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## A HALF-CENTURY OF IRANO-INDIAN STUDIES <sup>1</sup>

By H. W. BAILEY

ON THIS MY FIRST occasion of lecturing to the Society I have a more light-hearted theme to treat than the solemn lecturer on an obscure problem. The emphasis on the first part of Irano-Indian in the title of this brief allocution is for the Iranian tinged with Indian and excluding the Arabian content of Islam. The interaction of these two disciplines, Iranian and Indian, has been constant since the 18th century when the sacred book of the Zoroastrians was revealed to Europe by the voyaging of Anquetil du Perron, who published his famous book *The Zend-Avesta* in 1771. The abundant Indian documents gave the greater certainty to the understanding of ancient Indian language and literature. The Indian had been further removed to the east; it had lost a considerable part of the older basic vocabulary of the "parent" language (called for want of a good word "Indo-European"), so that words had vanished or survived as isolated evidence for an older stage of the language. In this matter of vocabulary, Iranian was more conservative. The phonetic shape of the language was modified both in the Iranian and the Indian field, but such an Iranian word as *myazda-* for the "solid offering" is more archaic than the corresponding oldest Indian *miyédha-s*. To the present day a mountain-dweller in the Pamirs will say *nayant* "they churn butter", though the word survived in the oldest Indian 3,000 years ago only in *nīta-* "churned stuff, butter" and *netra-* "churning-cord". In Iranian too the base *nay-* "to churn" is not in the oldest texts, but occurs in Khotan Saka *nīyaka-* "butter" and *ñye* "curds". The Indian language had the fortune of preserving its old books within its own land, even, in the South, undisturbed. The Vedic literature is large, from its oldest elements the Rigveda and Atharvaveda of ritual, speculation, and magic through the explanatory books of the Brāhmaṇas and their speculative books of philosophy the Upaniṣads, with massive epics and dramas and sententious poetry and technical treatises; though Buddhist texts suffered large loss, which Chinese and Tibetan translations only partly make good.

In the field of Iranian studies it has been entirely different. In the earlier expansion of the Saka peoples (whom the Greeks called Skuthai) in the Pontic region of the Black Sea across the central Asian plains and mountains to Kāšyar, Khotan, and the Lop Sea, there was no inducement to preserve written documents. Out of an uncertain region emerged a sacred book transmitted for centuries till we find our earliest extant manuscript in the Bodleian Library dated A.D. 1323.

This book which we call now the Avesta, through a Persian pronunciation of the early Islamic period of an older word, is a fragment of a much larger literature which had been preserved by the Magu-priests in their priestly tradition in Erānšahr. Part of it is in a dialect very close in form (but with Iranian phonetics, vocabulary, and inflexion) to the oldest attested Veda language about 1,000 years before our era. It is obvious that such an ancient book must contain archaic knowledge. To provide against the loss of understanding glosses were necessary. This was attempted. The whole of the extant ritual part

<sup>1</sup> Read as an informal lecture after the award of the Society's Triennial Gold Medal on 13th April, 1972.

of the sacred Avesta is accompanied by a word-for-word translation with copious notes. That is the part called *Yasna*, the oldest word in Irano-Indian texts, the *yazna-*, for "worship" of the *yazata*-gods (now the *izad*). The ritual prescriptions of the book *Vidēv-dāt* or *Vendidad* has also its own gloss. But other parts are no longer accompanied by an interpretation. Here was a problem to tackle: could the original meaning be recovered? What did the composers of hymns and heroic stories mean?

At the beginning of this century the study of the oldest Iranian tradition was struggling with great difficulties. While the Indian texts were examined with enthusiasm and the later Sanskrit language had never been forgotten in spite of the loss of vocabulary and obscurity of the oldest words, the Iranian tradition had preserved much less. The Avesta was eventually handed down in an excellent script marking subtleties of pronunciation. It was possible to prepare a grammatical structure on the model of the oldest Indian. The commentaries, however, and theological disquisitions were in an obscure writing, the Zoroastrian Pahlavi, which could only be penetrated in part. The indagation was perpetually defeated. Most of the books had been taken from Persia to India. To this must be added the scarcity of scholars who could devote themselves to this task; usually indeed they held posts in other, though related, subjects, as in Indo-European or in Sanskrit.

The Iranian task therefore lay in two fields: to use all the Indian evidence as to the oldest beliefs and customs, to vocabulary and grammatical forms, and to gather up every minute piece of evidence on the Iranian side in traditional learning, manuscripts, inscriptions, of both western, that is, Persian, and eastern source in the mountains of Afghanistan, and of the northern regions where the Achaemenian Persians placed the Sakas, from the Saka paradraya on the Danube to the Saka tigraxauda with pointed hats in the North whom they depicted on their monuments, to the Saka haumavarga and the Saka para Sugdam on the Iaxartes river. From Babylonian and Elamite cuneiform texts came copious words, especially titles, from Greek and their imitators the Romans came Median and Persian words, and especially proper names; and other matter from the North, the Scythians. That was the period of the Avesta.

Later sources flowed more copiously. In Persia west of the Iranian expanse the Persian tradition was carried on unbroken till the mass of post-Islamic literature was produced. But between the end of the Achaemenian period (330 B.C.) and the Sasanian renewal (A.D. 226) written records are scanty. An occasional inscription has been found of the Parthians. Nisa, the Parthian city, has delivered thousands of inscribed broken pieces of pottery from wine-jars. The Kušān of the eastern region is known in recently found inscriptions in Greek script. But long consecutive texts in manuscripts are unknown. The Greeks wrote of *hypomnēmata* "records" of the Persian court, but they have perished.

An earlier form of Iranian was found in Armenian loanwords, which by present knowledge can be separated into Parthian, borrowed in the Arsacid period when Armenia had an Arsacid ruling family, and Sasanian words of the south-western Iranian dialect of Persis, Fārs, beside traces of northern Iranian, that is, Saka in origin, but actually of the tribes in contact, particularly the Alans who were dominant in the North and in the northern Caucasus till the 11th century, and after whom the Caucasian Gates, the *dar i alānān* "Gates of the Alans" were named, the pass between Tiflis and Dzäuägi yäü (earlier Vladikavkaz). The name Sat'nik of the Alan princess is evidently the feminine of the masculine

title in Avestan *sātar-* “ruler”. The northern Iranian word *marg* “bird” occurs in some Armenian loanwords, and is also found modified in Georgian *p'arša-mang-i* “peacock”.

For more abundant materials, however, of this intermediate period scholars had to wait till the unexpected discoveries in the region of the Sītā river, the modern Tarim river of the Taklamakan desert, east of Kāšyar, and the borderland of Throana (Tun-huang) in western China. For the first time masses of manuscript texts in four Iranian languages were placed in the hands of scholars. Eighty years ago some travellers and later some Aq saqals, Indo-British agents, had brought or sent pieces of written documents to India, where A. F. R. Hoernle was active in studying them. But the most astonishing discovery was in 1908 in a temple in Throana. There a room in a temple was found, stuffed from floor to ceiling with manuscripts in several languages. Excavations were also undertaken in the Tarim region in deserted settlements. Further north the Turfan region was a source of many, primarily Manichaean, manuscripts.

For Iranian studies these discoveries were fundamental. Scholars at once turned their attention to their elucidation. Two Iranian languages, Sogdian and Saka, of which hardly a trace beyond proper names had survived were suddenly abundantly attested. Sogdian from ancient Marakanda, Samarkand, had been carried to the regions of Kroraina, Loulan, by merchants. It was the Silk Route. We have some of their ancient letters of the years 312–313 of our era. But the greatest amount is in theological texts written by Buddhists, the more archaic spellings, by Manichaeans in a reformed spelling expressive of real pronunciation, and a still more developed Sogdian in Christian texts, both canonical and other translations from Syriac Nestorian books. Even Ilios the city of Troy was known to the Sogdians in these translations. There is also an archive from Mount Mug on the Zar-afshān river near Samarkand itself of the beginning of the 8th century, the time of the war against the Arabs. Sogdian is still spoken in the valley of Yaghnāb.

Having parallel texts in Buddhist, Manichaean, and Christian books it was possible to proceed at once to analyse these Sogdian documents. Much has already been published with translations and elaborate commentaries. Here G. Gauthiot, E. Benveniste, and in Germany F. W. K. Müller, H. Reichelt, W. Lentz, O. Hansen, and W. B. Henning were particularly active, and work is continued on the many unpublished texts by M. Schwartz in Berkeley, California. In most cases a corresponding text could be found. The Sogdian Buddhist texts were at times translated from Chinese. M. Schwartz has been particularly successful in finding Syrian originals for the Christian texts. Two grammars of Sogdian exist: R. Gauthiot had planned a grammar which after his early death was completed by E. Benveniste. The other grammar, indispensable in this field, is based on the Manichaean Sogdian with constant comparison with the Buddhist and Christian texts, the *Grammar of Manichean Sogdian* by I. Gershevitch.

Sogdian has supplied valuable aid to interpret the older language, as for example the Avestan hapax legomenon *ara-* used of a mental defect, for which the Sogdian has given the connected *āraka-* “mad”, translating the Buddhist Sanskrit *unmāda-* “madness”, and related to Ossetic *ārrā* “mad”.

The Parthian and Persian texts were also Manichaean in a clear script of Syrian type. This revealed the pronunciation of the Manichaeans, as they spoke it without archaisms which were still affected in the official inscriptions of the period. It gave a very satisfactory

knowledge of the vocabulary and inflexion of about A.D. 200–300. Manichæan texts are known in many languages, since the religion survived almost a thousand years as a living faith. Hence it was possible to analyse the new texts speedily with help of bilinguals and to use the new knowledge to interpret the hieratic texts of the Zoroastrian Magi. The Sasanian commentaries on the Avesta began to be interpreted. How much remains to be done can be illustrated by a reference to the Life of Zoroaster told in legendary form in a large 9th-century book, the *Dēnkart*. Here there are stories of the life of Zoroaster, and it is related how as a child his enemies tried to destroy him. In the morning after these dangerous attacks the mother hurries to the scene and finds him 𐬵𐬀𐬎𐬎𐬀𐬎𐬀 (‘*wstk*’, ‘*nst*k’). This, said E. W. West in 1897, must mean she found him *ōstak* “standing up”. But 70 years later Maryan Molé saw otherwise. He translated with somewhat dubious grammar: “she seized him by the rump”. Now the ambiguities of the Aramaic script which had reduced 22 signs to 14 distinct shapes allow other readings. And certainly the anxious mother does not find her son standing up, nor does she seize him by the rump. She finds him simply *anastak*, that is, “unharméd”, and nothing more.

It is to be expected that eventually all these mysteries of the Zoroastrian Pahlavī books will be solved by the few devoted scholars who are fascinated by them. But much still remains to discover.

The Parthian and Persian texts made the separation between two literary languages of Erānšahr perfectly clear. Almost the whole vocabulary can be distinguished by phonetic and semantic tests. These two dialects, however, have diverged so greatly by A.D. 300 that for example the word for “heart” is Parthian *zird* (like modern Balōči *zirdē*), but is Persian *dil*.

Persian Christian texts also existed and one Persian translation from Central Asia was found to be a rendering from Syriac of the Psalms of David. It is fragmentary, but enough survives to show the archaic system of spelling like the Zoroastrian Pahlavī books and unlike the Manichæan, which as a reforming and new religion abandoned the older traditions.

One curious feature has been the very small amount, one glossarial fragment, of the Mazdean, that is, the Zoroastrian literature in Central Asia. It is curious because the Mazdean worship which used fire as a symbol was well-known in China. As late as A.D. 886 in the originally non-Chinese town of Qamul (modern Khami), a Chinese document knew of this cult with a temple to *A-lan* (older *a-lam*). The Chinese even made a special written sign, now pronounced *hien*, by placing the heaven character to the right of the religion character, to refer to the fire cult as they considered it. It would have been exciting to have found some part of the Avesta in the sands of Central Asia.

The second language Saka, quite unknown apart from proper names in Greek books and inscriptions, was found in manuscripts both of official business origin and of religious texts. In the texts the books from Khotan, in Buddhist Sanskrit *Gostana*, called their own language *hvatanau* “of Khotan”, but evidence exists that the people, at least the dominant group, were of the Saka Iranian stock. In addition to Khotan, a few manuscripts have been found in another more archaic dialect based upon the ruined city Tumšūq, a Turkish name meaning “beak”, of which the older pre-Turkish name is unknown. The ruin is near modern Maralbaşı, north-east of Kāšyar. How different the development had been can be seen in such a word as Iranian *frabṛta-* “offered”, in Tumšūq *rorda-*, in Khotan *hūda-*.

From the new documents much can be recovered concerning the history of the Kingdom of Khotan. The Chinese annals are jejune in the history of the western barbarians. Here is something new.

Saka, if we adopt the Achaemenian value of the word for all the northerners from the Danube to the Iaxartes, the modern Syr-darya, now survives in Ossetic of the Caucasus and in the Iranian dialects of Shughnān, Wakhān, and Munjān of the Pamirs. By gathering up all the materials now available in Khotanese and Tumšūq manuscripts and in proper names from the Greek books of the Pontic region with the two modern dialects of Ossetia, Digoron in the west and Iron in the east, we have a considerable purview of the Saka language of antiquity.

The Khotan texts seem to have begun about A.D. 300 with translation from Buddhist Sanskrit books. They continued to write the language till the coming of the Turks, who took over Khotan in 1006. The language is thus attested for some 800 years, and not surprisingly there is a vast change to be noted over those eight centuries. The oldest Saka Khotan language is still highly inflected in the noun with seven cases. The verbal system, however, compared with the Avestan language is greatly simplified. The vocabulary is still largely intact, although for peculiar Buddhist ideas the foreign Prakrit and Sanskrit words were either taken over unchanged or translated mechanically. The script used for the Khotan and Tumšūq Saka was a modified form of the Brāhmī script of India, of which the script of modern Hindi is a later descendant. That meant that every sound was indicated. In the Tumšūq form twelve new signs were added to express peculiar Iranian sounds, where in Khotan they preferred to join older signs for the new sounds.

In all aspects it was clear that these massive discoveries of manuscripts must be examined and so far as possible edited. After the work of A. F. R. Hoernle, E. Leumann, and his son Manu Leumann's work on his father's papers, and Sten Konow, there remained a large amount of Saka material untouched in 1934. For Iranian studies these Saka texts were extremely important. They also, as being Buddhist, must contain much of interest for the illumination of the obscurity which covered the expansion of Buddhism through Central Asia to China and Japan.

In addition to all the Iranian materials there had been found almost 800 documents in the north-western Prakrit dialect of Gandhāra, the modern Peshawar region, transferred to Kroraina, Loulan, and there used as the administrative language of a kingdom flourishing about A.D. 300. For this Gāndhāri Prakrit the Kharoṣṭhī script was used, written from right to left, which had been introduced in the Achaemenian period from Persia to the north-west of India. I have thought that the name is from an older *xšātra-piṣtra-* meaning "Imperial script". The Kharoṣṭhī script continued in use in the Kingdom of Kuci in the Tarim region till the 7th century. Many pieces of Kharoṣṭhī text lie still unpublished, after many years, in Germany, and some small pieces also in London, from this northern region where a local form of Kharoṣṭhī script had been developed. One religious text from the region of Khotan was an important recension of the Buddhist Dharmapada, the book of devotional poems.

For Iranian studies these Kharoṣṭhī Kroraina texts are important for the Iranian words they contain; they assure a date around A.D. 300 before the bulk of the extant Khotan Saka texts were written. One problem they have raised is the source of the north-western Dardic Paśai word *čimdr* "iron", and the related words of Dardistan and Nuristan. In a Buddhist

Sanskrit manuscript of the Saṃghāta-sūtra from the Gilgit Buddhist monument called a *stūpa*, probably therefore about A.D. 400, there occurs the word *cimara-kāra-* “worker in *cimara-* metal”. The Chinese translation proposed the meaning “iron”, and the Tibetan translation gave “copper”. The modern dialects have the meaning “iron”. Now this word probably occurs in Kroraina in the phrase *cina cimara* (the quantities of the vowels are unknown in this script). If we render by “Chinese *cimara-*”, that is, “Chinese iron”, one is at once reminded of the Arabic *ḥadīd šīnī* “Chinese iron”, possibly meaning “nickel”. But this Buddhist Sanskrit word *cimara-* has such a similar appearance to Turkish *timür* “iron” that the older form of the Turkish *timür* is likely to be \**čimr-* with *-ür* replacing *-r-* after consonant, as the Turks turned Persian *babr* “tiger” into the name *Babur*.

Our Khotan Saka and Tumušaq Saka documents are of the second stage of Iranian linguistic development and therefore less easy to use than the older linguistic texts for historical theories. One word has proved of importance in the Ossetic field. The Khotan Saka word *naḍaun-* from older \**nṛtāvan-*, with plural *naḍaunā* and nominative singular *naḍe* (from \**nṛtāh*) means “man”, and “hero”. It is a normal derivative from *nar-* “to be strong, virile, skilled”. This word at once gives the interpretation of the famous Ossetic word *Nartā*, which occurs from Ossetic in many Caucasian languages. It is the name of the chief of the heroic families of the Caucasian Epic, the stories of the Nartās. Here the Ossetic word belongs to a more archaic dialect than the modern Digoron and Iron Ossetic dialects, an older dialect in which the syllable *-rt-* is kept unchanged in *nartā*.

Saka has also surprising similarities with the Pamir language of Wakhān. Here there are the well-known words Wakhī *īšn* “iron”, Khotan Saka *hiššana-*, and *yaš* “horse”, Khotan *ašša-*. But also the wild mountain animals Khotan Saka *draušša-* and *puršša-* are clearly with dialect differences connected with Wakhī *drokš* “bull” and *vrokš* “male *Ovis poli*”. Then too the Khotan Saka *karasta-* “skin of an animal” is in Wakhī *kurust* and Shughnī *karast*. Such comparison gives some assurance that isolated words in the Pamir Iranian languages are at least one thousand years old.

There are Iranian loanwords in the autochthonous languages of the Caucasus. The abundant Alan (ancestor of the modern Ossetic) words in the Ingush language were collected in 1930 by A. Genko. The Ingush live to the north-east of the Ossetes in the northern Caucasus. The closely related Chechen too has many of the same loanwords.

A striking piece of evidence from Khotan Saka can illustrate the presence of Iranian in the Caucasus. In Khotan Saka the word *piṃja-* “point” is used of a mountain “peak” and of the “breast”, and it is known elsewhere that the sense of “point” is used to express these concepts. The word *piṃja-* is of common Iranian formation from the base (s)*pei-* “to be pointed” (familiar in the English word *spit*). In Ossetic Iron *fyndz*, Digoron *fij* (in a proper name *findz*) means both “point” and “nose”, as when they say *jä dzäburtän sä fjitä* “the points of their shoes”. The two words are clearly from the older Saka and ultimately Indo-European. But to these must be added Abkhaz *a-p'ənc'a* “nose”, Georgian *p'inč'-vi* “nostrils”, and Armenian *pinč'*, *pinj* “nostrils”, which have previously been mistakenly treated as of Caucasian origin.

It was from Khotan Saka manuscripts in the bilingual of traveller's phrases that the Sanskrit name *Gostana-deśa* for “Khotan” was first discovered. Indeed it is clear that not all the Old Indian vocabulary has been recovered.

The Khotan Saka word *durausa*, an epithet of the lovers' drink in a lyrical text, is the adjective to the archaic word \**durausa-* which occurs in the Avestan *dūraoša*, the Zoroastrian Pahlavi *dūr-ōš*, and the oldest Indian *durōša-*. Much ink has been spent on interpreting this word; the dispute is not yet settled. But it is the distinctive epithet of the sacred ritual drink, the Iranian *hauma-* and the Indian *sóma-*. Thus the specialist in Saka studies cannot hold aloof from the controversy over the original meaning of *hauma-*. One of the Saka tribes was in fact called *hauma-varga-*, mentioned above, which seems to transmit this same plant name. It is a strange situation to find that no one can state what the *hauma-* was. For the second component of the name, which the Greeks called Ἀμύργιοι, the base is used in the Avestan word *varaxδra-* for \**varxδra-*, the technical word for some solemn utterance in a non-Zoroastrian ritual. The *hauma-varga-* would then be the Saka particularly devoted to the *hauma-* cult.

The plant has no reasonable name if it is traced to *hau-* "press out juice", that is, "the pressed stuff" or the "act of pressing juice". What the plant was must satisfy fairly stringent conditions. If both Iranian and Indian evidence is combined the choice is limited. The poets claimed that on drinking it they experienced almost divine feelings. The juice is pressed from a stalk. It is not fermented, but acts immediately, so that various plants are excluded. It grows on mountains; the *mūjavant* mountain is named in the Rigveda. In the Iranian texts it grows on mountains, on plateaux, and in rocky clefts. It was costly to buy in India. It was necessary to admit substitutes in the Indian plains, since the plant did not grow there. It was necessary also to make the stalks swell in a special rite called *āpyāyana-* before pressing out the juice (a rite already misinterpreted in the Brāhmaṇas). The word is from the unitary Irano-Indian period, and that would place it in the Caspian or Pontic area.

In modern use there is the Pašto *ōmā*, *hōm* in Afghanistan, which is Balōči *hum*, *humb*, *nar-ōmb*, a name of one of the *Ephedra* plants. The *Ephedra* is in fact the plant now used in the Zoroastrian cult both by the Zardušti of Persia and by the Parsis in Bombay. Since the *Ephedra* grows in India, it is excluded as the primary *hauma-* plant.

A complication arises, not yet fully clarified, when it is seen that Khotan Saka has as adjective *huma-* meaning "spongy" or "soft" in a description, beside *ttona-* "fat", of the former state of hands which in a cemetery had become dried up. This Khotan Saka word makes certain that the Pašto word for "mushroom", *xōmba*, means in fact the "spongy plant". Basically the Vedic Rigveda *kṣūmpa-*, glossed by *ahi-cchattra-* "mushroom", belongs here, together with the early Germanic \**swamma-*, \**swampa-*, \**sumpa-*, all referring to "spongy" things, the "sponge" itself, or "mushroom" or "swamp" or "sump". At some early period there was likely to be collision between the word *hauma-* as the name of the sacred drink and the word *huma-* or *hvama-* of the "spongy" thing. Indeed would not "spongy" plant be a better name for a plant than "pressed juice"?

The evidence available for the solution of endless ancient Irano-Indian problems is rarely sufficient to give a certain decision. Hence the perpetual struggle to prove personal views. This is the reason for the regrettable personal disagreements among specialists in Iranian. A monograph which may be greeted as a work of genius by one scholar, to another seems audacious, and to yet another nonsense. The ground for a *communis opinio* is still restricted.

At times one may wait many years before some decisive evidence is found. I can



mention a case of my own. When 40 years ago I proposed that an Old Persian word meaning "ornamentation" must be read *āranjanam*, because the Iranian word for "to decorate" was *ā-rang-*, it was rejected, and, if cited, it was just a rejected "personal" view. In 1970 the word was found in a document in another language, the Elamite, as a loanword, but written out fully as *ha-ra-an-za-na-um*. The other possible reading of the Old Persian word, namely *\*arjanam*, is now finally disqualified. But 40 years is a long time to wait.

Another case comes to mind. Thirty-six years ago the word *ārya-bhāṣā* meaning the Buddhist Sanskrit language was rejected. I had quoted it from a colophon to a Sanskrit-Chinese lexicon. But now the word has been found in a most respectable text, the *Abhidharma-kośa* of Vasubandhu. It is well to remember that the Buddhist Sanskrit is still far from fully known.

The wandering or nomad tribes, who ranged back and forth between the Danube and Kan-su of north-western China, did so before the Turks descended from Mongolia. That some were Iranian-speaking has long been known. From Greek sources we know Skuthai, whom the Persians called Saka, the Sarmatai, and the Daai, who are the Sairima- and Daha- of the Avesta; the Aorsoi, who have been compared (but not yet certainly identified) with the later Arsia, who are the Ās, Assi, Āsi, Os, Ovs of the Caucasus region (a name now used in the name Ossetia); and the Alanoi, Alani, the ἀλκήμετες Ἀλανοί (powerful Alanoi) of the Greeks. All these were Iranian-speaking. But other names are also likely to be Iranian in origin. The Avesta knows the people Hyaona-, hostile to its prophet and to his patron Vištāspa, having a king with the Iranian name Arəjaṭ-aspā. This *hyaona-*, taken as a simple adjective, is identical with the Old Indian Vedic *syoná-* "satisfying", and like Vedic *bhoja-* meaning both "enjoyer, possessor, ruler" and a tribal name, is used of those who have satisfied their desires by lordship based upon possessions. As a tribal name the Hyaona- were thus calling themselves "lords" or were so called by others. Similarly the Daha people have a name identical in form and probably in meaning with the Khotan Saka *daha-* "virile person, man as contrasted with woman", which is once cited in the Vedic tradition in the Rigvedic *dāsa-* used of the primal man before the *mānu-* "man" from which the later *manus-* and *manuṣya-* "man" were derived.

When therefore we meet later the *Avares*, the *Avars* of the 5th century of our era, and the name handed down by the Greeks of the *Ouar-xōnitai*, and the *Ouar kai xounni* "the Var and the Hōna", both names are likely to be of Saka origin. In *var-* and its by-form *avar-* one would see a Saka adjective meaning "strong", as attested in the Khotan Saka *vara-* (which renders Buddhist Sanskrit *bhadra-*) from *var-* "be strong". As to the prefix *a-*, it is familiar in other names of the Iranian tradition: Old Persian *akaufačiya-*, later *kōfič*, *Mardi* beside *Amardi*, *Parni* beside *Aparni*. Whether the prefix was originally *a-* or *ā-* cannot at the moment be decided. The New Persian *āmul* from *Amardi* may have a secondary long *ā-*.

Tribal leaders do not necessarily speak the same language as all their followers. But the royal names are often Iranian. The name of the *Hūṇa* ruler of north-west India in A.D. 520 was *Mihira-kula-*, son of *Toramāṇa-*. The *Mihira-* of the name is certainly the older *Miθra-*, and the whole name will be Iranian. Within the many dialects of Saka the older group of sounds *-rta-* underwent various changes, in one change it was replaced by *-ula-*. Hence in *Mihira-kula-* we have the rather obvious older *\*Miθra-kṛta-*. It is a name formed like that

of the Sasanian kings \**yazata-krta-* attested in Armenian *Yaz-kert*, Zoroastrian Pahlavi *Yazd-kart*, later *Yazdigird*, and Greek *Izdigerdēs*.

It has been proposed recently by V. Livšic in Leningrad that the *Hefthal* name, which the Persians wrote *haitāl* and *haiṭal*, and which they stated to be a Bokhara dialect word meaning "strong man", was the same as the Khotan Saka *hītala-* in the compound *hītala-tṣai* serving as some heroic epithet. This, which seems likely, has important consequences for the name of the Hefthal people.

It seems clear now that the Kušān word, the title *yavuga-* of Kujula Kadphises (Kapphiśa) is an Iranian \**yavuka-* or \**yāvuka-* "gatherer, assembler of a troop, troop-leader", from the well-known base *yau-*, from which we have also Old Indian *yūthā-* "group". The initial change expressed in Greek ZAOOY is like that in Khotan Saka *j-* (= *ǰ-*) from older *y-*. Later this Iranian *yavuka-* gave Turkish *yapyu*, and *jabyu*.

It is necessary also to keep in mind that Iranian words of an early period from some Saka dialect were carried east and taken up by Turkish, only to be brought later to the Iranian languages in the west. A notable case is that of the word for "mule". To express this concept Old Indian had used *aśva-tara-* "partly horse". The Iranian used *xara-tara-* "partly ass", which survived in the Sogdian *yrtr'k* \**xarataraka-* and Khotan Saka *khaḍara-*. This became the Turkish *qatīr*, whence we find it again in Ossetic in the Turkish form Digoron *qadir*, Iron *qadyr*, although they had their own Iranian word *xārg-āfs* "ass-horse" meaning "mule".

It was long ago proposed that the Finno-Ugrian word Votyak *pari* "pig" had come from a lost Saka word connected with Latin *porcus*. This word in later form has in fact been found in Khotan Saka as *pāsa-* from older \**parsa-*. But it has also been found in a fragment of the Avesta in the phrase *huš pərəsō* as recently as 1967 by K. Hoffmann. It is one of the many words which Iranian has preserved, in common with other Indo-European languages, but of which no trace has been kept in the oldest Indian.

In the Gilgit *stūpa* monument which was opened in 1933 and contained many Buddhist Sanskrit manuscripts one folio of a manuscript at the end of a Buddhist text contained a long list of names of persons who had shared the merit of the work. These names are largely unfamiliar, but are likely to be to some extent of Iranian origin. The presence of the word *phaṇa-* is important, since it is almost certainly the Iranian *farnah-*, in Sogdian *frn*, and *fn*, and in Khotan Saka *phārra-*. One Iranian title *sāhi* "king" occurs, a dialectal form from the ancient *xšāyaθiya-*, the modern *sāh*.

One piece of paper from Central Asia has a text in a language like that on the inscriptions of the Kušān period. It has been described as Bactrian, but it is still unpublished after more than half a century since its discovery. The inscriptions are themselves hard to interpret and every small piece of information is desired to this end.

It was from Śāka-land, the land of the Saka people, that religious movements brought Maga-priests, having the ancient Magu-title, into north-west India in the Kušān period, as worshippers, one group of Mihira-, the older *Miθra-*, and in the second group worshippers of Jaraśāstra, that is, certainly the *Zaraθuštra-* of the Avesta, and the Mazdean religion. Eventually in India there is reference to Maga-brāhmaṇas when assimilation had taken place. Of these Magas came Varāha-mihira- the encyclopaedist.

In Europe these ancient *Magu*, Greek *magoi*, Latin *magi*, introduced into the gospel of

Matthew, were carried over into many pictures, even down to the present-day Christmas card. But the Greeks knew also of *mageia* "magic", which was "service of the gods", not the Chaldean modification which passed through Babylonia on its way to Europe with its modern meaning of our "magic". The title is rare in the Avestan tradition, but one of the two most ancient manuscripts, K5, applies the word to Zoroaster himself, and its being the *lectio difficilior* makes it more likely the original text.

Zoroaster, *Zarathuštra*, was glorified by his followers. That he was an outstanding individual seems clear. When he lived is still a debate among the experts. But his name has lived on revered in a cult for almost 3,000 years. One would gladly know precisely what he taught. The Avesta contains 17 poems, called *gāthā*, a word famous as *gāthā* also in the Indian tradition, in elaborate metres, indicating probably a long artistic development. In these poems we have, it is claimed in the Zoroastrian tradition, the *ipsissima verba* of Zoroaster the messenger of the Creator Ahura Mazdā. But exact interpretation struggles with obscure cultic terminology and a language full of isolated words, and at times largely ambiguous syntax. Every trace of Iranian language which can be found in manuscript or inscription or spoken dialect is urgently needed to win through to a full interpretation of these ancient poems.

For a soundly based study of Iranian it will be necessary (though it may be impossible in the near future) to have all these Iranian manuscripts reproduced in facsimile. So only can every scholar feel sure of his data. We are far from that position. The admirable Paris publications have provided facsimiles of the Sogdian texts of Paris. But the Sogdian of the British Museum lies mostly without facsimiles. We have only transcripts in print. For some of the Saka folios there are now facsimiles but most is available only in the museums and libraries. Yet the texts are difficult and need constant inspection. Parthian and Persian texts are hardly available in facsimile. This will be a weakness of Iranian studies for many years. The two recent facsimile volumes of the Zoroastrian Pahlavī texts, the Bundahišn and the Dēnkart, at last provide a solid basis for an advance in this difficult field, but usually one must depend upon a printed text, which must always be secondary.

Unexpectedly Iranian of the 11th century in Muslim manuscripts from the ancient Chorasmia has revealed a considerable amount of the lost Chorasmian language. It is well known that the polymath Al-Bairūnī was by birth a Chorasmian, and that he quotes a few of his Chorasmian words. Transmission in the Arabic script has made the subject particularly difficult. The absence or displacement of a dot in an unknown language can deform a word out of knowledge.

Now to a more modern period. The Saka of the Caucasus in the Alan tradition, now known in the western and eastern dialects of Ossetia, has preserved old stories full of folklore, possibly a little ancient mythology, but much of ordinary Caucasian life. This is the epic of the Nartās, mentioned above. The protagonists are heroes. The two heroes of the younger generation are Batraz and Soslan. Of Soslan a long *curriculum vitae* can be compiled. Though a great hero he has a darker side. The narrators have much good, but no little evil to relate of him. The heroes set out on long expeditions called *balc* "ridings" to raid cattle, equine and bovine, of their neighbours. This booty is all driven to the Plain of Distribution, the *uārān fāz*. The Great House, *Ustur Xādzarā*, a system which the Greeks recognized as *oikarkhia* in Persia, meant the social structure with a director, called

*Orāzmāg* in the Nartā tales, and his wife (who is also a half-sister) called *Satana*, in charge of the House with the *guppur* "sons of the House", a later form of the ancient designation of members of the Great House, though no longer asserting genetic connexion, which in the Avesta was called *visō.puθra-*, and was translated in the Achaemenian inscriptions into Babylonian *mār bitī*. In the Nartā tales there were four important families, the Boriatā, the Āxsärtāgkatā, the Alāgatā, and the Acātā. Interplay of these families leads to hostile situations. The Boriatā almost annihilate the Āxsärtāgkatā, who grew numerous again from the two surviving brothers Āxsarā and Āxsärtāg. From the Acātā came Acāmāz son of Acā or Uacā, a young hero, whose name is programmatic "Great in strength". He is in love with Agunda the Beautiful, daughter of Saināg āldar of the Sau xonx "Black Mountain". Having his father's magical flute, a gift of the *izād-idauāg* protecting genius Āfsati "lord of wild beasts", Acāmāz can set the mountains toppling down, charm all beasts and birds to follow him, and win the love of Agunda the Beautiful by his playing. Then the supernatural *izād* genii gather to escort him to his wedding with Agunda. Other heroes, Soslan and Sāuuaj, play on the *fāndur*, the two-stringed fiddle, but only Acāmāz has the magical music. The picture of Acāmāz sets him apart from his fellow-heroes, whose exploits are giant-slaying and cattle-raiding. Since the tales came from village raconteurs, it is village ethics which are prominent, with the Caucasian background of mountains and the Caucasian village towers.

Linguistically the tales are in an Iranian language, with a large vocabulary of which many words of unknown origin form part. Many of these isolated words also may well be of Saka origin, but this cannot at present be assured. Only a few Muslim Arabic words are used, a few also Turkish and Mongol, and some from their Caucasian neighbours, the Circassians. But the Ossetic grammatical structure with its eight nominal cases and a large verbal system is Iranian.

David Soslan is the name of the second consort of the Georgian Queen Tamar (herself having an Ossetic mother), who died in A.D. 1212. His name Soslan assures the existence of the heroic name Soslan in the 12th century, so that the Nartā tales contain old material. The Georgian Chronicle writes of *Os-baqat'ar* "the Ossete hero" in the early Georgian legends.

The Lady of the House in the Nartā epics is called *Satana*, an epic-dialectal form, which is the feminine counterpart of the title *sātar-* of a ruler or organizer, applied in the Avesta to rulers associated with the hostile *kavi*-princes and *karapan*-priests, the singers, foes to Zoroaster and his friends. But we need not accept their prejudice against the *sātar*-rulers. In Armenian the loanword *satarā-* is used of the "organizer, helper, artisan". The Saka, as we know, did not worship Ahura Mazdā in the time of Dareios I (522–486 B.C.). The name *Satana* is connected, as already noted, with the name of the Alan princess *Sat'inik* in the *History of Armenia* of Movsēs Xorenac'i of the 5th (perhaps rather the 8th) century. This name *Sat'inik* is from the same source, a feminine to *sātar-* "organizer" with a different or differently developed suffix.

The recognition of the archaic dialectal words distinct from Ossetic Digoron and Iron, arising partly from the various tribes who made up the Ossetic people, is important, though hitherto overlooked, for many words in the archaic vocabulary of the Nartā epic. One word of this kind is important for the meaning of the word *miθra-*, which could be traced to at least four different bases. This word is in Digoron *emillāg*, Iron *emylyk* for the "untamed,

wild" horse. It occurs widely as a loanword in Adyge *emlāč*, Qabardei *emələdž*, and Inguš *iemælkæ*, *əmallk*, *əmallk*, Chechen *əmallk*, *əmallkan govr* "untamed horse". The same word is preserved also in the Armenian loanword *amehi* with the same meaning. The older Iranian form is thus \**a-miθryaka-* "untamed, wild". It may be taken as supporting a base *mait-* : *mit-* equivalent to the base *yat-* "to place properly", but also "to tame", rather than the base *mai-* "to be friendly" as in Zoroastrian Pahlavī *mīhr* "kindness", with Lithuanian *mielas* "dear", Old Slavonic *mirŭ* "peace", and the many cognates.

When I was on my one visit in 1966 to the Caucasus, I inquired about the plant with the Ossetic name *nimātk'u*. The name occurs in the older form *nəmaδkā-* in the Avesta. The Zoroastrian writer was denouncing the cultic acts of his enemies. He protested that the priest placed *aēsma-* "fuel" *nəmaδkā-* on the fire. The Ossetic word is now used of the *Viburnum lantana*, from which pipe stems are made. A plant was pointed out to me. Whether this was the precise plant intended by the Avestan *nəmaδkā-* remains unproven.

It is not a little astonishing to find that the modern Pašto of Afghanistan still uses the word *zəman*, *zamme* for "payment of wages, stipend", which we have in the ancient Avesta over 2,000 years ago in *zəmanā-*, and still more surprising that the old gloss could give the meaning *mīzd* "reward, pay". Yet a further interest is that this base *zam-* is clearly the cognate of the Greek *γαμέω* "I marry", aorist *ἔγημα*, in its original meaning of "payment" by the suitor for the bride, the earliest Indo-European marriage practice. The Khotan Saka has from the same base *zam-* "to pay" the word *zanθa-* (written *ysaṃθa-*) for "payment for use, usury, interest", as I realized recently.

Another important mass of documents for the history of Central Asia, which can here be only mentioned, comes from the ancient kingdoms of Kuci (modern Kucha) and Agni (modern Qarašahr), north of the Tarim basin, in two languages now often called Tokharian. Many of the Kuchean manuscripts lie on the Continent still unpublished after 60 years. There are also 800 minute pieces of this Kuchean in London. They interest Iranian studies for the loanwords they have preserved.

The present position for Irano-Indian studies is full of promise. On the Iranian side the older professors G. Morgenstierne, G. Redard, S. Wikander, Geo Widengren, W. Lentz, W. Hinz are still active. There are younger scholars here in Great Britain, in Germany, Italy, Russia, and America. In Persia itself Zoroastrian texts are attracting attention. The Zarduštī of Bombay have always been interested in Zoroastrian scholarship. Large projects like the *Cambridge history of Iran* and the *Corpus inscriptionum iranicarum* are making progress, but scholars for the work are few.

One may hope one day that all Iranian materials may be within the grasp of one scholar. We need too an up-to-date encyclopaedia to survey what has been accomplished so far.

But for the oldest text, goal of so much erudition and labour, it may be supposed that only an international committee of experts can be expected to produce one day an accepted translation.