out, scholasticism maintained itself in the schools of Italy after it had been driven out of those north of the Alps, and only gave way when the Catholic reaction of the sixteenth century produced in its turn a body of teachers, uniting religious fervour with new educational methods.

The number of points of interest in these volumes is endless; the philosophic movements of the middle ages and the life of the students generally we have hardly had time even to refer to, but they are abundantly illustrated; the effect of endowments and the character of the original college foundations and their developments too we have had almost entirely to pass over. We can only hope that in these days of University Reform and Extension, the encouragements and the warnings of the experience of their predecessors may become familiar to the students of the present day, and often it will be found that the true path of reform is that indicated by the old motto

'Antiquam exquirite matrem.'

J. WELLS.

ART. IV.—THE ASIATICS IN AMERICA.

THE question of the origin of the native American races, and of the civilisations discovered by the Spaniards in Mexico and Peru, is one of great interest in connection with the general history of the diffusion of the human race. Many theories have been propounded, according to which the aboriginal Americans were autochthonous, or created in America an immense antiquity being ascribed to the original traces of man's presence—while some have supposed the Peruvians to be an Aryan people, reaching the Pacific coast from Europe. The Spaniards themselves thought that St. Thomas from India must have reached Mexico and Peru, and thus accounted for the appearance of the Cross in America, and for other similarities in religious rites and customs.

When, however, we study the racial types, the languages, and the civilisations of America, we must conclude that an Asiatic origin, and a connection with Mongolic races, is far more probable, especially as the distance to be traversed by sea is so much shorter. But in treating this subject two distinct questions must be distinguished : the first being the question of the aboriginal population which was everywhere found by Europeans living in a semi-savage state; and the second, the question of the origin of the two distinct civilisations which existed, in the sixteenth century in Mexico and Peru, while the remainder of the two continents was still barbarous.

As regards the origin of man in America, the existence of a very ancient race, whence the American Indians of both North and South America have descended, is generally admitted. Palæolithic arrow heads, belonging to the Quaternary strata, show a widely diffused but savage race, and rude implements are even asserted to occur in Colorado in Miocene and Pliocene strata; but the evidence requires still to be very cautiously accepted. The earliest American type was long-headed, and approaches nearest to the Turanian or Mongolic, but not to the Chinese or Mongol proper, being rather comparable to the Ugro-Altaic and Burmese, and to that of the early Dravidian races of India. Humboldt was struck, even in South America, with the Mongolic type of the natives; and the main characteristics are the same in both the American continents. The hairless faces, high cheek-bones, prognathous jaws, and even the large curved nose (common among the Kirghiz Tartars, and shewn on the old historic bas reliefs which represent Hittites and Akkadians) are Mongolic features. On the Pacific shores the original type is modified by an infusion of blood of some short-headed race, probably representing later elements of population. In Peru the lower class of natives had long heads, but the Incas had short heads. The Azteks had the custom of artificially elongating the head, which is common in America and found in other parts of the world. The longest heads are found among Patagonians and Esquimaux. The prognathic jaw is not found commonly among Thibetans or Mongols, but it occurs among the Chinese. The Wakash tribes are thought to belong to the Tunguse family, and other elements of population may have come from the Aleutian

Islands, or by Behring Straits, from the north-east corner of Asia. Short heads are found in the Ohio mounds, and the later infusion of Malay, and possibly of Chinese and of Japanese stocks, appears probable.

The American languages are numerous, and vary in character, but they are in no cases inflected like Aryan or Semitic languages, and their structure is only comparable to that of the Mongolic or Turanian languages of Asia. Comparative study is rendered difficult by the rapid changes, which affect all languages where there is no literature to preserve the vocabulary. Thus in Africa, and in America, the problem is more difficult than that of Asiatic languages. But grammatical structure is always a safer guide than vocabulary, and the American languages resemble rather the agglutinative speech of Central Asia, with its long words, due to the incorporation of pronouns and particles, its absence of gender and of inflection, its vowel harmonies, its reduplications representing plurals, and its distinctive syntax, than they do when compared with the more advanced Aryan and Semitic tongues. Classification is still very imperfect, but comparative study has already shewn that the classes are fewer and less distinct than used to be supposed. In North and Central America Bancroft recognised three classes, the Tinneh family on the North-West, the Aztek in Mexico, and the Maya. The Otomi language is said to differ from others in being more clearly monosyllabic, and comparable in many features of grammar to the Chinese. The Aztek, though perhaps the most perfect of American tongues, does not distinguish the letters b d f r g s, and has no gender or inflexions. All these features also mark the Mongolic languages. The Pima in California is said to present fifteen per cent. of Malay words, but none that are Chinese or Japan-The Quichuan, which is the classic tongue of South ese. America, presents the same agglutinative features, and the case in favour of a Mongolic connection is therefore strong.

The comparative vocabularies published by Mr. R. P. Greg*

^{*} Comparative Philology of the Old and New Worlds, by R. P. Greg. London, 1893.

are of great interest in this study. A list may here be given of about an hundred words generally common to North, Central, and South American languages, with comparisons with Mongolic words taken from his pages. In dealing with modern languages there is no doubt a danger that loan words may have travelled far from one people to another, but the words which compare are as a rule those denoting the simplest objects and acts, and they shew us a savage people living in the condition of hunters or pastoral herdsmen. The comparisons do not indicate a Chinese origin, but are generally closest to the dialects of Central Asia and of Siberia, though some words are so widely diffused that they occur also in the Indo-Chinese languages, in Thibetan, and in the Dravidian dialects of India.

Among the words here given we find several to denote house, boat, axe, knife, bow, arrow, stone, and fire; but the only metal which has a common name is gold (N. American *ccaxi*, Central American *chuqui*, South American *ccaxi*), and this seems to be a later native word. Among animals the bear is specially to be noted, with various names for the dog. The original Americans appear to have recognised family relations, and had several words for God or Spirit. Their languages had advanced to the use of pronouns, but their general condition was that of hunters, sowing a little corn, and fishing in boats. They knew of cold and snow, and may have come in their skiffs from Asia, but used probably only stone weapons and bows. They were in fact in that condition of progress in which they were found still living, in North America, by the first colonists.

	North American.	Central American.	South American.	Mongolic.
House,	Ko Uca	Ku Oigu	Ku Uca	Keui
,,	In Ank	Ngu	In Ngu	Ion
2.9	Hi Ho	Hu U	Hi I	Hu Ui
,,	Dum Dimi		Dum Tau	Tami
"	Kotai	Goti	Hit	Kat
Stone,	Tak	${ m Tek}$	Tika	Tash
,,	Kuk	Kak	Kak	Koch
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COMPARATIVE VOCABULARY.

Stone,	Sileh		Silla	Zela
Mountain,	Tipi	Tepe		Tepe
"	Ku Kaak	Kauah	Kakka	Kai, Kgi
Great,	Muck	Noh	Makh	\mathbf{M} agh
,,		Pacha	Pacha	Paka
Tree,	Kagg	Kagg	Khoka	Aghagh
Boat,	Kayak		Kao	Kaiyik
Axe,	Tuk	Tek	Taqui	Taka
Knife,	Akyek	Hasha	Chuki	Chucki
,,	Kiai	Quai	Kiai	Kao
Bow,	Nama		Mumute	$\mathbf{N}\mathbf{u}\mathbf{m}\mathbf{u}$
,,	Siia	Za	Za	Zaa
Arrow,	Sua	Tzuh	Suu	Sawa
Dark,	Kaak	Akakka	Coca	Gigi
Bad,	Kaka	Ukku	Akaka	Haica
Fish,	Kanu		Kanu	Kan
Dog,	Achu Shue	Ochu	Huchute	Ku Schey
22	Puka	Pek	Puku	Betka
")	Keikue	Chiki	Kukui	Kaik
Bird,	Kuku	Kukai	Huku	Kush
Pig,	Cuchi Ak	Ak	Kuch	Gachi
Deer,	Tsick	Kweh	Guaca	Kayik
Bear,	Matto Mavar		${f Mari}$	Medve Mar
Corn,	Sigi	Saxi	Zaxi	Suk
Salt,	$\mathbf{Shukosh}$		Sachi	\mathbf{Saksi}
Snow, Ice,	Tek Toosha	Istek		Tek Tosh
Foot,	Ooch	Uoc	Kayu	Ayak
Hand,	Paco	Maco	Paco	Baeg
Finger,	Ka	Ca	Ka	Ki
Nose,	Uk	Gu	Cana	Ang
Ear,	Gyu		Huchu	Kuo
Tongue,	Del		Del	Dil
Hair,	Oshu	\mathbf{Si}	Zye	Usha
,,	Shuka	\mathbf{Soz}	Socco	Shag
2.2	Thaesh	Tusu		Thash
Head,	Ca	Que	Gue	Go
,,	Psh Biza	Pacu	Pacu	Bash
5 3	Iku	Akang	Yakae	Yok
Tooth,	Itza	Tzi	Dza	Tez
,,	Tong	Tollau	\mathbf{T} ullu	\mathbf{Tang}
Mouth,	Ku	Ku		\mathbf{K} o
,,	Sana		Sane	Sun
Eye,	Asu	Siki	Zu	Sei
"	Na	Nik	Na	Na
Man,	\mathbf{Er}		Urre	Ere

Man,	Cune	Akun	Canai	Kena
,,	Ka	Ka	Che	Aika
,, ,,	Hama	Huema	Huema	Him
Son,	Saka	Chichi	Chechu	Chuken
,,	Cui	Gua	Ciu	Chu
»» »»	Cin	Akun	Cana	Ken
Father,	It. Ose	Aitze	Aha	Atya Isa
,,	Tata	Tatle	Tayta	Tato
**	Aya		Aya	Aya
,, ,,	Appa	Aba	Pai	Ab
Mother,	Ma Anna	Maa	Meme Anu	Ema Ana
Woman,	Sun Tan	Dome	Zumo	Zin
God,	Ata	Teo	Ati (Chinese) Ti
,,	Ogha	Ogha		Agha
,,	Hun		Ken	Jin '
,, ,,	U Yeh	Ku	Huai	Yo Yahu
22	Niou	Andrewick according their solid	Ano	In Na
Daylight,	Tina	Tani		Tan
,,,	Caan	Chaan	Kin	Kun
22	Sua	Tse	Sua	Si
,,	Ara		Ara Uru	Or
22	Ene	Andi	Ano Inti	In
3.2	Tak Teshe	Tes	Tagg	Tawash
Sky,	Kegek	Quik	Kecai	Kueuk
Sun,	Kon	Kin	Kin	Khon
,,	Sohn		Suna	Shun
2 2	Suus		Suus	Susi
2.2	Kese	Cha	Cachi	Kaisa
Star,	Tsohol	Sillo	Silla Tysel	Tysil
Moon,	Aguei	Chic	Yace	Ike
,,	Nosi	Masa	Masa	Mah
,,	Ari Bari	Bari	Ari	Ira
Fire,	Koh Iche	Cha	Iakai	Kuy
,,	Tetsch Tah	Tata	Tesha	Tuz Tet
22	Teik	Tschuko	Taika	\mathbf{T} ogo
Water,	Dzu Du	Du	Dzu Du	Zu To
12	Ia Ui	A Aya	Aah Ui	Ai Wa
To cut,	Kut	Kuta	Kut	Ket Kes
To give,	Da	Da		Da
"	Kia Chu	Caa	Ku	Ka
I,	Noka	Nek	Noka	Ngai
,,	Si Di	De	Su	Si
Thou,	Zu Ta	${ m Ti}$		Su Ti
He,	Na	Nunu	Ni	Na
This,	Huen	Quin	Kim	Kan

With respect to this list it should be noted that a large proportion of the words are very ancient, and occur in the oldest known Mongolic language—the Akkadian of Mesopotamia,* yet the American tribes were apparently offshoots, not directly of that civilized race, but of the rude tribes of Siberia, which had either never learned the arts of the Akkadians, or had lost them as they migrated to wilder lands, remote from the original home of the Mongolic races near the Caspian.

When we continue the enquiry, in the case of words which are not common to the whole range of American languages, we still find that comparisons of vocabulary are more common when the Ugro Altaic, or North Mongolic languages, are used as a basis; and the Aryan languages furnish no comparisons; the Chinese in some cases comes however nearest to the American. The following important words widely spread in North America are very closely like those used by Altaic Turanians in Asia.

	North American	. Ugro Altaic.
Land,	$\operatorname{mah} \operatorname{amet}$	ma modu
,,	ti tu	da
Tree,	kan	kona, kanu
33	tsa	sa
,,	pichu	posu
Knife,	pesh	beechak
2.5	\mathbf{seepa}	sapa
Axe,	skum	suka
Arrow,	skui	sogau
Fish,	$_{\mathrm{gat}}$	kata
Snake,	osheista	eshdissa
Dog,	cannu	kon
>>	meda	meda
Bird,	mon	motun
Sheep,	una	unet
Deer,	addik	teke
Hare,	yo	(Chinese) yu

* Compare for instance the Akkadian words for 'house' un, ki, tami: 'stone' tak: 'great' makh: 'dark' gig (also 'bad' 'ill'): 'fish' kha khan: 'bird' kus: 'head' ca: 'mouth' gu: 'eye' si: 'man' eri, gan, gum: 'son' sak: 'father' ai, ab: 'mother' ene: 'God' An: 'day' tan: 'sky' gug: 'sun' shun: 'moon' agu: 'water' a: 'give' de: 'I' anga: 'thou' zi: 'he' na: 'this' gan.

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Bear,	matto		medve
39	moan		maina
"	sus		saks
Fox,	chula		koll
Seed,	sum		80
Milk,	chychtya		shiut
Egg,	manig		manu
Ice,	ak		yig
Snow,	kais		kaisa
,,	speu		buss
Foot,	kolo		kol
>>	looga		llagyl
Mouth,	an im		an ama
God,	man		man
"	u yet		ye
Silver,	shuney	(Chinese)	shen
Clothes,	togai		tug
War,	gawi		cooha

In numerals the North American languages differ much, but the commonest words for numbers seem also to indicate an Ugro Altaic connection.

Number.	North American.	Ugro Altaic.
1	ak, ik, cau	aku
2	ако	iki
3	{ taugh { katsa	{ touga { kudem
4	tseto	thett
5	tawit, etsha	vit
6	sih	hat
7	siete, tutsheos	sat seitsa

Up to No. 5 the resemblances are striking, but the numerals for 8, 9, 10, do not shew any remarkable resemblance. The Azteks, as will appear later, had words for 1, 2, 3, 4, 5, and formed the rest by compound words denoting additions.

Not only was the common word for boat in America of Mongolic origin, but the words for the sea in North America shew the same connection. The commonest word for sea among the Aryans and West Asiatics is $m\bar{a}r$, which perhaps means 'great water,' (Sanskrit mira, Latin mare, Slav moray, Celtic mara, Teutonic meer, Finnic mar, Altaic meri and mora, Lapp mär, perhaps the same as the Mongol nor), but this word does not apparently occur in America. The Malay, Polynesian, and Australian languages are connected together by another word for sea (Malay *atui*, Polynesian *tai*, Australian *tan*), and the languages of Polynesia and Australia generally compare closely with the Malay. In North America there are many words which as a rule only mean 'waters,' or 'great water'; but some are more distinctive, such as *ta* 'sea,' which is the same as the Corean *ta*; and *vaat* 'sea,' which compares with the Ugro Altaic *vat* or *vut* for 'water' 'sea.' In South America on the other hand we find the word *atun* for the sea apparently of Malay origin.

The indications afforded by such words point to the derivation of the North American Indians from the nearest part of North-east Asia. The tribes which crossed over the narrow straits were in the primitive condition of pastoral hunters. They knew the sheep among domestic animals, but were probably unable to bring cattle with them. They were perhaps acquainted with corn, as well as milk, and they knew the bear, and came from a region where ice and snow were found. The word for silver compares with the Chinese, and is probably of later origin. The numerals, also, though they compare only with the Ugro Altaic, do not seem to have been named beyond 'five.' The words compared for numerals do not in any case recall the vocabulary of any Aryan race.

In South and Central America there are indications, already noticed, that the same northern race penetrated to the extreme end of the continent, but there are also indications of later arrivals from the Malay peninsula. Numerals are the most valuable words for comparison, because the most distinctive of various classes of language. The Otomi numerals, in Central America, seem to show a connection with Mongolic systems, both Ugro-Altaic and Indo-Chinese, though in most cases these are not very close. The Otomi No. 1 is, however, nearest to the Dravidian *onru*, 'one.'

	Otomi.	Ugro Altaic.	Indo Chinese.
No. 1	nura		
2	zooko	kok	kichi
3	hui	uitse	
4	gooho	$ng\mathbf{y}$	hichi

5	gyta	wit	ngat
6	rahti	hat	re
7	yotho	yedi	tsit
8	hyate	dsghat	thata
9	gy the	gessu	acu

Dissimilar as these may appear, they are closer than any other comparisons with existing numeral systems.

The Aztek system in Mexico included only numerals to 'five,' and these compare with other widely-spread Ugro Altaic words for numbers as far as 'four.'

	Aztek.	Ugro Altaic.
No. 1	ce	aku
2	ume	unem
3	ye	uitse
4	nahui	negy
5	chicu	

In South America the Quichuan being the most important language, it is interesting to find, in some cases, similar Mongolic comparisons, especially pointing to the northern branch.

	Quichuan.	Ugro Altaic.
No. 1	huk	huca aku
2	yskuy	yike
3	kunsa	kudem
4	tahua	thett
5	picka	besh
6	sokta	kaht
7	kancis	seitsi
8	pussak	sekis
9	yskun	wexum
10	cunka	kamen

These must be taken for what they are worth, but it is conceivable that the two systems may have a common origin, and neither bears any resemblance to the Aryan system common to all European languages of that class.

Before considering the later civilisations of America it is necessary to glance at the early civilisation of Eastern Asia, in order to appreciate the conditions which existed when first the historic races can be supposed to have come into communication with the New World. The oldest civilisation of Asia was that of the Akkadians, whose language (including the numerals) is most closely represented by the Turkish dialects of the region north of the Oxus. The Akkadians had a complete system of syllabic writing, originating in picture emblems, and they possessed the lunar calendar of twelve months, which was adopted by the Babylonians and the Greeks. It is now very generally recognised that the earlier tribes of India-preceding the Aryans-were akin to these Mesopotamian Mongols, but no known remains of their civilisation have been recognised. The Turko-Mongol tribes, however, who were certainly akin to the Akkadians, spread into Central Asia, where the Khitai were established in the time of the geographer Ptolemy. These latter invaded China, and brought with them a considerable civilisation including a system of writing. The distinctive Chinese system, which is traced back to about 800 B.C., presents many comparisons with other Asiatic systems, but these are only pictorial, and there is so much that is distinctive in the Chinese hieroglyhic writing that a direct derivation from the Akkadian becomes untenable. Only a very remote original connection can at most be supposed.

On the extreme north the Siberian tribes appear never to have been civilised, and in China itself the population was, from an early period, extremely mixed, many barbarous tribes being gradually conquered by the Khitai and the Mongols, while other elements of population entered China from the west through Thibet, and from the south through Burmah and the Malay peninsula. The Malays were a great sea-going race; and the communication between China and Arabia, in the Roman ages, may in great measure have been due to the boldness of the Malay sailors, who also appear to have populated the Polynesian islands, and to have found their way to Australia, as is very distinctly shewn by the comparison of numerals and of vocabulary as a whole.

But the civilisation of India and of the Malay peninsula was not of Mongol origin. It commenced with the establishment of the Greeks in India and in Bactria. It was fostered by the early Buddhists, from the third century B.C. onwards. It was also partly dependent on the Arabs of Yemen, who, even earlier than the Greek period, seem to have been in communication with Ceylon and India. The astronomy, and especially the calendar, of India was of Greek origin, and Indian architecture is in the same manner based originally on Greek art.

About the sixth century A.D. the Nestorians began to push their way from Persia into Central Asia and Mongolia, penetrating at last even into China. They found the Mongols mainly pagan, but a debased form of Buddhism had also begun to spread among them from India. The Mongol alphabet is of Nestorian origin, and in the twelfth and thirteenth centuries Central Asia was full of European traders. The great Mongol period was that of the successors Genghiz Khan, whose wide empire extended from India to Siberia, and from the borders of Persia to China. The accounts left to us by Rubruquis, Marco Polo, and other travellers, attest the statesmanship and energy of the Mongols, and their mixed civilisation of Buddhist and Christian derivation. The whole empire was bound together by a postal system, which brought news from its furthest provinces to the distant capital at Karakorum, north of China; and the wealth and magnificence of the Khan's Court were astonishing. The tolerance of this great ruler, and of his splendid grandson Mangu Khan, was equally remarkable, and it was not till the later age of Timur that the savage cruelties, which marked the Mongol devastation of Western Asia, led to the revolt of subject peoples, and to the decay of the Tartar power.

Meanwhile in Thibet the corrupt Buddhism of the later Indian schools had already penetrated into the mountain plateau about 640 A.D. The Indian origin is clearly traceable, but it is not impossible that some of the strange similarities to Christian ritual—the use of robes including the mitre, of incense, rosaries, bells, crosses, and holy water, may have been due to the Nestorian influence. Missionaries from the Roman empire penetrated to these regions in 635 A.D., and the Edict of Si-ngan-fu, by the Chinese Emperor Tetsung, which has been found near the east border of Thibet dates from about 780 A.D.* Abu Zeid el Hasan, in the ninth century A.D., speaks

^{*} See Buddhism of Tibet, L. A. Waddell. 1895, p. 422. Yule's Marco Polo, II., p. 23.

of thousands of Christians massacred in China-the south-west provinces-and Marco Polo in the thirteen century found Nestorians north of Yunnan. There were then 30,000 Alans in the Mongol Empire who were Christians, and the Buddhist lamas were familiar with Christian rites and emblems from the seventh century onwards. In Thibet while propagating the later Indian Tantric Buddhism, and even preserving much of the original ethics and philosophy of Buddha, they also permitted the survival of the older savage demonolatry of the country, and added to it much that, in India, was derived from the older Non-Aryan systems. They divided the cycle of existence into six states including heaven, the paradise of the inferior gods, the animal creation, hell, the Hades of starving ghosts, and the human life. Through these six states the soul passed successively in an eternal progress, unless attaining to Nirvana. Their religious system included establishments of monks, hermits, and nuns. They drew terrible pictures of demon guardians on the outer walls of their temples, and recognised all the fabulous beings of India, Nagas, Yakshas, Ghandarvas, Asuras, Garudas, etc., with Indra, Yama, Varuna, Kuvera, and Agni. Their astronomy was that derived from Greece by India, but they possessed the Tartar cycles of 12 and 60 years, and intercalated 7 months in 19 lunar years. They practised both cremation and burial, and burned a lay figure of the deceased on the 49th day, at the close of the funeral ceremonies. Among their emblems the 'wheel of the law,' or Swastika, was one of great antiquity, and found in all parts of the world. Their festivals were remarkable for the masquerades, in which actors assumed the appearance of demons with enormous heads and grinning mouths. Human sacrifice and cannibalism existed in Thibet in the seventh century, A.D., but as Buddhism spread a figure of dough was substituted for the human victim. The morsels of this figure, torn in pieces by masks representing bull-headed and deer-headed fiends, were distributed among the crowd. All these customs still survive on the borders of India.

The Tantric Buddhism so described existed not only in Thibet but in China and Mongolia, in Burmah, and the Malay

peninsula, and islands. The reasons for thus describing the civilisation of India and Mongolia, and the character of the religion which spread over Eastern Asia to the Pacific shores, will appear when the Azteks and Incas are considered immediately. The history of hieroglyphic systems in China is also important in the same connection, for there is no trace of any hieroglyphic character in India, or in the Indo-Chinese peninsula, where alphabets of western origin were adopted. The florid ornamentation of Malay temples, built in Java and on the main land, and the structure of the topes there found, all point to the Indian origin of this civilisation; but as Buddhism advanced to China the character of its rites and art became further degraded, by the extravagances of Chinese heathenism and pictorial style; and while little survived of the philosophy and humane scepticism of the original religion, little also was left to mark the remote classic origin of architecture and sculpture. The only direct communication of America with any Asiatic civilisation must have been with the deformed Buddhism of the Eastern shores.

We may therefore pass on to consider the earliest known discovery of America by Buddhist travellers*: for there appears to be no reason to suspect the truth of the account given by Hwui-Shan, who came back to China in 499 A.D., under the Tey dynasty, having sailed a distance of 32,000 li east, to the Fu-sang country. He first describes the Aleutian Islands, north-east of Japan, and then apparently the Alaska tribes. The distances to Fu Sang point approximately to the position of Mexico. The country was named from the Fu Sang trees, like bamboos, noticed with a red fruit like a pear : the fibre was used for cloth. The agave seems to be intended, which has sprouts not unlike the bamboo. The red pear-like fruit may be that of the cactus in Mexico. The agave has a fibre from which cloth is spun. The houses in Fu Sang were of wood and no citadel or walled tower existed. The people had a written character, and used paper made from the fusang, which recalls the agave papyrus of Mexico. They were un-

^{*} See An Inglorious Columbus. E. P. Vining. 1885.

warlike people and had no weapons. In the north was a prison for minor offenders, in the south one for more important criminals. This also points to the Mexican polity. When a noble was condemned to punishment he was shut up in a hollow tomb and surrounded with ashes. In Mexico the criminal left to die at the stake was, in like manner, surrounded with ashes. Crimes were visited on descendants to the third and seventh generation in Fu Sang. In Mexico the children of traitors were enslaved to the 9th generation. In Fu Sang nobles were called Tuilu, and the second order of nobles 'the little Tuilu.' In Mexico the title of the nobles is variously given as Tecleh-tli and Teule-tli, and a lesser order were called 'Little Chiefs.' The Fu Sang king went in procession preceded and followed by horns and drums. In Mexico the chiefs were accompanied by horns and drums, and large sea shells were blown. The Fu Sang monarch, in the first and second years of the cycle of ten years, wore blue or green, in the third and fourth he wore red, in the fifth and sixth yellow, in the seventh and eighth white, in the ninth and tenth black. In Mexico these five colours in like manner distinguished the years. Large cattle horns are noticed in Fu Sang, and in Mexico the buffalo horns were used for drinking vessels. The pilgrim speaks of carts drawn by horses, cattle, and deer. The Mexicans had no horses or cows, but they had deer; and, as Hwui Shan says, that the Fu Sang people raised deer as cattle were bred in China, he seems to recognise this, and to refer to the tame deer and large deer forests of the Mexican nobles. The inhabitants had no iron, but plenty of copper in Fu Sang, and did not value gold or silver. The Mexicans also had no iron, but much copper. They had a great quantity of gold and silver, but did not use either for money. Among the customs of the Fu Sang people the pilgrim notes that a lover would erect a hut outside the girl's home, and sweep and sprinkle the ground for a year. The girl could dismiss him afterwards if unwilling. The marriage ceremonies resembled those of China. Among the Apache Indians similar courtship occurs, and the newly wedded pair live in a cabin before the father's house for the first year. It is also to be noted that

similar customs existed among the early Chinese tribes. The Fu Sang people mourned during stated times for various relations, as did also the Mexicans. They set up an image of the deceased, and poured libations before it noon and eve. This was also a Mongolic custom in Thibet and China, and in Yucatan wooden statues of parents were placed in oratories, while the statue of a Mexican king was adorned with offerings of clothes, food, and jewels. Hwui Shan concludes his account by stating that these people had been ignorant until visited by five Buddhist Bikshus in 458 A.D., who are said to have come from *Kipin* or Cabul, in Afghanistan. He also speaks of a country, 1000 li east of Fu Sang, called the 'Country of Women,' where a fair, long-haired race lived, who fled from strangers. He may refer to *Clhuatlan*, 'the place of women,' on the Pacific coast ten days journey from Mexico.

This interesting account, as explained by Mr. Vining, would thus appear to give a faithful picture of Mexican life about 500 A.D., and contains indications, not only of the Buddhist origin of Mexican civilisation half a century earlier, but also of the Mongolic customs of the people so civilised. When we compare this account with the existing remains of Yucatan,* and with Spanish accounts of the Azteks in the sixteenth century A.D., we find further reasons for believing the truth of Hwui Shan's account.

As regards existing remains, the temples of Central America, rising in steps to a building above, bear a striking resemblance to the Buddhist topes, especially to those of Java and the Malay peninsula; and the florid art of the statues is equally like that of the same Asiatic region. The hieroglyphic character does not recall any of the syllabaries of Western Asia. It is clearly ideographic, and few symbols are repeated, except certain strokes and dots added to the left of the emblems, which appear to denote terminations of words. The inscriptions of Palenque are in the same character used in Aztek MSS. The writing may have been in horizontal lines, but in some cases it is vertical. There is no system known which,

^{*} Central America. J. L. Stephens. 1841.

in general character, bears as close a relation to the Aztek as does the Chinese; and if the inscriptions ever come to be read (the language being known) it will probably be by aid of the oldest Chinese hieroglyphics—the seal character. The evidence of Hwui Shan would point to this having been introduced from Mongolia, or Central Asia, into Mexico by Buddhists in the fifth century A.D.

At Copan, on the borders of Honduras, one of the pyramid temples is adorned with a row of sculptured skulls, and this symbol of sacrifice and death was derived originally from the terrible symbolism of India by the Eastern Asiatics. At Palenque the kings, standing on slaves, are represented with long pig-tails, like the Mongols, who introduced this custom into China. Terrible masks, like those noticed in Thibet, are represented. The winged sun is also a Mexican emblem, and one widely spread in Asia. The use of stucco for these basreliefs also recalls the Buddhist art of Eastern Asia. The 'lion throne' on which Buddha sat is represented at Palenque on the east border of Mexico, and a figure carrying a child recalls perhaps the mother goddess of Eastern Asia. The cross is represented as an object of worship; but the cross was an Indian and a Buddhist emblem. The figures are beardless and of Mongolic type; and Herera speaks of the Azteks as a beardless people, who wore their hair long and coiled up, with a pig-tail hanging behind.

Humboldt, who was struck with the Mongolic type of the American Indians, collected many important indications of their Asiatic connection. He pointed to the monastic institutions, symbols, etc., but especially to the Mexican zodiac, as compared with that of Thibet and the Manchu Tartars :—

Tartar Signs.]	Mexican Signs.
Rat,	•••	•••	Water.
Ox,	•••		Sea monster.
Tiger,	•••		Tiger (ocelot).
Hare,	•••		Hare.
Dragon,	•••		Serpent.
Serpent,	•••		Reed.
Horse,	•••	•••	Flint knife.
Goat,	•••	•••	Sun's path.

Monkey,	•••	•••	Monkey.
Bird,	•••		Bird.
Dog,	•••		Dog.
Hog,	•••		House.

The variations are equally remarkable with the coincidences. The Mexicans had no oxen or horses, and probably no hogs or goats. The signs were therefore changed in these cases, probably by the teachers who introduced the Tartar calendar.

Mr. Vining has given a useful *resumé* of the customs and other details which connect Mexican civilisation with that of China, Japan and Mongolia. Among their religious ideas were the transmigration of souls, monastic life, penances, ablutions, alms, the use of household gods, the festivals, the knowledge of astronomy or astrology, the cloistered virgins, the dragon standard, and a kind of heraldry as among the Japanese. They also used incense, charms, amulets, and chants, like the Buddhists, and burned the dead, preserving the ashes in vases. The clothes of bride and bridegroom were tied together, but they lived apart for the first four days. Both these customs are found among the Hindus.

Prescott's History of the Conquest of Mexico* gives other indications of this connection. The four cycles of Mexico, in which the earth is successively destroyed by each of the four elements, auswer to the Indian Kalpas, carried to Thibet and East Asia by the Tantric Buddhists. The dead were buried in a sitting posture, which is also an Indian custom. The mitre-like crown of an Aztek monarch recalls the Buddhist mitres—perhaps borrowed from the Nestorians; and the armour of quilted cotton is equally suggestive of that worn by the Mongols in the Middle Ages. The helmets made to resemble the heads of wild animals recall Chinese and Japanese helmets, intended to terrify the enemy. Baptism, confession, and absolution were customs common to Azteks and Buddhists; and, like Mongols, they believed in 'one god by whom we live,'-an expression used also by Mangu Khan in the thirteenth century in speaking to Rubruquis. But, as among Mongols, this belief in a supreme god, who knew all things

^{*} Conquest of Mexico. W. H. Prescott. New edition, 1878.

and gave all gifts, incorporeal and invisible, perfect in goodness and purity, 'under whose wings is a sure defence,' was accompanied by the worship of inferior deities, chief of whom, among Azteks, ranked the terrible war god, to whom human victims were offered in hecatombs. They also believed in three future states-hell, hades, and heaven, answering to three of the six conditions of existence among Tantric Buddhists. Paper charms were strewn on the corpse, as in China they are burned at a funeral. The soul was conceived to make a long journey to the North, and to pass between mountains which, moving together, crush the suffering shade ; this was a feature also of the Lama's hell. Every year the ghost returned to the family, recalling the Buddhist yearly feast of the dead. A green stone was buried with the corpse, as jade is buried with the dead in China. The children sacrificed for rain were eaten by Aztek worshippers, but such sacrifices were unknown to the milder Toltecs who preceded them. They possessed also a custom of 'eating god,' in the form of a dough image, which recalls that already noticed in Thibet. They spoke of this world's wealth as an 'illusory shadow,' in the language of original Buddhism; and mendicant pilgrims came to visit the shrine where first the foreign teacher of Aztek tradition had taught religion and arts, just as Buddhists visited the sacred land of their faith in Northern India.

Mexican traditions spoke of more than one such teacher. Quetzalcoatl entered Mexico from the east. He wore a long sleeved robe with crosses on it, and a mitre like that of the lamas of Thibet. He taught various penances and ascetic customs, and is said to have introduced the calendar. In his time various artizans disembarked in the north at Panuco, including jewellers, smiths, architects, painters, and sculptors, with agriculturists. His assistants could cast metals, and engrave gems. Cukulcan, another teacher, came to Yucatan from the west, with nineteen companions, who were bearded and long-robed. They introduced a written character, and forbade human sacrifice. They taught the duty of confession, and finally disappeared and were deified. After them the rulers who followed made roads, palaces, temples, schools, almshouses, retreats for widows and orphans, inns, baths, and ponds. The Chilan Balam, or Sacred Book of Yucatan, reckoned back to the second century A.D., or according to another calculation to 583 A.D.

The civilisation so introduced among the peaceable Toltecs was, in time, developed by the Azteks, though the religion of the country decayed, and human sacrifice was reestablished. The Azteks are reported by the Spanish writers to have been able to cast metals, and to have understood the art of enamelling and of lacquer, they used jade and glazed terra cotta, as in Japan and China, and had tesselated pavements. Their lake dwellings on piles resembled those of Eastern Asia, and they had regular posting houses on the high roads like the Mongols. The American legends included that of the Deluge whence Coxcox and his wife escaped in a boat to a mountain, sending out a dove, as shewn on ancient paintings. The Flood story is also found in the high plateau of the Andes, where Tezpi is said to have sent forth a vulture and a humming bird from his boat, in which he preserved many animals. The humming bird brought back a twig in its beak. An Aztek picture represented a single tree in a garden, round which was coiled a human-headed snake. At Cholula giants are said to have begun a tower which the gods destroyed by fire. These legends are traceable to Mesopotamia, but they were known also to Indians, Mongols, and the Chinese. The Flood story is preserved in an Indian Purana, and in Chinese tradition, as well as in Persia; and the Persians, Indians, and Chinese all possessed legends of a paradise garden.

Among other points of comparison may be mentioned the suspension bridges of the Azteks, resembling those of India and Eastern Asia. The king was also called the child of the sun and earth—a Mongol idea. The Aztek calendar consisted of twenty months of 18 days, with four weeks of 5 days, and an extra week of unlucky days. In every cycle of 52 years 13 days were intercalated. This calendar was reformed in 1091 A.D. The astrological year, with months of 13 days, is comparable to the vague year which, in a sothic cycle of 1491 years, returned to its starting point. These ancient systems,

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originating in Chaldca, spread eastwards in Asia, and appear to have been introduced by Buddhist ascetics into America. The pantomimic dances of the Azteks, with their masks, like heads of birds and beasts, also recall those of Tantric Buddhism already noticed. The Toltecs came into Mexico from the north probably about 650 A.D., and spread abroad during the four following centuries, till dispersed by famine. The Azteks followed about 1196 A.D., entering Tula north of the Mexican valley; and in 1325 A.D. they settled south-west of the Lake of Mexico. Dialects resembling the Aztek language have been found in New Spain, a thousand miles north of Mexico, and a similar architecture is here said to be traceable. The existing skulls of the more civilised race are said to resemble those of the eastern Tartars.

The numerals of the Aztek language have been mentioned. The language was not a Chinese dialect though it possessed no letter r, which occurs in Mongolian and Japanese, but not in Chinese. The general character of the grammar is more akin to that of eastern Tartar dialects. Its greatest peculiarity was the affix tl to nouns. The numerals are nearest to the Ugro Altaic or North Turanian. A few words may be compared with Mongolic words, as examples of possible comparative study.

Aztek,	Teo 'god,' -	-	Chinese ti.
37	To 'mother,' -	-	Dravidian tay.
,,	Calli 'house,' -	-	Altaic kalle.
27	Cu 'lord,' -	-	Chinese chu.
> >	Mez 'moon,' -	-	Malay masi.
,,	Canoa ' boat,' -	-	,, chuma.

Words like these seem to point to a later condition of language in Eastern Asia, and to a more southerly origin than that of the original American race.

The general result of these comparisons tends to show that the Mexican races were of East Asiatic origin, but that the civilisation introduced in the 5th century was foreign, and due to the energy of the Tantric Buddhist missionaries, at a time when Buddhism had spread very widely in Eastern Asia, and when trade and navigation were boldly prosecuted. It remains to consider the civilisation of Peru under the Incas, which, though presenting many similarities to that of the Azteks, was in other respects distinct, and superior to Mexican conditions.

The Incas traced to a mythical pair representing the Sun and Moon-a married brother and sister who drove a gold wedge into the earth in Peru.* The story of the gold wedge occurs in the Persian legend of Yima, and Mongol kings traced their origin to a similar divine pair. Only thirteen Incas ruled before the Spanish Conquest in 1524 A.D., and the period is variously estimated at 200 or 550 years. The word Inca itself suggests the Tartar un or unk, 'Lord,' and their conquest must have occurred between 1000 and 1300 A.D., the period of Mongol Empire in Eastern Asia. Among their customs and institutions many recall those of Eastern Asia. They had a ceremony, when youths assumed the 'girdle,' which recalls the sacred thread of Parsees and Brahmins. They used litters in travelling, and had regular stations, called tambos, on the high roads. The palace was fitted with silver pipes to the baths, and had gold and silver carved objects in the gardens, just as Mangu Khan's palace at Karakorum was fitted by his French goldsmith in the 13th century. The bodies of the Incas were mummified, and seated in gold chairs. The laws were strict, and the land was held by village tenure as in India. Care was taken of the sick and aged, widows and orphans. The Peruvians knew how to spin and weave wool, and wore cotton Their country is full of the ruins of temples, palaces. dresses. forts, aqueducts, and roads. The latter were paved, and bitumen cement was used. Milestones were erected about a league apart, and suspension bridges were carried over the rivers. In the tombs of the Incas are found vessels of fine clay, gold and silver vases, bracelets, collars, utensils of copper, mirrors of silver or of hard, polished stone, and earrings in the form of wheels. Post-runners carried news along the roads between the *tambos*—ten or twelve miles apart—where military stations were established. These runners-mentioned by

^{*} The Conquest of Peru. W. H. Prescott. New edition, 1888.

Herodotus in the Persian Empire — were also a feature of Mongol organisation in the 13th century A.D. By their means fish, game, and fruit were brought 150 miles in a day to the Inca's palace. The arms in use—bows, lances, darts, swords, battle-axes, slings, etc.—were of copper, or tipped with bone, iron not being used. The quilted cotton armour, noticed among the Azteks, was also used in Peru, and was, as already stated, common among Mongols.

The Peruvians had not only the Deluge story but, according to Father Charlevoix, a legend also of Virgin birth. It must not however be forgotten that the Mongol monarchs claimed descent from a Virgin mother, and the same birth was attributed to the Buddha, and to Zoroaster in Persia. The Peruvian religion recognised an immortal soul, a resurrection, and a hell in the centre of the earth, as well as a Heaven beyond the clouds. The sun was the Inca's father-as in Mexico-and worshipped by sacrifices on altars. Pilgrimages to sacred shrines, human sacrifices of children-but not, as in Mexico, accompanied by cannibal feasting-the institution of vestals, or nuns, who fed the sacred fire, and became brides of the Incas, feasts with dancing and drinking, and distribution of bread and wine, were among the religious customs. As among Mongols, there were registers of property, births, marriages, and deaths. Plays were acted, and poets composed songs. Diviners and astrologers had small repute, but augury by entrails was practised, as in Asia generally. The Peruvians had cycles of years, like the Azteks, and used gnomon stones to correct the calendar. They lamented (like Indians and Chinese) the occurrence of eclipses, and watched the planet Venus. They had a calendar of twelve months, and divided the month into weeks. This calendar is remarkable as being almost identical with the old Asiatic zodiac, which, as already stated, reached India from Greece.

	Peru.	Greek.
April,	lamb,	ram.
May,	ram,	bull.
June,	two stars,	twins.
July,	crab,	crab.
August,	tiger,	lion.

September,	mother goddess.	virgin.
October,	crossing,	scales.
November,	pleiades,	scorpion.
December,	unknown,	archer.
January,	buck,	capricorn.
February,	rain,	aquarius.
March,	unknown,	fishes.

The custom of inaugurating the ploughing season, by use of a gold plough driven by the Inca, was also a Mongol custom. The Peruvians had silver balances, and were in this respect apparently in advance of the Azteks. They had idols, some of which, still extant, resemble those of Eastern Asia. They used the indigenous transport by llamas and vicunas, instead of camels, and the wool of the alpaca, cattle being unknown.

It is thought that the Incas had no literary character, using only the Quipu, which consisted of coloured threads with knots—a system chiefly applicable to registers and short messages, white signifying 'silver' or 'peace,' red 'war,' and vellow 'gold;' but in the museum at Cusco * a sixteenth century MS. appears to indicate the native system of writing used before the Conquest. The Aztek character, as already noticed, was ideographic and not syllabic, and in its general appearance—especially the square and equal forms of the emblems-approaches most closely to the Chinese; but the Peruvian character seems to have been a syllabary of about 100 signs, often repeated and quite different to the Aztek. Among these emblems is found the cross—as in Central America; and on Peruvian pottery, as well as among the Lengua tribes of North America, and in the mounds of Yucatan, the Swastika or 'croix cramponée' occurs. This ancient emblem was much used by Buddhists, to represent the 'wheel of the Law,' and wherever the Bikshus travelled they carried with them this remarkable symbol, which however does not occur on the MS. in question in Peru. The grinning mask of the Tantric Buddhists, mentioned in Mexico, is also found in Peru. Among the Peruvian hieroglyphics one of the most

^{*} Wiener. Peru et Bolivie, p. 775.

distinctive is a kind of tree; and the legend of the sacred tree, by which heaven was reached, is found in Paraguay as well as in India and China, in Persia, and even among the Maoris.

These indications point to a separate civilisation in South America, which may have been introduced as late as the thirteenth century A.D. The skulls of the Incas are said to resemble those of Burmans rather than of Mongols; and Malay enterprise may have carried the conquerors over the Pacific. In New Grenada, close to the equator, a legend referred to the arrival from the East of a stranger called Bochica, (probably Pachcheko or 'Saint') who taught chastity and abstinence. He, too, may have been a Buddhist missionary, reaching the plateau of the Andes perhaps from the Toltec settlement, but by an eastern route, and bringing no doubt with him the Swastika found in Peru. The fact that the lion is replaced by the tiger in the Peruvian Calendar seems to point to Indian origin, unless it be due to the absence of lions in America. The ram takes the place of the bull because cattle were unknown. The Pleiades, which replace the Scorpion, were generally observed by Eastern Asiatics, and the legend of the lost Pleiad was carried by the Malays to Polynesia.

It was not surprising that the Spaniards should suppose that certain features of religion, in Mexico and in Peru, were only explicable on the theory that Christian missionaries had visited America. The Cross, the flood story, the images with rayed glories, the traditions of virgin-birth and of paradise, the use of incense, the existence of monks with shaven crowns, and of nuns, the practice of confession and penance, all recalled Christian ideas. But the Spaniards knew nothing of the history of Buddhist systems, or of the early contact of Buddhism with the Christianity of Central Asia. The civilisation of Mexico was distinct from that of Peru, but both shew more points of contact with that of Eastern Asia, and with the strange degraded Buddhism of Mongol peoples, than with any western ideas; just as the languages of America, by grammar even more distinctly than by vocabulary, are related to Mongolic speech, and have no connection with Aryan languages; or as the racial types are Tartar and Malay, and not European. America was so much nearer to Eastern Asia than to Europe that it is natural to suppose that it was discovered by Mongols, and by the hardy Malay sailors, long before the Atlantic was crossed with such difficulty by Columbus, and even before the Norsemen found Vineland in the far North-East.

The evidence here collected seems to shew that, at some early period, the Siberian tribes crossed over the straits, and spread gradually south even to Patagonia. That by the fifth century A.D., Buddhists from the Corea, or from China, reached Mexico, and perhaps travelled on to Peru; and that in the eleventh or twelfth century a Malay or Burmese Conquest civilised the Empire of the Incas. The study of Aztek and Peruvian hieroglyphics can thus best be prosecuted by aid of the old graphic systems of Eastern Asia, which were at most very remotely connected with the yet older hieroglyphs of Egypt, Chaldea, and Syria.

C. R. CONDER.

ART. V.-SCOTLAND UNDER THE ROUNDHEADS.

IN the last issue of the Scottish History Society's publications is included a volume of much and varied interest—Scotland under the Commonwealth, 1651-3. If a statue to the Lord-General should again become a question of the hour, even to the imminent peril of an English ministry, this volume ought to recommend the tardy honour, for it goes far to justify the favourable judgment on his usurpation of Scotland as 'tolerant, wise, and just.' It entirely wants the commanding personality of Cromwell himself, who finally turned his back on the Kirk and her cantankerous leaders in the early autumn of 1351, to close with Leslie and the Royalists at Worcester. But it deals with questions of considerable moment at the time, and of constitutional interest now, such as the incorporating Union of the two kingdoms, the reduction of the Highlands, and the settlement of difficult ecclesiastical, judicial, and economic pro-