiquity — not, therefore, merely owing to historical *vis inertiæ*, but because of natural veneration for a glorious past. It was the *patina* of age which gave them a religious character; in the eyes of the people they were not so much historical petrifactions as relics.

In the *ver sacrum* this feature of religious devotion, generally described as *religiosum*, took the form of *sacrum*, *i.e.*, sacred to the gods, and the later repetition of this act of antiquity that of a vow and a sacrifice to the gods. It is not difficult to understand how this representation came about. They associated it with grateful remembrance of what the gods had done for the people in days of old, when they had assisted them in their

[1] See, however, the tradition of the Hirpini in § 40.

dire distress. They had had compassion on the emigrating host who were compelled to leave their homes; they had graciously preserved them amidst the dangers which beset them during the long march, and had granted them a new home. To the mercy of the gods—this is the idea of the *ver sacrum* in the form we have represented it—let us again commit ourselves: we will take up the same attitude which enabled them to prove their favour before, not in order that our distress may be alleviated, but simply that through the sacrifice which it implies we may buy the favour of the gods. We bring them the best that we have to give out of the early fruits of our herds: as to our children, let them do unto them according to their will; we withdraw our hands wholly from them. So we live in the hope that the means which were efficacious in the past, and which saved both the mother-nation and the daughter-nation in their great need, may also tend to our salvation.

There are certain truths made so apparent to all that one has but to stoop to pick them up, provided of course that one travels by the way on which they lie and has an open eye to see them; they need not be searched for, they require only to be found. Amongst these I reckon that as to the historical origin of the *ver sacrum*. There was no need of a weary waste of learning and a happy knack of drawing conclusions to make this discovery; the simple reference to Roman antiquity is sufficient. It is owing merely to the circumstance that Roman archæologists have allowed this very obvious interpretation to escape their notice that I have, as I think, been able to throw an unexpected light upon the *ver sacrum* as well as upon a number of other matters of Roman antiquity. The fact of the survival of antiquity in the institutions of Rome, of which I have already given several proofs in the preceding pages, gave me the idea of testing all phenomena of Roman antiquity which came under my notice by this light, in order to find out whether they bore any relationship to the conditions and motives of the migration time. I argued that the adherence of the Romans to the old traditions, which was manifested in

the most superficial and trivial things, would certainly not be found wanting in reference to institutions of antiquity. It would not have been in accord with Roman custom if they had not connected themselves with the past, and if remains or reminiscences of it should have been preserved. I am convinced that this general point of view is very wide-reaching and by no means exhausted by this one application of it; Roman archæology will certainly discover many more things in the direction in which it points.

In what follows I will apply it to the *ver sacrum*. It is incumbent upon me to furnish evidence that the *ver sacrum* is an imitation of the departure of the Aryans from their original home. This presupposes that the similarity between the two has been proved; all the features of the *ver sacrum* have to correspond to those of the original which it has imitated—the emigration of a part of the population from its original home; and this proof I am prepared to give. But it will substantiate only that this Roman institution may be traced back to antiquity, still leaving room for the possibility of another interpretation: it does not prove that this was actually its origin. I take it, therefore, that under these circumstances we can attribute to it only the value of a plausible hypothesis.

But it lays claim to historical truth, and this I will prove by showing that certain points in the *ver sacrum* allow of no other interpretation than the one I have stated—that the problem given us to solve can find its solution only in the departure of the Aryans from their original home.

2. *The Several Features of the Ver Sacrum.*

§ 38. This point of view has now to be subjected to the test of the several details of the *ver sacrum;* and these are as follow:

1. *The External Occasion of the Ver Sacrum.*—In Rome it was some public calamity,[1] such as great distress in time of war, epidemics, etc. Of what nature can the calamity have been which induced the Aryans to emigrate from their original home?

[1] FESTUS, *Ep. Ver Sacrum*, p. 387: *magnis periculis adducti.*

We may answer with, I believe, almost absolute certainty, over-population and overcrowding. This alone explains why a part, and a part only, of the nation—the superfluous, for whom there was no longer sufficient food—left the home of their fathers. It cannot have been the pressure of an overwhelming enemy, which so often decided the Teutons to adopt a similar course. For the exceptionally numerous Aryan nation there was no enemy sufficiently powerful to threaten them with danger: had this been the case the whole nation, like the Teutons, and not merely a portion, would have had to retreat before them. Neither can an epidemic have caused it. A few might escape from it by flight, but a mass of people, numbering thousands, would carry it away with them. The event of a temporary famine has little probability in its favour. For a shepherd nation, like the Aryans, it could result only from a murrain among the cattle; but in such a case desertion of the home would be of as little avail as in the case of pestilence. If the land generally yielded sufficient food for the maintenance of the population, a temporary misfortune of this kind would never have induced them to leave their home.

The political and social depression under which the Roman *plebs* groaned frequently caused their thoughts to turn to emigration. But with the Aryans there must have been another reason. The contrast between the dominant and the oppressed classes—the rich taking advantage of the poor—cannot be traced anywhere among the Aryans; that contrast originated at the time of the development of capitalism.

The only possible cause, therefore, is over-population. This occurs nowhere more readily than with a pastoral nation. Soil which, under the most imperfect cultivation, will sustain ten families, and under the most perfect a hundred families, can supply only one *pastoral* family with the necessary food. Now if we bear in mind the fact that the Aryans, at the time when the European branch separated from the stock, had already been in existence several thousand years, we can understand that overcrowding must have attained such enor-

mous dimensions that nothing short of wholesale emigration could be of any avail. Hunger drove the Indo-Europeans from their Asiatic home into Europe; hunger has been the lever employed by history to cause them to fulfil their historical mission. For thousands of years it has kept them on the move. It scared them from their second home when the soil, owing to imperfect cultivation, no longer sufficed to feed them; and after they had secured a third home, it would not let them rest. Until far into historic times we find Celts and Teutons resorting to emigration; it was always the cry for land which they raised. They were willing to lay down their arms if only this request were granted them. It was not insufficiency of soil that forced them to this, but the imperfect cultivation of the land which they possessed. In proportion as agriculture attained perfection, the necessity for emigration diminished; and thus it can be explained why the Greeks and the Latins were not forced to take refuge in emigration, but resorted rather to colonization. Of the Samnites only are frequent emigrations reported;[1] but they were a pastoral tribe, to whom the causes above referred to do not apply. Transfer the plough to the Aryans, and the history of Europe would have assumed a totally different aspect: instead of Aryan blood it would probably be Semitic blood which would flow through the veins of the European. The soil of Europe has always attracted the Semites. Even in the prehistoric times of the Aryan nations of Europe we meet with the Semites in the commercial settlements of the Phœnicians, on the coast of the Mediterranean. In historic times the struggles between Carthage and Rome for the dominion of the world follow; a thousand years later the Arabs obtain a foothold on European soil. The fact that Europe has not fallen to the share of the Semites is simply because the Aryans anticipated them: they would not have done so if the mother-nation's ignorance of the plough had not forced them to emigrate.

[1] VARRO, *de R. R.* 3, 16, 29, quoting the reason mentioned above: *ut olim crebro Sabini factitaverunt propter multitudinem liberorum.*

[illegible]

in which the object is to get rid of the surplus population, but that the *ver sacrum* had merely an illustrative motive. The Romans never mention over-crowding as one of the grounds of the *ver sacrum*, but refer to other calamities, such as pestilence and war, which are not in the slightest degree remedied by migration; and the fact that in the *ver sacrum* the execution of the vow is separated from the vow itself by an interval of twenty or twenty-one years does not harmonize with the idea of alleviating an existing over-population.

The migration in the *ver sacrum*, therefore, has no real purpose. This marks the difference between it and the migration of the Aryans. There the motive was of a real nature, viz., the riddance of the surplus population, which could not find sufficient bread at home. It follows, therefore, that the dimensions of the migration must have been very different from those of the *ver sacrum*. To be of any service a considerable portion of the populace had to migrate, and this was moreover imperative in the interest of the emigrants themselves. It was necessary that they should number thousands, perhaps hundreds of thousands, if there were to be any chance of their overcoming the resistance of foreign nations for which they had to be prepared. The fact that they did so shows that our supposition is well founded. We must therefore assume their departure to have been somewhat after the manner of the migration of the Teutons at the time of the migration of nations, or general migration, when peoples numbering hundreds of thousands set out on the march. In one point only is there a considerable difference. With the Teutons the whole nation set out, old and young, sick and infirm, capable and incapable alike; here it was only a portion. How are we to interpret this?

We have two connecting links to help us to answer this question, What were the elements of which it was composed? One we derive from the motive of the migration, the other from the *ver sacrum*.

No one emigrates without urgent need, and if the need

in the case of the Aryans had been over-population, only those would have been likely to emigrate who felt the pressure —the oppressed, the homeless, the poor, and the hungry; but the well-to-do and the rich, who were unaffected by it, would have remained at home, being without any inducement to exchange their comfortable lot for an uncertain future. A participation of the wealthy classes in the emigration would at most have been confined to the younger sons, to whom the prospect of what awaited them at home after the death or displacement of the father, when they would have to submit to the *régime* of the firstborn and of his wife (p. 32), did not offer any attraction; and to the daughters, who preferred marriage with poor men, whose intention it was to take them with them, to the uncertainty of finding a husband at home, or to the small appreciation which they found under the paternal roof. I will give one more positive proof for the above hypothesis that the non-propertied class formed the chief contingent in the migration, and that is the fitting out of the expedition by national contribution.

The *ver sacrum* contains another point in connection with this matter, viz., youth. Let us see how this bears upon it.

Just as the rich remained behind because there was no need for them to migrate, so those also stayed at home who were unfit for it, viz., the old, the weak, and the cowards. Those who were unfit could not join in an undertaking fraught with dangers and difficulties of all kinds; they would only have been a needless burden. In these expeditions every man would have to hold his own, which implied that he must be able to fight, be healthy, strong, valiant, determined. If those who lacked these qualities had not excluded themselves from the migration, they would doubtless have been declined by their prospective companions, to whom it was of the greatest importance not to have any unserviceable persons amongst them. The question of maintenance during the march, to say nothing of other considerations, made such weeding-out imperative. Those only who by military service could compensate for the food served out to them

by the leaders of the undertaking were worthy of partaking in it. During the migration even those who had attained an honourable old age had to depart this life when they were no longer fit for military service. How much less, then, would the hale and sound have encumbered themselves at the outset with old people, or those whose military efficiency would soon come to an end! "Away with the old folk!" was the watchword at the commencement of and throughout the migration period; "he who will eat with us must fight with us." And what applied to the old people would apply also to those who were unfit for service on other grounds—the weak, the ailing, the cowards. Here again the custom of later times, excluding weakly children, gives us a historical link. Fitness for military service was the indispensable qualification for joining in the expedition.

This statement presupposes that this participation in the migration was not merely a question of personal inclination, but rather that the decision as to who might join was left either to the particular community or to the chief directors of the enterprise. That such an authority must have existed is obvious, because two other matters must necessarily have been regulated before starting—first the time of departure, which had to be fixed beforehand, so that in the interval the necessary preparations might be made; and secondly the question of maintenance. The decision as to who should join the expedition is in no way less important than these two points, and the close connection it bore to the question of maintenance presupposes that it must have been settled by some authority. The number of the migrating host was known to a man (§ 39).

All who intended to join the expedition had therefore to be fit for military service. That is the explanation of the youthfulness of the exiles in the *ver sacrum*. The young men were left to grow up until fit for war. They came of age at puberty, but fitness for military service required a still greater physical and mental development than mere legal majority. I believe this to have been the object in view in postponing the time

until the age of twenty or twenty-one. This does not conflict with the fact that fitness for entering the service of the Legion commenced at the age of seventeen, for there the young men had the older ones by their side, while in the *ver sacrum* they stood alone. Fitness for service is the one quality upon which everything depends for a man. It is the virtue of man, even as fruitfulness is of woman. The remembrance of this conception of the past has been permanently preserved amongst the Romans in *virtus; vir* and Sansk. *wira* (Goth. *wair*, Ang.-Saxon *wër*, from which the compound *Wergeld*) is the man, the hero, the warrior, and with this quality of his in *virtus* the Roman idea of virtue is coupled. The Romans preserved this notion long after the idea of virtue itself was alienated from it; while with the Greeks and the Teutons, as regards the denotation both of man and of virtue, the ancient mode of viewing things had long since made way for another. Man they designated by the physiological distinction of sex (Greek *ἀνήρ*, Sanskr. *nar*, German *Mann*, from the Sanskr. *Manu*); virtue, as fitness pure and simple (Greek *ἀρετή*, from the Sanskr. *ar*, to fit, to join; German *Tugend* from *tugan, taugen*, to be fit). None of the Aryan nations has preserved the notions of the period of migration in this respect so faithfully as the Romans. There can be no doubt that it originated in the time of the migration, considering the fact that, as language testifies, it was unknwn to the mother-nation. The Aryans indicated man by his sex (*nar*); the expression *virtus* for virtue they did not know. They were herdsmen, whose regular, peaceful, harmless existence, interrupted only by petty skirmishes with neighbouring tribes, sufficiently conveyed to them the idea of heroes (*wira*), but was not adequate to absorb the full conception of virtue. But what was only a transitory condition for them became the rule for the daughter-nation. The legend of Hirpini, of which I make mention below, represents this alteration by changing the herdsman into a highwayman. Every inch of ground had to be gained by force of arms, and in all these battles it was a question of the existence or non-existence of the whole

nation. To be conquered was equivalent to annihilation. Thus it is explained why courage was the only virtue in man which was worth anything, the only one which, in cases of exceptional bravery, was publicly rewarded. The reward of virtue was the lance bestowed by the nation (*hasta præusta*),[1] the order "*pour la mérite*" of antiquity. The wooden spear-points which the Romans retained long after they had been made acquainted with iron ones show us that we here have to do with a custom of antiquity. Cowardice is the greatest disgrace that can befall a man. The Teutons sank their cowards into a swamp. Offences which presuppose a manifestation of strength, such as robbery or murder, did not disgrace a man; it was left to the parties concerned to procure satisfaction for themselves.

In the *ver sacrum* fitness for military service is identical with youth. It has already been observed that on the occasion of the departure of the Aryans from their home it was not so strictly adhered to. But the element of strength illustrated in the *ver sacrum* is nevertheless highly instructive. The Romans always retained it in the official designation of the people gathered together for the purpose of a national assembly, as *pube præsente*,[2] and in connection with this version the oft-disputed linguistic meaning of *populus* as denoting the young people[3] gains much in probability. This is, moreover, supported by the contrast between *populus* and *senatus*, which latter is linguistically connected with old age. If *senatus* denotes the old—*senes*, *populus* must refer to the young, the *puli*, *puberes*; the contrast would lose its force, and linguistically be quite incorrect, if *populus*, as was supposed, denoted merely the mass of the people.

[1] FESTUS, *Epit. Hastæ*, p. 101. [2] FESTUS, *Ep. Pube præsente*, p. 252.

[3] According to KUHN, in *Zur ältesten Geschichte der indogermanischen Völker*, p. 4, *populus* contains a reduplication of *pubus*=young (example: *disci-pulus*, pupil) from the Sanskr. root *pu*, to produce, to bring up, from which the Sanskr. *putra*, son; *putri*, daughter; Latin *puer*, *pubes*, *putus*, *pupus*, boy. Similarly the reduplication *pupillus*. For a comparison of the above derivations see my *Geist des r. R.*, i., p. 249, note 147, to which may now be added that of VANICZEK, *loc. cit.*, vol. i., p. 506.

What meaning was attached to the word "people" is seen in *populari* = to destroy, derived from *populus*, which in German corresponds with *verheeren*, derived from *Heer*. It was not in our acceptation of the word "the people"—an aggregate mass united together by descent, history, language, and civilization — but an army, which, like a devastating stream, overruns the enemy's land, destroying everything in its way. The idea of the army is also sustained by the political activity exercised by the people in the national assembly. In the first place, fitness to take part in it began and ended in efficiency for military service (17–60 years). Secondly, as regards the regulations for calling together the national assembly: the red flag was hoisted; the sign was communicated by military signals; the place of assembly is the *Campus Martius*, dedicated to the God of War, outside the city.

The popular assemblies of the Teutons also recall the army to us; those who participated in it appeared at the Thing fully armed, and were drawn up in military divisions; and the Thing served at the same time as a military review.[1] Their consent to the various proposals brought forward was made known by the clashing together of arms,[2] and when it concerned the election of a king the person elected was lifted up on a shield, and a spear handed to him.[3] This custom is not found amongst the Aryans. Its first origin, therefore, dates from a later time; and, as it is found amongst the Romans and Teutons alike, it can have been established only before the two peoples separated, that is, during the time of the universal migration of the Indo-European nations collectively. In a settled nation, amongst whom peace is the normal condition, and only the outbreak of war necessitates the taking up of arms, it would be as difficult to understand the

[1] SCHRÖDER, *Deutsche Rechtsgeschichte*, p. 16. This old Germanic custom of armed assemblies is maintained up to the present time in the Canton of Unterwalden, in Switzerland, surely the last remnant of the institutions of the migratory period of the Indo-Europeans.

[2] TACITUS, *Germania*, cap. 11.

[3] GRIMM, *Rechtsalterthümer*, pp. 163, 234 *sqq.*

origin of this custom as it is easy to understand in a nomadic military tribe living in a continual state of warfare.

The people is the army; this gives us the true character of the Aryan nomads. Fitness for bearing arms was the first qualification of membership for the male sex; he who had lost his fitness was cut off as a useless member; bread was too scarce during the march to admit of its distribution amongst the useless. Those who wished to share the food had also to share in the fighting. In historic times the custom of killing the old men was not known in Rome; they were not only allowed to live, but they received a prominent political position in the constitution of the Senate, which realizes the idea that the old men, when no longer fit for action, were, on account of their age and experience, all the more in request for advice. It seems quite superfluous to raise the question: What brought about the change? What could the answer be but "the revolution in social ideas"? Only why did not these social ideas develop themselves during the migration? If the conditions had not changed, these notions would also have been deferred. But the conditions did change. In place of the nomadic came the settled life, and therewith the question of maintenance assumed quite another form. During the march it was the concern of the military administration; now it became the concern of the individual; each one had to thank himself for his food: he lived at his own, not at the public expense; and whereas formerly they were dependent upon the cattle which they had with them, upon the wild fruit they gathered, and upon plunder, and there was thus every reason for being careful and even frugal in the distribution of victuals, now the plough had opened the door for procuring a fully adequate supply of food. A fixed abode and the plough did away, amongst the Latin races, with the custom of killing their old people. That it continued to exist amongst the Teutons and Slavs far into historic times proves that the plough had not yet fulfilled its mission amongst them; as this was accomplished the custom disappeared there also.

3. *In the Ver Sacrum all connection with the Mother-nation was severed.* — The Roman popular mind attributed this to the fact that the departing host was absolutely given over to the care of the gods, and that consequently the people must withdraw their support from them. As above remarked, this view was foreign to the Aryans. Doubtless they also invoked the blessing of the gods; but what decided them to depart was not the idea of performing a deed well pleasing to the deity, but simply a desire to help themselves. Separation from the mother-nation was absolutely necessary for this, and although at first some kind of communication may have been kept up with them, gradually, as the distance which separated them increased, this became more and more difficult, and finally ceased altogether. This circumstance of the separation of mother-nation and daughter-nation assumed, in the *ver sacrum*, a political character. What had in the first instance been the inevitable result of the migration, was converted, in the *ver sacrum*, into a necessary obligation.

4. *The Popular Decree in the Ver Sacrum.*—The official formula is given above (p. 250), and it was there hinted how little notice had been taken of it by Roman antiquarians in their interpretation of the contents of the vow. According to them the popular decree included also children — the formula made no mention of them; according to them the young of all animals were dedicated—the formula mentioned only the cattle: "*quod ver attulerit ex grege,*" and those only "*ex suillo, ovillo, caprino, bovillo.*"[1] Considering the exactness of the wording of old Roman formulæ, in which every word was weighed with painstaking precision, and the improbability that Livy, who, with regard to the execution of the vow concerning the young of animals, gives the most detailed description of the formula, should have omitted the

[1] That horses and asses are also counted as "*gregatim,*" see i. 2, § 2, *ad leg. Aq.* (ix. 2).

most important part, referring to the children, there can be no doubt that the formula does not extend to them at all. Why not? We are here apparently before a problem incapable of solution.

If our view be the correct one, that the *ver sacrum* is an imitation of the migration of the Aryans, it is clear that the popular decree, as well as the other features of the *ver sacrum*, must find its counterpart in the exodus of the Aryans. The necessity for it,[1] urged upon them by the Pontifex maximus, must have had its foundation in the urgent necessity for it formerly. What was the motive which induced the people to take the matter in hand? The question answers itself. The migration was caused by the necessity of rescuing the nation from a great calamity. It was the "social question," as we should call it now, which then for the first time presented itself to our forefathers—provision for the poorer classes, the simple question of subsistence. Where there is abundance of food this can be settled by arranging for the rich to give to the poor out of their superfluity; but where there is not enough to supply the population, there is nothing for it but migration. But even migration necessitates that, at least for the immediate future, a sufficiency of food should be provided, otherwise it is equivalent to certain starvation.

The question of victualling is the first to present itself when a mass of people is setting out, whether it be, as in our days, an army, or as it was during the migration, a whole nation or part of one. And this cannot be left to the individual, but must be settled by authority. When the Helvetii migrated to Gaul (Cæsar, *De Bello Gallico*, i. 5), a national decree proclaimed that every householder should provide himself and his family with provisions for three months. The three months understood thereby were the three months of spring: they started in March. Spring served for the Aryans, as will be pointed out presently, not merely as their

[1] LIVY, *loc. cit.*, *omnium primum populum consulendum de vere sacro . . . injussu populi voveri non posse.*

time of departure, but also of the migration: they rested during the heat of the summer and during the winter. The Helvetii had already become an agricultural nation; their provisions consisted of flour (Cæsar: *frumentum . . . molita cibaria*). The Aryans were a pastoral nation; with them therefore it must have been cattle. As with the Helvetii, so with them also, the departure was doubtless preceded by a similar decree that every one had to provide the necessary cattle for himself and his household. But what about those who were not able to do so, the poor, who had tended the flocks of the rich and had thereby lived, but not acquired any cattle for themselves? If they desired to get rid of these, *i.e.*, of all those in a similar position, there was nothing for it but for the rich to provide them with the necessary cattle. If this had been left to their own goodwill, many would have refrained from doing so; yet it was to the common interest that the exodus should be made possible; it was a question of warding off a danger with which the wealthy might be threatened by the needy. It was therefore necessary that this obligation should be laid upon the wealthy by a national decree, in order that, by giving up a portion of their cattle, the departure might be made possible; it was a kind of property-tax, as we should call it.

This explains the above-mentioned declaration of the Pontifex maximus: *in jussu populi voveri non posse* (the people alone could impose this tax upon themselves).

But the imposition of the tax presupposes a knowledge of the necessity for it, and this again the assessment of the number of the emigrants and of the cattle which they could themselves provide. It is inconceivable that these preliminary questions should not have been first gone into; and this could be done only by public summons; every one intending to take part in the migration would have had to present himself previously, to report upon the number of the members of his household and of the cattle in his possession. Lists had therefore to be made out in every community, and these lists had then, either directly or through the province or tribe,

to be laid before the central body, which latter we have taken for granted as absolutely indispensable. Guided by this computation of the total number of emigrants and of the cattle held by them, the question of the assistance needed was then gone into, calculated according to the individual heads and the length of time that it would be needed, and thereupon the amount was fixed which those remaining behind had to contribute. To determine the actual share of each individual it was necessary to have an accurate list of the number of cattle owned by each of those remaining behind. The knowledge of the total number of cattle in hand and of the number yet to be contributed was the standard by which the taxation of the wealthy was regulated. The small folk who owned only a few head of cattle each, would not have been called upon to contribute.

Some will doubtless regard this registration system of antiquity as an anachronism. I must leave it an open question whether the inference from the Celts is to be considered conclusive evidence for the ancient Aryans. With the Celts the system was fully developed at the time when Cæsar came into hostile communication with them. In the camp of the Helvetii Cæsar found, when, after his invasion of Gaul, he had vanquished them, the most carefully-compiled lists of the number, not of the fighting men only, but also of those unfit to carry arms, all carefully specified—boys, old men and women,[1] and of the number of their allies. With reference to the armed forces opposed to him in former battles with the Gauls, Cæsar gives in other places (ii. 4; vii. 71, 76) the most minute information. Ostensibly he owed this knowledge to his spies amongst the native

[1] CÆSAR, *De Bello Gall.*, i. 29: *tabulae litteris Graecis confectae, quibus in tabulis nominatim ratio confecta erat, qui numerus domo exisset eorum, qui arma ferre possent, et item separatim pueri, senes, mulieresque.* The total number of the Helvetii was 263,000, or counting the allies 368,000, that of the fighting men 92,000, exactly a fourth of the total number. At the exodus of the Aryans, when the old men and those approaching manhood did not set out, and many of the young men would just have married, and the number of children therefore may also be estimated at a low rate, the number of fighting men must have been considerably larger.

inhabitants, of which he had no lack in any of the Celtic tribes: this presupposed that the numbers were registered; and Vercingetorix knew exactly how many days the provisions of the besieged would hold out (ii. 71); these also must therefore have been numerically calculated.

The same system of registration which we meet with amongst the Celts is also found with the Romans in the form of the census. In its historically attested form the census is known to have originated with Servius Tullius, but I cannot imagine that the institution, without any connecting link with the past, could have proceeded perfectly new and fully developed, as it were, from the brain of its originator, like Minerva from the head of Jupiter; it is much more likely that the foundation upon which he built the system of registration had previously existed, and was not invented at the time. That no high degree of civilization was needed to bring this about is proved in the case of the Celts. Ordinary common sense will suffice to show any martial nation the value of it.

But neither Celts nor Romans had to discover it; their predecessors had saved them the trouble. What the Helvetii did on leaving their former home, the Aryans had done before them on leaving theirs: they had originated a census of the emigrants. For the former there was no urgent necessity to do this, because the supply of the necessary provisions was each individual's own affair; but for the latter it was indispensable, as the amount of the property-tax to be raised for this purpose by the nation, and the portioning out of it amongst those who remained behind, presupposes of necessity a numerical estimate of the emigrants and of their needs. If I am right as to the property-tax, the *gabella emigrationis*, in the passive sense of the word, as one might say, it proves that statistics in their primitive state date back to the Aryan mother-nation.

No proof of the truth of this statement has thus far been given. Should it be forthcoming, it must, in the first place, be ascertained that, as in the *ver sacrum*, so also in the

departure of the Aryans, a national decree preceded the actual exodus; and, secondly, that the tribute of cattle prescribed thereby was not intended, as with the former, to be a sacrifice to the deity, but for the support of the emigrating host.

If the *ver sacrum* is in reality based upon an imitation, the original departure from the Aryan home (and upon this point the reader must draw his own conclusions when he has read all that I have to say on the subject), it will be proved that the one as well as the other must have been preceded by a popular decree. And how could it possibly have been otherwise? For, quite apart from the agreement about the departure itself, there were a host of preliminary arrangements to be made: the time of starting, the maintenance during the march, and the place of meeting.[1]

The substance of the vow in this popular decree of the *ver sacrum* lies in the sacrifice of the young of the flock. This point, overlooked alike by Roman and modern antiquarians, is of great significance. It represents to us the sacrifice of the shepherd in contrast to that of the farmer. The shepherd offered one of his flock to the deity; the farmer brought of the produce of his land; both invited the deity to share their repasts—as their food, so their sacrifice. This contrast between the bloody and the bloodless sacrifice is, from a historical point of view, of great importance; it represents to us two forms of human existence and also two different degrees of civilization—pastoral and agricultural life. The bloody sacrifice is as certainly an offspring of the pastoral as the bloodless is of the agricultural period; the former is the elder of the two, and although it may be found to exist side by side with the bloodless sacrifice, yet it did not originate beside it, but as a remnant of earlier times, even as is the still older hunter's sacrifice, *e.g.*, of the hind to Diana.

[1] These three items are specially mentioned by Cæsar as matters of decree amongst the Helvetii at the time of their departure, the question of sustenance, i. 5, the two others, i. 6: *diem dicunt qua die ad ripam Rhodani omnes conveniant.*

In the Old Testament legend the contrast between the bloody and the bloodless sacrifice is personified in Cain and Abel. "Abel was a keeper of sheep, but Cain was a tiller of the soil; and Cain brought of the fruit of the ground an offering unto the Lord . . . . and Abel, he also brought of the firstlings of his flock and of the fat thereof." (Genesis iv. 2, 4.) Cain kills Abel. I see there the allegorical illustration of the supplanting of the imperfect form of existence of the shepherd by the more perfect form of the farmer;[1] the substitution of the bloodless for the bloody sacrifice follows as a matter of course.

The Roman legend pictures for us the Roman from the very beginning as husbandman. At the founding of Rome Romulus appointed two yoke of arable land to each citizen, and his successor, Numa Pompilius, replaced the bloody by the bloodless sacrifice,[2] which, on account of the resemblance between the sacrifice and the domestic meal, can but signify that Roman tradition attributed the change from the animal to vegetable diet to very remote times. This fact is also proved in the Vesta worship, known as one of the oldest cults of the Roman people. The altar of Vesta represents to us the domestic hearth, the sacrifice offered thereon the ordinary food of man; it consisted of a kind of farinaceous pap, prepared from the "oldest kind of corn known to the Romans" (*far*, spelt; which, in the form of bread, we come across in the marriage contract—*confarreatio*), with the addition of a little salt. The name of the pay given to soldiers in later times (*soldi*) is derived from corn (*stipendium*, from *stips* = fruit of the stalk; *pendere* = to weigh out).

By the side of the bloodless sacrifice, however, the bloody sacrifice was also retained in Rome, and we find one of its applications in the *ver sacrum*. If we did not already know that the *ver sacrum* did not originate on Roman soil, but belonged to ancient Aryan times, we might conclude this from the fact

[1] See above, p. 109 *sqq.*

[2] PLINY, *Hist. Nat.*, xviii. 2, § 7: *Numa instituit deos fruge colere et mola salsa supplicare.*

that the vow made in the *ver sacrum* was limited to the flocks; were it otherwise, the fruit of the land would also have been included. It is, therefore, the sacrifice of the herdsman of antiquity, and was obligatory only upon those who possessed flocks. This circumstance, which is fully explained in the historical origin of the *ver sacrum*, was of great practical importance; it meant that the sacrifice in the *ver sacrum* was incumbent upon the rich, not upon the poor. The poor man had no flocks; his live-stock consisted of the draught cattle working his plot of ground, the familiar four *res mancipi*—ox, horse, ass, mule—and the few herds of cattle grazing in the field—cows, goats, sheep; the vow did not extend to the young of these animals. In this respect, also, the similarity between the *ver sacrum* and the exodus from the first home is maintained, for there also only the wealthy were called upon to pay the tribute (p. 271).

The conclusion to be drawn from this is that the sacrifice prescribed in the *ver sacrum* is the sacrifice of the herdsman, and leads us back to the pastoral life of the Aryans in their first home before the introduction of agriculture in their second. There is only one point in which this does not apply. The swine, as is shown by the resemblance of the Gk. ὗς, Lat. *sus*, Old-High Ger. *sû*, with Zend. *hû*, and Sanskr. *sû-karâ* = wild boar, was known to the Aryans, but the breeding of swine was still unknown in the Veda and Avesta: swineherds are nowhere mentioned. The change seems to have taken place upon their settlement in their new home. The new name found amongst all the Aryan nations: Gk. πόρκος, Lat. *porcus*, Iran. *orc*, O.-H. G. *farah*, Old Slav, *prase*,[1] can have been derived only from the language of the original inhabitants; the appearance of a new name beside the old one for one and the same thing always points to its derivation from an outside source. Probably it was not the name of a household animal, but of some kind of cattle kept in herds. Thus, it figures, as the divine swineherd in the *Odyssey* proves,

[1] SCHRADER, *Sprachvergleichung und Urgeschichte*, p. 343. [Engl. Transl., 1890.]

amongst the Greeks as early as the heroic age, and amongst the Romans in the sacrificial vow of the *ver sacrum;* the fact that it was added afterwards must have escaped the notice of the people when they intended to illustrate by it the departure from the original home. The idea that the *ver sacrum* was a reproduction of the departure from the *second* home is excluded, because in that case the husbandman instead of, or at any rate together with, the herdsman would have been called upon to bring his offering.

The sacrifice, therefore, which in the *ver sacrum* was by popular decree made incumbent upon the owners of flocks, without any doubt refers us back to the period of an existence exclusively pastoral, *i.e.*, to the Aryan mother-nation. An event had to be reproduced which had taken place at the exodus of the Aryans from their home, viz., a tribute payable by the owners of flocks of a portion of their cattle, though whether for sacrifice to the deity or for equipment of the departing host we have now to decide: it will depend upon whether the features of the sacrifice in the *ver sacrum* do not exclude the possibility of the former assumption, as to which I hope to be able to convince the reader.

The supposition that the Aryans before their departure offered sacrifices to the deities in order to invoke their blessing upon their enterprise seems so obvious that we may take it for granted. But the very fact that it was so obvious makes it difficult to understand why a decree of the whole nation was required. Even in Rome, notwithstanding the highly-developed system of sacrifices, that ordained in the *ver sacrum* remains without a counterpart. Besides the sacrifices incumbent upon individuals (*sacra privata*), or upon all the citizens together (*popularia*), there were others which the whole nation (*publica*) or the gentlefolk (*gentilicia*) had to make, but these were voluntary and composed of their own property, and were not considered a tax specially imposed for that purpose. The method adopted in the *ver sacrum* is so entirely opposed to the ordinary form of the Roman sacrificial system that no other interpretation seems left to us save the

one I have suggested—an illustration of a precedent of antiquity.

But supposing individual sacrifices were not made voluntarily, but had to be imposed by a national decree, it is easy to see that in that case it could not possibly have assumed the form illustrated in the *ver sacrum*, where it distinctly states *si res publica . . . salva servata erit*—in the former case it would of necessity have to be unqualified; in the latter it applied to the fruit to be expected in the following spring; in the former, where the sacrifice had to be offered at the very time of departure, it could apply only to such animals as were available at the time, not the new-born, which would not be suitable for it, and which, on the contrary, the herdsmen allowed to grow up and to fatten before killing,[1] but only the full-grown, the fattened cattle. In the *ver sacrum* this was particularly emphasized in a special passage in the formula: "*qui faxit quando volet facito.*" In the *ver sacrum* the sacrifice preceded by many years the departure of the youthful host; in the latter case it would have had to be brought at the time of the departure: in the former it did not stand in any intimate connection with it—it was not brought to invoke the divine blessing upon the departing host, but out of gratitude for deliverance from dire calamity; in the latter it stood in the closest connection with it, the object being to propitiate the deity; in short, in the former case it was a thanks-offering, in the latter it was of the nature of a precatory sacrifice.

Thus, all that remains of the connection between the law by which the Romans were in the *ver sacrum* bound to dedicate the forthcoming addition to their flocks and the corresponding decree of the Aryan people, of which it was an imitation, is the reference which they both had in common

[1] When it says (Genesis iv. 4): "And Abel he also brought of the firstlings of his flock," it is clear from the addition "and of the fat thereof" that it did not mean that he killed the young just born; the firstlings in this case mean rather the first young brought forth by the animal in contradistinction to those born afterwards; it is the preference of the firstborn transferred from man to the animal.

to the cattle; moreover, instead of the object being in the latter case that of sacrifice, we have no choice left but to regard it as a tax on property imposed upon the wealthier classes in order to facilitate the migration of the poorer portion of the population. To my mind, this evidence bears the stamp of a fully-certified historical fact, not of a mere hypothesis; and those who object to this view will have to invalidate the evidence which I have brought forward in favour of it.

As the migration of antiquity is represented by the youthful host who in the *ver sacrum* left the city, the popular decree as to what cattle the emigrants should take with them is thus represented by the solemn vow made by the people to dedicate their cattle in sacrifice to the deity. In both cases the real object was supplanted by its religious representative, whereby a diversion from the external appearance of the original was necessarily involved, which needs no further demonstration after all that has been said about it in the preceding pages. There is one point, however, which so far has not been touched upon, and which I feel bound to explain.

All the cattle to be born during the next spring were dedicated; in what sense this has to be taken is stated above (p. 250). Why was the spring set aside for this purpose; why not the whole year? Was it because in the spring the animals gave birth to their young? This is the natural rule for horned cattle, but not for goats, sheep, and swine. The time of birth depends upon the rutting season and the length of gestation: this falls for all cattle alike in the season when they find the most nourishment, *i.e.*, in the summer. The period of gestation differs for the four different kinds of cattle referred to above; for horned cattle it is a little over nine months, for sheep and goats five, and for swine four. This brings the normal time for the cow to calve about April or May; and for goats, sheep, and swine to cast their young in the beginning of the year. In the *ver sacrum*, therefore, this implies that the owners of herds of sheep, goats, and swine are very lightly taxed by this vow, its burden falling upon the owners of horned cattle.

If the intention had been to sacrifice to the deity the young of all animals, the increase of the whole, or at least of the first half, of the year would have had to have been dedicated; the owners of sheep, goats, and swine would then have been called upon equally with the owners of horned cattle. Could the limitation of time to the spring have been made with the intention of setting them free? The real reason was a different one; it is to be found in the importance of the spring for the *ver sacrum*, presently to be explained; but its advantageous effect upon the above-named three classes of proprietors was far too valuable for them not to gladly avail themselves of the religious significance of the spring in connection with it. Not even where the gods were concerned did the Romans neglect their own interests. One must indeed possess but little knowledge of them not to be convinced that the owners of horned cattle, too, would not hesitate to make use of this very obvious means for reducing the increase of their flocks in the spring to a minimum. During the three summer months the bull was admitted only to those cows which were to calve in the spring; to the rest not till September; then the calving fell in the summer. The solemn vow was not contravened—it was merely a question of "*quod ver attulerit*," not of man doing his utmost to bring the largest possible returns into the spring. The stipulations contained in the formula of the *ver sacrum* concerning the sorting out of the cattle set apart for sacrifice were also so worded that anyone wishing to avail himself of it could find a loophole whereby to escape. "*Si id moritur, quod fieri oportebit, profanum esto neque scelus esto.*" This *oportebit* was probably aimed at disease of the cattle. How easily symptoms might be detected! "*Si quis rumpet occidetve insciens ne fraus esto.*" This "*si quis*" no doubt referred to third persons,[1] not to the owner himself; but if one of his slaves, "through neglect," exchanged the consecrated for an unconsecrated animal, this was not his

[1] The *damnum injuria datum* of the *lex Aquilia*, cap. i., *si quis occiderit*, 1. 2 *pr. ad leg. Aq.* (9. 2), the third *si quis ruperit*, 1. 27, § 5, *ibid.*

concern, and there can have been no lack of such awkward slaves. There was no public supervision over the carrying out of the pledge, which was left entirely to the conscience of the individual: "*quomodo faxit, probe factum esto.*"

It has been mentioned (p. 268) that the formula of the *ver sacrum* speaks only of animals, not of human beings. It was pointed out, moreover, that this cannot possibly be accounted for by any inaccurate rendering of the formula by Livy. We stand here, as it seems, before an insoluble problem. The side issue in the *ver sacrum*, the cattle, are mentioned; the principal thing, man, is not. The solution of the problem is afforded by our view of the *ver sacrum* as a representation of the exodus of the Aryans. It is this: participation in it was a voluntary act; the nation compelled no one to leave the country; the popular decree had merely to do with the raising of contributions for the migrating host; it did not compel anyone to migrate; in fact, it was not migration at all, it was banishment. This explains why the legal precept to the Roman nation in the *ver sacrum* also observes perfect silence on this point. The precedents of antiquity were strictly followed; the popular decree was limited, as of yore, to animals; but of men it makes no mention. As to the way in which the vow was extended to them also by the Romans, we have no direct information; negatively, however, this much is certain—not by a popular decree. The only reason for this is the one already given. The view which I hold has stood a test which puts its accuracy beyond all doubt; it has solved a problem for which no other solution can be found anywhere.

5. *The Spring in the Ver Sacrum.*—Why should it be the spring? Why not some other season of the year? This question has, as far as I know, never yet been asked, much less answered. And yet we cannot waive it, for it cannot have been by accident that the Romans elected the spring-time. What decided them to it? The awakening of nature in the spring? We cannot see what the awakening of

nature had to do with the solemn promise to the deity and with the sacrifice; promises and sacrifices are not associated with any fixed times. Was it because the animals bring forth their young in the spring? As shown above (p. 278), this applies only to horned cattle, not to the three other kinds of cattle; and as for human progeny there is no special season. Yet, doubtless, in choosing the spring they have been influenced more with a view to mankind than to animals.

Once more our theory of the departure of the Aryans from their home enables us to answer a question to which otherwise we should vainly seek a reply. The spring was chosen because it was the season in which the Aryans left their home. This fact can be confirmed with all certainty by the connecting links in Roman antiquity, to which may be added the evidence of the separation of the Teutons at the time of the migration of nations.

Let us imagine ourselves at the period when the Aryans, after the question of migration had been decided upon in principle, took counsel as to their exact mode of procedure. When were they to start? In the winter? It was too cold then; and we know that the Aryans also found the winter very trying. In the summer it was too hot. There remained only the spring; it was neither too hot nor too cold; mild weather prevailed, and made marching possible without any great exertion. In the spring, or, to speak more correctly, according to Roman tradition, on the first of March, our ancestors left their home.

I quote the evidences which prove this.

The first month of the spring is March. Its name, "*mensis Martius*," marks it as the month of the war-god Mars; it is the martial month. Why this month in particular? Because the military march was resumed with it as at the first departure, and at every fresh start during their wanderings.

On the first of March the fire in the temple of Vesta had to be extinguished and relighted by the Vestal Virgins in the way previously described; not, however, in the temple itself, but outside in the open. Curiously enough, all through the

year the fire had to be most carefully kept up, and the Vestal Virgin who had the misfortune to let it go out committed a serious offence, and was severely punished. Why, then, should the very thing which at all other times was so strictly prohibited have to take place on the first of March? A practical reason is difficult to find; fire does not lose its virtue by burning for a whole year; and a religious reason is sought in vain. On religious grounds one would, on the contrary, rather have expected the maintenance of the fundamental principle of the eternity of the Vestal fire. The only basis for the solution of the problem for us, which, moreover, explains not merely the reason why the fire had to be extinguished and on that particular day, but also why it had to be relighted in the open, and why this had to be done by virgins, is the historical basis, viz., that it was done in this manner by the Aryans on leaving their original home, when the fire on the hearth was extinguished. We know that this departure took place in the spring (*ver sacrum*), in the martial month (*mensis Martius*); the Vestal ceremonial gives us more exact intimation as to the precise day: the departure took place—whether in reality or traditionally is of no consequence—on the first of March. What happened to the fire at that time is imitated in the Vesta-worship. Regarded from this point of view, everything that might appear strange in this service is accounted for.

Once again I will endeavour to give the right explanation on historical grounds. Of course those who cannot abandon their preconceived, but quite unfounded, opinion that the form of the Roman institution in historical times must have been the original one, will totally discard the explanation I am about to offer. It is this, that I will do for the Vestal Virgins what I hope to do later on for the Pontifices and the Augurs—namely, represent them in the practical function which fell to their share during the migration time, disregarding them in their religious character. This results from the preceding. It was their function to provide fire when the army halted. The men rested; the wives were

busy with their children; and the fire-maidens of the army, as we may call them, skilled by long practice, understood how to kindle fire quickly. While, under other circumstances, no unmarried maidens were allowed to join the wanderers, as they were incapable of requiting by service the food handed out to them, and as also from a moral point of view they were a somewhat awkward element amongst them, an exception was made in this case—they earned their living. But they had to be responsible: to promise not to marry, and, in order that they might not be compelled to do so, to abstain from all intercourse with man; otherwise there might have been a lack of fire-maidens, or, at any rate, of a sufficient number for the various divisions of the army. On this understanding only were they allowed to join the company, and they were strictly kept to it. A fire-maiden was not allowed to marry; or, more correctly, she could not marry. Should she fall she would be punished. She might not become a mother; the service would suffer thereby; she belonged exclusively to the mission to which she had pledged herself.

From these fire-maidens of the period of migration the Vestal Virgins later developed. In the place of their formerly strictly practical function, a strictly religious meaning became attached to them; but the meaning alone was changed—the fire-maidens survived, unaltered, in the Vestal Virgins. They had to kindle the fire in the same way by means of rubbing the wood together in the open air, even as their predecessors had done; they had to be virgins also: the same law of celibacy and of chastity applied equally to both; both lived at the public expense. In fact, all the individual features are by this hypothesis accounted for in the simplest way.

First of all there was the extinguishing of the fire on the day of the departure. They took no fire with them; they could light it at any time. Neither did they take the stone hearth; it would have been absurd to burden themselves with it, for wherever they wished to build one the stone was at hand.

Then, as to the lighting of the fire in the open. That was the method during the migration when the halt was called in the evening of the first day. A fire was lighted in the open as is done at the present day by wandering gipsies and in our military camps. The fire in the open was the sign of a temporary halt; the fire on the hearth, the sign of an abiding resting-place; the lighting of the fire on the hearth served the Aryans as a symbol of an intended permanent settlement.[1] During the three vernal months fixed upon for the migration no prolonged rest was taken, no huts were built, and all camped out in the open, or in tents. Not until the close of the migratory period were the huts built or the portable wooden houses erected, or the hearth fixed; until then the fire always burnt in the open; even inside the tents they did not light it, for fear of setting them on fire.

This accounts for the precept that the Vestal Virgins had to light the fire in the open, as also that it should be done in the manner known to us. It was done in this way at the time of leaving the old home and throughout the migration; iron, by means of which in after-times fire was drawn from the flint, was as yet unknown, and the custom of antiquity held good here as in every other matter of religious worship.

But why should it have been virgins only who were to light the fire? According to the idea which underlies Vesta-worship, they ought to have been married women, for Vesta-worship is the religious imitation of the domestic hearth, and the domestic hearth is surely entrusted to the care of the housewife—of the mother, not of the daughter; the daughter has to milk the cows (θυγατήρ, p. 17), the mother to cook the food. In the Vesta-worship this natural order of the household is reversed; here the daughter has to attend to the hearth and to cook the food. The argument that this service could not have been expected from married women, because it would have involved the neglect of husband and

[1] ZIMMER, *Altindisches Leben*, p. 148.

children, is untenable, for it might have been given to widows. The choice, therefore, of virgins instead of married women was not based upon any practical, much less on religious grounds found in the Vesta-worship, for which, on the contrary, married women would have been preferred, for it is they and not the maidens who are representatives of the home, and if Vesta-worship is to represent the home, then surely the married woman would have been the appointed priestess. Let us see if this, again, cannot be accounted for by tracing it back to its connection with the migratory period.

The army makes a halt: fire is wanted for the preparation of food. Who shall take the trouble to kindle it? Certainly not the men; they need rest, even if no other work which they alone can do claims them, and after the exertions of the day they deserve their rest. Neither can the wives do it; they have to look after their husbands and children. So there remains only the maidens. But not every one understands how to make a fire. It is easy enough to learn how to milk, but the lighting of a fire needs special training and practice; and we may accept for the period of migration the same institution which we find among the Vestal Virgins—that the experienced taught the inexperienced. The worship of Vesta needs only a small number; originally there were only four Vestal Virgins; afterwards the number was raised to six. But during the period of migration the people, when pitching their tents, covered a large area and required the services of a large number of girls, in order that fires might be lighted simultaneously in all parts. This could not be left to chance; care had to be taken that a sufficient number was always available; but the number could not be considered sufficient even when every division had its own fire-maiden; there had to be more than one, so that if one failed in strength the others could relieve her, or, in case she sickened or died, take her place. A reserve force had thus to be arranged for. In a word, there had to be a fire organization on the same principle as that of the commissariat. The military

administration no doubt took this matter in hand; it was in reality the complement of the victualling department.

In this sense the experienced fire-maidens ranked as public officials with the experts in bridge building, Pontifices (§ 49), and those familiar with the flight of birds, Augurs (§ 50). I believe that the priestly character was in antiquity equally foreign to them all; all three were simply skilled in their work; their function was purely practical and realistic. In after times they were raised to a spiritual rank, as everything belonging to antiquity was viewed in the light of religion. They have, however, in my opinion, always borne a public character, and this supposition is based not so much upon the fact that it belonged to them afterwards—a conclusion against which some objections might be raised—as upon the fact that the services which they had to render were called for by the practical needs of the migration.

I think the foregoing fully explains why the duty of lighting the fire in ancient times fell to virgins. Out of this custom, created by purely practical considerations, later times have evolved the religious commandment that the priestesses of Vesta must be virgins, and the duration of their term of office (thirty years) made it equivalent to a commandment of celibacy and chastity; they were the nuns of Roman antiquity. The command of chastity I can understand; the virgin serving the goddess should be spotlessly pure. But the command of celibacy I cannot understand. If the worship of Vesta was to represent the home, which is based upon marriage, why should the marriage of the Vestal Virgin be inconsistent with it? One might rather argue that it was the most fitting preparation for marriage, for, if anyone, surely the priestess of the Vestal hearth should be competent to have the care of the domestic hearth entrusted to her. But the reverse was the case.

Let us see whether here again a reference to antiquity will not solve the problem for us—that is to say, whether we cannot deduce from the religious commandment of later times a practical meaning for the period of migration.

The fire-maidens might not marry during the time of their office. Why not? Because the public must be able to rely upon them. They could not be allowed to come and go at will; they were compelled to serve their appointed time; after that they might marry. But in order that they might not be led in a roundabout way into matrimony by entering into relations with the other sex, and thus necessitate the contracting of a marriage, and also for the simple reason that the consequences of it might prevent them from fulfilling their office, they were bound to take the vow of chastity; if they broke it, they were punished, not so much because of the moral trespass, but on the purely practical ground that they had forfeited their fitness for office.

I am prepared to find this sober realistic interpretation of a commandment, which later passed for a most sacred institution, indignantly rejected by many as a profanation of religion, and I myself would hardly have had recourse to it had it not been that the method of viewing the religious institutions of later times in the light of an originally realistic meaning had already stood me in such good stead in so many instances that I have considered myself justified, on practical grounds, in resorting to it whenever there has been occasion to doubt a primarily religious origin for a custom. I will ask the reader to postpone his judgment concerning my right to do this until all the evidence obtained in this way has been laid before him; then let him decide whether he can condemn my realistic interpretation of the commandment of celibacy and chastity for the Vestal Virgins. If he condemn, he will have to account for the inconsistency of the command with the idea of Vesta-worship; and this he cannot do: no other course will remain for him but to admit that the matter is inexplicable, which would be synonymous to a declaration of the bankruptcy of science. Of course there are cases in which science is bound to admit insolvency, but she ought never to make use of such an extreme admission without absolute necessity.

I might adduce other specially historical evidence in support

of the view here expounded, that the Vestal Virgins did not originally possess this religious character. For myself, however, I attach no importance to it, and I refer to it merely to guard myself against the imputation that I have overlooked it. According to Livy (i. 20), the worship of Vesta was instituted by Numa, and the religious position of the Vestal Virgins called into existence by him (*virginitate aliisque cæremoniis venerabiles ac sanctas fecit*). But the conclusiveness of this argument for the subsequent religious character of the Vestal Virgins is invalidated by the note added by Livy—that Numa copied the worship of Vesta from Alba (*Alba oriundum sacrificium et genti conditoris haud alienum*).

I will now leave the Vestal Virgins and return to the point whence I started, and which led me to speak of them, namely, the extinguishing and relighting of the sacred fire of Vesta on the first of March. I think I have proved sufficiently in the foregoing that to the *ver sacrum*, which was intended to represent some incident in the departure of the Aryans from their old home, we owe the valuable information that the forefathers of the Romans, according to Roman tradition, left their original home on the first day of March.

This is confirmed by the fact that the sacrifice offered for the dead by the nation as a whole (*feralia*, p. 45) fell upon the third week in February (14th–21st). Transferred to antiquity, this means that before the emigrants left their homes they took leave of the graves of their ancestors and brought them their final offerings. This took place in the third week, because the last week, as will be shown presently, was intended for taking leave of the living and preparation for the departure. This simultaneous sacrifice for the dead brought by the entire nation was unknown to the Aryans. They had only the *parentalia* (p. 38 *sqq.*)—*i.e.*, the individual sacrifice for the dead, which each one offered periodically, at some time or another. With the departure from their home, however, the obligation was laid upon all who took part in it to bring their last sacrifice for their forefathers at exactly the same time. This was the origin of the Roman *feralia*—a counterpart to All Souls' Day of the

Roman Catholics; like the extinguishing and renewal of the fire on the first of March, the annual repetition of this ceremony in memory of the departure of the people's ancestors from their original home was intended to keep the remembrance of it perpetually green amongst them.

The solemn Roman Passion Week, as it might be called, was followed immediately in the Roman Calendar (22nd February) by a joyous festival, the *caristia*. Valerius Maximus (2 i. 8)[1] describes it as *convivium solemne . . ., cui praeter cognatos et affines nemo interponebatur ut si qua inter personas necessarias querella esset orta, apud sacra mensae et inter hilaritatem animorum et fautoribus concordiae adhibitis tolleretur.* It was, therefore, a feast of peace and reconciliation for the Roman family. Transferred to antiquity, it meant that for the last time those about to leave and those remaining at home met at the festive board in order that any outstanding grudge or dispute might be settled. By means of the *feralia* they had taken leave of the dead; by means of this feast they took leave of the living. But not merely in order that they might once more have a merry time together—rather that, in case their mutual relationship had hitherto not been sufficiently cordial, they might once more meet as friends and separate in peace. This alone explains the sudden transition from mourning to joy.[2] The *feralia* were intended to do justice to the dead, the *caristia* to the living. The wanderers were to depart absolved from all obligation towards their relations, both living and dead; hence the name of "Month of purification" for February.[3]

On the next day after the feast of the *caristia* followed (23rd

[1] Other evidences in MARQUARDT, *Röm. Staatsverwaltung*, iii. p. 125, note 1.

[2] Pointed out by OVID, *Fasti*, ii. 619: *scilicet a tumulis et qui periere propinquis protinus ad vivos ora referre juvat.*

[3] *Zeugnisse d. Alten* in VANICZEK, *loc. cit.*, ii. p. 609: *Februare id est pura facere—id vero, quod purgatur, dicitur februatum.* According to VARRO, *De L.L.* vi. 34, some writers find the derivation of the name of the month in *quod tum diis inferis parentatur;* he explains it by *quod tum februatur populus, i.e., lustratur* (= purification—VANICZEK, p. 851); in any case the above adopted meaning of February as the month of purification is linguistically quite certain.

February), in the Roman Calendar, that of *terminalia*, the feast "upon which the neighbours meet together to sacrifice a lamb or a young pig, and at the social repast to rejoice in peaceful neighbourly intercourse."[1]

Transferred to antiquity, this represented the leave-taking from their neighbours. Family union and peace rested on family affection (*caritas*); hence the name *caristia:* peace between neighbours rested upon the preservation of the boundary line (*termini*); hence the name *terminalia.* In antiquity *termini* could apply only to the lines of demarcation of a community, because there was no such thing as private territory; all pasture-land was public property (p. 14), and I infer from this that the festive gathering of neighbours was preceded by a solemn procession round the boundary line of the community; which in itself is highly probable, as being the solemn leave-taking of the land.

These three festivals range themselves in connection with the incidents of the migration under one general head—solemn leave-taking, taking leave of the graves, of relations, of neighbours, of the land. It is not necessary to emphasize how much each individual meaning given by me gains in probability by this common standpoint, beyond that everywhere a permanent separation from home implies a leave-taking. Without the aid of the Roman Calendar we should have presumed this to have taken place amongst the migrating Aryans. The interest, therefore, of ascertaining this fact lies not so much in the fact that events and matters which occurred many thousands of years ago amongst our forefathers have been thus rescued from oblivion, but rather that it reveals to us a part of the Roman Calendar in its true light.

The festival days which the Roman Calendar names for the last days of February[2] are not in any way connected with the period of migration; the five last days were devoted to preparation for the departure.

[1] MARQUARDT, *loc. cit.*, p. 197.
[2] MARQUARDT, *loc. cit.*, p. 543: *regifugium* and *equiria.*

II.

THE CONSERVATION OF THE TRADITION

§ 39. NOTHING that I have stated in the preceding pages seems to be known to Roman historians. This proves that the remembrance of the incidents of the departure of the Aryans from their original home had, at a very early date, vanished from the memory of the Roman people. This is not to be wondered at; on the contrary, we should be surprised if the memory of the past, separated from historic times by an interval of at least fifteen hundred years, had been preserved by the people. With the Jews, it is true, the remembrance of their departure from Egypt has been retained down to the present day; but with the Aryans the case was altogether different. The former soon attained the promised land, and the memory of the departure being still fresh when they settled down, they could consider their deliverance as certain, and preserved the memory of it in an annual festival. It certainly took the latter more than a thousand years before they reached their ultimate resting-place, and the length of this period, the unsettled life which they led during that time, the stream of the "eternally new" which pressed upon them, the profusion of exciting incidents, suspense, and new impressions, were not calculated to retain within the people's mind the memory of the departure from their home. Therefore it is not at all extraordinary that none of the Roman historians know anything about them. The same ignorance prevails amongst them where the institutions of the migratory period are concerned, equally distant as they are from historic times: none of them gives any

information as to its peculiar connection with the wooden spears, nails, stone axe, and many other things, upon which I hope presently to throw some light. They had completely lost sight of the historical key which would have opened all these things for them, and it is only modern philology and comparative history which have restored it to us. The absence of external evidence in the works of Roman historians for the correctness of my interpretations is fully compensated by the convincing and consistent internal evidence which they afford. They reveal a coherent, detailed picture of the incidents of the migration, which bears upon its surface the impress of credibility. Everything coincides with the purpose, the circumstances, and the conditions which the migration imposed upon the departing host: the national decree for their maintenance and the departure of the young people in the *ver sacrum*, the name "*mensis Martius*" for the month in which the departure took place, the extinguishing of the fire and its rekindling by virgins, the leave-taking of the graves, the relations, the neighbours, and the soil, the name of the "month of purification" for February, the reservation of the five last days of the month for the preparation for the march. Seldom, indeed, has science succeeded in throwing such a flood of light upon any special occurrences which took place many thousands of years ago. Science owes this success to the circumstance that these occurrences were firmly established in the institutions of later times.

When this took place the memory of it must still have been vivid amongst the people. Granted, as was most probably the case, that it was not until the time they became a settled nation that this took place, the question now arises: How was it possible that these customs of antiquity could for all that length of time have been kept in the mind of the people? As regards the fact of the departure itself, it is not surprising, though it is so as regards all the details connected with it. It appears to me utterly impossible that, after about a thousand years, they

could have remembered that the taking leave of the graves took place in the third week of February, that of relations and friends on the 22nd and 23rd, and the departure itself on the 1st of March. We may apply here what the Roman jurists said, with regard to superannuated customs, about the untrustworthiness of the popular memory concerning past historical events.[1] This consideration leads me to the conclusion that the custom, to be thus faithfully preserved in their mind, must have been frequently repeated during the migration.

There can be no difficulty about the time of the annual march. Whether they remained in one place for only the allotted period of rest, the summer and winter months of one year or of several years in succession, when once the move was decided on there was no occasion to deviate from the date fixed for the departure of the first host, which, fresh in everybody's mind, still took place on the first of March. It was not until they reached colder climates, where the spring fell later, that this date was for obvious reasons altered. Wintry weather was still unpropitious for the transport of women and children; the trials of the march were considerably aggravated by the condition of the soil at this time of the year, not to speak of the maintenance of the cattle. We have an example of this in the campaign of the Helvetians, previously referred to (p. 269), which was postponed till the 28th of March. Why not till the beginning of the following month? The intention in fixing upon this date is so obvious that one cannot fail to see it: the campaign had to be commenced in the month of March, the martial month; this they adhered to, only deviating from the old custom, if indeed they were at that time still conscious of it, by allowing themselves to postpone it from the beginning to the end of the month.

The meaning of the month of March, therefore, was known to the Helvetians, *i.e.* to the Celts in Cæsar's time, at least fifteen hundred years after the event which originated it. It

[1] 1, xxviii. *De prob.* (22, 3), 1, ii. § 8 *de aq.* (39, 3).

was also known to the Teutons about the same time. Witness the field of Mars of the Franks, and the Campus Martius of the Romans, where the military review took place in March. When we consider how unsuitable the time of year was for this performance, it is clear that only their attachment to the inherited institutions of their forefathers could have influenced its selection. Upon the ground that it did not fit in with the climatic conditions, Pippin postponed the reviews till May, Charlemagne not unfrequently kept them back till summer.[1] With the Longobards, as with the Romans, the first of March appears as a memorial day: all the laws of Liutprand and of his successors are dated from the first of March.[2] The intention in choosing this day is clear enough, as that date became a standing institution; neither can there be any doubt as to its connection with antiquity. The first of March was the day upon which, at the departure of the Aryans from their home, the function (*imperium*) of the commander-in-chief came into play, and upon which, if the supposition be correct that he was elected for one year only, this ceremony was annually repeated—the commemoration day of the kingship.

The taking leave of the graves of those who had meanwhile died, by means of bringing their last sacrifices to the dead, and repeating this at every fresh start that was made during the migration, needs no confirmation for a people who held the worship of the dead in such deep reverence as did the Aryans. Whether they remained one or several years in the same place, they were always sure to have some dead; and it is absolutely certain that the surviving relatives, before their departure, took a last sacrifice to the dead. It was not until after they had become a settled nation that this leave-taking of the graves was omitted; and in its stead came the *feralia;* there can be no doubt as to the continuity of the tradition.

But this continuity appears to be wholly absent with regard

[1] SCHRÖDER, *Deutsche Rechtsgeschichte*, p. 145. [2] *Ibid., loc. cit.*

to the festivals of the *caristia* and *terminalia* (bidding farewell to relatives, neighbours, and the boundary lines previous to departure). The migration offered no occasion for its repetition, for the entire nation set out, and none was left behind from whom to take leave. On one occasion, however, this was not the case—when leaving the second home (Book V.); then portions of the people separated themselves from the main body, which remained behind. And who can tell whether this did not occur several times? If within the first decades of the migration places were found which answered all requirements, why should they have wandered further? They remained as long as the soil yielded sufficient food for them. As the population increased, a time was sure to come when this was no longer the case. What then would have happened? The same as happened at the first exodus. The young and strong set forth; the old, the feeble, and the infirm remained at home. This was the way with the campaigns of the Normans and the march of the Celts, of which Livy (v. 34) tells us:[1] some of the people went forth, and others remained at home. It is the precedent illustrated in the *ver sacrum* of the Romans which presupposes that it did not happen once only in ancient times, but had been repeated many times during the migration.

This desertion of their home on the part of a portion of the nation, however, implied the taking leave each time afresh of relatives, friends, neighbours, and the old abode. The continuity of the tradition of antiquity was thus secured here, too, in a way which shows that the connection between these two festivals of *caristia* and *terminalia* cannot be dismissed as peremptorily as we supposed. The fact that these two festivals are found in the Roman Calendar on the 22nd and 23rd of February, in connection with the third week set apart for the *feralia*, and with what took place on the first of March in the Temple of Vesta, leaves us in no doubt as to the idea which dominates it. It was an imitation of what

[1] *Is (Bellovesus) quod ejus ex populis abundabat . . . excivit.*

took place at the departure from their first home—after they had once lost their real meaning they were transformed into commemorative festivals in memory of antiquity.

If I have hit upon the right interpretation of these two festivals, they acquire the dignity of historical evidence for the oft repeated separation of a portion of the nation from the parental tribe which remained behind. This also draws the parallel between the partial migration, as illustrated in the *ver sacrum*, much closer to historic times. When speaking of the *ver sacrum*, we are no longer bound always to refer back to the first departure from the Aryan home, and have no longer to account for the fact that the memory of it could be retained so long amongst the people; the survival of this recollection and the continuity of the tradition were by this constant repetition of the original act during the migration secured for the *ver sacrum* as indubitably as for the above-mentioned commemoration days in the Roman Calendar.

According to the above, a partial migration, exactly similar to the first exodus, was often repeated during the migratory time. The land which was taken by their forefathers into permanent possession, and which at that time fully sufficed to feed the whole nation, would, after some time, owing to increasing population, be found insufficient, and then that which had happened in the old home under like circumstances would occur here: the old, the feeble, the infirm, the well-to-do, and the faint-hearted stayed behind, while the young, the strong, the determined, the courageous, and the adventurous went forth. What became of those who stayed behind? They have totally disappeared from the face of the earth. The devastating tempest in the shape of Scythians, Avars, Mongols, etc., swept them away. Thus we have lost the linguistic traces which otherwise would have helped us to find the route taken by the Indo-Europeans in their wanderings from Iran to Southern Russia; as far as I know, no tribes have been discovered in all this vast tract of land whose speech bears the smallest relationship to the Sanskrit; if

such could yet be found they would mark for us the halting-places of the Aryans upon their march.

With this I close my investigations on the *ver sacrum* and the Roman Calendar; but I feel compelled to linger a few minutes longer in order to point out the conclusion which they lead to. It consists in this, that in both these institutions the incidents of the departure from their temporary homes have been fixed. This reveals to us two points, the importance of which I feel it my duty to put in the right light, the temporary and the fixed.

The incidents connected with the exodus from the temporary home, not merely the original home. I cannot lay enough stress upon this fact, which is, in my estimation, of threefold value.

In the first place, the above-named means towards the continuity of tradition from the departure from the original home until the time of the settlement of the Latin races explains how the remembrance of these precedents of antiquity could be preserved so long.

In the second place, it enabled me to ward off an objection which might otherwise have been raised against me. In the national decree of the *ver sacrum* the pig figures as cattle (p. 250: *ex suillo grege*); as such it was unknown to the Aryans. In this respect therefore the *ver sacrum* cannot have been an imitation of the original Aryan exodus. This is true. But here occurs the repetition of the same act in after times. It was in Southern Russia that the Indo-Europeans became acquainted with the pig as an animal for herding; thence they took it to their next home, and when, later on, it was included in the *ver sacrum* it signified that the national decree concerning the support of the wanderers by means of cattle, was at the exodus then preparing extended to swine in addition to bullocks and sheep. This did not at first take place when the nation had become a settled one, for the *ver sacrum* contains an imitation of events which occurred during the migratory period.

In the same manner may be explained the cast bronze

vessel in which the Vestal Virgins had to carry into the Temple of Vesta the fire lighted in the open air, for the Aryan nation, at the time of the separation of the daughter-nation, was not acquainted with bronze work. The wandering tribes must have become familiar with it during their migration, and not for the first time after having become a settled nation, otherwise the bronze vessels could not have been included in the ritual of the Vesta worship; for in this, as in every other religious ritual of the Romans, everything which they first became acquainted with after they had settled was most scrupulously excluded. As the stone axe in the *fetiales*, the wooden nails for the *pons sublicius*, the kindling of fire by means of rubbing wood together prove that the Latin races at the time of their settlement were as yet unfamiliar with the forging of iron, so the bronze vessels of the Vestal Virgins prove that the order was reversed in the case of bronze work—permission to make use of them in the Temple of Vesta necessitated their having been employed during the period of the migration.

Thirdly, I hope to turn this fact to good account when touching upon a question to which I shall give my attention in another place (§ 51), the question of the moral influence of the migration upon the character of the people. I refrain here from any further remarks upon this matter, and refer the reader to the passage indicated.

The fixing of primitive precedents.—With the foundation of Rome every inducement for the continuance of these precedents disappeared: emigration of a portion of the nation did not occur again; the Romans dispensed with the necessity for it by conquest. The despatch of a *ver sacrum* had merely a religious meaning, and was not intended as a mere riddance of the surplus population. The foundation of Rome, therefore, marks the close of the migratory period for the Romans. Hence all institutions exclusively connected with it might have been consigned to oblivion; they had done their work, why still treasure up a useless relic of the past? We know that this was not done, and also why. It was opposed

to the Roman spirit of conservatism to simply throw overboard superannuated institutions; in practical life they were renounced; for the rest they were held in high honour as the venerable remains of antiquity, and the memory of them was secured by the allotment of a special sphere to them, where, without in the least interfering with the necessities of daily life, they might still be preserved, pre-eminently in public worship, which might be called the chamber of Roman relics of antiquity. He who desires to understand primitive history will find a rich source of information here.

At the time when the institutions of the migration, after a fixed abode had at length been secured by the people, had in this wise become fixed, their former real meaning was naturally still familiar to the people. All knew that they referred to what happened during the last two weeks of February and on the first day of March, and when for the first time, at a period of great distress, a *ver sacrum* was vowed they were not ignorant of the fact that they were thereby imitating a precedent of antiquity. But in course of time the consciousness of the original meaning of this public act was quite lost. Even Roman historians had no conception of the value of these institutions of prehistoric times, preserved to them in a petrified form. The memory of the migration had quite disappeared amongst the Romans of historic times; even popular tradition—the legend of the wandering of Æneas into Latium is a learned fabrication of later times—can tell us nothing whatever about them.

III.

THE LEGEND OF THE HIRPINI

§ 40. WITH only one Italic people, the Hirpini, belonging to the tribe of the Sabines, has a dim and scarcely recognizable reminiscence of the events of antiquity been preserved in the legend on the tradition of their origin contained in Servius.[1]

Shepherds offer a sacrifice on the mountain (*manibus consecratus*) Soracte, consecrated to the god of the nether-world (*Dis pater*). Wolves appear and steal the sacrificial offerings (*exta*) from the fire. Pursued by the shepherds, they flee into a cave, whence proceed poisonous fumes, whereby the foremost immediately fall down dead. A pestilence (*pestilentia*) ensues, and this becomes the motive for consulting the oracle. The answer is that the pestilence will be stayed: *si lupos imitarentur, i.e. rapto viverent.* This is done, and the pestilence is stopped. Thus the name of "Hirpini" was originated—*nam lupi Sabinorum lingua irpi vocantur.*

It is evident that the object of this tradition was to explain the name of the Hirpini by connecting it with the wolf.[2] The real purpose, however, may be traced back to the people themselves: they were so called by their neighbours because of their rapacious tendencies. The Hirpini

[1] SERVIUS, *ad Aen*, xi. 785. I quote the decisive words in the text.

[2] PAUL, *Ep.*, p. 106: "*Irpini appellati nomine lupi, quem irpum dicunt Samnites, eum enim, ducem secuti agros occupavere.*" *Irpus*, the Greek ἅρπαξ, robber, from the Sanskrit root *rap*, to rob, to tear away. This representation of tearing away is found again in *irpex*=harrow: *quod plures habet dentes ad extirpandas herbas in agris*; FESTUS, *Epit.*, p. 105, *Irpices.*

were to them as wolves, thieves, and robbers, and this name, given to them by their neighbours, they adopted for themselves — a precedent which is confirmed by many parallel historical cases, and which may be thus explained: that neighbours are better able to judge of the characteristic peculiarities of a people than are the people themselves. Where the name of a nation is not derived from a locality, but from the peculiarities of the people, we may be pretty certain that it is their neighbours who have named them.

But even supposing the Hirpini had chosen this name themselves, it is clear that the manner in which they are said to have obtained it is perfectly incredible; it is so absurd that we ask in astonishment: How could such an old wives' tale ever have found credence? If they wanted to make use of the wolf why drag the sacrifice for the dead, the robbery of the sacrificial offerings, the pestilence, on to the scene? The wolf alone would have been quite sufficient; they might have given him, as was done by Paulus Diaconus[1] in his rendering of the Hirpini legend, the *rôle* of leader when they went to take possession of the land; or, as the Roman legend of Romulus and Remus has it, the she-wolf as wet-nurse. The above-named apparatus, put together for the purpose of bringing him upon the scene of action, has nothing whatever to do with him; clearly, therefore, there must have been some special relation to him.

Shepherds bring an offering to the dead before the decisive event takes place which causes them to exchange their hitherto peaceful existence with the vocation of robbery. Exactly the same thing happened before the departure of the Aryans. Before they started they brought an offering to the dead. Until then they had been shepherds; thenceforth they were transformed into warriors, going forth to plunder and to conquer, *i.e.* robbers. But it was not of their own free-will; necessity compelled them. With them the necessity, as we see above (p. 258), was lack of food; in the

[1] FESTUS, *Epit.*, p. 106, *Irpini.*

Hirpini legend this became a pestilence, which, as is well known, not unfrequently results where there is scarcity of food for an entire nation. This feature also is repeated in the Hirpini legend. The robbers develop into an independent warlike nation. The Hirpini legend ends here, as also does the history of the Aryan migration. There are, therefore, five features which occur in both of them:

1. Originally shepherds.
2. Transformation into robbers.
3. Sacrifice to the dead.
4. External privation.
5. Rise of a new warlike nation.

But so far we have not come across the wolf. The argument that he acted as one of the leaders in the *ver sacrum*[1] is unfounded; as such he appears only in the Hirpini legend. We might therefore suppose that it was merely the name of Hirpini which led to his appearance upon the scene. But the legend of the wolf as leader is also found amongst the Longobards.

In his history of the Longobards, Paulus Diaconus[2] relates that his great-grandfather, having been taken prisoner by the Avars, escaped by flight. Ignorant of the road he had to take, he followed a wolf, who eventually led him back by the distant way of Italy to his own people. This odd story cannot have emanated from empty air; there must have been some foundation for it, which I detect in the tradition that at the time of the migration the wolf was the leader of the hosts bent on plunder. But, it may be asked, what is the good of removing the origin of the fable of the wolf as leader back to the time of

[1] SCHWEGLER, *Römische Geschichte*, i. p. 241, note 2.

[2] *Hist. Longob.*, iv. 39 (pp. 131, 132). I owe the information concerning this, to my mind, most important passage to the very kind communication of Herr Viertel, Director of the Gymnasium, Göttingen. I give the quotation in full: "*Ei lupus adveniens comes itineris et ductor effectus est. Qui cum ante eum pergeret et frequenter post se respiceret et cum stante subsisteret et cum pergente praeiret intellexit sibi cum divinitus datum esse, ut ei iter quod nesciebat, ostenderet.*"

the migration? In the first place this much: that we secure for it one common point of issue both for Hirpini and Longobards. But its first conception is made none the clearer thereby. How could they conceive the ridiculous idea of appointing the wolf to the post of leader? The answer is that the leader of the band was in ancient times called the wolf—a wolfish nature he must have in order to be equal to it; he who possessed it in the highest degree was the born leader. Two such wolves were Romulus and Remus, and this explains the legend of their being suckled by a she-wolf. Their fitness for the position of wolf which later on fell to their share could not be more suitably accounted for than by making them drink in the wolfish nature with their mother's milk. Tradition, which says that "in antiquity we were led by a wolf," has gradually, by confounding the name with the thing itself, applied it to the actual wolf. In this sense—*i.e.*, as applying to the leader designated as a wolf—the words of Paulus[1] may be taken literally: "*eum enim ducem secuti agros occupavere.*" Similarly the legend of the suckling she-wolf appears in its right light; it becomes connected with the prehistoric times belonging alike to Romans and to all Indo-Europeans; it is only the application of the wolf made by the Romans which is peculiar to themselves, as also is that of the Hirpini and the Longobards; but with all of them the wolf of antiquity is the starting-point.

In addition to the wolf, tradition speaks of yet another animal as leader. It is the woodpecker, which, according to the popular tradition of the Picts, guided their forefathers in their peregrinations, by seating itself on the top of their banner.[2] Here, again, the linguistic hold upon the tradition is plainly

[1] FESTUS, *Epit.*, p. 106, *Irpini.*

[2] FESTUS, *Epit.*, p. 212, *Picena regio;* STRABO, v. 4, 2, p. 240. The statement made by Schwegler that in the *ver sacrum* they took a woodpecker with them as guide is as unfounded as the above, that the wolf was used as such; in the sources both animals appear only in the legend. I would like to know how he pictured the scene. If the animals were chained, they certainly did not lead the way; if they were free, their followers could not have kept up with them for long; and how if the two took different directions?

visible (*pic-us, Pic-entes*). In reality the Picts owed the name to their national characteristics expressed therein: it describes them as circumspect, cautious, cunning.[1]

But the tradition of the woodpecker as guide is nevertheless not wholly hypothetical. For it, as well as for the wolf, I believe I have traced an actual connection with antiquity. It was the *bird of passage*, which, as will be shown in its proper place, actually did service as guide. Without some such connection the tradition of the woodpecker as guide would not have been established amongst the Picts any more than that of the wolf as leader amongst the Hirpini. The name of the people was in both instances but a pretext for connecting with it something belonging to the remote past.

In the Hirpini legend, besides the features already discussed, we meet with yet another, for which I believe I may also claim a reference to antiquity. I mean the *exta*, the more essential parts of the slaughtered animal — the heart, lungs, liver, and kidneys. They served in antiquity, as I will later on show, to ascertain the healthiness of any given place. In these, therefore, tradition has again made use of a fragment of the past.

Thus each and all of the features mentioned can be traced back to events or institutions of primeval antiquity. The separate ingredients were derived from antiquity, but popular tradition, which supplied them, had gradually lost sight of the original connection, and in its stead imagination put the different items together after its own fashion, and created an image which had no longer any resemblance whatever to its original form. As with individuals when the mind, weakened by old age, sees the pictures of the past not infrequently transmuted to such an extent that although the facts themselves remain engraved upon their memory their proper

[1] *Pic-entes* as *pic-us* from the Sanskrit *spak* = to spy, from which Middle-High Germ. *spacke* = wise, preserved in Mod. Germ. *spähen*, *Specht*, in the Ital. *spiare*, from which *Spion*, etc. *Picus* designates "one who at nearly every step looks round the trunk of the tree" (VANICZEK, *loc. cit.*, ii. p. 1174). The same name was borne also by the first king of Latium raised to the dignity of the god of wisdom; the above interpretation therefore cannot be subject to any doubt.

sequence and their causal connection are completely lost, so is it also with nations. Imagination builds out of the fragments which still cling to memory an image after its own fashion; the last takes the place of the first, and the first of the last, and the causal connection becomes totally different.

So it happened in the Hirpine legend. Looking at it impartially one cannot help seeing that it is not a free creation of national imagination, but an artificial production, in which the main point was to introduce in the guise of a story with the necessary catchwords, or of a poem with prearranged rhymes, certain deeds of antiquity still surviving in the recollection of the people. If the popular imagination could have had free scope in making use of the coincidence which connected the name of the people with that of the wolf, in order to testify to their historical origin, something very much better would have been produced than the miserably distorted and forced fabrication which the legend now presents. But the things which they had to allude to were mapped out for them—they were bound hand and foot.

Here I close my investigations of the departure of the Aryans from their original home to follow them on their wanderings.

Fourth Book.

THE WANDERING

branches of the Indo-European family brought it with them into their new home, whilst for the ephemeral incidents of the exodus they had to rely upon memory. What happened with regard to the latter would have been still more likely to happen with regard to the former.

These considerations led me to commence this part of my task with a strong conviction that I should discover something for my purpose, and I have tested all the institutions of Roman antiquity and law with the object of ascertaining if some reference to the migration could not be found in them. I am prepared for the objection that in so doing I have gone too far; but a new theory has, upon its first introduction and advocacy, the right to be somewhat one-sided; it is for criticism to reduce any exaggerations to their proper proportions. The results I have obtained have fully convinced me of the correctness, as a whole, and of the fruitfulness of the two points of view advanced by me in the present work for the study of prehistoric history and Roman antiquity, with reference both to the departure from the original home and to the period of migration; nor do I consider that I have by any means exhausted this new field of inquiry by what I have been able to bring to light; I do not doubt that others will yet discover many things which have escaped my notice.

In the following researches ancient Rome once more primarily supplies me with data as to the conditions of the exodus. Nothing of special interest can be gathered from other Indo-European nations: they teach us nothing fresh; their evidence becomes of value only in as far as it confirms the facts deduced from Roman antiquity. Our inferences herefrom, as the institutions and incidents of the migration, may be drawn in the same manner as those with regard to the departure from the original home. Besides the linguistic element, which will again be of service to us, I will make use of the lever which I formerly employed, regarding the question from the point of view of *purpose*, which has been my guiding star for years in seeking to understand different social organizations. In the following inquiries the application of this

method takes the form of a comparison of the historically ascertained purposes of certain Roman institutions of later times with problematic institutions of the migratory period. If this comparison "shows a balance" in favour of the latter, I infer that their original establishment took place in the migratory period, and that subsequent times simply retained them. In other words, if I can prove that certain institutions were inevitably evoked by the circumstances of the wandering, while there was no such urgent need for them afterwards, I may conclude that they originated where they were indispensable, not where they were not necessary, however useful and suitable they might have been.[1]

To the accepted view with regard to certain Roman institutions—that their function in later times was also their original one—very serious objections may be raised. How, if they had had the later purpose in view all along, could they have chosen such a curious way of expressing it? As an example, I may mention the form of the Roman *auspicia*. What a strange fancy to look for the favour of the gods in the belly of the ox, or the beak of the fowl! How could such a notion have arisen? In this dilemma it occurred to me that it must originally have had another meaning—not a religious one, but connected with the conditions of the migration, and thoroughly practical, which I will explain in its proper place. Thus I come to distinguish two purposes for the same institution—an original, purely practical purpose, and a later, exclusively religious purpose. Called into existence for a purely practical end in connection with the migratory life, the institution fell into disuse with the ultimate settlement of the people; and whilst, like so many other institutions, its outward form was preserved, its former purpose was replaced by a new—a process which is well expressed by the words, "the outward form retained, the inner meaning altered" ["Keeping to the letter, but not to the spirit."].

[1] In my *Geist des röm. Rechts* I have made very extensive use of this point of view (iii. p. 338 *sqq.*, and elsewhere); I have there pointed out that the place where necessity first arose for institutions and legislation must be considered as their historical starting-point.

II.

THE ARMY

1. *Time of the Campaign.*

§ 42. ACCORDING to Roman tradition it was in the spring, on the first of March, that the Aryans left their home. To this fact, already known to us from what has gone before, we can add a fresh one: the Aryans continued their march only during the three vernal months; they rested all the summer and winter, and did not start again until the following spring. During this halt all arms were laid aside, unless perchance they had to resort to them to ward off the attacks of enemies. The year was thus divided into the marching, or war, time, and resting, or time of peace. The reason for this lay in the climatic conditions: in summer it was too hot, in winter too cold; the three vernal months alone were suitable for the march. The nomads adhered to this institution during all the years of their wanderings. I will now give evidence in proof of this assertion.

The Roman Calendar has already enlightened us as to the date of the beginning of the campaign: let us see whether it cannot do so respecting the time of rest. The first of June was dedicated to Carna, the goddess of the door-hinges.[1] Transferred to the migratory time, this means that they commenced to build their huts on that day, having until then camped out in the open. Henceforth each family lived by itself in a private enclosure. The means to make it private

[1] OVID, *Fasti*, 101, 102: "*Prima dies tibi, Carna, datur. Dea cardinis haec est; numine clausa aperit, claudit aperta suo.*"

was the door; hence the door-hinges: *clausa aperit, claudit aperta;* and hence the name of the goddess.[1] The significance of the first of June for the campaign is therefore as clearly marked out as is the first of March.

The campaign lasted three months. This explains why the Helvetians, when departing for Gaul (p. 269), were instructed to take provisions for three months. The uppermost thought in their minds would be that the march must not be impeded by the question of sustenance. They could not stop to forage; whatever was found by the way could be taken, but the march must continue without interruption. Not until the campaign was concluded might the question of food affect the people, and then they had to fend for themselves.

When the Cymbri invaded Upper Italy and conquered Catulus in a glorious battle, they halted during the summer in the midst of their victorious career, although it would have been an easy matter for them to have brought the Romans to extremities. Instead of doing so, however, they gave them the whole summer and winter to prepare for their defence. This was a strategic mistake, as unwarrantable as it certainly was unaccountable, and it led to their destruction. In the following spring they were annihilated. Why did they stop in the midst of their victories? There is only one explanation possible, viz. that it was the custom, handed down from primeval times, and shared by all Indo-European nations, for the march to be continued only during the vernal months, and to be discontinued with the beginning of summer. The army adhered to this; they considered it their lawful right; and the opinion of the few in the higher ranks who knew better and who realized how fatal delay under such circumstances would be would have had no weight with the Cymbri. The army insisted upon the rest, which was their right.

This, however, is no reason why the period of rest should always commence on the first of June, as specified in the

[1] VANICZEK, *loc. cit.*, ii. 1098: *Cardo. . . . Car-da, Car-dea, Car-na*, goddess of the door-hinges, the door-step, family-life with the Romans.

Roman Calendar. Just as the climatic conditions which afterwards presented themselves caused the commencement of the migration to be postponed (p. 281), so they may have exercised the same influence upon the termination of it. It would be very satisfactory could we have the question as to when the Teutons started on their travels and when they halted threshed out by experts. It is too remote from my sphere of inquiry, but I may at least recommend these points to the attention of others; and I fancy that our resources, if they give any information at all upon the subject, will answer the question in the sense I have indicated.

I now return once more to the *ver sacrum* of the Romans. In a former passage I have made use of it merely for the purpose of proving that the departure of the Aryans took place in the spring; here it is to serve as linguistic evidence that they concluded their march at the close of spring. The proof lies close at hand. It would be quite out of keeping if it were intended to refer to the first start; it speaks rather of duration, and declares that the precedent which the *ver sacrum* was meant to illustrate lasted throughout the spring. In this sense we may render the idea which the Romans originally had in their mind in connection with the expression *ver sacrum* as a campaign after the manner of antiquity. The youthful company which set out was not only to start in the spring, but was also to continue the march during that period; with the beginning of summer the campaign ended, as did that of their forefathers.

If I may be allowed to sum up the results of my inquiries, both present and past, concerning the campaign of the Indo-Europeans, I will do so by showing that the memory of it was retained by several of the Indo-European nations until much later times—the memory of the time of the departure amongst the Romans (p. 281), the Celts (p. 293), the Longobards (p. 382), and the memory of the institution of the campaign with the advent of summer, as just stated, by the Romans, the Helvetii, and the Cymbri.

2. *Division of the Army.*

§ 43. A people leaving their home to acquire a new abode by force of arms has need of a military constitution. Always liable to meet with armed resistance, they must at any moment be prepared for action; it is not sufficient that they should be always under arms—there is need of a carefully regulated military organization and unity of control by means of a single commander-in-chief. Let us see how this was managed by the Aryan daughter-nation.

An organization for purely military purposes was unknown to the mother-nation. The political division into tribes, provinces, and villages served this purpose, and those who were together in daily life stood also side by side in battle.[1] It is true that Tacitus (*Germania*, 7) reports of the Germans that the *familiae* and *propinquitates* fought together in battle; and in Homer (*Iliad*, ii. 362) Nestor calls upon Agamemnon "to set the men in order, according to their tribe and family, that each family may assist the other, and the tribes assist the tribes." Opposed to this is the fact that with both Romans and Germans we meet with the division of the army into companies of tens and hundreds, with the latter also of thousands.[2]

Numbering for the purpose of forming the army into divisions was unknown to the Aryans; and so I conclude, from its appearance in both these nations, that it was a result of the migration when the peoples were still united. We must, of course, leave room for the possibility that it did not take place until after they were settled; only, when comparing the conditions of the migration with those of the settled state, it

[1] ZIMMER, *loc. cit.*, p. 161, *sqq.*

[2] Lat. *decuria*, from the Sansk. *dak-ara* = containing ten *dakan* (Lat. *decem*, Germ. *zehn*); *centuria* from Sansk. *kant-ara* = containing 100 *kanta* (Lat. *centum*). The companies of a thousand, known to the Germans (see SCHRÖDER, *Deutsche Rechtsgeschichte*, p. 30, note 8) is linguistically contained in *miles* (soldier), as was rightly recognized by VARRO, *de L.L.V.*, 89 . . . . *quod singulae tribus* . . . . *milia singula militum mittebant*, literally rendered by "thousand-goer" from *mille*, Old Lat. *mile*, Sansk. *mil* = to unite. VANICZEK, *loc. cit.*, ii. p. 730.

cannot but be seen that this is highly improbable. It would mean transferring the origin of a newly-introduced institution, not to the time when it was urgently needed, but to a time when it might have been dispensed with. A settled nation, where, in case of war, all have to take up arms, can do without military divisions; natural division, according to descent and birthplace, takes its place, those so connected forming the divisions of the army. A nomadic, martial nation can also dispense with it. If the whole nation emigrates, the old plan of grouping answers the purpose. But at the departure of the Aryans from their home the whole nation did not set out, only a portion, compelled thereto by circumstances wholly disconnected with their natural divisions. From some districts, more favoured, for instance, by a scanty population or rich pastures, only a few—from over-populated or sterile districts, many—formed the company. How could they, under these circumstances, maintain the classification into villages, or even districts, for military purposes? From one village came a contingent of not more than ten, from another over a hundred, from another district came hundreds, and from another several thousands. There was nothing for it but to adopt a system of division, nor was it necessary that it should be specially prepared for this occasion. It was already in use in the lists drawn up for the regulation of the maintenance of the army, and had only to be adapted to its classification. No doubt they considered the existing natural ties as far as possible; it would have been unwise to have unnecessarily separated those who had previously been together. The same plan would have been adopted by them as obtains to-day in our recruiting department—the contingents from single tribes and districts, and where there was a sufficient number of villages and families remaining together, only they were numerically arranged. This explains Tacitus' account of the fighting side by side of the *familiae* and *propinquitates*, without rendering it necessary for us to renounce our belief in the other testimonies concerning the numbering system used in the Germanic army, or to see in it a subsequent alteration; and

we may assume the same for the old Roman Legion, where the number 3000 answers to three *tribus*, 30 *curiae*, 300 *gentes*. With both nations, therefore, the system of military classification was retained after they had become a settled nation. Whether it was the same with Greeks, Celts, and Slavs I am not able to decide, and I must refer this question to specialists. It is needless to say that the accurate lists of the Celts concerning the number of men fit for active service are not sufficient evidence to answer the question in the affirmative; as also that the absence of authentic proof of a system of numbering with these three nations—supposing this to be equivalent to the absence of the thing itself, which it is not—does not upset the conclusion at which I arrived as to the existence of it among both Romans and Teutons. Intended for the exigencies of the migration—that is to say, not merely for the division of the army, but also for the maintenance of it—these three nations let it lapse when, on their becoming settled, its meaning quite lost its force for the latter purpose, and was considerably weakened in respect of the former.

By this explanation I believe I have stated beyond all doubt the historical fact that the numbering of the army for the purposes of its division amongst Romans and Teutons can be traced back to the time of the migration. We must not picture the migrating host as an immense unorganized mob, cleaving its way by mere brute force, like a mountain torrent, but as a well-ordered army, the necessity for which we can trace back to the very commencement of the migration, to the time of leaving the original home. Everything in connection with it had to be previously put in order, the different divisions, their "captains," and the "commander-in-chief." This was rendered necessary by the fact that the different contingents, separated by long distances, had to start at different times—first those furthest away, then those nearer, and so on; and this necessitated, apart from an agreement as to the exact starting time and as to the halting places for refreshment, the institution, for all the different divisions, of a military organization made expressly for the migration.

I cannot leave this topic without appending one further reflection. To my mind the appearance of military numeration marks a turning-point of great importance in the history of civilization: to render it by a favourite expression of modern times, it marks the elevation of the *organic* classification of the people to a *mechanical* classification—the former grew, the latter was made. This is similar to the relations between law and legislation, where, to the alleged primitive form, custom—*i.e.* that which has grown up without any forethought—the legislative is added, *i.e.* that which is made, or purposely and deliberately called into existence. In both instances we see the transition from the natural into conscious form of existence.

The Latin tongue has two expressions for *army;* one, *exercitus*, belongs, according to the statement of a Roman,[1] to modern; the other, *classis*, to ancient times. Each one is representative of the time it dates from: and, owing to the very marked distinctions between them, they cannot be interchanged. *Exercitus* is the expression for a host[2] forcing its way *ex arce*; but the *arx* with the surrounding town does not date further back than the time of settlement—neither term can apply to the period of the migration, with its frequent changes of place; when a halt of any considerable length occurred in a district, the people would have protected themselves against hostile attacks by fortifying their camp with walls and ditches, or, after the manner of the Ayrans, by building fortified retreats on elevated ground (p. 86). The term *classis* represents an army called together by word of mouth (*calare*), and we shall do well to bear this in mind.

The correctness of this argument from language is confirmed by several others. First and foremost, by the fact that this primitive mode of calling the people together was preserved by the Pontifices late into historic times, whilst the secular powers had long since adopted the military bugle. As usual

[1] FESTUS, *Epit.*, p. 56: *classes clypeatas antiqui dixerunt quos nunc exercitus vocamus.*

[2] See also VANICZEK, *loc. cit.* i., p. 55.

the clergy did not share in this progress; they adhered to the old way. The meetings which they convened were therefore called *comitia calata.* We must not imagine that this way of calling the people together had from the first been a method peculiar to them, and that the secular power had employed another: it was the only method known to antiquity as yet unacquainted with the working of metals (p. 22); and over and above the evidence given in the expression *classis*, language has preserved two others, *classicus*[1] and *classicum. Classicus*, in its subsequent meaning, denotes him *qui lituo cornuve canit* (Varro, *de L. L. V.*, 91); *classicum*, the signal given by him. As antiquity did not possess the military bugle the commands in battle could be conveyed only by shouting; and, according to the *Iliad*, this was still the case in the battles before the walls of Troy. It required, however, a powerful, far-reaching voice, and this explains the stress laid by Homer upon the capacity of the loud "crier in battle." Not everyone fitted for the leadership possessed this quality, while nature might have given it in an exceptional measure to a man otherwise good for nothing; and thereupon I base the supposition that the *classici* of antiquity were not merely meant to call together the army, but also to cry out in war the words of command communicated to them by the leaders; they therefore performed the same duties as the *classici* of after times — the one with their voices, the others with their instruments.

I have said above (p. 318) that the Pontifices adhered to the old fashion of *calare.* With them are connected the *calatores*—

[1] The expression *classicus* occurred in olden times also in another sense, namely, as signifying the witness to a testament, FESTUS, *Epit.*, p. 50: *classici testes dicebantur qui signandis testamentis adhibebantur.* This is explained by the most ancient form of the drawing-up of a testament in the public assembly; the expression *classicus* refers to his representing the people (*classis*) in the testament, which is also implied in the five witnesses corresponding to the five classes of the census. Our present-day "classical witness" therefore, philologically speaking, dates back to the *calare* of remote antiquity, all three expressions referring to the primitive method of "crying." That they were preserved even after they had lost their meaning is a phenomenon very constantly repeated in the history of language; in Hamburg certain magisterial functionaries are to the present day called "mounted officers," although they have long since lost their horses.

their servants, who at the time of sacrifice had to proclaim the institution of the week-day labour; the *calendae*—the first of the month upon which they proclaimed aloud the monthly calendar; and the *curia calabra*—the place where this took place. This publication of the calendar by word of mouth is as characteristic of them as the assembly of public meetings by word of mouth. They declined to make use of writing for the former just as they refused to use the bugle, which had been meanwhile introduced, for the latter.

Secular power, on its advent, replaced the formal verbal proclamation (*edicere*) by the written one, though they still retained, as in the case of the *classicus*, the now unsuitable expression *edictum*. But the Pontifices did not share in this progress so far as its official application was concerned; although, as a matter of fact, they had themselves brought it about (they were the earliest scribes of the people), they were all the more particular in discriminating between the private use of writing for their own purposes[1]—everything was written down—and its public use for the people, wherein they kept to the old method. The calendar was, as of old, publicly proclaimed; and in the same way the *legis actiones* prepared by them were communicated in all their details by word of mouth, although no doubt the people would have been greatly benefited if they had been recorded in writing.[2]

[1] *Pontificum libri in* CICERO, *De Orat.*, i. 43, 193; *monumenta pontificum* in VAL. PROBUS *de notis interdum antiquis praef.* Examples: accountancy, the *Legis actiones*, the calendar, sacred songs. According to CÆSAR, *De Bello Gallico*, vi. 14, there was a prohibition amongst the Gauls that the Druids also should not write down anything for private reference with regard to sacred songs: *neque fas esse existimant ea literis mandare*, while they *in reliquis fere rebus publicis privatisque rationibus graecis utuntur literis.* Secrecy forms one of the two motives to which Cæsar refers this, just as it did in case of the Pontifices: the second is: *ne literis confisi minus memoriae studeant*, characteristic of the Roman conception, which could imagine only practical motives; the real reason, the historical one, brought forward in the text, would never have been thought of by any Roman, not even by historians: its connection with antiquity was lost to them just as was their remembrance of it.

[2] As happened without their knowledge by one of their recorders, CN. FLAVIUS, *adeo gratum fuit id munus populo, ut tribunus plebis fierct et senator et aedilis curulis.*

Afterwards in Rome, as is well known, they were reproached with intentional secrecy; but they only adhered to the old principle that the custom of their forefathers was binding upon the clergy, that they must not share in the innovations of ordinary life. Just as they adhered to wood for bridge-building after masonry had been discovered, to wooden nails and spears after iron, to scourging to death after decapitation had come in, to the assembly of the people by word of mouth after the bugle had long been known, so they adhered also to oral proclamation of the calendar and oral communication of legal suits long after the secular power had substituted writing for them. In legal proceedings this principle of oral expression has been preserved down to the latest times in the practice of verbal recital of the process, whilst for centuries the principle of written statements had been in vogue with the civil authorities for law-suits, in reference both to the statement of complaint in the edict and to the drawing-up particulars. The revolution was brought about by the *Praetor Peregrinus*, who had to decide suits between *Peregrini*, or between *Peregrini* and Romans, and who for that reason was not tied to the old Roman method. He was the first, either by reason of his absolute power, or because he was appointed thereto by the law which introduced it, to adopt the form of the written complaint long since known to the Greeks; and from him dates the introduction of the new procedure, which, after it had been perfected and approved, was entrusted by an act of legislation to the *Praetor Urbanus* for employment in suits between Romans.

In the foregoing I have quite lost sight of the army, but I felt that I should not omit the opportunity which the *calare* here afforded of bringing also to the front the *calare* of the Pontifices, not merely because it gave me the chance of setting a fragment of Roman antiquity in its right light, but because it also threw light upon prehistoric times; the *calare* of the army during the migration is thus placed beyond all doubt, and it gives at the same time the evidence promised (p. 23) that the use of metal instruments for the communication

of military signals was not known to the nomadic nation. Further information I cannot give about the army of the migration, except perhaps that we have to picture the men as foot-soldiers. The horsemen of the Romans date from the time of their settlement; probably they found them among the people then living in Italy. The Greeks before Troy had no horsemen; the only use they had for horses in military service was the one already familiar to the Ayran mother-nation, to draw the chariot of war.[1] With the Romans this had given way at a very early date to the more practical custom of riding—the 300 *celeres* of the oldest Roman military constitution; the war-chariot had quite disappeared for all practical purposes; the only trace which it seems to me to have left behind it was to be seen in the triumphal car upon which the victorious general made his entry into the city, a suggestion which after all that has been said in the preceding about the retention for solemn occasions of things long since supplanted for practical purposes—the *caput mortuum*—can meet with no serious objection. This was the way in which the general once returned from the victorious battle, therefore this remained the way still.

3. *The Commander.*

§ 44. In the Vedic period—and we may accept the same for the Aryan mother-nation—each tribe stood under a king (*rajan*)[2] appointed by election, who, in time of war, had the chief command. He was *satpati*, *i.e.* leader in the field.[3] This institution did not answer the purposes of the migration, where a unity of leadership, *i.e.* a single commander-in-chief, was essential; and, if an inference from the departure of the

[1] The expression "horse" is for the Vedic Aryans inseparably connected with the "war-chariot." ZIMMER, *loc. cit.*, pp. 169, 295.

[2] The election of the king is often mentioned in our sources of information, see ZIMMER, *loc. cit.*, pp. 162, 165; succession by heredity is never mentioned. The fact upon which this writer (p. 162) bases his theory that amongst some tribes the son succeeds the father in the kingly office, after him the grandson, and so on, is not sufficient proof; it is quite consistent with the principle of election.

[3] ZIMMER, *loc. cit.*, p. 165.

Helvetians may be correctly applied to the Aryans, he must have been appointed beforehand, so that he might direct the necessary preparations with full authority,[1] with which it is quite consistent that he might be assisted by an administrative committee. Without oneness of leadership the undertaking would have been doomed to destruction from the outstart. Had any difference of opinion arisen as to the route to be followed, one contingent might have gone in one direction, others in another. Thus the kingship of the tribe could not have been transferred to the contingents sent by each separate tribe; the whole army had to be subordinate to the supreme command of one, the cleverest, the most experienced, in fact, to him who possessed the confidence of the whole people—whether he was of high or low descent was of little moment: the salvation of the people demanded that the best man should be at the head.

The Sansk. *rajan* has been preserved as the designation of the king in the Latin *rex*, Gothic *reiks*, Irr. *ri*, and as final syllable to proper nouns in *rix* (*e.g.* Orgetorix, Vercingetorix) and the Germanic *ric* (*e.g.* Theodoric, Alaric),[2] a proof that the kingship itself was maintained during the migration. But this is quite consistent with a form of it specially adapted to suit the requirements of the migration. In the kingship of

[1] CÆSAR, i. 3: *Ad eas res conficiendas Orgetorix deligitur.*

[2] There must have been some special circumstances connected therewith. It does not designate the king; the different bearers of the name which Cæsar mentions among the Gauls are not kings, but merely eminent personages, "*principes*," through their wealth and social standing. As the expression undoubtedly has reference to the kingship in the sense of the text, *i.e.* leadership of the army, I presume that, after the fashion of the Byzantine *porphyrogenitus*, it is meant to indicate royal descent; *rix-ric* may thus be considered to indicate the son of a commander-in-chief born during his time of office, but only the first-born; the second has no right to it. This explains why some kings' sons, for instance, in CÆSAR, i. 3, *Casticus and Divitiacus*, do not bear the name. That the kings did not adopt it after their election is proved beyond all doubt by many examples, in CÆSAR, for instance, i. 2, v. 22, where a king does bear that name, as, for instance, Cingetorix, Lugotorix (v. 22), Ambiorix (v. 26). This may be explained as meaning that he succeeded his father in the command. The same as for the Celtic ending *rix* may be accepted for the Germanic *ric*. Alarich, Amalarich, Friedrich, Ganserich, Theoderich, and so on, are thus designated as sons of kings.

the tribe its military side was overruled by the political; the *räjan* (from the Sansk. *rah* = to stretch, to straighten) represents him who rules the community, sets it in order, and maintains it; the normal condition, however, is peace; the event of war, in which he does duty as commander-in-chief, is the exception. But during the migration this was reversed. Here war was the normal state, and consequently the position of the king was also essentially different. He did not stand at the head of a nation, but of an army: there was no such thing as a nation; the nation was merged into the army; he was king of the army, not of the nation, the same as "Herzog" of the Teutons, who had "to lead the army"; the βασιλεύς of the Greeks, who had to put the λαός into motion (βαίνω in the transitive sense of the word); the Roman *rex* and the Germanic *reiks*, in the sense of regulating (*regere*, Germ. *rich-ten*, to rule) not the civil organization, but the battle array. Therefore his authority was unlimited in all military concerns; he had power over life and death. The Roman expression for this is *imperium*, *i.e.*, literally, the power of compelling (*endo-parare*, *imperare*). As the symbol, and at the same time as the means of manifesting his power over life and death, the Roman general carried the *fasces*, the rods with which in olden times the guilty were scourged to death; the axe was added afterwards.

The election was made by the people, but the mere fact of being elected did not put him in possession of his power; something more was needed—the oath of allegiance. In Rome this was performed by the *lex curiata de imperio*, which he himself proposes (within five days); before that he has, to use a Roman idiom, only a *titulus* to power, not the thing itself.[1] Amongst the Teutons it was effected by handing him a spear[2] and by lifting him up on the shield as symbolizing his having been raised above the masses; amongst several races, by his spear being touched by those of his countrymen.[3]

[1] CICERO, *De Leg. Agr.*, ii. 12: *Consuli si legem curiatam non habet, attingere rem militarem non licet.* [2] GRIMM, *loc. cit.*, p. 163: *hasta signifera.*

[3] SCHRÖDER, *loc. cit.*, p. 18: pledge by means of *gairethinx*, the place of which was afterwards taken by the oath of allegiance.

As it was the people who conferred his power upon him, they could also withdraw it should it be proved that his continuing in power would be harmful. The possibility of being deposed by the army was one of the checks which reminded the commander that his power was not absolute, and at the same time guaranteed that he would not misuse it. What Tacitus (*Germ.*, cap. 7) asserts of the kings of the Germans, *nec regibus libera aut infinita potestas*, must *a fortiori* have applied to him. With the Teutons legislative power was absolutely in the hands of the people, and judicial power no less so;[1] and upon all matters of importance the king had to solicit the verdict of the people. In one point only was he uncontrolled, as was in the nature of the thing, viz., with regard to the maintenance of military authority; and this included the power to uphold it by the adjudication of punishments. The Roman kingship presents exactly the same aspect, which, although fully and indubitably accepted for all the rest, is erroneously disputed for his judicial power—a point upon which, considering its insignificance for the question in hand, I will not enter in further detail. A commander-in-chief no longer competent to fulfil his office—for instance, either by becoming feeble-minded or by being permanently disabled by wounds or incurable bodily suffering—could not remain in command; the well-being of the whole nation depended upon his removal. Even in our constitutional monarchical States, founded on the principle of legitimacy, provision has been made in the constitution for such an emergency; it is the indispensable safety-valve for the continuance of monarchy. Where it is absent, as in Russia and Turkey, the deficiency is supplied by a sling for strangling, poison, or a razor wherewith to open the veins. The difference lies, not in the *whether*, but in the *how*, the removal is to be effected. The Teutons did it in a very business-like way—the army renounced their allegiance by casting away their arms.

[1] About its execution by officials specially appointed by the people, see TACITUS, cap. 12; amongst the Gauls, CÆSAR, vi. 23.

The Romans, at the time of the Republic, did it in a constitutional manner—the magistrate was instructed by a decree of the Senate to resign office (*abdicare se magistratu*). The Teutonic, as the more crude, must have been the form in use during the migration. For my purpose the fact suffices that the Teutonic kingship, as pictured by Tacitus,[1] and the Roman are cut after the same pattern. From this resemblance I conclude that both alike originated in the period of the migration.

The Teutonic and the Roman king was not the king of the Aryan mother-nation; he bore the same name, but was in reality the commander-in-chief of the migration. He was distinguished from the *duces*, who arose simultaneously amongst Celts and Teutons, inasmuch as they were elected for the duration of one campaign only, retiring at the end of it, while the king was elected for his lifetime; and this life-long power we may presume to have been the aim and object of the ambitious amongst Celts and Teutons aspiring to the kingship. The idea of an absolute kingship can scarcely have entered their minds, considering the very pronounced spirit of liberty which marks both nations. The fact alone that when, without having been elected by the people, they ventured to take upon themselves ever so limited a command, with a view to possess it for life, was sufficient to enrage the people to such an extent that they avenged the outrage by their death.[2] The *principes* of the Teutons and the Celts, according to Tacitus and Cæsar, had no position in government at all; they were merely distinguished by their wealth, birth, or influence, which advantages, however, were often stepping-stones to the kingship.[3]

[1] It is that of the Western Teutons; that of the Eastern Teutons has, through its contact with the Byzantine Empire, assumed quite a different shape.

[2] Thus in the case of Orgetorix, CÆSAR, i. 4: *ex vinculis causam dicere coegerunt damnatum pœnam sequi oportebat ut igni cremaretur;* vii. 4: *ob eam causam, quod regnum appetebat, ab civitate erat interfectus.* Also Arminius, TACITUS, *Annales*, ii. 88.

[3] TACITUS, *Germania*, 7: *reges ex nobilitate, duces ex virtute sumunt.*

4. *The Law of Booty.*

§ 45. We have previously, in passing, mentioned the law of booty, but reserved a more detailed exposition of it until now.

From the way in which Gaius speaks of it, when treating of *vindicatio* (iv. 16), we are led to suppose that the booty belonged to him who captured it. The staff used in the *vindicatio*, he explains, represents the spear, and the spear is the sign of lawful possession: *quod maxime sua esse credebant, quae ex hostibus cepissent.* To base the act of private property upon the law of booty without acknowledging the intervention of public property in the booty, can mean only that it belonged to each person individually, and that the early Romans saw in it the principal source of private property.

If Gaius really held this opinion, and if it were not for the sake of mere brevity that he omitted to mention this intervention of public property, he has committed a historical blunder, for booty did not fall to the share of the individual but of the public—it could become private property only by its transfer on the part of the people. With this limitation, however, it is quite consistent to assert that antiquity considered booty as the principal source of property (*maxime sua esse credebant*). It reveals to us the migratory time wherein well-nigh every possession was taken from the enemy, and when peaceful acquisition through labour was quite insignificant compared with that gained by plunder: they were the robbers of the Hirpine legend (p. 300).

We have only to clearly realize what this law of private booty involves in order to be convinced of its impossibility. It need hardly be remarked that it could not apply to land or soil. Neither could it apply to victuals—cattle or corn—or some would have lived in luxury while others would have starved, and it might have led to a fight for subsistence between these companions-at-arms. Neither could objects of value nor prisoners of war be assigned to whomsoever, by some lucky chance, had happened to capture them. Booty was by

no means always the well-earned reward of personal valour; on the contrary, it fell more often to the share of the less valiant. The former would always be found in the front, in pursuit of the retreating enemy; the latter kept as much as possible in the background. It would therefore be comparatively easy for them to rob the enemy lying on the field of battle, or to carry them away as slaves, and thus to deprive those to whom they owed their opportunity of their rightful due. To adjudge the booty to each individual would have been equivalent to sowing seeds of strife and dissension as to the rightful possession of it, and would have called forth envy and malice from the less fortunate; it would have been throwing the bone of contention amongst the people—nay, by losing sight of the principal object in view, the overthrow of the enemy, in their zeal to secure the booty it might have endangered the issue of the battle. No one, not even the bravest, could claim booty for himself; left entirely to his own resources in the enemy's land, he could never have secured it. Booty was in reality the fruit of the joint undertaking; each one contributed his share. Therefore booty had to be joint property also; community in danger and expenditure of strength, and community also in the gains—this was a condition which would appeal to the most crude conception of right. Marauding expeditions by land or by water gave the initiative to this banding together in one common pursuit, and laid the fundamental idea of society in the mind of the people long before the peaceful form of this union had taken the place of the originally predatory one.

Thus the principle of the common possession of booty was rendered inevitable by circumstances, and as to three of the Indo-European nations—Greeks, Romans, and Teutons—we are in a position to prove that they acknowledged the same.[1] It must have come into use during the migration, unless indeed it can be traced back to the Aryan mother-nation; upon which

[1] For the Greeks see the *Iliad*, i. 125; for the Romans see below; for the Teutons, GRIMM, *Deutsche Rechtaltertümer*, p. 246; for the Celts and Slavs I can find no evidence.

point I reserve my judgment. The people were very sensitive upon this question of right. The common man in the full pride of his legal right insisted upon his lawful share. When Clovis once, upon the petition of a bishop, was on the point of returning to him the sacred vessels obtained as booty, a common Frank objected to it, and Clovis complied with his demands, although only to wreak his anger upon him afterwards. A no less telling example is found in the implacable fury of Achilles, which became so fatal to the Greeks at Troy: it had its ground in an arbitrary act of Agamemnon with regard to booty.

There was only one exception to this principle, which, however, I can substantiate only as regards the Romans, but which no doubt was the general rule, namely, with regard to the arms taken from the slain in battle; they were the prize of victory, awarded to him who had done the deed. Thereupon rests the idea of *spolia* in contrast to the rest of the booty, the *praeda*. This is not an actual but a legal contrast; *spolia* and *praeda* are two legal conceptions—that is to say, a different legal operation is connected with each of them. They certainly count amongst the oldest conceptions of which the nomadic nation was aware. Whoever gained the *spolia* had free disposition of them. The general who had conquered the hostile commander not unfrequently hung the armour[1] taken from him in the temple as a remembrance of the victory. Horatius adorned himself with it when he made his triumphant entry into the city with the army (*trigemina spolia prae se gerens*, Livy, i. 26); and of a valiant warrior of later times it is said (Pliny, *Hist. Nat.*, ii. 29) that he possessed no less than thirty-four *spolia*.

The booty was divided by the commander. Amongst the Greeks he could claim a larger share for himself (*Iliad*, i. 138, 172): amongst the Teutons, where it was allotted,[2] he could not. The Romans as a rule, instead of dividing the booty, sold it in the camp at the place appointed for it (the market-

[1] *Spolia opima*, *i.e.* beautiful, shining: see VANICZEK, *loc. cit.*, i. 533.
[2] GRIMM, *loc. cit.*

place of the camp) in the presence of the assembled people (*sub corona*).[1] The proceeds (*manubiae*), sometimes in gross, sometimes after deducting a part for the public treasury, were then divided amongst the men. They were sold either piecemeal or, to avoid so many details, as a whole or in lots; which presupposes that there was no lack of tradesmen with plenty of ready money in the camp. As the bulk thus purchased was again sold by them in retail, they were called *sectores* (cutters, dividers: the Swabian *Güterschlächter*), and the sale *en masse* was called *sectio*.

The form of law applying to booty amongst the Romans here described, viz., the public auction of the booty, the division of the proceeds between the army and the public treasury, shows that with them also, with the exception of the *spolia*, the booty did not belong to whomsoever had captured it, but to the people. An individual could come into possession of any one piece of the booty only by transfer from the people: division by the commander or by public sale. The symbol, therefore, of the right of booty in the form of a spear cannot have been based on the idea which Gaius associates with it—that the booty belonged by right to whomsoever had taken it; it gives expression rather to the idea of public property. In this sense the spear figured at public sales on the part of the people,[2] *e.g.*, at the sale of property of a person condemned to death; never, however, at sales on the part of an individual. It also figured at the court of the *Centumviri*, where the people, by their representatives, undertook to protect the property in opposition to the private judge appointed by the parties themselves. The spear was the attribute of the people.

[1] In later times, however, we still meet with an actual division; see, for instance, CÆSAR, *De Bello Gallico*, vii. 89.

[2] FESTUS, *Epit.*, p. 101. *Hastae subjiciebantur, quae publice venundabant.* As motive is added: *quia signum praecipuum est hasta.* This is nonsense; a word must have been left out; *prælii* or *belli* was meant. This makes the next sentence fit in: *nam et Carthaginienses, quum bellum vellent, Romam hastam miserunt*, but neither the preceding nor the concluding sentence *et Romani fortes viros saepe hasta donarunt* takes it for granted that the spear was a *signum praecipuum* of the Roman people. *Populi Romani*, therefore, must somehow have been left out, which could easily occur if the transcriber, finding

Witness also the above-mentioned case (p. 324) of its being bestowed as a reward of valour.

All this proves that the meaning which Gaius attributes to the *vindicatio*, that the staff replaced the spear as the sign of legal possession, cannot be the right one. Quite apart from the fact that such a substitute is not in the least called for, because a spear is quite as easily procured as a staff, it is opposed by the principle of the institution that the spear represented the exclusive right of the people, *signum populi praecipuum*, and could therefore not be used by private persons. This also excludes the idea of the staff representing the *hasta pura*, derived from antiquity; it has nothing in common with the spear. Its meaning, therefore, must have been merely indicative of the matter at issue by means of bodily contact with the staff.

I may sum up all the evidence given above in one statement, viz., that according to the martial law of the migratory period, booty, with the exception of the weapons and armour of the conquered enemy, belonged not to the captor but to the people as a whole.

PRAECIPUUM in MS., overlooked the sign of reduplication over the two first letters, which caused *Populi Romani* to be left out. But this does not fit in with the passage about the Carthaginians, for if the spear is a *signum praecipuum* of the Roman people, how could it do duty for the proclamation of war? All three cases mentioned in the passage—a public sale, a grant of the spear by the Roman nation, and a proclamation of war by the Carthaginians—find a satisfactory solution if we accept that the text originally ran as follows: *quia signum populi praecipuum est hasta*, be it that *populi* was abbreviated by P. or by PRAECIPUUM.

III.

THE OLD AND THE INFIRM[1]

§ 46. HUNGER drove the Aryans from their home, but they did not escape it by so doing—it accompanied them permanently on their wanderings. It was perhaps the most dangerous enemy against which they had to guard.

A barbarous custom of the migratory period was involved in this—putting to death the aged. We do not find it among the early Aryans, but with Slavs and Teutons[2] far into historic times. Roman tradition also speaks of it. The custom, therefore, must have been formed during the migration. To understand how it could ever have grown into a custom we must not forget that the position of the aged was a very miserable one amongst the Aryans. (p. 33.) It was but a step from the son refusing bread to his parents to the community putting the old to death. In the eyes of the people it certainly did not bear the character of a temporary measure, legitimate only on account of dire necessity, for in that case the old would have been kept alive when there was a sufficient supply of provisions, but rather that of an institution wholly justifiable in itself. The community—and all provisions belonged to her (pp. 262, 269)—did not give bread for nothing, but only in return for service rendered. He who could not fight should not eat; when a man was no longer able to serve the commonwealth her obligation to support him was at an end.

The Romans afterwards knew the value of the experience

[1] This paragraph was not worked out in Dr. von Ihering's manuscript; the editor has put it together from notes.

[2] A large number of proofs for the Teutons are contained in GRIMM, *Deutsche Rechtsaltertümer*, p. 486. As to the Slavs, see below § 49.

and insight which age was able to supply, and ensured the services of old men for the commonwealth (p. 267) by a special institution (*Senatus*). But reminiscences of the custom of the migration were preserved—the sacrifice of the *argei* and the expression, *senes depontani* (p. 356.) To these we owe the knowledge that when crossing a stream during the march the old people were thrown over the bridge.

In the same way that they disposed of the aged by putting them to death, they got rid of the weak and sickly children by exposition at their birth. Why should they be brought up when there was no prospect of their serving the community? The healthy child, on the contrary, might not be exposed. It was the father's duty to bring it up in the interest of the community. That he might not forego this duty he was bound by a law attributed to Romulus, which here, as everywhere, pointed to a custom of primitive times, to bring the child for examination before five witnesses; if he exposed it in opposition to their verdict, a heavy punishment awaited him. He was allowed to do as he liked with his female children, excepting only the firstborn; but of male progeny a man could not have too many, for war continually thinned the ranks of the men, while it spared the women. The exposure of the daughters was an attempt (as with other nations) to artificially regulate the balance of the sexes disturbed by war.

IV.

THE WOMEN

§ 47. If all the daughters, with the exception of the firstborn, were exposed, the danger might easily arise that some men might not be able to find wives; and this want of women was no less threatening to the community than their superfluity would have been. A dearth of women would have also meant a dearth of mothers to ensure a sufficient supply of children.

This want of women was no doubt felt keenly during the migration. The following Roman institutions may be brought into connection with it:

(*a*) *The prohibition of the gentis enuptio to liberated females.*—The fact that it was enforced for them only, and not for liberated males, shows that the ground for it lay not in the desire to prevent marriages between the relatives of different *gentes*, but merely in the desire to secure wives for the male relatives of the *gens*. It can hardly have existed in this form in primitive times, as Roman tradition places the liberation of slaves in historic times. Perhaps even then a want of women was felt; but I scarcely think this probable, since the reason for the chary preservation of female children, rendered necessary by the conditions of the migration, disappeared when the nation became settled. I hold it to be more likely that the prohibition of *gentis enuptio* did not first come into use then, but was transferred from free-born women to liberated slaves; only that for the latter it would hardly extend to the *gens* only, but to the *curia*. This would explain the ten witnesses at the contraction of a marriage by *confarreatio*. They were the representatives of the ten *gentes*

belonging to the *curia* of the woman, and their assistance was required for the purpose of preventing the giving in marriage of the woman outside the *curia* without their consent. They were not mere formal witnesses to the solemnization of the marriage. However familiar to us may be the idea of formal witnesses, who have nothing to do beyond bearing witness to the act, it was wholly unknown to antiquity. The witness of olden times had quite another function to perform, as will be shown elsewhere. If the ten witnesses had merely to confirm the act of the contracted marriage, the number ten, which is not found anywhere else, remains unexplained;[1] they were, however, not there to confirm, but to legalize it. There was no need for this in the case of the man, who might take his wife whence he chose, but only for the woman, who was limited in the choice of a husband.

(*b*) *The betrothal of minors or even of new-born*[2] *infants by their fathers.*—As a mere agreement, *i.e.* not legally binding, there is nothing remarkable in it, and it may occur anywhere, but where it is legally binding, *i.e.* actionable on either side, like the *sponsalia*, according to old Latin law (Gell. iv. 4) it becomes quite another matter. What could induce the father to bind himself in this way? The answer is a simple one. A prudent father set about in good time to secure a wife for his son, and the opportunity presented itself when another purposed to dispose of his newly-born daughter. With the assurance of a future husband she was allowed to live; her future was secured. But the other party must keep to the compact, otherwise he would never have agreed to it, and the father of the son must be equally able to rely upon the other, or else he would have looked round, while there was yet time, for another wife for his son. Therefore the contract was

[1] BODEMEYER, *Die Zahlen des römischen Rechts*, p. 93, Göttingen, 1855, does not know what to make of this number ten.

[2] I. 14 *de spons.* (23, 1.) . . . *a primordio aetatis.* The additional clause contradicting this, *si mode id fieri ab utraque persona intelligatur, i.e., si non sint minores quam septem annis*, can be attributed only to the compilers, as has already been rightly observed by others (see SCHULTING, *Notae ad Digesta*, iv. p. 203); perhaps the Christian conception of marriage has aided it.

among other nations which have led an uninterruptedly settled existence. We may dismiss this objection by pointing out that all nations at a low degree of civilization follow the custom of exposing their daughters, which, with the scarcity of women resulting therefrom, must necessarily lead to the same result—marriage by capture. In raising this question we should be careful not to confuse the *woman* with the female *slave*. We have not so much to explain the capture of females generally—this is not necessary—but the singular circumstance that preference should have been given to the foreign over the native woman, and the only explanation for this is that there were not enough women at home.

As the scarcity of women has brought woman within our horizon, I avail myself of this opportunity to insert a few necessary remarks concerning her. There are three points which I have to advance. All three stand in the closest relationship to the migration.

1. *The Monogamic Form of Marriage.*

With the Aryan mother-nation monogamic marriage was actually the rule, but it was not prescribed by law. Polygamy was allowed and practised by princes and men of rank, who alone were in a position to indulge in the luxury of keeping several wives, while the means of the common man were not equal to it. Polygamy was irreconcilable with the conditions of the migration. At home all men provided for the maintenance of their wives; it was their own affair whether they could afford to do so. But during the migration each individual householder did not provide for himself and those belonging to him: the care of the maintenance was a public concern. To have many wives would have meant under these circumstances to have indulged in luxury at the public expense, to have laid the burden of supporting them upon the shoulders of the community.

Where would have been the end of it if this had been allowed? What held good for one held good for all; each man would have kept a harem at the common expense. The

impossibility of such a state of affairs is so evident that we need not waste any words upon it, and there is no necessity to refer to the scarcity of women, as pointed out above, to be convinced that a plurality of wives did not exist during the migration, simply because it *could* not.

We have thus established a fact of the very first rank in the history of civilization: the causal connection between the monogamic form of marriage and the migration of the Indo-Europeans. To know that Aryan polygamy developed into Indo-European monogamy during the migratory period is enough: that fact alone is of great value for the history of civilization. History owes it to the Indo-European that polygamy was not brought into Europe, that Europe became the native soil of monogamy, as Asia was, and to the present day is, of polygamy. It was a turning-point which, with the exception of Christianity, has no parallel in the history of the world. This view may possibly exhaust the interest of the fact for the historian of civilization, but for the moralist there is more in it. It is the recognition that one of the principles upon which the morality of mankind is based has not been called into existence by *moral intuition*, in which modern ethics is wont to see the ultimate basis of all morality, but by the compelling force of *external circumstances*. The mother-nation did not realize that polygamy was contrary to the nature of marriage. The Indo-Europeans left their home fully convinced of its legitimacy. Their reason for exchanging it for monogamy cannot therefore be traced back to any moral scruples on their part, but simply to its practical impossibility during the migration, as I have pointed out before. Monogamy is thus based upon so strong a foundation that the most determined antagonist will not be tempted to dispute it. Monogamy owes its introduction amongst the daughter-nation to practical, not to moral, motives. It is familiarity and long usage alone which have caused the originally non-moral motive to be converted into a moral motive; it is the same process which I have above applied to religion, and which to my mind holds good without exception for all standards of

law, morality, and custom, in the widest sense of these words. Practical motives have called every one of them into existence. If in some way or another they happen to have amalgamated with some social ordinances so that they cannot be extricated without threatening to upset the latter, the real progenitors, viz. practical reasons, sink into oblivion and morality claims them as her children. But they are only adopted children. Draw back the veil, and with the help of history the true parents may in most cases be identified. As regards monogamy I flatter myself to have done this.

2. *Indissolubility of the Marriage Bond.*

Polygamy and free dissolution of matrimony on the part of the man go hand in hand. They come from the same source —the libertinism of man with regard to marital relationships. The man who is at liberty to inflict the most grievous wrong upon his wife, by the introduction of another woman into his house, cannot be prevented from bidding her begone. To the true wife, separation will be the lesser of the two evils. The Old Testament still acknowledges this right of man to give the woman, without stating any causes, a letter of separation; the Koran does the same; the New Testament limits it to the case of adultery. Has Christianity established the principle of the indissolubility of marriage? The Indo-Europeans had done it already, from the same motive to which the principle of monogamy owes its existence—polygamy and free dissolution of the marriage bond were not compatible with the requirements of the migration.

Whether the Aryan mother-nation acknowledged the liberty of the man to separate himself from his wife, I have not been able to ascertain; but as they suffered polygamy amongst them they most likely would have put no difficulties in the way. However this may have been, for the migration the man's free right of divorce was as incompatible as polygamy. How, for instance, when they were preparing to depart, and each man sought a wife for himself, could any woman be expected to give her hand to a man unless she were secured against the danger

of being rejected by him in case he got tired of her? Should such a fate befall the woman at home, she could return to her own people, with whom she would find shelter and protection; but if it befell her on the march, she would be a miserable and forlorn creature devoid of all support. It was to the public interest to secure her against this fate—an indispensable condition by which the women could be induced to join the migration. The pledge of the man to his wife was not sufficient—what guarantee had she that he would keep his word? There was need of the guarantee of the body collectively, *i.e.*, the principle must be established by universal agreement that the man could not separate from his wife at his pleasure, but only when she had given cause therefor by guilty conduct.

This consideration applied only to the women whom they wished to induce to leave their home, not to those born during the migration. And yet the same law applied to them; therefore there must have been other considerations as well. We have mentioned above (p. 335) the legal force of the betrothal. This alone suffices to explain the protection which the law vouchsafed to the women with regard to marriage. It was necessarily included in the legal force of the betrothal, otherwise the latter might have been simply set at naught by the man taking his wife unto him and forthwith dismissing her.

Therefore with regard to the indissolubility of the bond of marriage, as well as with regard to the principle of monogamy, it was not a sense of morality which brought about this state of matrimonial relationship, but inevitable practical necessity. Here again it is only in course of time that the idea of morality can have been attached to it. What nowadays we attribute to the "nature of the marriage bond" has been historically called into existence without the co-operation of any moral conception; it rested simply on practical motives. We are not indebted for it to the deeply moral intuition of our Indo-European predecessors, but to their insight into their practical needs. The true conception of conjugal rights, one of the most imperishable boons which the Indo-Europeans have bequeathed to humanity, was an absolute postulate of the migration.

Starting from the indisputable fact that none of the Indo-European nations has preserved the institution of the migratory period more faithfully than the Romans, I think I may safely draw an approximate picture of the aspect of conjugal relationships at that time by conveying to the reader the instructions which, according to Roman tradition, Romulus, always the representative of antiquity, issued with regard to them.

The man who deserts his wife (Old Lat. *voxor*, later *uxor*, from Sanskr. *vaçā*, beloved) fell under the penalty of death. In case of adultery he might put her to death; also for drunkenness. He might divorce her only on certain legal grounds, of which I need here mention only adultery, reserving the others for future investigation. If he put her away without any legal cause he paid the penalty by forfeiting the whole of his property, one half of which went to the wife, the other to the *gens*.

The extremely severe penalties here imposed for the purpose of securing the position of the wife, show that the Romans were fully aware of its importance for the welfare of the community. The death penalty and the loss of the whole of one's property—what more is needed to convince us that antiquity considered the legal security of the standing of the wife a matter of vital importance? How very differently this was viewed in after times is shown by the introduction of the so-called free marriage (*coëmtio*), which placed separation altogether at the discretion of the married pair, and as regards the husband laid him open, in case of separation, to a reproof from the censor (*nota censoria*). What was the reason for this? Not the neglect of the moral significance of marriage—upon this point there cannot be the slightest doubt from all we know about the married life of the Romans in the olden times—but rather in that the conditions of their settled life made it possible to place the law on a different footing with regard to marriage than during the time of their migration. The law withdrew her hand, and left it to the protection of morals. With this release from the bond of marriage, the bond of betrothal was also set free. It would have been preposterous henceforth to have brought an action for breach of promise at

the contraction of an alliance, the dissolution of which was left entirely to the option of the parties concerned. Liberty with regard to the dissolution of marriage of necessity involves also liberty with regard to its contraction. The legal rights in connection with betrothal in later times stand in the closest connection with the introduction of free marriage.

3. *Fertility of Woman.*

The community took the woman under its protection, but in return she was expected to bring forth children, as many as possible,[1] preferably of the male sex. A woman who bore only boys (*puerpera*) was highly esteemed; to bear more girls than boys, or only girls, was a misfortune to her; no children at all, a curse. The object of marriage is to bring children into the world; therein it differs from the illegitimate alliance where the intention is mere sensual pleasure and children are more dreaded than desired, and from the mock marriage contracted to escape the punishment for celibacy, which the censor checked by the imposition of an oath upon the man that he lived in true wedlock (*liberorum quaerendorum gratia se uxorem habere*). The wife becomes mother, and hence from *mater* the definition of marriage as *matrimonium*, and *matrona* as the honorary title for the wife (*matronarum sanctitas*), while language derives from *pater* the expression for fortune, *patri-monium*: the wife looked after the children, the husband after their property. In case she had no children, this lay at her door, according to the popular idea, and even the legislature of later times was guided by this idea, in that it exempted the husband from the punishment of childlessness (*orbitas*) when one child was born to him; the wife was not exempt until she had given birth to more children (in Rome three, in Italy four, in the provinces five). This is based upon the idea that it is the wife's fault if there are not any more children; she, out of dread of the

[1] From the *quinta* in the *dos* (Ulpian, vi. 4) we learn that it should be at least five, and this number of ancient law was also preserved for the *jus liberorum* in the provinces, whilst in Italy it was reduced to four; in Rome to three.

pangs of child-birth and of the trouble of bringing up children, had circumvented nature; if she had wished it there would have been more children; her first confinement showed that she was not barren; the man was exempt from all blame.

Children, therefore, were the one thing which the husband as well as the community demanded of the wife. Fruitfulness of the woman stood on a par with valour in the man; and as the latter was rewarded by the bestowal of a spear,[1] so the former by the bestowal of a key—the symbol of the opening of the womb.[2] Upon this depended the love of the husband and the respect of the world. True, he could not put her away because of her unfruitfulness; amongst the grounds which Plutarch (*Romulus*, c. 22) specifies this one is not found. Plutarch enumerates the grounds upon which Romulus (here again the personification of ancient law) allows the man to separate from his wife. They are closely connected with the barrenness of the wife, and this has decided me to touch upon them. But we must first place the passage of Plutarch in its right light; so far it has been misunderstood in a most incomprehensible manner.

In addition to the case of adultery, Romulus is said to have specified two more reasons—poisoning of children and forgery of the keys.[3] *Poisoning of children.*—Would the wife, whose highest ambition and pride were centred in her children, be likely thus ruthlessly to destroy her own happiness? Be that as it may. But she must have been as foolish as she was depraved if she attempted to take the children's lives by means of poison, which would expose her to the danger of being found out. There were surely other much more likely

[1] FESTUS, *Epit.*, p. 101: *Hastae.*

[2] FESTUS, *Epit.*, p. 56: *Clavim consuetudo erat mulieribus donare ob significandam partus facilitatem.* The expression *partus facilitas may* apply to the single fact of giving birth, but also to the ease of child-bearing in general. It is uncertain who bestowed the key, whether the husband, the relations, or, as in the case of the spear of honour, the community.

[3] The decisive words are: *ἐπὶ φαρμακείᾳ τέκνων ἢ κλειδῶν ὑποβολῇ καὶ μοιχευθεῖσαν*; in BRUNS, *Fontes Romani Antiqui*, i., Romulus, rendered as: *propter veneficium circa prolem vel falsationem clavium vel adulterium commissum.*

means; why not strangle the child in its sleep? And would the law not have awarded the same penalty for any other mode of murdering the child? It would have been like shutting one door and holding another open. If you poisoned your children, your husband could divorce you; but if you murdered them in some other way he could not. And why should only the poisoning of children be mentioned? Was the poisoning of other persons less punishable? If the wife were to poison father, mother, or the brother or sister of the husband, would the law of separation not apply here? But why this special mention in the case of poisoning children? Surely every murder by poison was punishable by death; and the man would thus get rid of his unnatural wife without any legal separation. In short, this view of the matter is such a mass of contradictions and incredible assumptions that common-sense and criticism cannot for a moment accept it.

The thing is quite simple: *τέκνων* does not belong to the preceding *φαρμακείᾳ*, but to the following *ὑποβολῇ*. The comma, if put in the Greek text, must be placed, not after *τέκνων*, but after *φαρμακείᾳ*. They are not two offences, but three: *φαρμακεία, ὑποβολὴ τῶν τέκνων* and *ὑποβολὴ τῶν κλειδῶν*.

The first is the *substitution of children*. From the above it will appear not unnatural that a woman whose happiness and position depended upon her motherhood, might, in case nature refused it to her, conceive the idea of assisting nature by adopting another's child, and passing it off as her own. She would take her opportunity when her husband was away on a warlike expedition; upon his return the child was there.

The second offence is the *falsification of the keys*. The interpretation given to this is somewhat, though not much, better than the former. The wife is supposed to take pleasure in prying into her husband's secrets, which he keeps under lock and key, and the key of which he carefully carries about with him, even when on the march or in the wars, as of course he could not trust his wife with it. And yet the keys were the requisite and characteristic sign of the domestic government

of the wife. Upon her first entry into the house they were handed to the bride, and in case of separation taken from her (*claves adimere, exigere*). Why then counterfeit the keys? But the keys which the wife falsified were not the real but the symbolic keys, the above-named *clavis ad significandam partus facilitatem*, the badge of honour of a child-bearing woman. In the concrete the question was whether the wife counterfeited the key, stole it, or bought it from someone else, or bribed her relations to give her one; but this is immaterial—in any case, her object was to deceive her husband, and this presupposes that the deception dated from before the marriage. The key implied to him "here you have a wife who will readily bear children."

The *third* offence is the *preparation of love-potions*, which she secretly poured into his cup. Here again she deceives him. Why? To secure his love? This appears to me to be too lofty a conception for primitive antiquity. We must seek a more *actual* reason. In the first place, is the motive to artificially increase sexual desire in the man? This explanation does not satisfy me either. With a strong, healthy people, living in a state of nature, such means would not be needed. There is, however, another explanation, which from what goes before lays claim to the greatest probability: the childless wife mixes the love-potion in order that she may become a mother. It is not an erotic desire therefore which induces her to do it, but the idea which fills all her thoughts and mind. Far from destroying her children with her *φαρμακεία*, it is to assist her to bring them forth. That this *may* be the meaning of the word is beyond all doubt—*φάρμακον* means in the first place not poison, but a healing remedy, a medicine, *φαρμακεία*, therefore the mixing not merely of poisons but also of medicines, love-potions. That it *must* be taken here in this sense is evident from the fact that the law could not possibly threaten the poisoner with merely the penalty of separation; it would have been the penalty of death.

The belief in the efficacy of love-potions, already held by primitive man, was maintained in Rome down to historic

times. A report in Livy testifies to this (viii. 18). The passage has hitherto been misunderstood in as incredible a manner as the passage in Plutarch. According to the prevailing opinion,[1] in the year of the city 422 no less than 170 Roman women belonging to the best society formed a conspiracy to poison their husbands. It is astonishing that such a story could find credence with historians; it is not one whit better than that of the mother of antiquity poisoning her children. The incident took place in the most flourishing period of the Republic, during which time married life was in high repute —a fact which renders impossible a belief that there could at that time be found 170 women bent on poisoning their husbands. What could possibly have tempted them to exchange their brilliant lot at the side of men of distinction for the misery of widowhood? They would moreover have had to be as foolish as they were insane (like the mother of antiquity who poisoned her children instead of strangling them) if they had entered into a murder conspiracy, thereby courting the danger of detection—which, as a matter of fact, resulted—instead of each one doing away with her husband in secret.

The explanation is once more quite simple: the *venena* brewed by the matrons were not destined to rid them of their husbands, but rather to cement them more closely to themselves; they were love-potions (*vene-num*, from *Ven-us*—mediums of love) to the best of their knowledge, not *venena mala*, but *bona* (Livy, *loc. cit.*: *ea medicamenta salubria esse*[2]),

[1] For all this see Marquardt, in BECKER'S *Handbuch der röm. Altertümer*, v. p. 67.

[2] Distinction between *venena bona* and *mala*, i. 236, *de V. S.* (50, 16), *qui venenum dicit, adjicere debet, utrum malum an bonum, nam et medicamenta venena sunt*—hence: *lex ita loquitur: qui venenum malum fecit*, CICERO, *Pro Cluent.*, 54, 148, the same as in *dolus; qui dolo malo*, etc. The original kind of *venenum* is the *venenum bonum*, and more particularly the love-potion (*venenum* from *Venus*); the wife who prepares love-potions for the husband (*venefica*) has afterwards become the witch and poisoner. In all traditions it is the woman who does it (Medea, Circe), never the man; *venenum bonum* as well as *malum* fall, historically speaking, to her share, and to the present day poisoning is a specially feminine crime.

and they did not hesitate to experiment upon themselves, the result, to be sure, being fatal. The *veneficium* of these women is, therefore, in nature identically similar to the φαρμακεία of the woman of antiquity, only that in the former case it could hardly be said, as in the latter, to have been for the distinct purpose of becoming mothers; with both, however, it was not hatred, but love which led them to it.

All the three grounds for separation, as given by Plutarch, hinge upon the fruitfulness of the woman; the two first were intended to deceive the husband with the appearance of it (τέκνων ἢ κλειδῶν ὑποβολῇ), the third (φαρμακεία) to promote it. Perhaps this also applies to the fourth (μοιχευδεῖσαν). The motive for committing adultery may be sensual pleasure, but it may also be something else: the wife who has no children by her own husband, yields herself to another, in order to obtain that greatest boon of all upon which depends her happiness and position. We must try to realize the contempt and the misery which weighed upon the childless wife of antiquity to understand how a wife honestly loving her husband could yet make up her mind to this step. It was not the harlot giving herself away, but the honourable wife who endeavoured to become a mother, thus to ensure her own and her husband's happiness. And therefore the husband in this case, as in the three preceding, may have allowed mercy to overrule law, and have kept his wife with him—they were, after all, errors instigated by love; but the harlot he put to death as the law entitled him to.

The counterpart to the barrenness of the woman is the celibacy of the man. The community expected every man to marry and to beget children; it was his business to find a wife if possible amongst his own people—if not amongst the enemy. The unmarried man not only neglected his duty to the community, but became also a source of anxiety to the married man—the weasel stealthily creeping into the hen-house. It was this consideration which decided the Frieslanders of the Middle Ages to allow no unmarried

priest amongst them. In Rome the single man was, by order of the State, reminded of his duty by the censor,[1] and there was a special bachelor's tax (*aes uxorium*), the sting of which was enhanced by its being increased in proportion to income.[2] It would have been quite in accordance with the spirit of Rome if the proceeds of this taxation had been devoted to the endowment of penniless maidens. Both institutions clearly date from historic times, and cannot therefore be traced back to the migratory period. But when even the Romans after they became settled saw the necessity of taxing bachelorhood, we may be sure that during the migration, where this evil might more reasonably have been apprehended, it would not have been tolerated at all; the begetting of children was of the first importance.

[1] A censor even went so far as to threaten them with *multa* (fine) until they married. PLUTARCH, *Camill*, 2.

[2] HUSCHKE, *Verfassung des Servius Tullius*, p. 501.

V.

EXPERTS[1]

1. *The Fetiales.*[2]

§ 48. THE Roman *Fetiales* were the functionaries who attended to the execution of all external acts of international law: prosecution of the claims of their own people against those of other nations, the repayment of debts due, or, failing that, capture of the debtor himself (*noxae deditio*); and, on the other hand, payment of the debts of their own people or surrender of the debtors. They were merely executive functionaries without any personal right of decision. All resolutions about international concerns were passed by the people, who, however, in dubious cases went to them for advice. Their name denotes the spokesmen of the people.[3] The Romans allege this institution, which is found amongst all Italic nations, to have been of foreign origin; the name adjoined, *æquicoli* (=*qui æquum colunt*), shows how much truth there is in this. To my mind there can be no doubt that it belongs to primitive antiquity: the stone axe and the *hasta praeusta* have already been quoted, and as a third proof we may add the ceremony of the *deditio;* the debtor was stripped of all his clothes, and his hands were tied on his back (Livy, ix. 10). The binding of the hands is accounted for, but why should he be stripped of his clothes?

[1] Probably it was von Ihering's intention to introduce this important section with some general remarks.

[2] This paragraph does not seem complete. In speaking of the *fetiales* we think naturally of the dragoman of antiquity, an expert, therefore, in this sense, whom the people could not dispense with during the migration.

[3] *Fetiales* from *fari*. VANICZEK, *loc. cit.*, ii. 577.

This rests upon the same principle as the house-search for stolen goods (p. 2). All solemn acts were performed in the same manner as in primitive times. The old Aryans wore no clothes; therefore no clothes were admitted here. The *deditus* is the primeval debtor: the man at the stake (p. 54) naked and bound. The sacred herbs also (*sagmina, verbena*) refer to the Aryan representation of the sacredness of certain plants.[1] After all this, we are justified in our conclusion that the *fetiales* and the ceremonies observed by them belong to the period of the migration.

2. *The Pontifices.*

§ 49. Correctly speaking, the *Pontifices*[2] were those whose business it was to make bridges (*pontem facere*), and the fact that in Rome they had their place of office by the *pons sublicius*, and that the axe belonged to the insignia of their office, point to their relation to the bridge. The *Pontifices*, therefore, were the makers of the bridges, the bridge-masters. This view has met with much opposition.[3] It was considered impossible to reconcile this inferior duty of the actual making of the bridge with the religious side of their office and the exalted position of the *Pontifices*. Let us see whether the migration cannot clear up the supposed mystery.

The bridge occupies a prominent place with a nomadic people. When they come to a stream which impedes their progress and which is not fordable, a bridge has to be prepared; and this must often have occurred during the long journey of the Indo-Europeans from Asia to Europe. The making of a bridge, however, was not a matter requiring merely physical strength for the actual work of it and the collection of stakes, beams,

[1] Examples in ZIMMER, *loc. cit.*, pp. 59–62.

[2] LIVY (i. 20, 32; ii. 2) acknowledges only one for the regal period; other authors mention several. Probably Livy has in his mind the chief one, afterwards called the *Pontifex Maximus*.

[3] Not only from modern writers, but even from the early Romans, for which and for the very strained and in parts utterly incorrect and impossible etymological derivations of the word, see Marquardt in BECKER'S *Handbuch der röm. Altertümer*, iv. p. 186.

of technical development of the Indo-Europeans during their migration.[1]

Considering the vast importance of the art of bridge-building during the migration, as shown in the preceding pages, there can be no doubt that it would be properly organized, that is, that the management would be entrusted to specially appointed men. It required more than an ordinary amount of judgment, knowledge, and experience. The purely mechanical work, the cutting and hewing of the wood and the putting together and taking to pieces of the different parts of the bridge, could be done by anyone; and yet even for this purpose there was a special division in the oldest-known military organization of Rome, the *fabri aerarii* — our carpenters. The *fabrii aerarii* of the army of Servius Tullius first appear in the metallic period; but the projection and execution of the plan of the bridge, the determination of the exact proportions, the right selection of the available material—all this could be done only by those who thoroughly understood the technical side of the matter. When we duly consider this, there can be no doubt that the *Pontifices* were these men. Besides the linguistic evidence which their name supplies, two more proofs of a practical character can be adduced—the axe, symbolizing their calling, and the fact that they had their place of office at the *pons sublicius*. For later times this circumstance contains merely a historic reminiscence of antiquity, but during the migration it was of eminently practical importance. The *Pontifices* were obliged to take up their abode in the neighbourhood of the place where the bridge had to be made, in order to superintend the work; and they had also to live near the bridge when finished, so as to be always at hand in case a sudden attack of the enemy necessitated a speedy removal of the bridge.

The priestly office of the *Pontifices* stands in the closest connection with this technical function. According to a view

[1] An interesting proof of this is the *Buleuterium* of the Cyzicans, as described by PLINY, *Hist. Nat.*, xxxvi. 15, 23: *sine ferreo clavo ita disposita contignatione ut eximantur trabes sine fulturis ac reponantur.*

much spread amongst primitive peoples, the making of a bridge is a serious crime against the river-god: it puts a yoke upon him, and he revenges himself by destroying the bridge.[1] Therefore he has to be reconciled by prayer and sacrifice. But this is not enough. If the river had been traversed on foot, the deity would have secured his own prey. He lurks in the depths of the waters, as the crocodile, thirsting for human blood; he has been robbed of this tribute by the making of the bridge, and the debt has still to be paid. This is done by throwing the old people from the bridge into the river. They would in any case have become his prey, because of their slight power of resistance, while the young people would have saved themselves; the old, therefore, are the tribute preordained to be delivered up to him. This tribute had to be repeated not once only, when first passing over the bridge, but every year. In this way the old people, who in any event would not have been allowed to live, are put to some good service for the sake of the community. It is the only service which it is still in their power to render.

The *Pontifices* have bound the river-god in fetters, consequently they are the right persons to reconcile him. Before the army crosses the bridge they offer prayers and sacrifices on both sides of the river, and by their order the Vestal Virgins throw the old people from the bridge into the water. This took place every year in Rome on the day appointed, probably the anniversary of the opening of the *pons sublicius*. On both sides of the river prayers and sacrifices[2] were offered, and then the Vestal Virgins cast the tribute to the river-god from off the bridge. Straw figures took the place of human beings; why they should be called *argei* has not yet been explained. But the Romans specially notify that they were intended to take the place of human beings (*priscorum virorum simulacra*); in

[1] The last relic of this representation amongst the Romans I detect in the fact that even in later times the destruction of a bridge by the current was considered to be *prodigium*. Evidence in Marquardt in BECKER's *Handbuch der röm. Altertümer*, iv. 185.

[2] VARRO, *de L. L.* 5, 85: *sacra et uls et cis Tiberim non mediocri ritu.*

this way the barbarous primitive custom was reconciled with the more humane ideas of later times. It is beyond all doubt that this custom actually did obtain in antiquity. We find a linguistic proof of it in the expression of later times, *senes depontani* for sexagenarians. They are represented to us as those *qui sexagenarii de ponte dejiciebantur*;[1] they are the bridge-toll, during the migration offered to the river-god each time a bridge was made; when later they became settled, once a year. That this is a custom derived from the time when all Indo-European nations still formed one whole, and therefore from the period of their migration, is evident from the fact that there are traces of it amongst the Slavs. There is even at the present time, in one of the Hanoverian districts on the Elbe, which the Wends once occupied (Wendland of the present day), a Low-German saying which the people declare was once used as a prayer when the old people were thrown from the bridge into the water.[2] Why from the bridge? Could they not have been thrown from the banks into the river? And why drown them? There were surely other means of disposing of them? My answer is the only one that fits the case: it was the tribute due to the river-god.

The ceremony demanded that the sacrifice of the *argei* should be brought by the Vestal Virgins. Why by them? We might attempt to explain it as follows: The making of a bridge during the migration involved a certain delay; the people settled down for the time being, and in token of this the sacred hearth of Vesta was erected. When the bridge was ready the breaking up of the hearth was the signal for the start; everything was cleared away; things which they would not or could not take with them were left behind. Amongst these were the old people, and they, together with all the

[1] FESTUS, *Epit.*, p. 75: *Depontani.*

[2] It says: *Kruup unner, kruup unner, de Welt is Di gram* (*Kriech unter, kriech unter, die Welt ist Dir gram*). The saying itself has been quoted before by GRIMM, *Deutsche Rechtsaltert.*, p. 487, but only as one of the many proofs of the putting to death of old people in antiquity: its reference to the bridge was unknown to him. I owe it to the personal communication of a friend who has knowledge of the country.

residue of the temporary settlement which could not be taken on the march, were cleared away by the Vestal Virgins and given to the river-god. The appearance of the Vestal Virgins on the bridge signified that "the hearth was broken up; it would now pass over the bridge. We give to thee, the god of the river, thy tribute that thou mayest let us pass in safety—that is, suffer us to cross with all our belongings to the other side."

Whether this is right or not I leave in abeyance; it does not matter for my purpose. My only object is to prove the peculiar connection of the sacred function of the *Pontifices* with their technical function, and it seems to me that the above outline proves this beyond all doubt. If they were the transgressors against the river-god, it was for them to make atonement. There was no need of any priestly qualification in their own person; they brought the sacrifice, not as priests, but as those who had committed the injury. Language testifies that originally there was nothing of the priestly character about them, as the name *Flamen*,[1] with which they denoted the priests, was not extended to them, but they were called after their technical function. The priests (of whom, of course, there would be no lack amongst the nomadic tribes) could not offer the sacrifice, for they were destined to the service of the national deities. The river-god, however, was a strange god; to make a compromise with him, as the Romans did by means of the *evocatio deorum* at the siege of a hostile city, was not feasible, because they could not assign to him another river for his habitation. All rivers had their own deities; therefore the only way to do it was as described, and this could not be done by the priests, but only by the *Pontifices*. An after effect of this originally non-priestly position of the *Pontifices* is seen in later times, when they had long since attained to the highest and most influential clerical dignities, in that they, in sharp contrast therewith, took their place behind the *Flamines* (in the clerical order of rank, the fifth place). The

[1] *i.e.* Burner, lighter of the sacrifice, corresponding with *flamma*. VANICZEK, *loc. cit.*, ii. 618.

Flamines had been priests from the beginning; the *Pontifices* had only just become so.

I believe I have thus proved that, and also how, this priestly function, according to its historical origin, is linked with their technical function. The sacrifice made by the *Pontifices* and the sacrifice of the old people were indispensable, according to the conception of the ancients, holding as they did that the making of a bridge was a crime against the river-god which called for expiation.

There are two other phenomena closely connected with this technical side of their office: both are mentioned in history in connection with the *Pontifices* during the historical time of Rome, viz., the art of writing and their relation to law.

The Art of Writing.—Amongst all other nations the art of writing is first found amongst the priests. Why, then, in Rome, not with the *Flamines* but with the *Pontifices?* Writing is noting down, drawing symbols on some substance. The first persons who had this to do during the migration, and they did it because they were obliged to, were the *Pontifices;* they had to draw the plan of the bridge, and to calculate the size of rafters, planks, and timbers, in order to be able to direct the execution of the work. During the migration several new signs were added to those already in existence, and used by the herdsman of antiquity to mark his cattle (p. 15), signs which the *Pontifex* needed for the bridge:[1] the design of the bridge and figures. Most likely it was still the cowhide which formed the writing tablet, and paint which was used for inscribing the marks (p. 17). Here for the first time we find the exact measurement of proportions, and the use of figures to note them down—the first beginnings of mathematics. From the *Pontifex,* who measured space, proceeded the measurement of time; the calculation and writing down of the proportions of the bridge led to the measurement of time—the calendar.

[1] [The Editor cannot refrain from remarking that, according to von Ihering, before the first departure of the Aryans, lists were made, from which it would appear that the art of writing was known and fairly well developed before the migration. Compare pp. 271 *sqq.*]

The *Pontifex* is the official mathematician of the people, the geometrician of space and time. This indispensable art of drawing the plan of the bridge led to the art of writing (from drawing to writing is but a step); and so is explained how it was that in Rome, not, as everywhere else, the priests, but the *Pontifices* were the first writing-masters of the people.

Their Relation to Law.—How was it that the technical bridge-makers obtained and for centuries kept such a very prominent place in the development and administration of the law?[1] The first impetus was again the making of the bridge. This was an encroachment upon the rights of the river-god, and so the legal question specially relating to the river-god was brought within their jurisdiction. We know how they solved it: by acknowledging the claim of the river-god, and paying the tribute of blood. The *jus Pontificium* had for its point of issue and centre the legal right of the deity. Hence, all its institutions and purposes.

All questions treated by the *Pontifices* group themselves first and foremost round the legal right of the deity, the *sacra*, and the closely-connected co-operation of the *Pontifices* in the drawing up of wills, *arrogationes* (a kind of adoption), the contraction and dissolution of *confarreationes;* furthermore, vows (*vota*), expiations (*piacula*) in case of violation of the *fas*, and the oldest form of law-suit by means of *sacramentum*. I hope later on to verify the view that this latter ceremony took the place of the divine judgments of primeval antiquity. The *sacramentum* was the indemnity paid to the deity for permitting the right of decision in cases of legal disputes to rest with men—in modern language, a release from their right of decision. As the blood-tax on the bridge was replaced by the sacrifice of the *argei*, so the pledging of life and soul at the divine judgments was replaced by that of cattle, the substitute for money in early times. That is why it was handed to the *Pontifices*, and by them spent for the deity; and that is why the tax was so extraordinarily high in proportion to the value of the matter involved. Compared

[1] My *Geist des römischen Rechts*, iii. § 42.

with what was at stake under the divine judgment, the change was a great gain: in the one case a human life was claimed by the deity; in the other only cattle.

In all these cases it was a question of legal relations between mankind and the deity—a claim which the *Pontifices* made in their name upon the people, and therein lay the difference of the *jus Pontificium* and secular law. With the claims of man against man, for instance, of the robbed against the robber, of the creditor against the debtor, the *jus Pontificium* had nothing whatever to do, and when the *Pontifices* extended their jurisdiction to secular law, they did so, not in their religious capacity, but in their capacity of jurists, who, in the school of divine jurisdiction, had become experts and administrators of human law. They were distinguished from the other religious functionaries, the *Flamines*, in that upon the latter devolved the care of ritual and religious dogma, whilst ecclesiastical law fell upon the former, and this, with a law-loving nation as were the Romans, at once secured them an ascendancy over the *Flamines*.

I resume the above in one sentence: All the branches of the pontifical duties may be traced back to the original demands laid upon the technical bridge-makers of the migratory period: their priestly office, to the necessity of the expiatory sacrifice to the river-god, which could not be offered by the *Flamines*, who were the priests of the national deities only; their skill in writing, to the drawing of the plan of the bridge; their chronology, to the estimation of the proportions of the bridge; their relation to the law, to the claim of the river-god upon the bridge-toll. I leave it to the reader's judgment whether a view which focuses in this manner all the different phases of the pontifical offices into one historical issue, supported by practical reasons and the evidence of language, can lay claim to probability or not. To my mind the primitive bridge is the bridge of science for the attainment of truth; and once more it has been proved with what success the conditions of primitive times may be used to explain the relics which have been preserved down to historic times.

3. *The Auspices.*

§ 50. The belief that the deity condescends, either by petition or spontaneously, to reveal the future to the children of men by signs and wonders, is innate in all nations. But it is not granted to everyone to understand the secret language spoken by the godhead. This requires special knowledge, which is granted only to a few: the astronomers, interpreters of dreams, soothsayers, astrologers, necromancers, etc. Besides this indirect revelation of the future by special signs (divination), there is also a direct revelation based upon divine inspiration (prediction), which is the privilege of the specially favoured and enlightened few—the prophets of the Jews, the seers of the Greeks and Teutons.

Among the Romans this searching into the future (*divinatio*) took the form of *auspices*, *i.e.* of a special branch of public administration. Government appointed to the post certain persons who had to be consulted by all functionaries, both at home and abroad, in all matters of importance, and whose decision was absolute, viz. the augurs. But the wisdom of the augurs was limited, confined to the one day upon which the request was made; it did not answer the question whether the action contemplated might be carried out, but merely whether it might be done on that particular day. The negative answer was always *alio die*—the petitioner may renew his request the next day. Practically, therefore, the *auspices* were of very little importance. It was so arranged that they could run no very great risks; on the contrary, the magistrates, who could easily come to an understanding with the augurs, found in their answers simply a plausible and lawful excuse for any delay they might deem desirable, thus throwing the burden of the responsibility upon the gods.

The circumstance that divination was raised to the rank of a government office, which could be fulfilled only by men, resulted in this—that the prophetesses, who played such an important part amongst both Greeks and Teutons (Cassandra, Pythia,

Velleda), could get no foothold in Rome.[1] The people followed the example of the State and adhered to the augurs, who were consulted in all important matters of private life—*e.g.* in contracting a marriage. Prediction was unknown to the Romans: they had only divination, within the limits mentioned; had they need of the other, they resorted to the Greeks—to the oracle at Delphi, or to the Sibylline Books.

Linguistically speaking the two words *auspicium* and *augur* point to the observation of the flight of birds.[2] According to language, therefore, the flight of birds would appear to have been the first sign which the Romans or their forefathers observed. Not till much later were others added, to which these two expressions were then also applied. But this conclusion, as will be shown presently, is incorrect. Primeval antiquity was familiar with a great many other signs, but these were included only later in the extension of the meaning of *auspices* and the functions of the augurs, when the signs had exchanged their original and purely practical meaning for a religious one. The right interpretation of the Roman *auspices*, as I hope to prove in what follows, is based upon a careful distinction being made between these two periods, one referring to the time of the migration, the other to that of the settlement. In the former we have to deal only with natural processes, adapted merely to the purposes of the migration—signs without any religious meaning whatsoever. It was not until the second phase, when on their becoming settled the once practical meaning of these signs became quite obliterated, that the *auspices*, in the later Roman sense of the word, *i.e.* signs interpreting the consent or non-consent of the gods, came into existence.

Archæology, modern as well as Roman, has not recognized the distinction between these two periods. It holds the religious aspect of the *auspices* to be the original one. And yet, it seems to me, there is good reason to doubt it. Such

[1] The Sibyls are of Greek origin.

[2] *Aves specere, avi-spex, auspex, auspicium*, from Sansk. *spak* (=to spy), *avi-gur, augur*, from Sansk. *gar* (=to announce). VANICZEK, *loc. cit.*, i. 203.

wonderful things are spoken of that we ask in astonishment, How could the Romans conceive them? We can understand that they counted the signs in the heavens among the *auspices* (*caelestia auspicia*), and that birds were to them heavenly messengers (*signa ex avibus*); but the idea of consulting the intestines of the sacrificial animals (*signa ex extis*) and the feeding of the fowls (*signa ex tripudiis*) to obtain the divine counsel is so preposterous, that it seems a hopeless task to find any religious conception in it. The godhead hiding in the belly of the ox or the beak of the fowl in order to answer the questionings of men—can one conceive a more grotesque idea? And why these signs at all? Had they not already the birds as messengers of the deity, not to speak of thunder and lightning? What need was there of oxen and fowls as well as of birds? One of these three *auspices* would have been quite sufficient; and, as a matter of fact, in time of war and on the battlefield, the need was supplied afterwards exclusively by fowls, which accompanied every Roman army with an official fowl-guard (*pullarius*).

And now as to the night—the first hour after midnight—the time fixed for observing the flight of birds. A more unsuitable time could scarcely have been imagined. Surely they might have waited till daylight! Upon the questions, Why this most unsuitable time of night? Why not the daytime? historians keep silence as scrupulously as upon the question of the necessity for such a multitude of *auspices*. The question is not even raised; it is enough to know that it was so; the Why does not matter.[1]

This question of the Why forms the substance of the following observations, and I hope to be able to answer it satisfactorily from the conditions of the migration. I now sum up the result of my investigations in the statement: The *auspices* owe their origin to practical, essentially secular purposes. The religious idea was in the beginning utterly foreign to them,

[1] Thus even MOMMSEN in his *Römisches Staatsrecht*, i. p. 1 *sqq.*; and by Marquardt in BECKER'S *Altertümer*, ii. 3, p. 68 *sqq.*, iv. p. 348 *sqq.*, whom one would hardly expect to be silent upon the question of the Why.

and has been added, as was the case in so many other primitive institutions, after they had lost their original and practical meaning on the people becoming settled; and this has given the *auspices* not merely another meaning, but also another form, more suitable to the subsequent conditions, but not so widely different as to prevent the original form and meaning from shining through.

The Auspices during the Migration.

I begin with the *servare de coelo* of the Roman magistrate. This required, after the place had been marked out by the augur by means of the *lituus* (augur's wand)—(*templum*)—the construction of a tent (*tabernaculum*), which was made upon a scaffolding of spears and stakes of planks, linen and leather, and which had to be open on one side. Why a tent? and why had it to be made anew each time? Why was it not left standing? It was the commander's tent of the migratory time, whence he made his observations of the sky, and the tent was always taken to pieces during the march and put up afresh.

It had to be midnight when the magistrate made his observations. Why? Because this was the plan during the exodus; the magistrate conformed in all respects to the example of the commander at the time of the migration. But why did the latter choose the strange midnight hour, during which he could not possibly observe the flight of birds? Because he had nothing to do with the flight of birds, but simply this, which the expression *servare de coelo* alone signifies—the observation of the sky. Why so? Merely to ascertain whether they could march on the following day or not. If there were fears of a thunderstorm they would not set out: the roads would be bad and the whole host, men, women, and children, would get wet through. Were the sky clear, the army set out on the next morning at the usual hour. It was the commander's duty to ascertain this beforehand, so that he might in good time send the necessary instructions to those under him, whether they were to give the signal for the start early in the morning or not; in the latter case all might sleep on till late in the day.

And that was the object in view. The commander kept awake or was called by the watch at the door of the tent, so that the people might sleep and not be unnecessarily awakened. But he did not go out into the open; he did not even rise from his couch; one look through the opening of the tent sufficed to give him the desired information. A thunderstorm behind the army did not trouble him, but only one in the direction of the route to be taken, and his tent was open in that direction. It was not only lightning, but thunder also which might presage a storm, and it was to enable him to hear the distant rumbling of the thunder that there must be silence round about the tent —hence the injunction of *silentium* in the *auspices*.

This explains not merely why the commander made his observations at midnight, but also why he made them from his tent, and only in one direction, and why lightning, which otherwise when shooting from left to right is considered the best possible sign, should in this instance have been regarded as an obstacle. We look in vain for a solution to clear up this striking deviation from the general rule; the only explanation lies in the view which I have just stated: on rainy days the march was deferred.

This custom derived from the migration period was, together with many others, kept intact by the Romans—the commander's tent, the hour of midnight, the impeding influence of thunderstorms. The nation was the army; the national council was the military council. On days when a storm threatened, it did not take place. Not surely to save the honest Roman citizens (*Quirites*) from getting a wetting in the council! This was already provided for by the rule that a storm always dissolved a national assembly;[1] but it proves that the origin of the *servare de coelo* cannot be traced back to this consideration, which, moreover, would not coincide with the fact that the commander surveys the sky only from his tent, as storms might equally well gather from behind. In after times the *servare de coelo* served the magistrates to put off a national assembly fixed

[1] CICERO, *In Vat.* 8, 20: *Augures omnes usque a Romulo decreverunt Jove fulgente cum populo agi nefas esse. De Divin.* 2, 18, 52, etc.

for any certain day. Of course the skies always coincided with their wishes, and the people knew beforehand that the assembly would not take place on that day; and this originated the legal axiom that the mere announcement of an intended *servare de cœlo* was sufficient to postpone a national assembly.

Conspicuous among the auspices were the *pedestria auspicia*, which, as Paulus Diaconus[1] declares, *a vulpe, lupo, serpente, equo, cæterisque animantibus quadrupedibus fiunt*; or, as he expresses it elsewhere,[2] *signa, quæ augures observant ex quadrupedibus*, and on the strength of which they are called to the present day by the technical name of *signa ex quadrupedibus*.[3]

Modern antiquarians have taken no exception to this account, and yet it is quite evident that it cannot be true. Since when, I ask, have snakes belonged to the quadrupeds? Either they did not come at all under the category of *auspicia pedestria*, or the expression has a meaning which might also apply to snakes. In one or the other direction Paulus Diaconus, or, more correctly, Festus, must have deviated from the truth. And the extraordinarily wide range itself which he assigns to this *auspicium* (it is supposed to include all manner of quadrupeds, horned cattle and horses) shows that Festus must have made some mistake in the rendering of it. The *observant augures* allows of a twofold interpretation. Either the signs afforded by the quadrupeds were observed by the augurs—which would mean that an augur got up to see if any quadruped, ox, horse, ass, dog, cat, etc., was anywhere within view: an opinion, the very suggestion of which must be at once dismissed as preposterous—or else they were by him *expounded*. That would mean that someone went to him for advice as to what could be the meaning of his meeting any one of the above-named animals. This view is no better than the other.

This problem also is solved if we imagine ourselves back in the time of the migration. On the march they met with wild

[1] FESTUS, *Epit.*, p. 244: *Pedestria.* [2] *Ibid.*, p. 260: *Quinque.*

[3] MARQUARDT, *loc. cit.*, iv. 360: "the *exquadrupedibus*, also called *pedestre auspicium*."

animals—wolves, snakes, etc. What happened? The one told the other: "the moral is that it is not safe here; let everyone be on his guard; let none separate from the main body." The *signum* given by the animal explained itself. There was no need for augurs: the warning was understood by the most ignorant. How it came to be called *pedestre signum* is also evident; it was a sign observed by the army when on the march (*pedestres* = foot-soldiers. Horsemen were not known during the migration; foot-soldiers and the army were synonymous), in contradistinction to the *signum ex coelo* observed by the commander from his tent, *i.e.* in a condition of rest; a more appropriate designation could not have been chosen: the *sign of the march* in contrast to the *sign of the tent.*

These *pedestria signa*, which refer to the pedestrians who actually observed them when on the move, Festus transforms into signs passively observed on the animal in motion—a gross linguistic error, as the Latin tongue applies the expression *pedester* to people only, never to animals; *pedestria animalia* occurs nowhere to my knowledge. The representation of the animal in motion would as a matter of course be applied to quadrupeds. The birds were already provided for in the *signa ex avibus*; so only quadrupeds were left. Festus would certainly never have mentioned the snake if its name had not been found in his source of information. His thoroughness, however, did not allow him to pass it by unnoticed, and so it was included with the quadrupeds. To this false interpretation of the word *pedestria* Festus adds a not less false conclusion. According to the linguistic usage of later times the *signa pedestria* were also counted among the *auspicia*, and as it was the business of the augurs to observe and to interpret the auspices, Festus includes his *signa ex quadrupedibus* amongst those *quæ augures observant*, which, whether the *observare* refers to the observation or the interpretation, most decidedly cannot be correct.

Our conclusion is that the *signa pedestria* had during the time of the migration the same practical meaning as the

servare de coelo. In both instances it was practical observation; in the one case by the army, in the other by the commander. In neither of the two is there the slightest need to bring in religion in order to be able to explain them; they explain themselves, and this, according to my principle of a sufficient ground, settles the matter for me.

Should not this view of the originally practical meaning of the Roman *auspices*, which in these two instances has proved to be the correct one, be capable of further application? Let us try whether we cannot bring the remaining Roman *auspices* in relation to the purposes of the migration. For this purpose I would request the reader to divest himself for the time being of all thought of their later religious meaning. If, as I trust, he is convinced that in remote antiquity the two *auspices* referred to were utterly devoid of it, he will allow that the others may have been devoid of it also. This is all I ask; I desire nothing more than that he should abstain from the false conclusion that the Roman *auspices*, because in after times they had a religious meaning, must have also had it in primitive times. I will grant that they may have had such. The final decision as to whether they actually did possess it or not will have to be determined by the weight of evidence which can be thrown in the balance for or against it.

First of all I give my attention to the inspection of the intestines of the sacrificial animals (*exta*). The correct interpretation of these was in later times entrusted to the Etruscan *haruspices*, who had complete control over them. The institution itself was old Roman.[1] Its first origin, however, lies far beyond Rome; it belonged to those institutions which the Latin races brought with them from the migration, and, unlike the other Indo-Europeans, adhered to long after. When they became settled, the original purpose, merely intended for the conditions of the migration, had been lost sight of. In what did it consist?

[1] MARQUARDT, *loc. cit.*, iv. p. 362: inspection of the *exta* at every sacrifice *ritu Romano.*

The wandering people arrive at a region which tempts them to stop. Shall they stay? That depends upon whether it is a healthy neighbourhood, not only for the people, who can judge by their own feelings, but also for the cattle; that is to say, whether the food and water there are wholesome. One fatal experience—and these the migrating nation cannot have escaped on their long wandering—would be sufficient to sharpen their wits and to teach them the means of ascertaining it; and a nation living in a state of nature would find it by intuition. They would catch some of the native cattle, kill them, and examine the nobler intestines—heart, lungs, liver, kidneys. If they were in a healthy condition they would have stayed; if diseased, the march would have been resumed. The inspection of the intestines, therefore, has the same practical significance as the observation of the sky. In both cases the question is: Shall they stay or go? In the former case it refers to a considerable time, in the latter to the next day only.

That the condition of the intestines of the animal justified them in forming a conclusion as to the food and the healthiness of the district has, as Cicero tells us,[1] already been stated by Democritus, who brings the inspection of the victim in connection with it. Cicero rejects this view with scorn and derision as the foolish notion of a naturalist attempting to explain supernatural things by natural means, and thereby overlooking what lies close at hand. He argues that if this view be correct, the liver of all the animals in that district should be either healthy or diseased; but as it is only verified in a few cases, the conclusion is evidently incorrect. There must, therefore, be a special reason not to be explained on natural grounds. Cicero is quite correct from the point of view of his own time, for then there was no further need

[1] CICERO, *De Div.*, ii. 13, 30: *Habitu exterum et colore declarari censet . . . pabuli genus et earum rerum quas terra procreet, vel ubertatem vel tenuitatem, salubritatem etiam aut pestilentiam extis significari putat.* With regard to the attitude of the Stoics towards the Roman doctrine of divination in general, see CICERO, *ib.*, i. 52, 118; they themselves could not have given their opinion more strikingly than Cicero expresses it here: *non interesse deum singulis pecorum fissis aut avium cantibus, neque enim decorum est nec diis dignum.*

to ascertain the healthiness or unhealthiness of a place by an inspection of the intestines of the sacrificial animal. But this later aspect of affairs was not at all what Democritus had in view. All that concerned him was the question: What can have induced the people to subject the intestines of the slaughtered animals to such an examination? and I believe he has hit upon the right interpretation. I have borrowed my view of the matter from him. I am indebted for it to the idea which has been my guide in all my investigations into the early history of Roman law—the realization of the conditions of the migration. Nevertheless, I rejoice to have been enabled to raise out of its unmerited obscurity, and to restore to honour, the view of my predecessor, which found so little favour with antiquarians that they have left it in such unmerited oblivion.

For me the question of the historical origin of the examination of the intestines is quite settled by the arguments here adduced. A pastoral nation knows the importance of food and water for the cattle, as also that the beneficial or non-beneficial properties of the same can be gathered from the state of the intestines. I for one require nothing further to be convinced that the Indo-Europeans did actually make use of this means during their migration. They could not have been the people they were if they had neglected it. Those who reject this explanation can take refuge only in the notion that in remote antiquity the people believed that the deity revealed himself in the belly of an ox (*interesse deum singulis pecorum fissis*).

A vestige of the original meaning of the inspection of the intestines has been preserved in a technical expression of the Roman augural system: *pestifera auspicia.* Paulus Diaconus[1] presupposes that *quum cor in extis aut caput in jocinore non fuissit*, and Festus[2] interprets it by *quae mortem aut exilium ostendunt*, and speaks also (p. 210) of a *pestiferum fulgur, quo mors exiliumve significari solet.* It is hardly necessary

[1] FESTUS, *Epit.*, p. 244: *Pestifera.*
[2] *Idem*, *Pestifera*, p. 245.

to remark that the expression *pestiferum* did not originally refer to lightning; it could come into existence only where there was something tangible to represent the *pestiferum* —the *exta*. But what have death and exile to do with the representation of the *pestiferum*? Neither can this, therefore, have been the original meaning of the expression; nor do the two deficiencies which Paulus Diaconus mentions give us any clue. But the riddle is solved when we bring the view as expounded by me to bear upon the matter. The abnormal state of the intestines justifies the conclusion of the *pestilentia loci*.[1] It threatens the cattle with destruction; the sign is therefore, in the strictest sense of the word, a *pestiferum*, *i.e.* threatening destruction. An imperfect passage of Festus refers to this same thing (p. 157, *muta exta*), in which the words *a veneno talique* (*re*) . . . *instare periculum* have been preserved. The least forced connection with poison is the poisonous herbs of the field (l. 19, § 1, Loc. 19, 2: *herba mala*, afterwards also *venenosa*).

We meet with the *exta* in connection with *pestilentia* also in the Hirpine legend mentioned above (p. 300), with reference to the migration of the Indo-Europeans. I now offer the explanation there referred to of the link between the *exta* and the migration. They form, together with the other features there mentioned, such an essential part of the migratory period, that we can quite understand how the legend came to employ them in its own way.

The slaughtered cattle bear witness to the healthiness of a district. Let us see whether we cannot obtain a similar interpretation from the feeding of the fowls (*tripudia*).

In their wanderings they come upon places where forest and field fruits, with which they are unacquainted, abound, but which may possibly be fit for human food—berries, acorns, nuts, grain of various kinds, bulbous plants, etc. Are they poisonous or wholesome? The manner in which a primitive nation solves

[1] The use of the expression in this sense is familiar; see for example 1, 2, § 29, *Ne quid in loco* (43, 8) *locus pestilentiosus*. CICERO, *Agr.*, 2, 26: *agrorum genus propter pestilentiam vastum atque desertum*.

this question is, again, quite simple. The fruit, either cooked in the form of porridge (*puls*) or raw, is cast before the fowls. If they eat it and it agrees with them, it is wholesome; if they reject it or die of it, the food is poisonous. No doubt the people themselves began by making some fatal experiments, which warned them to be cautious, and led them to the idea of experimenting on fowls.

All the four *auspices* which we have thus far considered can be reduced to one common aspect, *prophylaxis*. There are inconveniences and dangers which can be averted by heeding certain appearances. We may therefore bracket them all together as signs of warning: an approaching thunderstorm, wild animals, the diseased state of the intestines, fowls rejecting the food thrown out to them; and the same holds good for the *signa ex diris*, upon which I have nothing to remark. But it does not apply to the *auspices* in the original sense of the word, the *signa ex avibus*. The fact that I have succeeded in tracing back the historical origin of the above-named *auspices* to some practical motive of the migratory period has led me to the idea of adopting the same method for ornithoscopy. I am quite willing to confess that I should hardly have conceived this idea of my own accord, for the notion that man recognizes in the bird a heavenly messenger sent to announce the counsel of the gods has for me nothing objectionable in it from a religious point of view; and even the peculiar manner in which the flight of the birds was watched by the augur from some elevated position, and after duly marking out the field of vision, in which after I had formed my own conclusions I found an unlooked for confirmation—even these would hardly have brought me to this point.

The wanderers chance upon some lofty mountain-range, which obstructs their progress.

Is there an easier pass across the mountains? Possibly natives who had been captured could give the desired information. But what were they to do when they happened to be in an uninhabited district, or when the natives themselves did not know? There the bird came to the rescue. It is

the bird of passage which twice a year passes by that way, and always chooses the mountain passes. The bird of passage knows from experience the best way to go. If it has to cross the sea, it chooses a spot where it is narrowest, and it knows what islands there are for it to rest on. On land he follows the course of the great rivers; across mountains he keeps to the passes, while he avoids the waterless steppes and the bare snow-crowned mountain-peaks, which give him no prospect of finding food. To study the flight of the birds, therefore, means to obtain information about the mountain passes and the course of the great rivers, and the keen power of observation common to all primitive nations warrants our supposition that this simple means of ascertaining the path they should follow was not unknown to the Indo-Europeans on their march.

In order to observe the flight of the birds the augur ascended some elevated place. Why? Because he must have a wide expanse of sky to survey, to follow the direction which they take either across the mountains or by the side of the river. If the object had been merely to *watch* the birds, the augur might just as well have stationed himself in the plain; but the object in view required observation from some elevated spot (*auguraculum*). There he made out the *descriptio regionum* by dividing the expanse of sky which he surveyed into four equal squares, upon the principle of the four points of the compass, which in order to get quite correct he notes down upon a tablet, and on this he then proceeds to mark the direction taken by the birds. The fact that the two fundamental lines which divide the squares were drawn exactly from north to south and from east to west, enabled him to make use of these same directions at each succeeding stage of the route, to test them anew, or to improve them as the case might be; and these directions served the army for their line of march. For the very reason that it was not a question of mere physical watching, *spectio*, which anyone could do, and therefore the magistrate as well as the augur, but because it required a certain amount of skill and ability which not everybody possessed—a keen eye, accurate determination of the points

of the compass, the recording of the direction taken by the birds, and experience—there was need of special experts, and in that capacity they were called augurs: *au-spex* anyone could be; *augur*, only the specialist. The magistrate could not make up the *descriptio regionum*—the *augur* was needed. The original meaning of *augures* therefore was, like that of *Pontifices*, a purely technical one—neither of them had anything in common with religion; both treated of some mathematical problem, of geometry and the art of drawing: with the *Pontifices*, to ascertain the dimensions of a stream, its width and its depth, and the corresponding size of the bridge; with the *augurs*, to calculate the dimensions of the skies as the foundation for describing the flight of birds.

In this way the *descriptio regionum* finds a full and satisfactory explanation, while, without it, it remains wholly inexplicable. Who, for instance, merely bent on watching the birds would scrupulously divide the heavens into four equal regions, carefully calculated by the four points of the compass? It would be utterly senseless. The original meaning, therefore, of ornithoscopy cannot possibly have been the mere *watching* of birds, but the ascertainment of the direction of their *flight* with mathematical precision. Based upon the above supposition that the bird of passage served as guide to the migrating host, this exact observation and description of the same followed as a matter of course.

The Bird as Guide of the Army.—As such it figured, as mentioned above (p. 303), according to tradition in the form of the *picus*, and this I take to be a positive proof in favour of my argument. Not birds in general but only the bird of passage could act as guide on the march, and it only for the above-stated purpose, to acquaint the people with the position of mountain passes and the course of great rivers—in short, to point out mountain-ways and water-ways. Thus it is clear that after they became settled, when the practical employment of the bird of passage had passed away, the significance of its original function was transferred to the *picus;* for language denotes him as the one that spies, directs. There was no other

bird which could more adequately express it. From the one that directs it has been transformed into the god *Picus* who predicts, and this gift of prediction the Teutons also attribute to the magpie; it, as well as the *Picus* of the legend, are survivals of the migratory period of the Indo-Europeans, when birds still led the way.

This ends my investigations of the historical origin of the Roman *auspices*. The migration point of view has been maintained throughout, and has, to my mind, spread a radiant light upon a portion of Roman antiquity hitherto wrapped in utter darkness. A satisfactory explanation has thereby been given for all the above-mentioned (p. 303) strange phenomena of the Roman system of *auspices*, upon which the current view of the originally religious origin of the same throws no light whatever: for the night, for the commander's tent, for the fact why lightning, otherwise the most propitious of all omens, should be an obstacle in the way of the meeting of the national assembly, for the three *auspices*, which defy all connection with any religious idea whatever—the *signa pedestria*, *ex extis*, *ex tripudiis*—last, but not least, the choice of such a number of *auspices* where one would have sufficed. Inexplicable from the standpoint of current opinion, this view, when based upon the principle which I have laid down, becomes not only quite intelligible but almost imperative. Neither could birds take the place of slaughtered animals and fowls, nor *vice versâ;* nor could either of these latter two take one another's place. They all have their appointed mission which no other can fulfil. Again, the appointment of special experts for the observation of birds appears, in the light which I have advanced, as imperatively necessary, since from the other standpoint it leaves room for the question: Why special experts? and why have they to stand on some elevated spot? and why the *descriptio regionum?*

The *Pontifices* themselves resort to the *auspices* in their official duties. If there was no need for any special professional knowledge, if it was merely a question of religious interpretation, ornithoscopy might just as well have been

entrusted to them or to some other priestly order. But during the migration the point in question was not the *interpretation*, but the *observation* of the birds; and considering the exactness with which it had to be performed, and the only correct demarcation possible by their means of a line of route at all times available, we can understand why experts were as much needed here as in the making of bridges. Priests in olden times could no more take the place of *Augurs* than of *Pontifices*.

Practical purposes are to be served by all these observations, which afterwards bore the name of *auspices*, originally only intended for one of them. Endowed with the keen insight of a primitive race, the wanderers take note of all the phenomena which can help them to form their plans during the migration: the sky, whether it will rain during the course of the day; wild animals, that they may be on their guard against them; the intestines of animals, thereby to judge of the healthiness of a district; the feeding of fowls, to ascertain whether the food is fit for the people; the flight of birds, to find out thereby the best way to go—sky, wolves, snakes, oxen, fowls, and birds all help to instruct man how to act.[1] These matters need no artificial, far-fetched interpretation; they all have a direct practical significance, intelligible to the ordinary man; and if I were to sum up the total meaning of the system of *auspices* during the migration in one single word, I should call it the Prophylaxis of a primitive race.

How greatly my opinion of the separate omens is strengthened, or, where necessary, completed by this uniformity of their origin, I need hardly state, and I may trust that criticism, even if questioning my views, will keep this fact in mind.

I do not know whether I must expect the objection to be raised: We meet with the system of *auspices* only amongst the Latin races, not amongst the other Indo-European nations; hence it cannot have originated during the migration, but it

[1] Compare also what has been said, p. 165.

must have been on Italian soil, as otherwise traces of it would have been found amongst other nations. This objection contains in reality an argument for the correctness of my view. The institutions intended for the march had lost their meaning when the march came to an end. At the end of the journey the staff is put in the corner. What has to be explained therefore is not its *discontinuance* among the other Indo-Europeans, but its *continuance* with the Latins, or, more correctly speaking, the change which it underwent on Italian soil.

The Auspices at the Time of the Settlement.

All other Indo-European nations abandoned virtually all the institutions of the migration after they became settled, and as far as practical interests were concerned the Romans did so likewise. The imperfect institutions of primitive times were exchanged for the more perfect ones which the progress of technology had made possible. But where it was not a question of practical interests they preserved the institutions of antiquity as things sanctified by reason of their age, in some cases quite unaltered, as the house-search after stolen goods, the wooden spear, the stone axe of the *Fetiales*, the wooden bridge for the *Pontifices*, the execution of capital punishment by scourging performed by the *Pontifex Maximus* himself, the oral form of calling together the *comitia calata*, and the reading of the calendar; or else in somewhat altered form, adapted to the requirements of later times, as the offering of human sacrifices from the bridge (*argei*) and the system of *auspices*. All these primitive institutions, with the exception of the house-search, which was strictly confined to private jurisdiction, assumed a religious character. It is, therefore, not surprising that the same phenomenon occurred with regard to the *auspices;* on the contrary, it would have been very strange if these alone had formed an exception to the rule. As a matter of fact, it was just in their case that the subject-matter was specially adapted to such a conversion, as it was closely connected with religion—prediction of the future. Nature instructing the

people as to what to do or to leave undone gave place to the deity foreknowing the future.

The existence of augurs had, to my mind, a very special influence upon the subsequent development of Roman *auspices;* first of all for transmuting the secular into a religious institution. It was the same as with the *Fetiales* and the *Pontifices.* The duties of these functionaries were in the eyes of the people hallowed, sanctified by their great age; in the language of the Romans, *religiosum a noli me tangere.* And this religious halo extended also to the officials themselves—the primitive technologists, the *Pontifices* and the augurs, became divines, a priesthood. The extension of the professional duties of the augurs finds likewise its parallel in that of the *Pontifices.* Appointed for the purpose of observing the flight of birds, they were later on considered the most suitable persons for looking after other omens also, the original meaning of which, together with that of the flight of birds, was lost sight of after they became a settled nation. So the word *auspicium* received a very general interpretation in place of its originally narrow one, and included omens of all kinds. The distance between the augur of ancient and modern times is as great as between the *Pontifex* of primitive times and of the most flourishing period of Rome; but neither the one nor the other had to usurp their place or their influence—it was the natural consequence of the gradual development of their profession.

If the omens of the migratory period were to be retained after the nation had become settled, it was for the augurs to adapt them to the altered circumstances, and this must not be forgotten when discussing the views which I have here laid down.

As a single example I will simply mention the transfer to the *auspices* of the *tabernaculum* and the night-time for the *servare de coelo.* This will show as well as any other how mistaken it would be to argue from the appearance of the augurs of later times in opposition to my reconstruction of the omens of primitive times. What holds good for these holds good for all the other *auspices.*

I conclude my investigations of the Roman system of *auspices* with the statement that in order to understand it we must bring it into connection with the conditions and purposes of the migration. We then perceive that it is *the relics of an originally purely practical institution to meet the essentially practical demands of the times.*

When now, in conclusion, I invite the reader to a retrospect of all that I have stated in this and the preceding Books, I feel confident that I have proved beyond all doubt that of the Old Roman institutions a considerable portion is derived from the time of the migration. I feel sure that this standpoint, from which I, a layman in the domain of Roman archæology, have reaped such abundant fruit, will prove a veritable vantage-ground to the specialist.

VI.

MORAL INFLUENCES OF THE MIGRATION

A Fragment.

§ 51. How was the Indo-European evolved from the Aryan? The following investigation will furnish the answer. He left his home a different man from what he had become when he set foot on European soil—at the time when he first made his appearance in history. Nor is he invariably the same. The Greek differs from the Roman, the Roman from the Celt, the Celt from the Teuton, the Teuton from the Slav; yet one leading feature runs through them all—more or less defined—which makes the Indo-European stand out in strong relief to the Hindoo, with whom he shares a common descent: it is the type of the European in contrast to that of the Asiatic.

What is the cause of this complete transformation? It was not merely the result of time, or, in other words, the gradual maturing of the germ implanted in the people from the very beginning. If that in itself were sufficient to bring about a revolution in national character, why has this germ developed in the Indo-European so totally differently from what it has done in the Hindoo? Together with this primary germ, therefore, some other factor must have been at work. Was it the soil upon which they lighted? Without a doubt this has a very decided influence upon the formation of national character.

A nation living close to the sea is bound to be a seafaring nation, and therefore of necessity different from a people of the interior. A people on the Equator or at the North Pole removed to the temperate zone would not be recognizable after

some thousands of years any more than plants or animals under the same circumstances. But it has already been observed that the transformation of the Aryan into the Indo-European cannot be attributed to these terrestrial influences; these were and ever have been different for the single branches of the Indo-European race, and yet a certain family likeness runs through them all. The reason for this can be found only in something which they all shared alike, and as such there is nothing but their common migration. By this means they have become what they are—Europeans. It is not Europe which has made the European: he was European before he settled there, and this he owes simply to the far-reaching influence of the migratory period, which hardened him and developed his character. It had upon him the same effect that the sea has upon the sailor to whom I compared him above. This period must have been of very long duration to produce such a total transformation; it may have lasted many hundred, perhaps a thousand, years. This proves that we must not picture to ourselves the march of the daughter-nation into Europe as one continuous campaign. The people must have frequently settled down in districts which suited them, and many generations may have come and gone before they resumed their wanderings, not for the mere pleasure of wandering, but because the land no longer sufficed to nourish the population, much increased during this prolonged time of rest and peace. Then the superfluous portion of the population set out, just as had happened previously from the original home; those that had plenty remained behind, but the hungry set out on the march.

This was the way it happened in the second home (as I have called it above), which I hope to verify later (Book V.). No less than seven of these periodical blood-lettings have been recorded thence, although the people were at that time acquainted with agriculture, which even with the most imperfect management could support a much larger population than a pastoral life. How much more true would this not have been in the past when cattle-rearing was the only occupation. It cannot be supposed that at that time the entire nation would

desert a settlement once gained. To those who were comfortably off there was no inducement to exchange a satisfactory and well-secured existence for an uncertain future. They therefore remained at home, and only those who had nothing to look forward to set out on the march. Of those who remained behind, history tells us nothing: they have disappeared without leaving a single trace; only those who stayed behind in the second home—the Slavs of to-day—have remained.

The migration of the Aryans towards Europe, therefore, was not that of an entire nation, but a periodically recurring migration of the superfluous portion of the people. That which took place at the time of the departure from the original home was repeated during the migration. The precedent established at the beginning regulated their subsequent movements, and in this sense the migration was a standing institution of the Indo-Europeans. This, I believe—as already stated above (p. 292)—gives us the historical link between the *ver sacrum* and the first exodus of the daughter-nation. It is next to impossible that the recollection of this remote event of the shadowy past could have been kept alive for so long unless their memories had been refreshed from time to time by its repetition during the migration.

Special interest attaches to the establishment of the moral influences of the migration upon the people. It is equal in importance to the Darwinian theory of the evolution of animals and plants—the theory of selection in the hands of history, the Survival of the Fittest. At every fresh departure the same process is repeated: the strongest, the bravest, the most daring go forth; the weaklings, the timid, the irresolute, and the old remain behind. It is always the best seed which is perpetuated, and each time the stock itself becomes more perfect. The great-grandsons of the man who once left the Aryan home had already become different from what he was. He had been nurtured by the wife of the peaceful herdsman, not by the warrior's wife, the she-wolf, who, together with her mother's milk, imbued these great-grandchildren with the nature of the wolf. And the

great-grandson of this great-grandson possessed these qualities in increased measure;—when the causes which have increased the capital continue, the capital itself must grow. And care was taken that they should continue. The long periods of rest, stretching probably over several generations, were followed, when over-population became evident, by periods of military campaigns, and these involved the sacrifice of their best, the most vigorous, the strongest, the healthiest, the boldest part of the population of both sexes—Darwin's Natural Selection.

Thus it is not only the migration and the length of its duration which out of the effeminate Asiatic formed the bold, strong European, though that alone would have sufficed, owing to the martial life and constant readiness for war which it imposed upon them, to cause a powerful change in the national type, converting the herdsman into a soldier. In addition to this, however, the above-named fact of Natural Selection was constantly active in the formation of the European. It was always hunger which drove him on, ever on, until he reached the land where it could permanently be satisfied, until finally, after the migration of the pre-Christian period had ceased for many centuries, it once again, in the Christian era, set the Teutons in motion. Some have tried to account for this by the roaming propensity of the Germanic race. We might as well speak of a propensity for eating in individuals; the eating propensity is hunger, and the roaming propensity of the Teutons has no other source. Supposing that at the division of Europe Gaul had fallen to the Teutons and Germany to the Celts, the history of Europe would not have been one whit different from what it has been, and the men of science would have talked of the propensity for roaming of the Celts and the stationary propensity of the Teutons. This assumed roaming propensity is on a par with "vital power," the product of an obsolete period of natural science; and I trust it will share its fate.

To hunger were later added the desire for booty and the joys of adventure and military exploits, to which may be attributed the petty marauding expeditions in which the Teutons

delighted, and for which they enlisted volunteers in the form of retainers, as also the historically highly important expeditions and conquests of the Norsemen. But this motive is not sufficient to induce an entire nation, or even part of one, to leave its home and to face an uncertain future. It requires necessity, *i.e.* hunger, either, directly, to set the people in motion, or, indirectly, to force them to submit to another and more powerful nation. Everywhere throughout history the battle-cry has been "Land! land!" not only with the Teutons, but also with the Celts in Upper Italy, when, under Brennus, they set out for Central Italy. For a grant of land they too are willing to lay down their arms (Livy, v. 36: *si Gallis egentibus agro . . . . partem finium concedant*). This same motive underlies the establishment of colonies by the Greeks and Romans—lack of food for the increased population; but the kind of assistance rendered was far superior to that of the migration, for in the latter case the home was sacrificed, while in the former it remained intact, and when only part of the population migrated, the connection with the mother-country remained unbroken.

Here the revised MS. ends; but I found the following notes:

Importance of the migration for the history of civilization.

1. Familiarity with military discipline—Political training—Obedience (in their own interests)—A higher stage of training in obedience—Oriental despotism.
2. Development of the sense of individuality—Selection of the fittest—Selection characteristic for the Indo-European—The East: birth—Reward of ability not withheld in this case—Personal interest of the selectors.
3. Monogamy—Woman's position secured by her ability; she shares the dangers and toil of the man—Character—The European woman the result of the migration—Example of North America—Respect of man for woman.

After-effects of the migration on the Roman people—Nowhere more pronounced—Greeks influenced by contact with nations of higher civilization (Phœnicians)—Spirit of conservatism the product of these relations—The Romans of primitive times came less into contact with other nations than did the Greeks.

1. Political spirit—Respect for the law—Rule and order—Influence of the law by means of them—Military despotic spirit also therein.
2. Preservation of the external forms of the migration—*Curiae—Decuriae—populus* and *senes—Rex*—Division of the land—*Ager publicus, gentilitius.*
3. Position of the woman—Difference between Greeks and Romans—Dorians (Sparta = the *Rome of Greece*).

Fifth Book

THE SECOND HOME

§ 52. We have no information whatever as to the length of the migratory period of the Indo-Europeans. But this absence of external evidence is balanced by the conclusive proof of two facts, which leave us no room to doubt that their wanderings must have occupied an exceedingly long period, which may be counted by hundreds, perhaps by thousands, of years. The first is the total transformation of the *character* of the combined Indo-European tribes. Together with the characteristics which distinguish them from each other (individual traits), there are certain others which occur with them all (common traits). The former pertain to the time *after* their separation from each other, to the divers influences which the particular circumstances, destinies, and conditions—above all, the contact with foreign nations and the peculiarities of the soil on which they settled—exercised in varying degrees upon each one of them. The latter belong to the time *before* the separation. If we compare the character of the combined Indo-European tribes with that of the Aryan mother-nation, the difference between them is so vast that it must have taken at least a thousand years to bring it about. Nothing alters more slowly than the character of a nation; the very slow rate at which language is transformed might by comparison be called rapid. The space of time from the moment of the separation of the different nations until their final settlement, or at least until they came within the sphere of history, must also be measured by many centuries; a thousand years would not be too high an estimate. Witness their languages, which in this space of time had undergone such changes that [illegible] only by the modern

science of philology that their common origin has been discovered, the different dialects being so altered that no two nations can understand each other.

The history of the migration of the Indo-Europeans, therefore, is divided into two parts: the period of unity and that of isolation. Between the two comes a third period, which forms the subject of the following pages—their abode in their *second home*, as I will call it.

The exceedingly long space of time over which the migration was spread, justifies the conclusion that their progress must have been very slow indeed. It was not an impetuous, restless pressing forward, after the manner of the wild hordes which overran Europe within historic times: Huns, Avars, Mongols—a tempest let loose; but a very gradual, irresistible advance—the slow progression of the glacier. Wherever food was found for man and beast, there they settled, remaining until the soil was exhausted. *Once*, however, they settled down for a long time, for at least several centuries; they had found the land that they had come in search of—a new home. Their stay in this new home was a turning-point in the history of the Indo-Europeans: it marked a step forward which carried with it the most important consequences—the transition to agriculture. The people which they found there and subjugated were agricultural; from them they learned to till the ground, and when, later on, they again left the country, they carried this knowledge with them.

The land must indeed have been fruitful and of great extent to be able for some length of time to supply the conquerors as well as the native population. This justifies the conclusion that it cannot have been a mountainous district; it must have been an extensive plain. This second home must have been at a considerable distance from the original home, otherwise a knowledge of agriculture would have penetrated to the latter, and then the exodus of the Indo-Europeans would perhaps never have taken place, any more than the advance of the Aryans into India. In both cases the herdsman came down from his mountains into the plain below.

Mountains are the natural foster-places for the herdsman, plains for the agriculturist. It was necessity alone which forced the agriculturist to bring the mountain slopes under the plough. Agriculture first saw the light in the wide plains in warm districts, where large rivers, such as the Euphrates, the Tigris, and the Nile, made an extensive system of irrigation possible (see above, p. 81).

The evidence for the correctness of this view I take from the two facts to which language testifies, that agriculture was unknown to the mother-nation, and that the Indo-Europeans became acquainted with it before they separated. A passing contact with an agricultural people and a mere passing observation of agriculture would not have been sufficient; it needed long practical experience, not so much for learning the art, for which a relatively short time would have sufficed, but rather that, by recognizing the advantages of agriculture over pastoral life, a total metamorphosis might take place in the outward life of the people, which can be the work only of centuries —the transition from pastoral to agricultural life. The Indo-European entered the land a herdsman; he left it an agriculturist, which he has remained ever since. It is only the soil which is unfit for cultivation that he uses as pasture-land. The mountains, the hills, and the plains are brought under the plough. Agriculture had not reached a very high degree of perfection amongst the people from whom the Aryans learnt it. They knew not the use of iron for the manufacture of the plough, sickle, or scythe. The plough was made entirely of wood, and without wheels—its most primitive form, the so-called "hook-plough." Neither did they use cattle for the purpose of drawing the plough; men and women did this work. Language refers to this in the expression *con-jux* (Gk. *σύζευξις*, from *ζεῦγος* = yoke-ox); it signifies a person yoked to another (*jug-um*):[1] hence *con-jug-ium* = sharing the yoke, *i.e.* marriage. The hypothesis that this expression was originally metaphorical,

[1] The yoke (Sansk. *juga*) was known to the Aryan mother-nation, though not applied to cattle yoked to the plough but to the cart. ZIMMER, *Altindisches Leben*, p. 248.

as in our marriage-yoke, is quite unfounded; it is contrary to all the rules of philology, for language always builds its expressions upon visible representations. The yoke, therefore, must here be taken in its literal sense, quite apart from the consideration that the description of the marriage-bond as a yoke applies only to the woman, not to the man. A reminiscence of the common yoke of primitive times is still preserved in the Roman marriage customs. After the nuptials the wife instals herself in her husband's house with this formula: *ubi tu Gaius, ego ibi Gaia, i.e.*, "where thou ploughest, I plough with thee."[1] Our expression "marriage-yoke," therefore, is a relic of remote antiquity, like the expression, *Was treibst du* (p. 14); for the right understanding of both we must go back to the pastoral life of primitive times, and to the first beginnings of agriculture.

The art of manuring was as yet unknown, which is proved by the fact that there is no common expression for manure in the Indo-European languages. In each one of them it is different—(*κόπρος, stercus, Mist, dung, manure;* Russ., *nawoz, nazom*; Pol., *nawoz, gnoy*; Hung., *knui*)—which is equivalent to saying that the thing itself was not known to them till after they had separated from one another. This seems to me very significant in two ways. In the first place, because it justifies us in accepting that the ground must have been exceedingly fertile, being capable to feed for hundreds of years the victorious as well as the native people, coinciding with my theory of the alluvial soil of the river-bed of the Volga. In the second place, because it explains how the soil, in the absence of manure, at last came to be so exhausted that it could no longer support the population, the result of which was the periodically-recurring migrations. It was the soil which invited the Indo-Europeans to remain, and again the soil

[1] According to the Greek lexicographers *γαῖος* means *βοῦς ἐργαστής*, the ox. Whether the note of SERVIUS, *ad Aen.* 4, 16: *jugum, quod imponebatur matrimonio conjungendis*, can lay claim to historical authenticity, or whether it has not rather an etymological meaning, I leave to other writers; as far as I know, none have mentioned this custom. For the Teutons TACITUS, *Germ.* cap. 18, mentions *juncti boves* as a symbol that the wife is *laborum socia*.

which after hundreds of years sent them forth on their wanderings.

Whether corn was threshed in those days, or was still, according to the primitive custom, trodden by man or beast, is uncertain; but they did grind it in handmills, and it must have been at this time that the Indo-Europeans first became acquainted with these, as the expressions for them agree in all languages (*μύλη, mola, Mühle,* mill; Goth., *malam*: Ill., *melim;* Old Slav., *mija*; Lith., *malti*), while the mother-nation has no expression for it.[1]

Land and soil were not private but public property. This is undeniably proved by the fact that both Teutons and Slavs, not only when first occurring in history, but also for a considerable time afterwards, were quite unacquainted with the private possession of pasture land, woodland, and arable land. If it had been known in the second home, this more perfect form of management would certainly never have been exchanged for the less perfect form of common possession. To exchange the more perfect for the less perfect is an unheard of thing in history. History mentions the change from public to private possession, but nowhere from private to public. There is no trace of this primitive state of affairs amongst the Romans. At the foundation of Rome Romulus distributed the arable land by giving every citizen two acres (*jugera*) in perpetuity (*heredium*), which, bearing in mind that Romulus is the personification of primeval antiquity, signifies that private possession of arable land was a primitive institution. The Latin races could not have imported it from the land where first they learnt agriculture; they must have found it in use with one or other of the nations in their new home.

There are two methods for the cultivation of common arable land: the one is joint-cultivation and division of the produce, and the other is a periodical interchange of the plots of land,

[1] The rubbing or chaffing of corn was known; the expression for it was *mar;* and, by way of reference to the word *mal* (retained in Germ., *zer-mal-men*) used in its stead, the expressions for mill above given are derived from it.

with separate cultivation and the exclusive right of the husbandman to the produce, no matter whether the interchange be effected by prescribed rules or by lot. The former method is still in use among the Slavs. We know from Tacitus that the latter was the Teutonic method. Of the two, the second is the more perfect from the economical point of view. The prospect of full possession of the produce supplies an invaluable impetus to due cultivation of the land—the industrious and careful farmer has a larger return than the slothful and careless one. It shows the transition from the primitive form of the management of arable land, the Slavonic joint-cultivation, to the definitive form, Roman private property.

Guided by the consideration that it is contrary to all historical evidence that the less perfect should supplant the more perfect, I conclude that the Slavonic method must have obtained amongst the people from whom the Indo-Europeans learnt agriculture. Had they known the Teutonic it would be impossible to realize how the Slavs came to exchange it for theirs, while, on the contrary, an advance on the part of the Teutons from a lower to a higher method of husbandry is quite natural.

So far I have depicted the condition of things as the conquerors found it among the vanquished nation—joint-possession and joint-cultivation of the arable land. The conquerors left this condition of things *actually* unaltered, but *legally* gave it another form, which first appears here. I mean *bond-service*. We cannot trace it back to the mother-nation in the pre-Indian period, while it is found among several of the Indo-European nations. The mother-nation knew but one way of dealing with their vanquished enemies—they made them slaves. Prisoners were slaves (*dasa*). It is still unsettled whether, as was the case during the migration (p. 328), the slave came only indirectly into possession of the individual as part of the common booty, or was assigned directly to him who had conquered him.

The condition of the slave, legally speaking, bears the character of absolute submission to his master (δεσπότης,

from the Sansk. *dasa* and the root *pa*, *po* = to maintain). But virtually the slave became an inmate of the house. In both respects the bondsman takes a different position. The extent of his slavery is limited; he has certain duties to fulfil either in actual work or in kind; beyond these his labour and his earnings are his own, and he lives not in his master's house but in his own. He has his own household, which the slave has not. In this manner Tacitus describes the position of the bond-servant (Germ. cap. 25): *Suam quisque sedem suos penates regit* (personal household); *frumenti modum dominus aut pecoris aut vestis ut colono injungit et servus hactenus paret* (limited bond-service); to which from the above (cap. 24) must be added the exemption from the right of purchase, which applies only to slaves. The relationship between client and patron took just the same form in the days of early Rome. The client had his own home, and was effectively protected against any usurpation of right on the part of the master. This same relationship is found with the Greeks (Helots, Perioeci) and with the Slavs. The Latin and German languages describe it as obedience (*cliens* from κλύειν—*hören* (to hear)—"*hörig*" (audible); both derive the idea of obedience from the same word (*ob-audire* = *obedientia*, *hören* = Germ. *ge-hor-sam*).

Now the fact that this institution is found amongst several different nations does not necessarily imply one common origin for it. Slaves, property, right of succession, marriage—all these are found everywhere, without one nation having derived them from another; and so also bond-service can be accounted for quite independently. I refer to the subjugation of an entire nation too numerous to be enslaved. The prescribed plan is that the conquerors use them for the purpose of extending their own farming operations, by exacting heavy duties from them, so that the lion's share always falls to them; the vanquished, on the other hand, having to be satisfied with but a bare living.

Bond-service is something of this kind. It was certainly known amongst the Romans as well as amongst the Teutons

and Slavs, and was also employed in the case of individuals in the shape of a settled agreement, either terminable as the Roman system of *clientela*, or permanent as the Teutonic and Slavonic bond-service, in which, however, I can see nothing but the transmission of an institution which had come into existence by other means, and not its original form. The supposed case of the subjugation of an entire and numerous tribe would offer a very valid and urgent reason for its introduction; they could not do without it; it was the only practical form possible under existing circumstances. It *might* have been applied first in individual cases, but it was not imperative there, the institution of slavery fulfilling all requirements. We must not, therefore, imagine that one individual became the bondman of another, but all the bondmen as a body came under bondage to the whole body of the ruling nation; separate bond-service was inconsistent with the system of public administration. The former can have been introduced only when, as with Greeks and Romans, public property gave way to private property, or, as with the Teutons, public cultivation of land gave way to private. Among the Romans it still bears distinct traces of its originally public character. The relation of the master towards his slave was purely a matter of private law—it had nothing to do with the community; there were no limitations to his powers. But this was not so in the case of clients (*clientes*), in whom the community had a share. Clients belonged to the *gens*, they were bound to serve in the army; and the master (*patronus*) could not at his pleasure set them free. For instance, he could not allow the female client to marry outside the *gens;* the community had to grant this permission (p. 334). In the case of a client dying without issue, the *gens* had eventually a right to any inheritance, and under heavy penalty (*sacertas*) provision was made against the patron dealing unjustly with his client (*patronus, si clienti fraudem fecerit, sacer esto*)—a compensation for his not being allowed to lodge any private complaint against his master; he stands under the protection of the community. This fact puts the public character of the

relationship in a strong light; if it had been regarded as a matter of purely private law, the client would either have been deprived of protection altogether, after the manner of slaves, or would have had to lodge a private complaint.

This protection in public law, which still characterized this relationship in later years, points to a corresponding origin. It was not created by private agreement or aggression, but by an act of the community: the conquest of one nation by another, and the thence resulting establishment of mutual relations, in the form of a mutual contract sworn to by both parties and consequently placed under religious protection (*sacertas*). One of the conditions, in addition to the amounts fixed to be paid in produce and field labour, was the obligation to serve in the army.

In this wise the two nations must have lived together for centuries. This sojourn in their second home marks a turning-point in the history of the Indo-Europeans; it was their school of agriculture which transformed them from a pastoral into an agricultural people.

I have asked myself the question, Where may this land have been? If the premisses are correct which I laid down above, it must have been a far-extended, fertile lowland, which could be found only north of the Caucasus; in the south it is all mountainous country. As the passage over the Caucasus is in many places quite impossible, and always fraught with the greatest difficulties, they must have taken their route along the slopes leading towards the Caspian Sea. North of the Caucasus there are two low-lying plains: the country between the Volga and the Don, a sterile tract of land which does not answer to the given requirements, and that between the Don, the Dnieper, and the Dniester down to the Danube (South or New Russia and Bessarabia), and it is here I believe that the second home of the Indo-Europeans may be placed.

The fact that the art of manuring the soil was unknown must in course of time have necessarily led to the exhaustion of the land, and this involved the migration of a part of the population, as previously happened from the first home. Again,

it would be only the young and the strong who sallied forth, and in this case, too, they must have gone in large numbers to accomplish the great distance to their third and final home. These departures have been repeated whenever occasion demanded. Many hordes may have been annihilated on the way, but seven of them survived and gained a lasting habitation: the Greeks, the Latins, the Celts, the Teutons, the Slavs, the Illyrians, and the Letts. As to the chronological order in which they left the land, that is a question difficult to answer with any degree of certainty, but a few connecting links do exist. Two in particular may be mentioned.

Firstly, the argument from language. I do not mean with reference to the question already considered by Sanskritists as to which of the different European daughter-languages is nearest akin to the mother-tongue, but with reference to another point, which, as far as I am aware, has not received the attention it deserves from philologists.

I start from the fact, confirmed everywhere by historical experience, that a nation living with another nation for centuries on the same territory, either on a par with or above them in civilization, be it as victors or as vanquished, must adopt many things from the other, as well of their institutions and conceptions as of their language. This, applied to the relationship between the language of the Indo-Europeans and that of the people of the second home, would be a guide towards ascertaining the length of time which each of the Indo-European nations remained there.

Words of which we find no trace, not even of their roots, in Sanskrit, and the derivation of which cannot be traced back to any other nation, as also new or virtually remodelled forms of speech, constructions, etc., should presumably be placed to the credit of the other nation. The larger or smaller the number of the foreign elements in the languages, the longer or shorter would be the residence in the second home. The length of time that a language has been spoken cannot in itself bring about such changes; the progress of a language, when disturbed by a foreign language, goes steadily on its natural course. Philo-

logical phenomena which contradict this law, be they single words or forms of speech, point to a foreign origin. Should it be proved, as I presume it will be, that Greek and Latin have been least, Slavonic the most, subject to this action of another language upon them, which from the above I take to be the language of the people of the second home, we may conclude that Greeks and Latins have sojourned the shortest, the Slavs the longest, in the second home.

The second link which I feel justified in bringing forward with regard to this question, but which I frankly admit is open to dispute, is the geographical distance of the third home of the Indo-European nations from the second. He who starts first has the first choice, and when he finds the place that suits him he will not travel any further; the next comer finding another in possession, resumes his staff, and journeys on; so do the third and fourth.

This, applied to the search of the Indo-Europeans for new homes, leads me to think that the Greeks and the Latins must have been the first to start. Asia Minor, Greece, Illyricum, were situated nearest to their starting-point. The Greeks could reach Asia Minor by ship either across the Bosphorus or from the Greek coast; they were quite familiar with ships from very early times—even if only for river navigation. After them followed, in my opinion, the Latins, who had a considerably longer distance to accomplish. Next come the Celts, and then the Teutons. If the Teutons had started before the Celts they would certainly never have chosen the inhospitable forests of Germany, but they would have crossed the Rhine and settled in Gaul; but both there and in Upper Italy the Celts had preceded them. Of the nations here mentioned the Teutons fared the worst in the division of Europe, as regards climate, the condition of the soil, and the position of the land, which latter cut them off from the Mediterranean, and consequently from all contact with the civilization of the old world. The other nations were satisfied with their lot, as well they might have been: not one of them has ever attempted to exchange its once acquired home for another. They have sent out colonies, made

conquests or tried to make them, as for instance Greece and the Gauls of Upper Italy; but none of them again emigrated—they continued in the home where we first meet with them in the annals of history. With the Teutons, on the contrary, migration remains the rule; for over a thousand years they did not really settle down. Cimbrians and Teutons at the close of the second century B.C. were succeeded, in the beginning of the Christian era, by Markomans, Franks, Goths, Suevi, Vandals, Angles, Saxons, Jutes, Longobards, and Norsemen, and they wandered all over Europe and even into Africa. This has been attributed to the innate roaming propensity of the Teutons. But their love of roaming is due to exactly the same motive as that of their forefathers, who left their first and again their second home; the reason lay in the soil. Should the Teutons have chanced upon Gaul and the Celts upon Germany, the order would have been reversed, and for palpable reasons they would not have been tempted to exchange their beautiful land for another. The history of the Celts would then have been that of the Teutons, and the innate propensity for roaming would then have been the heritage of the Celts, as it is now assumed to be of the Teutons. (p. 383.)

While the five races so far mentioned went west, the Letts went northwards. From my point of view, therefore, the probability is that they left their then home after the five others had departed. There remain then only the Slavs. This is the branch of the Indo-European family which has extended itself most; but I do not believe that this was the result of migration, *i.e.* desertion of their home, but rather that it was accomplished by a gradual expansion, in a westerly direction, including the Danubian principalities, as far as the Adriatic, in a north-westerly direction as far as the Elbe, and towards the far north up to the White Sea. The territories of all the other Indo-European nations are separated from their alleged second home by intervening countries, but that of the Slavs forms one continuous whole with it. The conclusion to be derived from this is evident: the Slavs are the only Indo-European tribe which did not leave the second home

by way of migration, but by gradual expansion. The diversity in speech and manners is not, as with the four other Indo-European nations of Europe, to be attributed to their separation from the mother-nation and their consequent isolation from each other, but to the extreme distance of the home of one tribe from that of the others; and even now after thousands of years there is not the same degree of diversity to be found in the Slavonic dialects as there was amongst the others at the time of their first appearance in history. The pace of their historical development was as swift as that of the others was slow. Of the five civilized nations of Europe the Slavs have proved themselves the quietest, the most peaceable, the least eager for innovations, and the least grasping after foreign territory; history, therefore, has least to say about them. Contentment with the land in which they found themselves, resignation to their lot, even when well-nigh unbearable, a most astounding power of endurance and obedience, which verges on slavish apathy and servility, are the characteristics which have marked the Slavs down to a period within our century.

Whence this striking difference between the Slavonic national type and that of the four other Aryan nations? I think I am able to trace it back to two causes.

In the first place, the historical development of the four other nations commenced with the departure from their home, an act which in itself, as well as in its consequences, required great moral effort. The most determined, the bravest, the strongest, the fittest sallied forth—the flower of the nation set out; the timid, the prosperous, the weaklings—in short, the less fitted remained behind.

But—and this is the second reason—they remained behind with a nation living in servitude. This, in my opinion, accounts for the historic fate of the Slavonic race.

Primarily, because the servitude of the common people relieved the ruling classes of all exertion. It is no injustice to the Slavs to allege that their power of work and the work itself cannot bear comparison with those of any of the other

four nations. The Slavs have never been capable of endurance, perseverance, or serious effort; and pleasure in work, and the thirst for work, without which qualities no great results can be produced either by individuals or by a nation, have never been theirs. Look at the national works of the Greeks and the Romans, at the productions of Italians, French, Germans, Dutch, and English since the time of the Middle Ages; and what have the Slavs to show, notwithstanding the prodigious number at which the combined branches of the Slavonic race are estimated? But all the other nations learned to work from their earliest youth upwards. Not so the Slavs; the ruling classes allowed themselves to be fed by the subjugated races, and so missed the morally elevating and invigorating blessing of work—the true self-respect, to which those only have a right who can show that they have accomplished something worth doing by their own exertions.

In addition to the absence of necessity for labour, another fatal drawback existed in the moral contagion communicated by the subject race to the ruling race. This is the only way in which I can explain how it is that the very pronounced feeling of personality and right, the desire for freedom and independence, which stamps all the other Indo-Europeans, and which may be accounted as the precious fruit of their joint migration (§ 51), was lost by the Slavs in their second home, and gave place to the above-noted characteristics of submissiveness, resignation, and inertia. The conquerors degenerated in the close atmosphere of constraint which surrounded them; the servility of the subject race was gradually transferred to them. And even if the superior classes escaped by the independence of their position and their isolation from the common herd, even if, perchance, by way of contrast, the spirit of dominion was fostered in them all the more, the less was their opportunity of establishing their exalted position as in olden times by valiant deeds on the battle-field. The lower orders, in their continual contact with the natives, and the unavoidable lowering of their social position on account of the ever-increasing population—which lowered them to the same

social level as the natives, and which even admitted of intermarriage with them, a thing spurned with disdain in olden times—the lower orders, I repeat, could not in the long run resist the influence of the spirit of submissiveness and servility, which had become a second nature to the subject race. And so the great mass of the ruling race, in my opinion, descended to the social and moral level of the subject race; the ruling class preserved its social standing; morally, it also has succumbed to the infection: aversion from labour—love of pleasure—pride.

Continued residence in the second home thus became the destiny of the Slavs. The only race that has not fallen a prey to it, but has rather preserved the character of the Indo-Europeans, as formed during the migration, is the race of Montenegrins.

How this character of the European nations formed itself will be shown in the following books.

BOOK VI.: THE ORIGIN OF THE EUROPEAN NATIONS [is wanting].

BOOK VII.: DIFFERENCE OF THE EUROPEAN NATIONS [is wanting].

INDEX

Abel: 84-5, 69, 274, 277 (n.)
Abraham: 101 (n.), 203, 236-7
acchar: 14
Achilles: 329
Acker: 12, 14
actio in personam: 56
Adriatic Sea: 400
aedes: 105 and (n.), 124
Aeneas: 1 (n.)
aequicoli: 350
aes uxorium: 349
Africa: 186
Agamemnon: 252, 315, 329
ágas: 50
ager: 14
,, *privatus* and *publicus:* 14
ἀγρεῖος: 94
agriculture, its absence among early Aryans: 11-3
agrimensor: 127
ἀγρός: 12, 14
Aharmann: 50
Ahnen-kultus: 32-7
aj: 14
ajras: 12, 14
Akkadian-Sumerians: 79, 99, 102, 103, 113, 125, 148, 150, 161, 180, 214, 234 (n.)
ἀκροπόλις: 86, 87
akrs: 12, 14
Alaric: 224 (n.)
Alba: 288
Alesia: 87 (n.), 88, 89, 106 (n.)
Alexander the Great: 55 (n.), 168 (n.), 175, 182
Allah: 239
ἅλς: 7
Altenteil: 33
anadvah: 187
anas: 187
Ancestor Worship: 38-9
Ancus Martius: 352
ἀνήρ: 264
Angles: migration of, 400
anstecken: 108
ἀντίφερνα: 29
Anunnaki: 151
Apollo: 253
Apron, Leather: 2-5, 6
aquam ducere: 154 (n.)
ar: 12, 264
arare: 12
Arabs: 236, 245
arathar: 12 (n.)
aratrum: 12 (n.)
arbor infelix: 53 (n.), 54
Architect, Difference between, and Labourer: 111
Architecture, Political Significance of: 122, 133
Architecture in Babylon: 110-22, 181-3, 212: *see also* House
ἀρετή: 264
argei, sacrifice of the: 333, 355-7, 359, 377
Aria: 1
Arii: 1
arjan: 12
Ark:—*vide* Deluge
Armenia: 152-3
Armorica: 87
Army, Babylonian: 160
,, of the Wandering: 312 *sqq.*
aror: 12 (n.)
ἀρότρον: 12 (n.)
ἀροῦν: 12
ἄρραξ: 300 (n.)
arrogationes: 359
arrha: 224
Art, Plastic: 224
Artemis: 252
arx: 86 and (n.), 318
Aryans, Law: 25-61; National Character of: 226-45
Assyrians: 136, 236
Astronomy of Babylonians: 175-83, 213, 224
ἄστυ: 21 and (n.), 94 (n.)
Asurbonigal, King: 137
Atharva-Veda: 35 (n.)
Athens: 89, 95, 142, 206 (n.)
Augeas: 2
augur, avigur, avispex: 326 (n.), 374
auguraculum: 373
Augurs: 282, 286
Auspices: 361-79
auspicium: 311, 362, 378
Autumn: 12-3

av: 13 (n.)
Avars: 302, 390
Avesta: 275
Axe of the Pontifices: 354
,, Stone: 255, 292, 298
ayas: 22

Baal, Priests of: 38 (n.), 243 (n.)
Bab-el-Mandeb Straits: 179
Babylon, Architecture: 181–3; Astronomy 175–83, 213, 224; Bricks 212; Civilization, transmission to Aryans 216–25; Commerce and Commercial law 85 211, 213; Deluge 99 (n.), 151–4, 169–75; Fortifications and Walls 112 (n.), 129–33, 160; Loans and interest 189–202; Money 202–4; Navigation 162–9, 185, 213; Town 89, 211 (n.); Waterworks 154–62; Writing 205–9
Bactria: 1
βαίνω: 324
bajit: 124
bama: 126
βασιλεύς: 324
Bastille, The: 145
baurgs: 86
Belus, Temple of: 102 (n.)
Betrothal of Infants: 335–6
Bird as guide of the army: 374–7
,, — *vide* Auspices
Bismarck, Prince: 75
Blood-brotherhood: 36
Boats:—*vide* Navigation
bodkefti: 22 (n.)
Boeotia: 95
Bond-service: 394–7
Booty, Law of: 327–31
Bosphorus: 399
Brahmanic Moral Code: 35
Brahminism: 30
Brama (god): 183, 184
Brick: Babylonian 212; Burning 141; Kilns 100, 134; Manufacture 100–1, 148; use in Egypt 217; Work 109, 148
Bridges: 223, 350 *sqq.*, 358
,, Strategic Value of: 353–4
Buddhism: 240
Buleuterium of the Cyzicans: 354 (n.)
burc: 21 (n.), 86
burg, burug: 86 and (n.)
Busento: 224 (n.)
Byzantine Court: 95
Byzantines: 109

Cadmus: 222
Cain: 84–5, 89, 274
calare: 318, 319 and (n.), 321
calatores: 319–20
calendae: 320—*vide also* Roman Calendar
Calypso: 176
Campus Martius: 266, 294
Capital Punishment:—*vide* Flogging
caput mortuum: 322
çarad 13 (n.)
caristia, caritas 289–90
Carna: 312–3 and (n.)
carpere: 13 (n.)
Carthage: 89, 98 (n.), 219, 220, 221
Carthaginians: 139 (n.), 243
casa Romuli: 105
Cassandra 37, 361
Catulus: 313
Caucasus, the seat of the Second Home: 397
Celts Civilization due to Greeks and Romans 222; Knowledge of Towns 21; Marriage among 29, 31; Migration 254, 293, 295, 314, 399; System of Registration 271, 272
centuria, centum: 315 (n.)
Chaldean: Astronomy 121–2, 128, 176–8; Mathematics 148
Charlemagne: 294
Chasis-Adra: 124, 151–4, 169–75, 183–4, 203, 235
χειμών: 13 (n.)
Children: Aryan law relating to 32; Poisoning of, among Romans 344–5; Sacrifice of 35, 251–3, 333; Substitution of, among Romans 345
Chinese, The: 34
chirs aelychot, etc.: 134 (n.), 220
Christ: 240, 241
Christianity: introduces Intolerance 244–5
Cimbrians:—*vide* Cymbri
classicus, classicum: 319 and (n.), 320
classis: 318, 319
Clay Tablets 35, 206–8, 218
cliens 395, 396
clientela: 396
Climate:—*vide* Soil
,, of original home of Aryans: 2
Clovis, King: 329
clypeum: 16
coëmtio: 28, 43, 342
Coffin, The: 140–1
Colonization: 220
comitia calata 23, 318, 377
Commander of the Migration: 322–6
Commerce and Commercial Law, Babylonian: 185–211, 213
confarreatio: 27, 274, 334–5, 359

conjux, conjugium: 60, 391-2
connubium: 337
Constantinople: 95
Consuls, Commercial: 220
contractus: 59
Co-operation:—*vide* Labour
Copper: 24
Corinth: 89
Corrective Stake: 54-61
cortesie, courtoisie, etc.: 94-7
cranntair: 22 (n.)
Cretans: 200
cribrum aeneum: 23 (n.), 24
curia calabra: 320
,, *Saliorum:* 105
curiae: 385
curtis: 94
Cyclopes: 26
Cymbri: 313, 314; Migration of 400
Cyrus: 95, 130
Cyzicans: 105, 106; *Buleuterium* of 354 (n.)

dagogs: 181
dakan, dakara: 315 (n.)
Danube, River: 397
Danubian Principalities: 400
Darius: 95, 139 (n.), 203 (n.)
Darwinian Theory: 382-3
dasa: 394, 395
Dates in Babylonian Law: 98 (n.)
Daughters, Exposure of:—*vide* Children
Debtor, The Aryan, at the Stake: 54-5; The Roman 55 *sqq.*
Decalogue, The: 54
decem: 315 (n.)
decuria: 315 (n.), 385
deductio in domum mariti: 23
deditio noxae: 350
Delphi: 104
Deluge, The: 149-54, 169-75
,, in India: 183-5
Democritus: 369
Departing Host in the *ver sacrum:* 260-7
descriptio regionum: 373-4, 375
δεσπότης: 395
detestatio sacrorum: 44
Deucalionic Flood: 26
Diana: 273
dii: 235
discipulus: 265 (n.)
Dispater: 300
Divination: 361-79
Dnieper, Dniester, Rivers: 397
dominium ex jure Quiritium: 18
domus nummis pensata: 204 (n.)
Don, River: 397
dos: 28, 29-30, 343 (n.)
douhtar, dotar, etc.: 17 (n.)
Dowry:—*vide dos*
Dove, The, in the Deluge: 170-1
Drinks, Aryan: 63
drupada: 51, 53
dubitar: 17 (n.)
dugdar: 17 (n.)
duh: 17 (n.)
dun: 21 (n.)
Dung: 392
dux: 326

Ea (god): 172, 174, 184
Ecbatana: 139 (n.)
edicere, edictum: 320
egregius: 17
Egypt: Babylonians in 216-19; Jews in 111-3
Egyptians: 28; Brick-burning of 135
Elijah: 244 (n.)
elôhim: 235 (n.), 237
ἐρέτης: 12
Erinyes: 37
Etruscans: 89, 352
Euphrates: 139, 391
,, and Tigris: 11, 79, 81, 98, 112 (n.), 150, 152, 156, 163, 164, 170, 391
evocatio deorum: 244, 357
ex suillo grege: 297
exercitus: 318
Export and Retail Trade compared: 188-9, 213
exta: 363, 368-72, 375
θεοί: 235
θυγατήρ: 17 (n.)

fabri aerarii: 354
faihu, fihu, etc.: 17, 18
familia: 18
famulus, familiaris: 18
fat: 274
farah: 275
fasces: 51, 324
feoh: 18
feralia: 45, 288-9, 294, 295
festuca: 22
Fetiales: 22-3, 298, 350-1, 377, 378
Fish, The Ship copied from: 165
Fire-brick: *vide* Brick
flamen, Flamines: 357-3, 360
flamma: 357 (n.)
Flogging: 23, 51-61, 321, 324
Flood: *vide* Deluge
foenus nauticum: 169, 193-9, 224
Fortifications: 106 and (n.), 148
,, Babylonian: 212
Fortress: 85-90

Fowls: 363, 371
Franks, Migration of: 400
French Revolution: 113 (n.), 145
fructus naturales civiles: 189
fundus: 105 and (n.)
furca: 54 (n.)

gabella emigrationis: 272
Gades: 125
γαῖος: 392 (n.)
gairethinx: 324 (n.)
gala: 94
Gambling, Aryan Love of: 63, 81-2 and (n.)
gehorsam: 395
gentilicia: 276
gentis enuptio: 334-5
γεομέτρης: 127
gharata: 184, 203 (n.)
Gibraltar: 125
gnoy: 392
Goths, Migration of: 400
Gorodists: 87 (n.)
gradu: 21 (n.)
grâma: 21, 25
Grandezza, The Spanish: 96
Greeks: Architecture, 123; Knowledge of Towns 21; Marriage among 29, 30; Migration of 399; Timber-work of 104-5; Writing 136-7

Hanging Gardens of Nebuchadnezza: 125, 156
harb: 13 (n.)
harudu: 184, 203 (n.)
Haruspices: 368
hasta praecusta: 22, 24, 265, 350
,, *pura:* 22, 24
Hellenism, Cosmopolitanism of: 240-1
Helots: 395
Helvetii: 270, 271 and (n.) 272, 273 (n.), 293, 313, 314; Migration of, 322-3
herba mala (venenosa): 371
Herbst: 13 (n.)
Hercules: 2, 26
Herdsmen and Husbandmen: 80-5, 86
heredes: 43-4
heredium: 14, 393
heres: 14
Herzog: 324
hiems: 13 (n.)
hima: 13 and (n.)
Hindus: Castes, etc., 63-4; Difference from Europeans 380; Leather Apron of 5
Hirpini, Legend of the: 300-5, 327, 371
Homer: 26
Horatius Cocles, Suit of: 53, 352
hören, hörig: 395
Horsemen of Romans and Greeks: 322
Hospitality, Contracts of: 219-20, 224
,, of Antiquity: 26 and (n.)
House-search, The Roman: 3-5
House, Wooden and Stone: 97-110, 223
hû: 275
Huns: 390

Iberians: 87
idh: 105 (n.)
Illyricum: 399
imperium, imperare: 324
India: 203 (n.); Architecture 181-3; Babylonians visit 179-80, 185; the Deluge in 183-5
Indo-European, his Evolution: 380-5
Indra: 6, 63 (n.)
Interest, Babylonian: *vide* Loans
Intolerance first introduced by Christianity: 244-5
Iphigenia; 252
Iphitos: 26
Iron: 22-5
irpex: 300 (n.)
irpus: 300 (n.)
Isis: 244
Islamism: 245

Jacob: 236
jana: 25
Jehovah: 239, 242
Jerusalem: 89
Jews: 24, 34; in Babylon as builders 112; in Egypt 111-3; *vide also* Sabbath
jugum, jugera: 60, 392 (n.), 393
Jupiter: 238, 251, 272
jus civile: 242
,, *gentium:* 242
,, *liberorum:* 343 (n.)
,, *Pontificum:* 43, 359, 360
Jutes: Migration of: 400

kantara, kanta: 315 (n.)
καρπός: 13 (n.)
Karna, Karnu: 184
karp: 13 (n.)
Keys, Falsification of: 344, 345-6
Kilns, Brick: 100, 206
κλύειν: 395
knui: 392
κόπρος: 392
Koran, The: 236 (n.), 340
Kronos: 33

labiatu, libatu: 184
Labour, Co-operation in: 111, 143, 145, 147, 158
Laertes: 33
laiwa, ljawa: 184
Lake-dwellings: 87
λαός: 324
Lares: 45
,, *Compitales:* 105
Latins, Migration of: 399
Law, Aryan: 25–61
,, Babylonian Commercial: 185–211
Lebanon, Cedars of: 98 (n. 2)
legis actiones: 320 and (n.) 321
Letts, Migration of: 400
lex curiata de imperio: 324
lex, fas, and *jus:* 50
Lex Julia: 56
li: 16
liberatio: 59
Lictor: 54
lineae, linere: 16
libripens: 46, 48
literae: 16
lituus: 364
Liutprand, Laws of: 294
Loans, Babylonian: 189–202, 213, 224
London, Sunday in: 118
Longobards: 294, 302, 314; Migration of 400
Louis xvi, Court of: 96
Love-potions amongst the Romans: 346
Lugdunum: 21 (n.)
Lycia: 107 (n.)
Lydia: 203

Macedonia: 217
Magan, Mountains of: 168, 175
mal: 393 (n.)
malam: 393
malti: 393
Mamertini: 250, 251, 253
mana: 180
mancipatio: 18, 46, 48, 204 (n.)
mancipium: 18, 115 (n.)
Mann: 264
Manu: 183, 184, 264
manubiae: 330
Manure: 392
March (the month): 281–2, 292–4, 312
Markomans, Migration of: 400
Marriage: Aryan 27–32, 41–2, 334–43; Hindu 61 (n.), 64 (n.); Roman 27–32
,, by Capture: 336–8; by *rázasa* 336 (n.)
Marriage yoke: 391–2
Mars: 250, 251, 281, 294
materia felix: 23
Maternal Right (*matria potestas*): 38–48
matrimonium, matrona: 343
matronarum sanctitas: 343
Measure of Time:—*vide* Time
,, Linear: 122–33, 147, 224
melim: 393
mercator: 193–4, 202
Metals: Aryan ignorance of working 22–5; Babylonian ignorance of 203, 224; Roman knowledge of 22–5; Roman tables 136–7
mija: 393
miles, mille, mile, mil: 315 (n.)
Mill: 393
mina: 180
mine: 113, 203 and (n.)
Minerva: 238, 272
Mist: 392
μνᾶ: 180
μύλη: 393
Moeris, Lake: 156 (n.)
Mohammed: 239, 240
μοιχευθεῖσαν: 348
mola: 393
Money, Babylonian: 202–4
Mongolia: Monasteries fortified 109
Mongols: 109, 390
Monogamy: 27, 338–40
Monotheism and Polytheism: 231–45
monsieur, monseigneur, etc: 33 (n.)
Moscow: 107 (n.)
Moses: 237–40, 243, 245
Mühle: 393
mundium: 42

Nails, Wooden: 255–92, 298, 321, 353
nabi: 124
Napoleon I.: 75
nar: 264
nau, nav: 12
ναῦς: 12
Navigation of Babylonians: 162–9, 185, 213
navis: 12
nawoz, nazom: 392
Nebuchadnezzar, Temple of: 100 (n.), 103
Nessus, Robe of: 245
nexum: 48, 59
Nile, The: 127, 391
,, Valley of: 81
Nineveh: 89, 100
Nizor (mountain): 173
Noah: 152–4; *vide also* Deluge
Norsemen, Migration of: 400

nota: 17
,, *censoria:* 342
noxae deditio: 350
Numa Pompilius: 209 (n.), 274, 288
Nun, the God, and water: 149-50

obaudire, obedientia: 395
observant augures: 366
Odin: 1 (n.), 249 (n.)
Oedipus Legend: 36-7
ohel moëd: 124
Oil, in Babylonian Law: 98 (n.)
Old People, Throwing over bridge of: 333, 355-6
Old and Feeble, The: 33-4, 332-3
operari: 214
oppidum: 21 (n.)
orbitas: 343
orc: 275
Osiris: 239
Oven, Public:—*vide* Kiln
Ox-hide: 16-17, 134 (n.)

pa, po: 395
paça: 17-18, 59
pack: 59
pactum: 59
paçu: 17, 18
pagodas: 181
pak: 17
parentalia: 45, 288
Parents cast out by children: 33-4, 332
partus facilitas: 344 (n.)
"Passion Week, Roman": 289
paterfamilias: 18
patrimonium: 343
patronus: 396
Paulus Diaconus: 301, 302, 303, 366, 370
peculium: 18
pecunia: 18, 204
,, *trajectitia:* 193
pecus: 17, 18
pedestres: 367
pedestre signum: 367
pedestria: 366, 367
Pell-el-Amarna, Clay Tablet of: 135
Penal Stake, The: 53-4
Penates: 45
pendere: 274
Peppin, King: 294
Peregrini: 321
Perioeci: 395
Persepolis: 182
Persian Gulf: 150 (n.), 152, 165, 166, 168 (and n.), 178, 188
Persians: 24, 146
pestilentia loca: 371
pestifera auspicia: 370-1
Pflug: 12
φαρμακεία: 344 (n.), 345, 346, 348
Phœnician Cities, Wealth of: 211 (n.)
Phœnicians: 26, 87, 104, 110, 126, 138, 139, 146, 167, 168 (and n.), 176, 178, 179, 234, 236, 243, 385
Phraortes: 139 (n.)
piacula: 359
Picenes: 304 (n.)
Picts: 303
picus: 304 (n.), 374-5
Pig: 297
pili: 21 (n.), 87 (n.)
plaum-orati: 12 (n.)
pliuges: 12
Plough: 12, 141-9
plugu: 12
πόλις: 21 (n.), 86 (n.), 87, 94 (n.)
πολιτικός: 94 (n.)
Polygamy, Aryan: 27, 338-40
Polytheism and Monotheism: 231-45
Pompeii: 136 (n.)
pons sublicius: 23, 24, 138, 298, 351, 352, 354, 355
Pontifex Maximus: 52, 54 (n.), 249 (n.)
Pontifices: 23, 42-3, 44, 282, 286, 351-60, 377-8
Popular Decree in the *Ver Sacrum:* 268-80
populus: 265-6, 385
porcus: 275
πόρκος: 275
porphyrogenitus: 323 (n.)
praeda: 329
Praetor Peregrinus: 206, 321
,, *Urbanus:* 206, 321
prase: 275
Prediction: 361-79
pretium periculi: 193 (n.)
,, *suum solvit:* 204
Priests, Babylonian: 160
principes: 323 (n.), 326
privi: 14
Property, Aryan Law of: 48-50
,, Descent of: 33
,, in Flocks and Herds: 14-9
,, in Land: 14
Prophylaxis the common aspect of *auspices:* 372
proprietas: 14
pu, putra, putri: 265 (n.)
pube praesente: 265
puberes: 265 (and n.)
pubus, puli: 265 (and n.)
puer: 265 (n.)
puerpera: 343
pul'rius: 363
puls 372
pupu, pupillus: 265 (n.)

pur: 86 (and n.), 87
πύργος: 86 (n. 2)
putus: 265 (n.)
Pythia: 361

Quirites: 365

Rachel: 236–7
rājan: 25, 322, 323, 324
Ramān: 151
rap: 300 (n.)
ratis: 12
Raven, in the Deluge: 170
regere: 324
Registration System of Antiquity: 271–2
reiks: 323, 324
Renan on Aryans and Semites: 231–45
"Residuary" Institutions: 5
res mancipi: 18, 19, 48, 275
,, *nec mancipi:* 18, 19
,, *publicae:* 144
rex: 323, 324, 385
ri, rix, ric: 323 (and n.)
richten: 324
Rig Veda: 12, 21, 30, 35 (n.), *vide also* Vedic
River, Strategic Value of: 353–4
,, God: 355
rix, ric: 323 (n.)
rna: 50, 54 (n.)
Roads, Construction of: 137–9, 223
Roman Calendar: 6, 289–90, 295–7
,, Writing: 136–7
Romulus: 274, 344
,, and Remus: 303
Runes: 136 (n.)
Russia, Pig in: 297
,, Wooden Houses of: 108–9
Russians: 139 (n.), 155 (n.)

Sabbath Day of Rest: 110–8, 147, 153, 212, 224
Sabbattu: 113, 114 (n.)
Sabines, Rape of the: 336
Saccara, Pyramid of: 101
sacertas: 396, 397
sacra: 42, 44, 48
sacra popularia and *privata:* 276
sacramentum: 359
sacrani: 250
Sacrifices to the Dead: 38–48
St. Petersburg: 107 (n.)
salaam: 7
Salt, Salt-mines: 7
Salz: 7
sama: 13
Samnites: 253
Sanherib, King: 113 (n.)
satpati: 322
Saturn, Myth of: 252
Saxons, Migration of: 400
Scandinavians: 22 (n.)
Scourging to Death:—*vide* Flogging
Sea-Loan, Babylonian: *vide* Loans
Seamanship: *vide* Astronomy
Second Home, The: 389–403
sectores, sectio: 330
Semites, Exclusiveness of: 240–1; National Characteristics of: 226–45
senatus: 265, 333
senes: 385
,, *depontani:* 333, 355–6
senior, seigneur, signore, etc.: 33 (n.)
servare de coelo: 5 (n.), 364–8, 378
Servius Tullius: 25
Seventh Day of Rest: *vide* Sabbath
,, Year of Rest: 115
Sheba: 185 (n.)
Sheep, Connection of, with Money: 18 (n.)
Shekel: 113, 181 (n.), 203 (and n.)
Ship: *vide* Navigation
Shirt, Hairy, of Northern Teutons: 3
Siberia: 97, 108
Sibyls: 362 (n.)
Sidon: 167 (n.)—*vide also* Tyre and Sidon
signa ex avibus: vide auspices
,, ,, *diris:* 372
,, *pedestria:* 366–8, 375
signare: 15
signum ex coelo: 367
silentium: 365
sir, sire, etc.: 33 (n.)
sirpara: 184 (n.)
slatina: 7
Slavs: Absence of Towns among 21; Expansion of 400–3; Marriage among 29, 30; National Character of 400–8
Soil, its Influence on National Character: 72–7
soldi: 274
soli: 7
Solomon's Temple: 124
solutio, solvere: 59–60
soma: 63 (and n.)
Soracte: 300
spacke, spähen, Specht: 304 (n.)
spak: 304 (n.), 362 (n.)
spiare: 304 (n.)
spion: 304 (n.)
spolia: 329–30
,, *opima:* 329 (n.)
Spear, Wooden: 255, 292, 321
,, Roman: 327, 330
sponsalia: 335

Stadt: 21 (n.)
Stake, The:—*vide* Flogging
staura: 184
stercus: 392
stipendium, stips: 274
"Stone, Age of": 142–3
,, House: 97–110
,, Parallelism between plough and: 141–9
,, Use of, for purposes other than Building 134–41
Stoning to Death: 139–40
Stâpe: 53
sû: 275
σύζευξις: 391
Suevi, Migration of: 400
Suez Canal: 157
sû-kara: 275
sumar, sumer, Sommer: 13 (n.)
Sumerians:—*vide* Akkadian-Sumerians
Sunday, the Christian: 117–8
sura: 63
Surippak, City of: 152, 174
sus: 275
Swallow, The, in the Deluge: 170
Syracuse: 89

tabernaculum: 364, 378
tarpu: 184 (n.)
taura: 184
τέκνων: 345
Temple of Belus: 102 (n.)
,, Towers: 101 *sqq.*
templum: 364
terebratio: 23
terminalia, termini: 290, 295
tessera hospitalis: 134 (n.)
Teutons 47; Migration of 399–400; Roaming Propensities of 383, 400
Thales: 177
θεοί: 235. θυγατήρ: 17 (n)
Tigris, River:—*vide* Euphrates
Time, Measurement of: 118–22, 180
tollere liberos: 35
Tower of Babel: 99, 100 (n.), 101 (n.), 102–4, 123, 151
Town, The: 85–97
,, Babylonian: 212
,, and Village: 223
,, (the word): 21
Towns, Aryan Ignorance of: 20–3
,, Greek and Roman Knowledge of: 21
traditio: 18
Tradition, Conservatism of: 291–9
Transylvanian Mines: 136 (n.)
tribus rusticae and *urbanae:* 88
τριήρης: 12
tripudia: 363, 371, 375
Troy: 25, 249 (n.)
tugan, taugen, Tugend: 264
tun: 21 (n.)
Twelve Tables, The: 105, 119, 136
Tyre: 98 (n.)
,, and Sidon: 168 (n.), 219, 220

Ulysses: 33, 38, 176
Unterwalden, Switzerland: 266 (n.)
Uranus: 33
urbs: 21 (n.), 87
usufructus in cattle: 15 (and n.)
usura urbis: 195
usurae: 189
usus: 189
uxor: 342

vaçâ: 342
Vandals, Migration of: 400
vastu: 21
Veda:—*vide* Rig-Veda
Vedic Period: Marriage in: 30
,, Philosophy: 10
Velleda: 362
venenosa herba: 371
venenum: 347 (and n.)
veneficium: 347 (n.), 348
Venus: 347 (and n.)
Vercingetorix: 88, 272
Ver Sacrum: 6, 8, 9, 13, 290, 314; Connection with mother-nation severed 268; Departing Host 260–7; External Occasion 257–9; Popular Decree in 268–80; Several Features of 257–68; Spring in 280–90
Vesta, Temple of: 105
,, Worship: 5, 45, 274
Vestal Virgins: 23, 24, 281–8, 298, 355–7
via militaris: 139
viç: 25
Vieh: 17
vinculum: 59
vindicatio: 327, 331
vindex: 57
vir: 264
virtus: 264
Vladimir the Great: 29
Volga, River: 397
vota: 359
voxor: 342
vrka: 12
Vulcan: 24
ὗς: 275

Waggon: 187
waina, wainu: 184
wair: 264
Walhalla: 38

War-chariot, Roman: 322
Water in Primitive Times: 149–54
Water-Clock: 119, 147, 212, 224
Waterworks of Babylonians: 154–62
Week, Babylonian Division of: 121–2, 180
Wends: 356
Wër, *Wergeld:* 264
White Sea, The: 400
Widow-burning: 30–32
Wilhelm, Kaiser: 75
wira: 264
Wolf, the Leader of the Departing Host: 250, 251; of the Hirpini 300–3
Women: 334–49; Aryan Law relating to: 27–32
Wood for Bridges: 321
Wood used for purposes other than Building 134–41
Wooden House, The: 97–110, 148
,, Nails: 321
,, Spears: 321
Woodpecker: 250, 251, 303–4 (and n.)
Writing, Art of: 358; Earliest Origin of 80
Writing in Babylon: 205–9, 212, 224
,, Tablet: 134–7

Xanthus: 107 (n.)

zehn: 315 (n.)
zenana: 64
Zeus Kronos: 33
Zopyrus: 130

PLYMOUTH:
W. BRENDON AND SON, PRINTERS.