## WALTER LEHMANN MEXICAN ART



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# THE HISTORY OF ANCIENT MEXICAN ART

BY

AN ESSAY IN OUTLINE

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### TO MY PARENTS-IN-LAW



#### Introduction.

It is incumbent on the history of art to work upon fixed basic principles applicable to the manifestations of many peoples.

Culture is creative. Civilization is exhausted. The former is productive. The latter paramountly reproductive. Thus civilization tends both to syncretism and archaism.

The creative part of culture is inherent in that which is artistic. The essence of art raises both the question of generalities and particularities. All art should be judged, examined and comprehended simultaneously from the point of view of humanity, as well as of a people and its representative, the creative artist.

No matter the art of which people be examined, it will always be found on closer investigation of phenomena, either similar or dissimilar, that the path leads to something common and superior to both: the enigma of art manifestation per se.

The final approach must be the task of philosophy beyond historical and ethnographical investigation. The enigma is rooted in the soul.

Indeed, every form of art is the expression of either the individual soul, or that of a generality. And here we discover a very peculiar reciprocity between both. The individual artist is able to move the masses. On the other hand the indistinct sentient life of a nation crystalizes in the artist. Though it is not necessary that his name be handed down to posterity. Nor is this the case with folk-songs for instance. Personal art is always imbued with the impersonal. For the genius of the artist and that of a people, if united, always finds its ultimate human expression in creations which, as something eternal, outlasts the mutation of time.

What is eternal? — The ideas which are the foundation of all universal phenomena, and therefore evolve the form problems of art.

Art is the power to embody ideas in a creative form, and to crect something permanent, though perishable in its exterior in the ever-flowing course of time.

A general view of man's multifarious art expression shows, in spite of all the peculiarities of peoples, that there are certain characteristics which permit us to speak of art styles, and great periods in the history of art. It is perhaps a moot question as to how far it is permissible to speak here of a history of development, although an irrefutable sequence is recognizable, showing an historical course in a given movement which we term time.

A succession of styles is observable, both with the individual artist, peoples, and groups of peoples.

It is important to remark, that pure and applied art, now travelling different roads throughout nearly the whole of Europe, are, with other peoples, more or less distinctly connected.

High art in the European sense of the word is the expression of the spiritual experience of the individual in which the work of art is both created and enjoyed for its own sake. Applied art is in the same sense of the word pronouncedly utilitarian. In both cases the aim is that of the embodiment of ideas. For the Greek "Charioteer", as well as an axe, are both, in their way, embodied ideas.

Style is, so to say, the handwriting of a cultured epoch in which recognizable or unrecognizable individuals produce works of art. Personal style is the master's handwriting.

The transference of art subjects to handicrafts is nearly always styleless, and a particular evil of our new age of machinery, which, by its highly developed technical ability facilitates any reproduction and nonsensical transference to the most varied material.

Style is the peculiar form of a work of art. On the other hand, conventionalizing of forms is the intentional or unintentional artistic changing of nature's forms and expressions.

All art is in so far impressionistic as it has its origin in exterior impressions; no one can evade these. The work of art thus created is a connecting-link inserted in an uninterrupted sequence between the external world and man.

Expressionism however — whether naïve or designing — holds that it can create straight from the soul a work of art devested of any intervening medium by disregarding all possible exterior impressions. Such a production finally appears to be in no connection whatsoever with the palpable world. Pure expressionism might be regarded as the art of metaphysics. As absolute space is dealt with by metaphysics, such a phenomenon, as for instance cubism, becomes psychologically comprehensible. And, as further, absolute space forms a synchronic continuity, we can also approach nearer to the intention of modern artists who attempt to represent a sequence of events confined in space, as may be sometimes observed in the case of the simple mediævel legend painters. As however the works of high creative art, plastic and graphic, are really not time-bound in only retaining one moment, the amalgamation of time and space in plastic and graphic art in one and the same work is a characteristic of the primitive, or a voluntary harking back to the same.

I understand by impressionism a preponderating influence in the artist's work from without, and by expressionism that from within.

The fundamental form of impressionism is naturalism, for nature was, and remains, the eternal teacher of mankind. Small wonder then that just the most primitive drawings, as for instance the ancient Altamira cave paintings, are possessed of an extraordinary vividness of impression. They are pictures of nature based upon the most acute power of observation emanating from the close connection of primitive man with nature.

The naïve grasping of the essential in vivid momentary movements (closely akin to caricature) is characteristic. It is clear that we have here, as is the case with bushmen's and other drawings, a certain psychic mood and form of human thought reacting to momentary phenomena in nature with complete psychic devotion. I term, the art of this attitude to the universe (Weltanschauung) primary naturalism. Sharply contrasted to this are the restricted and limited patterns enforced by the technique of plaiting and weaving at a period when man was possessed of a developed handicraft. As, ethnologically, the pot developed from the basket, woven patterns were transferred to ceramic, and were thus changed in various manners. I call this style primary plectogene geometrical.

Since the introduction of plaiting, weaving, and pottery, both styles begin to influence each other, and in doing so, it is probable that originally different and distinct cultural spheres reacted mutually on one another through amalgamation, trade relations, migration and other causes.

It is possible, for instance, in the case of ancient Peruvian art to distinctly recognize the two above-mentioned styles, as well as their mutual exchange of influence.

Plectogene geometrical patterns undergo a secondary naturalistic change on adoption, as human imagination easily conceives e. g. a square having another little one within it, to be an eye. This secondary plectogene style is geometrical-naturalistic.

On the other hand, naturalistic motives are conventionalized owing to a more reflective and more recent observation of nature. This is a form of observing nature, as conceived and reproduced by means of memory, rather than an observation of what appears actually and at first hand. Associative modifications of the pattern result. And finally, that mode of viewing the universe, which is pondered and mythological, creates an art more or less richly vested with symbols and attributes (mostly of the gods). This conventionalized naturalism as met with, for instance, in ancient Mexico, may be designated as a priestly or hierarchical art.

If the secondary naturalistic plectogene patterns are transferred to ceramic, the rigid form becomes less rigid, and naturalistic geometrical productions result.

Again, another form of naturalism developing to a conscious return to the nature of primitive man, is the mature and supermature naturalism of the most cultured peoples. It alone really knows the emotional landscapes and the spiritualized

portrait. It is rational (one in many) in its classical or classicizing form, irrational in its romantic form (many in one).

The exhaustion of impressionism leads to expressionism, which, in a way, is suppressed naturalism, and may perhaps pave the way for a new romanticism.

#### Mexico.

It is only possible within the disposable space to attempt an essay in outline of the history of Mexican art in view of the difficult archæological conditions in this extensive country, and because of the very complicated historical statements made in old sources which are hardly yet even sifted. In order to obtain a more or less comprehensive survey of the various styles and time-epochs on Mexican soil, it is necessary to unroll the variegated scroll of the many peoples, among whom the Mexican-speaking inhabitants of the plateau, and the Maya tribes have left important historical traditions and monuments.

We shall not go amiss in presuming that the differentiation from Mexican style amongst the neighbouring peoples is based on special peculiarities which they were originally possessed of. In doing so we must further consider that the Mexicans themselves have passed through various style-periods during which they influenced the peoples surrounding them.

It seems more stimulating in dealing with this obscure field of art to offer a comprehensive view of the peoples in question, as well as of their history, rather than a detailed appreciation of the artistic value of each picture reproduced in this little volume; pictures of works of art, be it said, that were rigidly selected, and which certainly speak very distinctly for themselves. Questions of style dealt with from the view-point of the history of art are now for the first time chronologically arranged in the appended table. The writer trusts that this volume, together with its bibliography, may facilitate an introduction into ancient American art.

#### General View.

#### I. Non=Mexicans.

The ancient inhabitants of Mexico are divided into two main groups: Mexicans and Non-Mexicans. The former can be arranged in two strata which are linguistically, archæologically, ethnographically, and chronologically quite distinct from one another.

The Toltecs or Nahuas (Chichimeca Mochanecatoca in Sahagun's Hist. de la Cosas de la Nueva España) form the older stratum of the Mexicans with dialects distinguished by the T sound in place of the Tl. Their language was, or is Nahuat. The latter stratum is formed by the Nahuatlacs, to whom the Aztecs belong. They have the mute Tl sound, and speak Nahuatl.

The Sonoras and the Shoshonees are elder relations of both. As the Mexicans of both strata immigrated to the Mexican highlands, we shall first deal with the Non-Mexican peoples. They either also immigrated in archaic times, or are there so long that they may be regarded as autochthonous. To these belong chiefly the peoples of the great Otomí group, further the Mixteco-Tzapotecs, Mixe-Zoques, Huaves and Mayas, as well as the Totonacs and Tarascs (whose linguistic position remains undecided), although these two latter are also sometimes mentioned in the migration myths as "arrivals".

Of the northern frontier tribes mention should be made of the representatives of the great families of Athabascans or Tinne stretching far to the south. The chief body of these tribes is settled in the north-west of the continent. The bestknown of the southernmost Athabascans are the Apachees between the Rio Grande del Norte and the Upper Rio Gila. In the remote west — in the south-west of the United States on the Lower Colorado, on the Rio Gila, and in the neighbouring territories — we find the Yumas as a particular stock, including the Mohaves, Cocopas, Cochimis (of Lower California) besides the Seri on the Tiburón island and enclaved on part of the opposite Mexican mainland (in the Pima district). This neglected group is particularly important owing to its relationship on the one hand with the Chontals of Oaxaca in the south, and on the other with the Californian Hokan group in the north. Perhaps we may regard the Californian elements in Mexico as very ancient. It is not possible to discern clearly now-a-days whether in remote antiquity Californians once held a major part of Mexico, or whether only single shoots had penetrated into a still older original population (the Otomí group). But, at any rate it is remarkable that the residue of the Seris, Cuitlatecs, Tlappanec-Subtiabas (Maribios), Chontals of Oaxaca, Xincas (south-east Guatemala), who appear as Californians, cling very closely to the Pacific coast following the direction of California to the south.

Among the tribes of northern Mexico, attention should be drawn to the Sonoras and Chichemecas. They will be discussed when dealing with the Mexicans. as well as the Shoshonees, as all three belong to one large group.

There are still to-day numbers of long-settled peoples in central Mexico. The most important are the Otomís of the southern Mesa Central and the neighbouring countries of the Tierra caliente. They include the Otomís-proper, Mazahuas and Matlatzincas or Toloques (Pirindas in Tarascan) south of them in the neighbourhood of the high valley of Toluca, as well as the Ocuiltecas (Malinalcas).

Mexicans found their way in various migratory waves into the ranks of these Otomí peoples.

Adjoining these autochthonous peoples, as primordial relations, are the Chocho-Popolocas now only existing as a fragment of a people south of Puebla, and in northern Oaxaca. Once they were very extensive and coincide, according to my last investigations, mainly with the ancient Olmecs (Olmeca-Uixtotin). They were the inhabitants of the fertile tropical coastal countries of the Gulf shore south of Verra Cruz. Sahagun, who collected old Mexican traditions up to his old age from the most learned Indians, emphasizes the fact that the Olmecs were not Chichimecas, but Olmeca-Uixtotin-Nonoualcas. This means that they did not immigrate from the north, but were long-settled barbarians, speaking originally a foreign language, and being a foreign race, even though later Toltecicized. They were already influenced at an early period by Toltec culture and language. And it was just their district — the inner angle of the Gulf — that also remained a centre of especially high intellectual culture till well into Aztec times, as is above all proven by the magnificent Codex Borgia originating from this district. The extensive Toltec influence among this "rich" border people is partially explained by the trade route passing through their territory leading from the central plateau to Tabasco and the Maya countries. Hence these Olmec tribes were considered in a later era (from the Aztec point of view) as being the children of Quetzalcouatl (the God of the Toltecs and the travelling merchants).

Olmecs were settled in ancient times in Tlaxcala, where later they had, as Pinome, a quarter of the town to themselves. It is apparent that the early Toltecicized Olmecs had also possessed themselves of the political hegemony in Cholula the Rome of the New World. We may presume that the Toltecs were exercised of the intellectual supremacy at all times, or at least passed it on to their successors. Bishop Lorenzana gives us tidings of the Toltec language which had been adopted, and which was a Nahuat idiom. He calls the dialect of the Puebla district uncompromisingly "Olmeco-Mexicano". We have an historical foundation for the whole of ancient American history in the Aztec text of the Historia Tolteca Chichimeca<sup>1</sup>) deposited in the National Library in Paris.

The expulsion of the Toltecicized Olmecs from Cholula was effected with the help of the warlike Nahuatlacs in 1168 A.D. As we read in Torquemada that the sovereignty of the Olmecs lasted 500 years, we arrive at the date of 600 A.D. for the commencement of the Olmec Tyranny, that is to say: exactly the time in which, according to Sahagun, the Empire of Tollan declined.

<sup>1)</sup> The Ms is bilingual on the 1st page, Aztec and Chocho, as I have been able to prove. This circumstance may also serve as another proof that the language of the Olmeca-Uixtotin was a Chocho dialect.

The Olmec question is therefore of the greatest importance for the early history of the Toltecs. We are further aware from Oviedo and Torquemada that it was the Olmecs who had caused the emigration of Nahuat-speaking Nicaraos from the surroundings of Cholula to Nicaragua (circa 1000 A. D.). Chorotega-Mangues had already arrived in Nicaragua before these Nicaraos. They must have gone there before 1000 A. D. from the district of the Chiapanecs of the Mexican isthmus, for Mangues were found by the Nicaraos as "Masters" of the country. Perhaps forebears of the Tlappanecs had come with these Mangues to Subtiaba (near León). These are foundations for a chronology hitherto wrapped in darkness, and which now permit of an exacter fixation of the periods of the history of art in Mexico and Central America (vide Table).

The Mazatecs are the nearest relations and neighbours of the Chocho-Popolocas. To these also belong the Triques, Ixcatecs and Chiapanecs.

It is as well to connect here the peoples of the Mexican isthmus: the Mixteco-Tzapotecs and the Chinantecs who are connected with the Othomí group, although this fact is not fully cleared up in detail.

The rough tribes of the Mixe-Zoques form a group of their own who show through the Tapachultecan I connection with the Xincan II in the south-east of Guatemala, perhaps via the mysterious Aguateco II of Guatemala. And finally may be the Huaves of the Tehuantepec lagoons also belong to this group. The linguistic connection of these fragments of peoples with the Maya family are not yet investigated enough to be conclusively judged of. At any rate, the original Mayas, when spreading, had to deal with the ancestors of the Mixe-Zoques in the northwest. These latter had been driven out by the Chiapanecs. In the south and southeast the original Mayas had to deal with Xinca peoples. The relationship of the Mayas with certain tribes in Honduras discloses new historical points of view.

We must insert here the Tarascs (Quaochpanme, "People with shaven heads"). They inhabit an extensive country (that was never subjugated by the Mexicans) in the west of the high valley of Toluca on the Pacific slope. They speak a very singular agglutinating language, and are remarkable, because — like the Toltecs — they did not sacrifice human beings. Archæologically the style of their ceramic shows connections with the primitive Otomi stratum.

The Totonacs of the Gulf coast between Huaxtecs in the north, and Olmecs in the south, were a people who had attained to a considerable height of culture of which their stone sculptury is an eloquent witness.

Linguistically they are conspicuously isolated. Their history goes back centuries anterior to the Spanish conquest. But it has only been handed down in its main lines in a few statements, chiefly by Torquemada. Certainly they were imbued at an early period with Toltec culture. It is possible that for this reason the Totonacs were considered by the Aztecs of a later epigonal period to be the builders of

the Teotihuacan pyramids which are decidedly Toltec. The magnificent twin manuscripts, the Vienna Codex and the Codex Zouche Nutall (Cod. Jovius) sent by Cortes to the Emperor Charles V. originate from Totonac districts.

The Maya peoples of the Mexican isthmus and the neighbouring northern Central America are still a homogeneous mass to-day, which has in course of time extended from the mountainous country between Chiapas and Guatemala to the west, north, east, and south-east without having reached the isthmus of Tehuantepec, nor passing to any considerable extent the Bahia de Fonseca in the south. Only the Huaxtecs, who must have separated from the original Mayas (Chicomuceloltecs) in very early times, are to be found at a great distance from the rest of the Mayas in the state of Vera Cruz from Tuxpan to beyond Tampico where they are neighbours of the Pamis and Otomís in the hinterland. The Huaxtecs, in illrepute with the Aztecs, as being barbaric drunkards, barbaric, because they wore no loin-cloth (but perhaps a sort of penis-glove), were possessed of neither hieroglyphs nor stone edifices: at best small modest earth pyramids with rough awkward stone human figures on them, and sometimes faced with stone slabs. On the other hand their coloured striped woollen textiles were celebrated, and drawings of Huaxtec stuffs in Mexican picture-writings give a weak conception of their magnificence. The lack of hieroglyphs with the Huaxtecs proves that they must have been separated from the original Mayas at latest in the 8th century after Christ, because the oldest known dated Maya monument — the Birdgod of San Andres de Tuxtla — originates at the latest from this period. Accordingly, to all appearances, they must have been separated from the original Mayas in much earlier times.

In order to understand Maya culture, chiefly distinguished by wonderful architecture, it is necessary to go back to the Mexicans.

#### II. Mexicans.

Historical, archæological, and linguistic facts show that it is possible, if we divide the Mexicans into two main groups, to satisfactorily connect the variety of apparently contradictory statements of the old sources about the earliest Mexican times. These two groups are the Nahuas and Nahuatlacas mentioned above, and by whom I mean the older Nahuat-speaking Toltecs, and younger Nahuatl-speaking tribes of the Aztec type.

It is a law that compact groups of peoples change, or "develop". On the other hand, segregated parts maintain themselves carefully at that point at which they stood when leaving the greater mother-nation, being a minority struggling to maintain its peculiarities as an enclave in a foreign majority. This applies particularly to the languages and dialects in the diaspora; they are therefore, in connection

with other investigatory auxiliaries, especially adapted to answer chronological questions which are also indispensable for questions dealing with the history of art.

The oldest Nahuat known to me is the Izalco of Salvador. It is partly on the same level as Sonora and Shoshonee. This can only be explained by extremely ancient Toltecs having penetrated as far as Salvador.

Beyond the real Shoshonees, the following also belong to them: the Hopis (Moquis) of Arizona, the Yutes of Utah and Colorado, the Paiutes of Nevada, the Chemehuevis of the Rio Colorado, and the Comanches of Texas and New Mexico.

The Sonoras include briefly the Pimas, Opatas, Cahitas, Tarahumaras, Tepehuanos, Acaxees, Coras (Nayarits) and Huichols, all settled in north-west Mexico.

We had best make mention here of the Chichimecs, who, according to Sahagun, are divided into Tamimes ("Archers" in ancient Nahuat) and Teochichimecas ("steppe Chichimecs"), and to whom the Zacachichimecas ("grassland Chichimices") also belong.

The name Chichimecs is a collective one for a number of tribes on the plains, and in the mountain countries of northern and north-western Mexico. It is difficult to decide as to their linguistic position. It is certain on the one hand that a part of the Chichimecs belong to the Otomí group, on the other we may think of the Teules Chichimecas in connection with the Teochichimecas and Zacachichimecas who led their restless lives between the southern Sonora and Otomí. The Cazcans, Cocas and Tecuexes may be placed next to the Teules Chichimecas. As a matter of fact, all these ancient Mexicans who had migrated into the country from the northern districts were called Chichimecs. For this reason Sahagun calls the Olmeca-Uixtotin: Nonoualca ("Speakers of a foreign language"), and not Chichimeca.

It is highly important that in the district of Teul (source of the Rio Bolaños) as well as in the valley of Juchipila and the side valleys of the Rio Verde magnificent earthenware vessels are found encrusted with splendid colours which are recognizable as being connected with the district of Tepic, La Quemada and Chalchihuites, as well as with the discoveries in the middle stratum of Teotihuacan. And further north of the ruins of Chalchihuites and the discoveries of Teul and of Estanzuela (near Tepic) we find La Quemada, the old Tuitlan, with relics of Tarascan style and the Sivano-ki. These "Sivano Houses" consist of numerous clay buildings in the Pima district which are very reminiscent of the old buildings of Casas Grandes in Chihuahua and Arizona. It is probable that the ancestors of the Pimas not only built the Casas Grandes, but also occupied several buildings of the Pueblos. As among the multi-lingual tribes of the Pueblos (Kera, Tehua, Zuñi, etc.) the Hopis (Moquis) of the first Mesa are the only present representatives of the Shoshonees in the north of Arizona we are justified in presuming there

has been, as far as extension, time, language and archæology are concerned an older Shoshonian period before the Sonoran. P. Perez de Ribera gives us information about the emigration of the Sonoras from the north in his Historia de los Triumphos de Nuestra Santa Fé (Madrid 1645, lib. I, cap. 19).

I consider the Casas Grandes as still belonging to the proto-Shoshonic period which ceases linguistically in about 1000 B.C.; the Sivano-ki to the first proto-Sonoran, the Chalchihuites with Teuls, Totoates, La Quemada and Estanzuela (Tepic) to the old-Sonoran period. Both of which reach from 1000—500 B.C. having intimate connection with proto-Toltec culture of the 1st cent. B.C. From this area sprung the proto-Toltec culture which depended on the ancient Toltec culture flourishing before 600 A.D.

The stages of these cultures are marked by ruins and characteristic antiquities, by linguistic studies in connection with chronological statements as established especially by Sahagun, in the Historia de los Reynos de Colhuacán y de México, and Torquemada. I do not mean that all ruins and discoveries need originate from such dates as 1000 B. C., 500 B. C., etc. (vide Table). Such dates merely serve to outline the epochs that created these styles, of which ruins and objects also belonging to later centuries, are examples due to rentention on the part of the inhabitants remaining behind, and their clinging to ancient traditions.

It is here that early American history focuses. Rays of light are always only thrown from complete historical centres back to distant antiquity, and onwards to centuries lying ahead. In America, it is only possible to find fixed points for the chronology and the dates of excavations important in the history of art where historical traditions, or the monuments themselves, have left reliable dates. This applies especially hitherto only to Mexico and Central America, far less to South America, and the least to North America. Mexico herself was in possession of the most important auxiliaries to historical preservation of her great part by means of highly developed picture-writing and hieroglyphics, together with an admirably planned calender system. It is true that mythological conceptions play an important rôle, as is the case with all peoples whose minds tend to mythology, and the corresponding uncritical treatment of history. Myths are connected with events, heroes of culture and historical personalities, and vest distant geographical districts with conceptions inseparably connected with the cardinal points. Originally chronology and calenders could not to be distinguished from cosmological studies. For this reason the starting points (zero points) of chronology are closely connected with the establishing of eras. This is particularly the case to a great extent with Mexicans and Mayas. Dim prehistoric periods are summed up into epochs synchronizing with a wellregulated and rounded-off universal conception. Thus the traditions in the Historia de los Reynos de Colhuacán y de México count with 2028 years, which are distributed over 4 world eras of 676, 312, 364 and 676 years, and with 2513 years which expired on 22nd May 1558 A. D., leaving 2513—2028 = 485 years of complete (Aztecan) time. The traditions of this document, the original writing of which is in the handwriting of Ixtlilxochitl, and which I was lucky enough to re-discover in Mexico in 1909, only goes back in its first part to 1073 A. D., a date that clearly points to 1064-1074, the  $2^{nd}$  dispersal of the Toltecs. These 485 years only include a newer Mexican, Nahuatlacan tradition, and deal with the age of the world, creation, and Toltec history from a newer, i. e. Aztec point of view. The starting point of the whole calculation would reach back to 955 B. C. We may perhaps interpret this "zero point" of Mexican-Aztec chronology as having a deeper significance, in as far as here the early period was accepted with 13+6+7+13 cycles — each of 52 years — (= 39.52 years). There ist a dim consciousness of a very ancient past doubtlessly mirrored in these years, as well as in the different zero-point of the Maya chronology. The much higher periods including more than ten thousand years of the Codex Vaticanus are purely cosmological epochs which may be connected with Præcession — like the serpent numbers in the Codex Dresdensis.

If Sahagun informs us that the Mexicans had stayed about 2000 years in the country, and if Azcapotzalco, which passed through an archæological Teotihuacan culture — as can be proved — and could (according to Torquemada) look back about 1571 years, these statements are by no means to be scornfully dismissed. These best of the old authors, perfectly credible in their statements, did not simply invent them. What we need do is to discover how to interpret such figures.

The days of such phantastic views as expressed by Brasseur de Bourbourg (who however should not be disregarded owing to his valuable sources) have, we trust, gone for ever since Eduard Seler's epochal studies. We are possessed of considerable information from Mexico both old and ancient, but it is very difficult to unravel the apparent entanglement of statements, and to render them uncontradictory. This difficulty is partly owing to the fact that various local traditions and chronologies were extant which had been cast into different systems by certain priest schools. Beyond this, there is a break between the younger Mexican-Aztec and the older Toltec traditions. We must recollect that Aztec history was grafted on to the Toltec, which was thus either moved to a more recent time, or vanished, and was hidden in a universal chronology. The end of more recent Toltecdom in 1064 A. D. (according to the Historia de los Reynos de Colhuacán y de México) leads us — with but a break of tradition of only a few years — to the abovementioned year 1073, the end of Toltec renaissance, and the beginning of Aztec times.

The question is: how far can pre-Aztecan times be historically illuminated? This requires a short treatment of the Toltec problem. Since Seler's archæological discoveries on the fresco strata of Palenque, it is quite certain that the Toltecs are by no means mythical. Beyond this, there is so much reliable old information about

them that there can no longer be any dispute as to their being the protagonists of an early Mexican period of culture. Sahagun ascribes to the entire Mexican culture a period of roughly 2000 years, and dates the destruction of Tollan (the Toltec realm) about 1000 years before his time (1571 A. D.), i. e.: about 600 A. D.

Thus the most prosperous period of the ancient Toltecs was some centuries before 600 A.D., and the commencement of the reign of the Toltecs - whom I call proto-Toltecs — should, according to Sahagun, be placed at 429 B. C. Both archæological and linguistic facts support this chronology. The newer Mexican dialects, distinguished by their Tl-sound, represent Aztec known to us from three periods: language of the ancient hymns to the Gods in Sahagun, which we possess commentated with glossary in classical Aztec of the period of the Spanish Conquest (16th cent.), and a finally present-day vulgar Aztec. The proto-Aztecs, old Aztecs and Tenochca-Aztecs should distinguished historically. I call all Nahuatl-speaking tribes Nahuatlacs. One of their members who rose to special political power are the Aztecs of Mexico-Tenochtitlan. The Nahuatlac immigration seems partly to date back to some centuries before 1168 A. D. Thus it is said that the Aculhuagues of Tetzcoco immigrated in the 47th year of Xolotl's reign (= 836 A. D.) together with the house of Citin (vide Torquemada). These Citin remind us of the Mecitin ("agave hares") or Mexitin. They expressly changed their name again from Mexitin to Mexica (Cod. Aubin 1576). It appears that the Nahuatlacs immigrated in successive groups. The 11 th—12 th century after Christ was the period of the chief migratory movement, and amongst others it also brought in 1168 A. D. the Tlatelolcas who were separated from the Tenochcas since 1337 A. D. The dynasty of the Mexico-Tenochtitlan kings (ca. 1376 A. D.) is preceded by a period of ten war-chiefs quauhtlàtoque), of which the first page of the Codex Mendoza gives us pictorial tidings. The time between these chiefs of the single town-quarters and Acamapichtli is occupied by Tenuch (ca. 1321-1373) according to André Thevet.

The peculiar dialect of Pochutla in Oaxaca, recorded by Boas, is distinguished itself from Aztec by certain vocal changes. Here we appear to have a special dialect which may be connected with the Toltec builders of Mitla mentioned by Torquemada, and which to my thinking belongs to the middle or late Toltec period (after 1064).

The style of the Xochicalco ruins, together with that of the Chalco sculptures projects into a Toltec-Aztec transitionary period.

After the decline of the ancient and pacific Toltec empire in about 600 A. D. caused by Olmecs, a period of confusion set in which is mentioned as "interregnum", the historians not agreing as to the duration of the time of this period.

According to Torquemada and the dynasty lists in other old sources the Toltec cultural, and certainly religious influence begins to get stronger again soon after 700 A. D. which justifies us in speaking of a kind of Toltec renaissance. Cholula

was the centre of this classical ancienne neo-Toltec culture. Older reports actually speak of a Tollan-Cholollan. Table A of Kings in Torquemada mentions names of kings from 651—1031 A. D. (Clavigero 667—1031), Table B of Kings from 726—1064 A. D. (Codex Zumarraga 799—1160).

The centre of old Tollan was in Teotihuacan, Tollantzinco and Tollan. I succeeded at Teotihuacan in 1909, by excavations in the Teopannacazco, in establishing the presence of three successive cultural strata, which were later found to be correct by other explorers, and were also found in other places. Remains of Aztec culture belong to the upper stratum, those of Toltec to the middle one, and a primitive (Otomí) culture to the lowest. The remains of Toltec culture are distinguished by fine stucco paintings and brilliant emerald green colours. The figures of the Teotihuacan temple frescos conformable to the paintings of the Aljojuca vessels show an archaic style which changed to epigonal style in Aztec times based on the fundamental style of the Estanzuela (Tepic) encrusted ceramic, the art of which can be traced far to the north. The rest of the ancient Toltecs were probably mixed to a great extent with the Otomí (Chichimeca-Otomí). As the pioneers of culture came from the north, and Chichimecs however were settled in the north of the Mexican high plateau, "Chichimeca" became a title of honour, both for the ancient Toltecs, as well as especially for the Chichimeca Aculhuague of Tetzcoco, whose beginnings reach back to 323 A. D. 1); i. e. at a time when ancient Toltec influences were extending to neighbouring Otomí tribes. Nahuatlacan Aculhuas seem to appear as early as 836 A. D. The Citin clan mentioned in connection with the above reminds us of the names of ancient Toltec relics such as Ecitin (vide supra: Mecitin).

The end of the earlier "young" Toltecs is completed in a second Toltec dissolution by the suicide of Uemac in Cincalco (1064—1070 A. D.). We hear of Cholula at the time when the migrating Toltecs begin to spread. The beginning of the Kingdom in Tepeyacac and Cholula is dated 1168 A. D. But this only means that since this time the predomination of foreign Olmecs, who were however already Toltecisized, was disrupted with the assistance of warlike Nahuatlacs. For instance, Tepeyacac counts 332 years (Herrera 2. 10. 21, p. 285/6) since the original home of Chicomoztoc ("Place of seven Caves") till the beginning of the kingdom. The year 1168 A. D. minus 332 years takes us to 836 A. D., the

<sup>1)</sup> Everything that is Chichimec before circa 320 A. D. would be proto-Chichimec. The period of 469 years in Torquemada (320—789 A. D.) civers the ancient Chichimec period based on an old Otomi stratum. The time from 789—989 (Xolotl) may be regarded as a middle period, that from 989—1139 A. D. (Nopaltzin Pochotl), and 1139—1175 A. D. (Tlotzin-Pochotl) may be termed a newer period. About this time the dynasty poses to a later one of Tetzcoco in the person of Tlaltecatzin Quinatzin (1175—1258 A. D.) whose accession to the throne Sahagun (VIII, 3) states as being in 1246 A. D.

above-menitoned 47th year of Xolotl's reign as the beginning of the Aculhuaque of Tetzcoco.

There are plain signs in Xochicalco of the admixture of Toltec art activity with aboriginal. Here we should note the calculiform framing of the day symbols hieroglyphs, and employment of a line instead of dots for the number 5, as in the Codex Féjerváry Mayer and the Codex Cospi on the one hand, and with the Mayas on the other. It is evident that we have here an older style which was also retained by the Tzapotecs (Monte Alban reliefs).

We may presume that ancient Toltec culture rescued the younger Toltecs extended to the surrounding autochtones at an early period through pacific and religious channels, and along the trade routes. It is thus that the Toltecs, Olmecs, Tarascs, Mixteco-Tzapotecs, Chiapanecs, and Mayas were repeatedly fructified by the benefits of Toltec culture and science.

The Tzapotec calender is retentive of the particularly ancient names of the 20 day symbols. The Toltec calender with hieroglyphic characters found its way via the Tzapotecs to the aboriginal Mayas of the boundary highlands between Chiapas and Guatemala, following ancient trade routes leading from Tabasco from the Rio Usumacinta upwards to Peten, Guatemala and further to Central America. Those aboriginal Mayas developed the old Toltec picture-writing independently to peculiar hieroglyphics, which in their inward conception of ideas, betray to the connoisseur a closer relationship with the Mexican pictures than one would presume in view of the great external differences between the two systems of writing.

The Leiden jade plate originating from the boundary district of Belize and Guatemala dates at the latest from the 10th century A. D., and deals with the old end of the year of the month Xul ("end"). The "Birdgod" of Tuxtla is considerably older according to my calculations, namely 158 years and 225 days, and thus belongs to the 8th century A. D. The date of this piece, 8 (caban) = 20 Mac, refers perhaps to the end of a year. The birdbeaked God of Tuxtla is connected with forms of Quetzalcouatl, and old Mexican mosaics in the Copenhagen and London museums support this theory.

The Maya calender certainly developed under the influence of the ancient Toltecs several centuries before the 8th after Christ. Ancient Toltec influence extended from Guatemala via Peten and Belize to Bacalar, and brought the first group of the Itza peoples to old Chich'enitzá the beginning of which dates back to about the commencement of the 2nd quarter of the 6th century A. D. according to the books of Chilam Balam. More recent Toltec influence came later from Champoton in the west to northern Yucatan. Especially Chich'enitzá and Mayapan show Toltec influence. In Chich'enitzá we recognize elements of the Toltec style of Teotihuacan as well as also those celebrated stone snake columns which Sahagun emphasizes for Tula (Tollan). Remains of such columns

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in the form of an "erect snake", which may also signify quetzacouatl, have been found in Tula, and are deposited in the Museo Nacional of the Mexican capital. The peculiar recumbent stone figures of the so-called Chac-Mol type are distributed as far as west Salvador; this should point to Toltec influence.

The Santa Rita frescos in northern Belize also betray Toltec influence, perhaps coming from the south with a strange admixture of Maya elements.

The magnificent stone figures of Santa Lucia de Cozumalhuapa in southern Guatemala are remains of ancient Pipil culture.

It is probable that the oldest culture from Chich'enitzá to south Belize is connected with ancient Toltec seats in the central Motagua valley from which offshoots can be traced archæologically on the one hand to northern Honduras, and on the other to south Salvador.

If Mexican culture has its roots in the Sonora and Pueblos districts, then the strange relationship between archæological discoveries in the southern states of the North American Union and those of ancient Mexico become more comprehensible. We may presume that certain influences of a very ancient culture with protogonal style emanated years ago from the Pueblos district which spread partly to the district of the Mississippi mounds, and spreading further, fructified Mexico. It will require close investigation to discover how far this oldest Pueblos culture can be traced to the north along the Rio Colorado. The Pueblos district will provide the key to a correct comprehension of ancient Mexican culture. In connection with this are further questions as to the links with the higher north-west of America which are to-day not yet ripe for discussion.

#### Bibliography.

- Channing Arnold and Fred J. Tabor Frost, The American Egypt. London 1909. 8°. 391 pp. ill. Maps.
- 2. A. F. Bandelier, Rep. of Am. Arch. Tour in Mexico in 1881, Papers Arch. Inst. Am., Am. Ser. II. Boston 1884.
- 3. Leopoldo Batres, Exploration of Mount Alban. México 1902; Visita a los monum. arq. de "La Quemada", Zacatecas. México 1903. Teotihuacan, México 1906. Civilización prehist. de las riberas del Papaloapam y Costa de Sotavento, Estado de Vera Cruz. México 1908.
- 4. H. Beuchat, Manuel d'Archéologie Américaine. Paris 1912. 8°. 773 pp. ill.
- 5. Franz Boas, Archæological investigations in the valley of Mexico by the Intern. School (1911—12)
  Intern. Congr. of Am. London 1912 pt. I (London 1913) p. 176—179.
- 6. G. Brühl, Die Kulturvölker Altamerikas. New York 1875-87.
- 7. Muñoz Camargo, Hist. de Tlaxcala, edid. Chavero, México 1892.
- 8. Chimalpain, Relaciones; Mss. Bibl. Nat. Paris.
- 9. Clavigero, Storia antica del Messico. Esena 1780-81. 4 vols.
- Diego Duran, Hist. de la Nueva España y islas de tierra firma, edid. J. Fern. Ramirez, México 1867.
   2 vols.
- 11. Escuela Internacional de Arqueologia y Etnologia Americanas, Año Escolar de 1911 a 1912. México 1912. XX pp. (cf. also 14).
- J. W. Fewkes, Certain Antiquities of Eastern Mexico, Bur. of Ethn. XXV (1907 Washingt.)
   p. 231—296. Antiquities of the Gulf Coast of Mexico. Smithson. Misc. Coll. Vol. 70 No. 2 (Wash. 1918).
- 13. E. Förstemann, Editions of the Dresden Maya-Manuscript: Leipzig 1880, Dresden 1892. 4°. Commentary on the Maya Cod. in the Ryl. Public Library Dresden. Dresden 1901.
- 14. Manuel Gamio, Arqueologia de Atzcapotzalco, Intern. Congr. of Am. London 1912 pt. I (Lond. 1913) p. 180—87. Investigaciones arq. en México 1914—15, XIX. Intern. Congr. Am. Washington 1915 (1917) p. 125ff. Los últimos descrubrimientos arq. en Teotihuacan. "Ethnos Tomo" I Núm. 1 México 1920 p. 7—14 (cf. also 11).
- 15. †H. K. Häberlin in the American Anthropologist N. Ser. 21 Nr. 1 (1919) p. 61-70.
- 16. E. T. Hamy, Galeric am. du Musée d'Ethnogr. du Trocadéro. Paris 1897. Fol.
- 17. Historia de los Reynos de Colhuacán y de México Original Copy by Ixtlilxochitl. Ms. mex. in the Bibl. del Mus. Nac. de México. (Refound there by the author in 1909.) Copies in the Bibl. Nat. Paris; cf. W. Lehmann, Zts. f. Ethn. Berlin. Bd. 38 p. 752ff.; cf. W. Lehmann, in the Journal de la Soc. des Américanistes Paris N. S. III No. 2 p. 239—97; cf. incomplete and faulty reprint = Anales de Quauhtitlan in Anales del Mus. Nac. de México, Tomo III Apend. Ixtlilxochitl's Ms. (1568—1648) = Boturini Catálogo § VIII Nr. 13.
- 18. Historia Tolteca-Chichimeca, Ms. Aubin-Goupil, Mexican Coll., Paris, Bibl. Nat.
- Holmes, Arch. Studies Among the Ancient Cities of Mexico, Field Colomb. Mus., Anthr. Ser. 1895—97.

- 20. Walter Hough, Arch. Field Work in Northern Arizona, U. St. Nat. Mus. for 1901, Washington 1903 p. 279—358 ill. Culture of the Ancient Pueblos of the Upper Gila Region, New Mexico and Arizona, Smithson. States Nat. Mus. Bulletin 87, Washington 1914. 8°. 139 pp. ill.
- 21. Al. Hrdlička, The "Chichimecs", Am. Anthrop. Lancaster 1903.
- 22. Al.v. Humboldt, Vues des Cordillères et monuments des peuples indigênes de l'Amérique. Paris 1813.
- 23. Ixtlilxochitl, Hist. Chichimeca apud Kingsborough, Mexican. Antiquities vol. IX fol. 197—316;

   Relaciones ibid. fol. 317—468; both works edited by Chavero, México 1891, 1892.
- 24. Thomas Joyce, Mexican Archæology, London 1914.
- 25. Diego de Landa, Relac. de las cosas de Yucatan, edid. Brasseur Paris 1864 edid. de la Rada y Delgado Madrid 1881, cf. Col. Doc. inéd. IIa. Ser. vol. XIII (1900) p. 265—408; important additional information in Cogolludo, Hist. de Yucatan, Madrid 1688 (2. ed. Mérida 1842, 3. ed. 1897).
- 26. W. Lehmann, Altmexikanische Mosaiken, "Globus" 90 Nr. 20 (1906) p. 318—322 (ad vide Xolotl Vienna ibid. p. 319 note 15); "Globus" Vol. 91 Nr. 21 (1907) p. 332—5; cf. also Oppel, "Globus" 1896. Ergebnisse und Aufgaben der mexik. Forschung, Archiv f. Anthr. VI (1907) p. 113—168, Engl. translation. Paris 1909. Ergebnisse einer Forschungsreise in Mittelamerika und Mexiko (1907—09), Zts. f. Ethn. Vol. 42 (1910) p. 687—749. The Hist. de los Reynos de Colh. etc. v. supra 17. Zentralamerika, 2 Vols., Berlin (D. Reimer) 1920—21.
- 27. Leon y Gama, Descripción hist. y cronol. de las dos piedras... México 1790.
- 28. Herzog Fl. de Loubat, Facsimile-Edit. of the Cod. Borgia, Cod. Vat. A and B, Cod. Fejérváry-Mayer, Cod. Cospi, Tonalamatl Aubin etc.
- 29. C. Lumholtz, Unkown Mexico, London 1903 2 vols. New Trails in Mexico (1909—10). London. Leipzig 1912, 8°. 411 pp. ill.
- 30. Teobert Maler, Yukatekische Forschungen, "Globus" Vol. 82 Nr. 13 u. 14 (1902) p. 197-230. ill.
- 31. Brantz Mayer, Mexico As It Was And as It Is. Philadelphia 1847.
- 32. A. P. Maudslay, in Goodman and Salvin's Biologia Centrali-Americana, Archæol., London 1889 to 1902.
- 33. Memoirs of the Peabody Museum Am. Arch. and Ethn., Havard Univ. Cambridge.
- 34. Mendieta, Hist. ecclesiast. Indiana, Col. Doc. p. la hist. de México III (1870); Nueva col. doc. p. las hist. de Méx. IV (1892).
- 35. Earl H. Morris, The Aztec Ruin (Pueblo), Anthr. Pap. Am. Mus. Nat. Hist. vol. XXVI pt. I New York 1919, 108 pp. (Culture Strata p. 104ff.).
- Motolinia, Hist. de los Indios de la Nueva España, Col. Doc. p. la hist. de México I (1858). Memoriales, edid. Luis Garcia Pimentel, México 1903.
- 37. Orozco y Berra, Hist. ant. y de la conq. de México. México 1880. 4 vols.
- 38. Oviedo y Valdes, La hist. gen. de las Indias, Sevilla 1533; reedition of the Real Acad. de la Hist. Madrid 1851—55, 4 vols.
- 39. Peñafiel, Monumentos del arte antiguo mexicano. Berlin 1890. 3 vols.
- 40. Remesal, Hist. gen. de las Indias occid. y particular de la gobern. de Chiapas y Guatemala, Madrid 1619—20.
- 41. Sahagun, Hist. de las Cosas de la Nueva España, edid. Bustamente. México 1829, 3 vols. (= Kingsborough vol. VII); Original-Mss. a) Bibl. del Palacio and Bibl. de la Acad. in Madrid, b) Bibl. Laurenziana in Florenz; French translation by Rémi Siméon, Paris 1880.
- 42. Ed. Seler, Ges. Abhandlungen zur Am. Sprach- u. Altertumskunde, Berlin (A. Asher) I (1902), II (1904), III (1908), V (1915). Die sog. sakralen Gefäße der Zapoteken, Veröff. K. Mus. f.V. Berlin I (Berlin 1890) p. 1882—8. Wandmalercien von Mitla, Berlin 1895. Die alten Ansiedelungen von Chaculá, Berlin 1901. Tonolamatl Aubin, Berlin 1900. Cod. Fejérváry-Mayer, Berlin 1901. Cod. Vatic. B, Berlin 1902. Codex Borgia, Berlin 1904, 1906 with Index by W. Lehmann 1909. La Quemada (Zacatecas), Ges. Abh. III p. 545—559. Similarity of

- design of some Teotihuacan frescoes and certain Mexican pottery objects, Intern. Congr. of Am. London 1912, pt. 1 (1913) p. 194—202. Die Teotihuacan-Kultur des Hochlands von Mexico V (1915) p. 405—585. Beobachtungen und Studien in den Ruinen von Palenque, Abh. Akd. Wiss. Berlin 1915. Die Quetzolcouatl-Fassaden yukatekischer Bauten, ibid. 1916.
- 43. C. Seler, Auf alten Wegen in Mexiko und Guatemala, Berlin 1900. Die Huaxteken-Slg. im K. Mus. f. V. Berlin, Baessler Archiv Bd. V (1916).
- 44. Leslie Spier, An Outline for a Chronology of Zuñi Ruins, Anthr. Papers Am. Mus. Nat. Hist. vol. XVIII pt. III, New York 1917, p. 209-331 ill.; Map and Bibliography.
- 45. H. J. Spinden, A study of Maya Art, its Subject Matter and Hist. Development, Mem. Peabody Mus. Am. Arch. and Ethn., Harvard Univ. Cambridge 1913. — Ancient Civilisation of Mexico and Centralamerica, New York, Am. Nat. Hist. Handbook Series No. 3.
- 46. W. Staub, Begleitwort zur Huaxteken-Slg. im Hist. Mus. in Bern, Jahresber. über die Ethnogr. Slg. in Bern 1920, Bern 1921, p. 36-77 ill. and Map; cf. "El México Antiguo" (publ. Herm. Beyer) Tomo 1, Núm. 7 y 8 (1921) p. 218-236.
- 47. II. Strebel, Alt-Mexico, Hamburg and Leipzig 1885. Ornamente auf Tongefäßen aus Altmexiko, Hamburg and Leipzig 1904.
- 48. Tezozomoc, Crónica mexicana, edid. Orozco y Berra, México 1878.
- 49. J. de Torquemada, Monarquia Indiana. Madrid 1613; edid. Barcia, Madrid 1723.

#### List of Illustrations.

- 1. Tripodal grey reddish catthenware bowl in the shape of a human figure; primitive style. 29 cm. high. Ethnolographical Museum, Berlin, No. IV. Ca. 34 398. Colima. Consul Vogel's Collection
- Red-brownish carthenware animal figure; dog species (perhaps young hairless non-barking dog bred for fattening purposes; dachshund species?). 49 cm. long. Ethn. Mus. Berlin, No. IV, Ca. 34 429. Colima. Consul Vogel's Coll.
- Earthenware vessel with serratures and stripes formed by hatched triangles. 17.5 cm, high. Ethn. Mus. Berlin, No. IV. Ca. 34 487. Colima. Consul Vogel's Coll.
- Earthenwave vessel painted black and white. 24 cm. high including handle. Ethn. Mus. Berlin, No. IV. Ca. 9381. Tanquian, Huaxteca. Seler Coll.
- 5. Earthenware vessels. 15.5 cm. high covered with stucco and finely painted; black background; colours: green, white, red, and yellow with black lines. Singing priests (breath issuing from mouth decorated with flowers soug) in rich garments with waving feather head-dress, an incense pocket in left hand, the right pouring a wine offering on the ground (cf. priests pouring pulque in front of the Moon Picture in the frescos on the south wall in the backroom of the Teopanacazeo in Teotihuacan). Ethn. Mus. Berlin, No. IV, Ca. 35 789 and 35 790. San Rodrigo near Aljojuca, district of Chalchicomula. Honorato J. Carrasco Coll. Ed. Seler. Teotihuacan culture, archaic style-cf. Seler Hist. Essays V, p. 529 et seq. (dealing with my first strata excavations in Teotihuacan) and plate LXIII.
- 6. Front r. side of a blue-green jade figure originating perhaps from the convent of Weingarten (in Wurtemberg), now in the Linden Museum Stuttgart. 29.7 cm. high. Mouth and cheeks with red-tinged pieces of mussels, and yellowish fragments in the nose. Nolot1 as death guide of the sun. Mexican-Aztec. Cf. H. Fischer, "Globus", Vol. 85, No. 22 (Brunswick 1904), p. 345—348, Seler Ges. Abh. 111, p. 392—409.
- 7. Front and I, side view of a squatting Xolotl-like figure 8 cm, high of dark brown wood with hair. covered cavity behind. The horn-like projection gilded at points, probably representing the dog's cars of the dog-shaped Xolotl; eyes and teeth made of mussel shells. Valuable insertions some of which had been fixed with pins and have been lost out of the ears, the butterfly shaped breast ornament and the carved triangular side pieces. Projecting out of, and clear of the navel, is a small beautiful mosaic-work head. The frontlet is of alternating light turquoise blue and dark green mosaic with dark red plaques on the clasp (right); oblique stripes run across each cheek (on the r. 2, on the l. 1); the right ear-ornaments yellow green material fastened by thread; the eyes of mussel shells with obsidian pupil (l.); the mouth of mussel shell with dark red congue plaque. The Xolotlfigure has an anal opening made of a flat-disc with central malachite piece. The male genitals are carefully made, the glans penis consisted of an inserted piece now missing. There is a short piece of square wire between the conic cars. Hof Mus. Vienna, No. 12 585. The figure came from the collection of the Coin and Antiquity Cabinet Vienna, in the inventory of which it seems to be registered as No. 164. The Mexican collection once contained there (Nos. 157-270) dates from the property left by the Emperor Maximilian of Mexico, and was purchased by the Treasury Dept in 1868 for 1483 florins (old currency), but handed to the ethnographical dept. of the Natural History Museum Vienna in 1881. Cf. Lehmann "Altmexikan. Monaiken", "Globus", Vol. 90, No. 20

- (1906), pp. 318—322, in particular p. 319, annotation No. 15. I am indebted to government Councillor Heger in Vienna for photographs and information.
- Jaguar-shaped vessel of light brown wood encrusted with mussel-shell mosaic and coloured stone
  plaques embedded in a resinous substance; the bowl formed lacquered part shows remains of gold
  foil; 16 cm. high, Lond. Brit. Mus. Christy Coll.
- 9. Stone jaguar, 2.75 m. long, 95 cm. high, made of smoothed andesite (lava stone) with traces of colour (black spots on white ground) with a hollow in back akin to bowls used to catch sacrificial blood; found in courtyard of the Secretaria de justicia, corner of the Primera calle del Reloj and the Calle Cordoba in the vicinity of the excavated temple pyramid with front facing south. Museo Nacional de México. Cf. Anales del Mus. Nac. de Méx. Vol. VII, Seler, Ges. Abh. II, p. 901, Aztec style.
- 10, 11. Carved-wood drum from Malinalco, dist. of Tenancingo in the State of Mex. covered on top with skin (tlalpan uēuētl); 97 cm. high, dimension on top 42 cm. greatest dim. 52, thickness of sides 4 cm.; dancing and singing jaguars and eagles are depicted on it; the sign Naui olin ("4" sun movements") and other war symbols. Now in Toluca Museum, reproductions of photographs by Frau Caecilie Seler, cf. Seler Mittlg. Anthrop. Ges. Vienna, Vol. 34, p. 222—274, and Hist. Essays III, p. 221—304. Aztec style.
- 12. Stone figure of smooth grey andesite with folded neck ribbon, frontlet, ear-pegs and loin-cloth, a hollow in the chest. R. hand broken off, l. hand closed like a ring. Low priest, torchbearer? 72.5 cm. high. Ethn. Mus. Berlin, No. IV, Ca. 341. Uhde Coll. Cf. similar stone fig. of the excavations in the Calle de las Escalerillas (Mex. City), however without nape ornament, but with incense-ball in r. hand; see Ges. Abh. E. II, p. 890. Aztec style (young-epigonal). The execution is no longer constrained, though the attitude is stiff.
- Stone toad with the hieroglyh chalchiuitl ("green jewel") on belly. 42 cm. long. Mus. Nac. de Méx.
   (No. 22). From photographs by Frau C. Seler. Aztec style.
- 14. Face mask of smoothed stone with mild expression. On the back the Wind God Quetzalcouatl in basso-relievo as Chiconaui ēēcatl "9 Wind". 14 cm. high. Ethn. Mus. Berlin. No. 26 077. Seler Coll. Cf. Ges. Abh. E. II, p. 953 et seq.
- 15. Face mask of smoothed stone with wild expression. Mus. Nac. de Mex. Aztec style. (Young epigonal.)
- 16. Group: mother with child of dark greenish carefully smoothed stone. 41 cm. high. Eth. Mus. Berlin. Dr. W. Lehmann's Coll. (presented by His Ex. the Duke of Loubat). Acapulco. Orilla del Rio de San Pedro, Guerrero state. Old epigonal style. Strictly conventionalized execution though showing evidence of internal unconstrained rhythm.
- 17. Clay figure, painted white-yellowish, red, blue, and orange-yellow. Macuilxochitl-Xochipilli (the "Flower Prince"), the God of the Rising Morning Sun in the mask of the Coxoxtli-bird with high feather cap singing at dawn. 35 cm. high. Ethn. Mus. Berlin, No. IV, Ca. 10 957, Scler Coll. Teotitlan del Camino, Frontier of the Tzapotecan country. Cf. Seler Ges. Abh. II, p. 886; wall paintings of Mitla, Berlin 1895, Plate XIII. Last branch of classical style.
- 18. Page 1 of the Codex Féjerváry-Mayer in Liverpool. Free Public Museum (12014 M). The period of 260 days = tonal-amatl, based on the fundamental row of 20 day symbols distributed as a cosmological picture over the 4 cardinal points with the Fire God, "the mother, the father of the gods" in the middle. Photographs of the coloured edition of the above-mentioned picture manuscript published by His Ex. the Duke of Loubat. The fusion of two perspectives is noteworthy. Last branch of younger Toltec style.
- 19. Mug-shaped alabaster vessel with superimposed lizard shaped figure of an animal. 23 cm. high. Mus. Nac. de Méx. Classical style or last remnant of same. Alabaster figures being found in Mixteco-Tzapotec districts. I observed however their southermost occurence in Guanacaste (Costa Rica) which points to the classical influence of Cholula.

- 20. Melon fruit of smoothed stone (diorite), 28 cm. long and 18 cm. high. Mus. Nac. de Méx. Perhaps Totonac origin.
- 21. Tajin from Papantla. Chief façade looking east. The rising walls of the intervals of the step-pyramid ornamented with niches which are the characteristic feature of Totonac architecture. Cf. Seler. Ges. Abh. III, p. 538; Del Paso y Troncoso, Catálogo Exposición Hist. Am. Madrid. Tomo II, p. 16 et seq.
- 22. Stone sculpture grooved underneath of the so-called "Palma type" in the form of a conventionalized pelican. Jalapa. Heredia Coll., Mexico. From an original photograph by Dr. W. Bauer in the author's possession. Totonac style. The meaning of the palma pieces is a mystery. Palmas were found placed in graves. Perhaps they were put in front of the corpse of a revered person as a protective spirit of the grave and as the soul's companion in its subterranean journey? (Cf. Seler G. A. III, p. 542). Palmas, be it noted, are characteristic of the Totonac district. But I also saw such a palma piece in western Salvador. Narrow stone heads, stone yokes, alabaster vessels, glazed ceramic, Chac-Mol figures and palmas seem to belong to an ancient period of culture. In reference to palmas, vide Seler in Boas Anniversary Vol. New York, 1906, p. 302 et seq.
- 23. Palma stone sculpture, 60 cm. high. Sacrificial male victim whosebreast is opened by a cross cut, the arms pinioned with ropes. Hair dressed in shape of a plaited grass-tuft (zacatapayolli), perhaps as a receptacle for the agave-leaf thorns smeared with the sacrificial blood. Heredia Coll. Mexico. From an original photograph by Dr. W. Bauer in the author's possession. Coatepec, Jalapa. Totonac style (cast in Berlin Ethn. Mus. No. IV, Ca. 32 462, cast No 4516).
- 24. Stone head with very hollow cheeks and open mouth. 25 cm. high. Mus. Nac. de Méx. Vera Cruz state. Perhaps Totonac origin.
- 25. Fragment of a child's figure of whitish finely sifted clay, showing grey when broken. Two small teeth in upper and lower jaw. A hole in top of head probably intended for an ornament. Photographs by Frau C. Seler. The original in Seler's possession. Santiago Tuxtla (acquired end 1910). Olmec style; presumably already influenced by Spaniards (vide plate 36).
- 26. Human clay figure with large rattle or incense staff. The lower left part of face covered with caoutchouc layers; holes are pierced round right half of the mouth. The ear-pegs are pointed and conical. The upraised left hand contains a roundish object (perhaps manopla?). Heredia Coll., San Andres de Tuxtla. From a photograph by Dr. W. Bauer in the author's possession. Style of the Olmec coastal population. Considered by Batres (in his Civilización prehist. de las riberas del Papaloapam, Mex. 1908 p. 47) as a product of "Mayoid" culture.
- 27. Clay figure of a warrior with pot-lid shaped hat, his raised arms holding a club and ready to strike. The body is in a pot somewhat like a suit of armour. The calves are covered with mosaic bands. Heredia Coll. S. Andres de Tuxtla. From a photograph by Dr. W. Bauer. Style of the Olmec coastal inhabitants (Olmeca-Uixtotin). The figure is strikingly similar to a clay-figure from Colima. Vogel's Coll. (Berlin Ethn. Mus. No. IV. Ca. 34 403).
- 28. Stone relief from Huilocintla, Hacienda San Isidro, Canton Tuxpan. Tatooed figure of Ce ocelotl ("1 Jaguar") = Quetzalcouatl's or his incarnation inflicting self-chastisement by piercing the tongue with a thorn-like instrument of torture. About <sup>2</sup>/<sub>15</sub> of natural size. Totonac style influenced by young Toltec art. (Plaster cast in Berlin Ethn. Mus. No. IV. Ca. 25 072).
- 29. Stone relief from Huilocintla Colegio preparatorio de Jalapa. About ½, of natural size; tatooed figure of Quetzalcouatl similar to fig. 28. Both from photographs by Frau C. Seler. Cf. Ges. Abh. E. III, p. 514—521 (plaster cast in Berlin Ethn. Mus. No. IV, Ca. 25 071).
- 30. Stone relief about 1 m. broad and 1.80 m. high. Richly ornamented human figure, the face looking out of the opened jaws of a monster, the ear-ornaments with flower rosette; a horizontal line is drawn from nose to mouth over the lower part of the face. The coat is ornamented with a mean-

drian edging with flower rosette in the middle-field, the lower border with a dentated edging and an animal's head in front; the bandages around the calves and a foot-ribbon are recognizable on the partly broken feet. At the back of the head of the monster-mask there is the head of a snake with open jaws. A snake--like body, belonging perhaps to this head, hangs down the back of the figure, its outer edge limited by the plaited hair tresses of the figure. The left arm is raised, the r. bent, showing only a partly extended hand. In front of the figure, on the edge, there is a vertical stripe of hieroglyphics. Horizontally above the figure a creature like a fire-snake, the head ornamented with lightning-arrows (miótli). Above the body another opened jaw of a reptile, the tail-end apparently moved to the side on the right. Mus. Nac. de Méx. (No. 24). Information as to origin of "Chapultepec" in Del Paso y Troncoso (Catálogo Exposición Hist. Am. Madrid, Vol. II, p. 389—90) is doubtful. The piece serves as a connecting style between the Huilocintla reliefs (vide plate 28 and 29) on the one hand, and the Tzapotec grave stone with its yet undeciphered hieroglyphics on the other. (Cf. e. g. grave stones from Tlacolula etc., Oaxaca in Seler G. A. II, p. 359 et seq.

- 31. Clay head with richly ornamented head-dress: 26 cm. high. Ethn. Mus. Berlin, No. IV, Ca. 11 152; Seler Coll. Tlacolula, Tzapotec style.
- 32. Smoothed hematite'figure 23 cm. high. Ethn. Mus. Berlin, No. IV, Ca. 30 347. Seler Coll. Teotitlan del Camino, borders of the Tzapotec country.
- 33. Head of smooth dark stone with frontlet; about 1 span high. In the town of Chiapa, Chiapas, private property. Photograph by Frau C. Seler (1897).
- 34. Above: Sacred funeral-urn in the shape of a sitting human figure with rich head-dress. Nat. Hist. Mus. Vienna, Guillaume Coll. Oaxaca. Photo. by Frau C. Seler. Tzapotec style. Below: Sacred funeral-urn in the shape of a sitting human figure with grotesque bearded face; two dentated clay censers on pipe-shaped base, in front jaguar head with ribbons. Kennedy Coll. Oaxaca. Photo. by Frau C. Seler (1910). Tzapotec style. (Cf. similar censers in Ethn. Mus. Berlin from Sta. Maria Sola.)
- 35. Front and side view of a human fig. with dance-rattles attached to belt; a drinking vessel in the shape of a jaguar's foot held in the outstretched hands. The head with hair dressed in catterpillar-shaped coils. Nat. Hist. Mus. Vienna, Guillaume Coll. Oaxaca. Photo. by Frau C. Seler. Tzapotec style (cf. a similar piece in Ethn. Mus. Berlin. No. IV, Ca. 28 353 from Nazareno, Dist. del Centro [Oaxaca], grave excavation 1856).
- 36. Front and side view of a brownish clay figure 62 cm. high, with rattle belt; mouth opened (to sing?) and chieftain's hair-coif consisting of a bundle of hair wrapped in a leather strap. Ethn. Mus. Berlin. No. IV, Ca. 31 601. Seler Coll. Santiago Tuxtla (acquired together with piece mentioned as No. 25). Olmeca-Uixtotin style, especially of the Cuetlaxtlan (Cotastla) the "leather-strap land".
- 37. Sitting jaguar with three bells; clay, 64.5 cm. high; painted brown-yellow and red (on tongue, nose ears, bushy eyebrows and breast ribbon). Ethn. Mus. Berlin. No. IV, Ca. 35 247. Seler Coll. Tzapotec style.
- 38. Above: Colossal stone head, very old-faced with wrinkles, beard and frontlet; reminiscent of similar bearded faces of glazed clay vessels from Vera Cruz. (Strebel Coll. Ethn. Mus. Berlin, cf. Seler G. A. III, p. 624, fig. 90, and V. S. 559, fig. 228) and the republic of Salvador. Sta. Lucia Cozumalhuapa, Finca Bilbao (later = Peor es nada) property of Koch Hagemann and Co. Photo. by F. Berendt (grandson of H. Strebel) belonging to Prof. E. Seler. Pipil style of the Guatemala coast. Below: "Cabeza colosal". Colossal stone head. Tuxtla canton. Photo. by Fr. C. Seler.
- 39. Large stone relief. A chieftain sitting on a chair (r. of spectator) dressed in jaguar skin. Snakes coiled round hair, and a snake on right leg. The hands hold fruit-shaped hearts. Underneath the chair a bowl filled with heads, a sacrificial knife, and the figure of child. In the middle of the relief

- a tall figure with head turned backwards, hair-plait, down-feather bush in nape of neck, the slightly raised hands hold (l.) an ornamented sacrificial blade, and (r.) a heart-shaped fruit. The loin-cloths are richly ornamented, the left knee tied with a snake. The features of this figure appear to be young. A smaller figure approaching from left has a long pointed peg in its knee, the extended l. hand holds a bone-dagger, the raised right one a female shirt-clad child. A small male person crouches between the stepping and the tall standing figures. There are tendril-scrolls in front of the mouths of the sitting and standing figures to denote speech. Along the whole relief garlands with leaves, buds, blossoms, and birds are distributed. The original is a lava block at the foot of a low earth pyramid of the Hacienda Peor es nada (formerly Bilbao) near Sta. Lucia Cozumalhuapa, Dep. Escuintla, Rep. Guatemala. Photo. by Frau C. Seler (Cast in Ethn. Mus. Berlin, Seler Coll. presented by H. Ex. the Duke of Loubat, and stands in the central hall, No. 29). Pipil style. Cf. S. Habel, The Sculpture of Sta. L. C. Washington 1872; Bastian "Steinskulpturen aus Guatemala", and J. F. Bransford, Ann. Rep. Board of Regents, Smiths. Inst. for 1884, Wash. 1885, p. 719-730, Seler "Centenario", Madrid, No. 26 (1892), p. 241-252, Strebel "Jahrbuch" Hamburg "Wiss. Anst." XI (1874), C. Seler, "Auf Alten Wegen in Mexico und Guatemala", Berlin 1910; Guides to the Royal Museums Berlin, Ethn. Mus. Berlin. 16th ed. (1914), p. 20-36.
- 40. Stone relief from Menché (Stone Lintel House, M.). A human figure kneeling on r. leg, grasping with r. hand the pendant tassel of a large flint bladed lance belonging to the chief person standing before the recumbant one. The former holds the lance in his uplifted l. hand, whilst with his r. he grasps the hair of the kneeling figure who holds with his l. hand the end of a ribbon attached to the lance. The central figure is ornamented with a feather head-dress, and has a skull suspended over his back. The flattened, i. e. artificially deformed skulls of the figures are noteworthy. Besides large hieroglyphics in relief there are still smaller engraved ones behind the left leg of the chief person. It is possible that these hieroglyphics refer to the two figures represented. According to Maudslay, Biologia Centraliamericana, Archæol. Vol. II. Pl. 97. (Photo. in Ethn. Mus. Berlin.) Maya style.
- 41. Façade of the temple palace of Sayil with stone columns probably developed from an older wood architecture and a grotesque mask of joined stones. Photo. by Teobert Maler (in Ethn. Mus. Berlin). Maya style. (N. W. Yucatan, between Hecelchakan and Ticul).
- 42. Clay figure, 18 cm. high. Mailed figure in cotton armour (Aztec ichcauipilli) with cap, collar-piece and shield, Ethn. Mus. Berlin, No. IV, Ca. 32 344, Dr. F. Cazares Coll. Mérida, Hacienda Cuzumal (between Mérida and Muna) Dist. of Maxcanú, W. Coast of Yucatan. Maya style.
- 43. Clay figure 29 cm. high. Jester (?) with collar-piece, upper garments with sleeves and leather strips. Girdle, apron; trousers with leather strips, and sandals. Ethn. Mus. Berlin. No. IV, Ca. 4938. Jimeno's Coll. Yucatan, Maya atyle.
- 44. Feather snake column in front of the Cella on the hill of the "Tiger and Jaguar Temple" in Chich'en itzá (N. E. Yucatan). Photo. by Fr. C. Seler (1902). Toltecan style of the celebrated Tollan snake column, fragments of which have actually been found in Tula, and are kept in the Mus. Nac. of Méx. In ref. to various architectural periods cf. T. Maler "Globus", Vol. 82, p. 225, and W. Holmes, Arch. Researches Field Columbia Mus. Anthr. I, p. 106—109.
- 45. Stone figure of the so-called "Chac-Mol" type (Le Plongeon's), also called "Dios recostado", with bowl-like hollow in body, butterfly-shaped breast ornament, head turned to right. About 1.48 m long, 1 m. high, and 78 cm. broad. The original was excavated in 1884 by Le Plongeon in Chich'enitzá, and is now kept in the Mus. Nac. of Méx. (Cast in Ethn. Mus. Berlin, No. IV, Ca. 18 553). Toltec style. Such antique figures are mostly found in or near the entrance of temple porticos being used perhaps as vessels to hold offerings of honey or pulque, also in the older stratum before the actual Sacrarium of the temple of Cempoallan (Totonac dist.). Cf. Seler, G. A. II, p. 817—820, V. p. 153 et seq. I discovered a Chac-Mol in S. Salvador (1909). The discovery of

- the Chiche' nitzá Chac-Mol in situ in Aug. Le Plongeon, Queen Móo II. edit. N. Y. 1900, plate 62, cf. Lond. Magazine Vol. 241, No. 140, p. 123—132.
- 46. Large clay vessel with plastic face. Nat. Hist. Mus. Vienna, Adam Coll. Photo. by Fr. C. Seler. S. Salvador. Similar, but partially perforated vessels come from Quen Santo (Chaculá), the western Maya dist. of the frontier of Chiapas and Guatemala. Maya style,
- 47. Page 6 of the Dresden Maya MS. (vide E. Förstemann). Gods with accompanying hieroglyphics, numbers and day symbols. Maya style.
- 48. Stone plate with a jaguar in relief eating a heart. Chich'enitzá, Mausoleum I, Photo. by T. Maler in Ethn. Mus. Berlin (1886, 94). Cf. Le Plongeon, Queen Móo II. edit. N. Y. 1900, plate 59.



ΕĮ	oochs	Culture Eras	Representatives of Culture	Places	(	
Earliest Times	•	1. Pre-Toltec	Aborigines	A. Pre-Teotihuacan etc. Teot. Lowest Stratum	Ι.	
	ca. before 1000 B.C.	2. Proto-Toltec	Immigrants	Pueblos, Casas grandes	II.	
_	ca. 1000—500 B. C.	a) Proto-Shoshonian		Sivano-ki (Cibola)	7	
Pre- History	(955 B. C. starting point of the Hist. de Colh. y de Mexico)	3. b) Ancient-Sonoran	Uto	Chalchihuites. La Quemada, Toto- ate, Teul. Tepic (Estanzuela)	III a)	
Proto- History (mythically tinged)	ca. 500 B. C.—A. D. (ca. 429 B. C. according to Sahagun) ca. A.D.—600 B. C. 1 st Toltee downfall ca. 600 A. D. (Sahagun) ca. 600—726 A. D. Interregnum	b) Ancient-Toltec (Pyramid-culture)	Nahua   With T-Dialects (Nahua   Nahua	B. Proto-Teotihuacan (Subterranea?) Proto-Azca- potzalco) (1571 years old, Tor- quemada)  C. 1. Old-Teotihuacan 2. Old Cholula ad 1. Ciudadela, central- westerly small pyramids. Tollantzinco, Tollan; Ancient- Azcapotzalco, Aljojuca ec.	0)	
Early- History (partly mythically tinged)	726—1235 (?) 726—1064 A.D. 2 nd Toltec downfall 1064—1168 A. D. 1168—1235 (?) A. D.	i Young-Toltec α older β middle γ recent	(National)	D. Young -Teotihuacan Ciudadela, central easterly small pyramids. Tollan-Cholollan Tollan- Colhuacan (721-1064) B. C. D. Teot. middle stratum	V. (Tol 70	
Actual History	perhaps already from 836 A. D. (Tetzcoco) 1064-1193 A. D. 1193-1323 A. D.		with T1Dialects (Nahuatl) Original home Chicomoztoc According to Saha-	Colhuacan. Tetzcoco etc. Azcapotzalco. Chapoltepec.  Colhuacan-Mexico (Sahagun X 29)  Tenochtitlan-Mexico (Sahagun).	VI.1 (Tolte VI a)	
	16 th-18 th cent. A. D.	6. European	Spaniards		Tra Col	

l e ral)		Tribes and their History
nitive inal)	Otomi-Groups Chocho-Popolocas (Olmecs)	
ogonal 000 B. C.)	Hopis	Olmecs Aloriginal popula displayed bla, Tlaxcala,  Otomi  Aboriginal Mayas
	Pimas	Tecamachalcoetc., originally not
nda- nental 500 B.C.	Teules Chichimeca (Tepecanos)	"Chichimeca" Olmeca Xicalanca A = Olmeca Uix- totin separate af- ter the Tlamati
. C o	Proto-Toltecs Tlamatinime. Chichime- ca mcchanecatoca) Yâquê-Izalcos Nahua-Toltecs	nimê in Tamoan- chan Oimecs destroy the old Empire of Tollan circa 600 A. D. Olmec Hegemony Lasting over 500 In Tenayocan (of Onauhtitlan)
haic A. D.	Ancient-Toltecs. Pipil Salvador, Guate- mala.	mada). Olmees Toltecicized. Nonoualca- Chichimeca Chichimeta Chich
sical aissance 4 A. D.)	Young-Toltecs. Nicarao (Ticomega e Maguatega): Pipil Chololteca (destroyed 1235 A. D.)	(Oviedo, Torquemada) from the Chichimeca Cholula district. Chichimeca Olmeca Xicalan-left-Colhuatepecin in gof Chichimeca driven from Tula together with Cholula by 7 tribes (amongst which the Chichi-zed Olmecs) 1116. When the Chichized Olmecs is a Chichimeca Chich
dstyle	Pochutla Pipil	huacan — Teo- thuacan — Teo- chichimecs) 1168 Quarrel caused by 47 th year of Xo- lotl — 836. Itel on a nother. Acullua in the lotlar dynasty for 130 years (1064— 1193 or 1103-1323) Leiden jade plate
e) igonal pigonal epigonal	Colhua, Mecitin (Mexica Chichimeca) Acolhuaque Tepaneca Proto-Aztecs. Citin Xolotl's mentioned already in 836 A. D. Pre-Tenochca. 1168 1325. Mex.tin -Aztecs Original home Aztlan-Ancient-Aztecs (Language of Sahagun's hymns Tlatelolca. Tenochca.	Tlaltecatzin-Quinatzin founds dynasty in Tetzcoco (Acolhuacan), 1175—1258 (scil. 1246, Sahagun)  Dynasty of the Tepaneca of Tlacopan and Azcapotzalco since 886, Quaquauhpitzauac the son of Teogomoctli 1st of the Tlatelolco dynasty  from S. Belize, at latest 10th cent A. D.
	Azteca (Mexica) Young Aztecs a) Period of the 10War- Chiefs before Acama- pichtli. Tenuch (1321 — 1373) b) KingsofAcamapichtli- till Quauhtemoc (1376— 1521)	Achitometl 1346. Colhuaque spread 1347-1377 without Kings, only war — chiefs.  Mayapan destroyed circa 1450 A. D.
onal & Style		*) The Chichimecs came to Tetzcoco 22 years after the destruction of Tollan (Sahagun).  **) Cultural connections of the district extending from old Chich'enitza to S.  Belize with ancient Toltec seats in the middle of the Motagua Valley.  Dr. Walter Lehmann, Seewalchen, Sept. 1921.

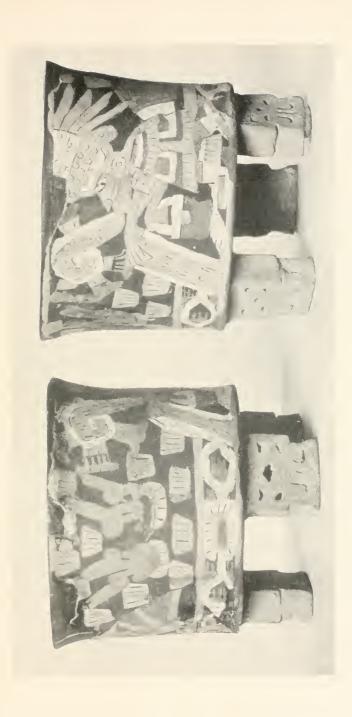




































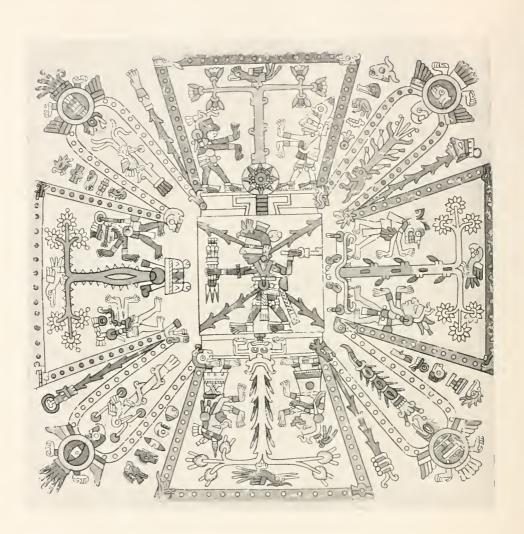




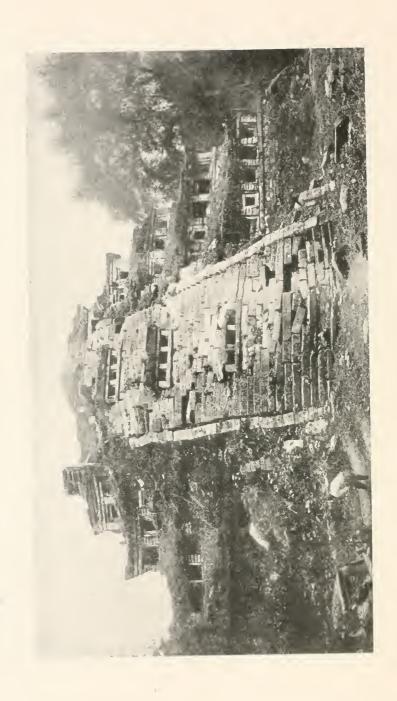


















































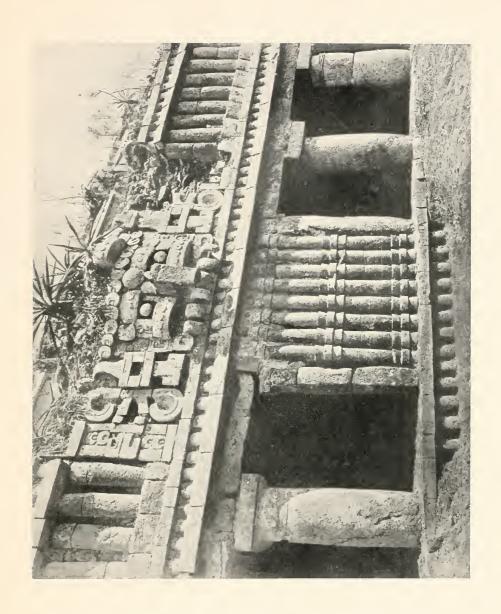
























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