

SPRACHE UND KULTUR DER INDOGERMANEN

Akten der X. Fachtagung
der Indogermanischen Gesellschaft
Innsbruck, 22.–28. September 1996

Herausgegeben von
WOLFGANG MEID

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Vorwort

Vom 22. bis 28. September 1996 fand in Innsbruck die 10. Fachtagung der Indogermanischen Gesellschaft statt. Sie war unter das Thema „Sprache und Kultur der Indogermanen“ gestellt und sollte – unter Einbeziehung besonders des Wortschatzes, der Phraseologie und nur in interdisziplinärem Zusammenspiel beantwortbarer Fragestellungen – ein Plaidoyer sein für eine integrierte indogermanische Sprach- und Kulturwissenschaft. Aus diesem Grund waren formalinguistische Themen und Fragestellungen, wie sie sonst bei solchen Veranstaltungen dominieren, weniger ermutigt worden zum Vorteil anderer, welche die kulturelle Aussagekraft sprachlicher Gegebenheiten untersuchen sollten. Dieser Bereich der kultursemantischen Interpretation besonders des Wort- und Formelschatzes der indogermanischen Grundsprache, unterstützt durch die Interpretation spezifischer Texte indogermanischer Einzelsprachen, welche im Zusammenspiel von Ausdruck und Inhalt altes Brauchtum und Gedankengut überliefern, ist gegenüber der weitgehend ausgereizten phonologisch-morphologischen Erschließung der Grundsprache ein weites, in vielem noch unbearbeitetes Feld, dessen Bearbeitung, besonders unter interdisziplinären Aspekten, interessante Resultate verspricht. Es bedarf dazu allerdings einer entwickelteren Methodologie, welche imstande ist, Wege aus dem durch lähmende, erkenntnisfeindliche Skepsis produzierten Methodendilemma zu finden. Anstatt Diskurse darüber zu führen, was man logischerweise nicht erkennen kann und daher auch nicht annehmen darf, wäre das argumentative Umfeld zu erweitern, wäre – wie vernünftige Forscher schon immer getan haben – auf sich zu Gewißheiten verdichtende Wahrscheinlichkeiten hinzuarbeiten.

Die Vorbereitung und der Verlauf der Veranstaltung zeigte, daß das kulturelle Thema gut angenommen wurde. Während in dem 1985 ebenfalls in Innsbruck veranstalteten Kolloquium zum indogermanischen Wortschatz dieses Thema nur zögernd angenommen worden war und sich in den mit Zurückhaltung und Skepsis geführten Diskussionen zeigte, daß das Interesse und Verständnis für inhaltliche Fragestellungen noch begrenzt war, durfte man diesmal eine viel größere Aufgeschlossenheit ihm gegenüber konstatieren. Insgesamt wurden 42 Vorträge gehalten, von denen 36 hier abgedruckt sind, z. T. in erweiterter, nur in einem Fall verkürzter Fassung. Den umfassenden Themen Indogermanische Sprach- und Kulturwissenschaft, Sprachliche Rekonstruktion, Indogermanische Onomastik und Religion der Indogermanen waren Hauptreferate gewidmet, gehalten von W. Meid,

K.H. Schmidt, R. Schmitt, B. Schlerath. Auch der indogermanische Wortschatz sollte hinsichtlich seiner Aussagekraft für den kulturellen und Sozialbereich eine exemplarische Behandlung erfahren; O. Panagl, an den das Referat vergeben war, mußte sich jedoch aus persönlichen Gründen thematisch und in der Materialbasis beschränken und lieferte eine philologisch untermauerte Fallstudie über soziale Strukturen im Spiegel des Wortschatzes frühgriechischer Sprachdenkmäler, die trotz der besagten Einschränkung wegen ihres exemplarischen Charakters gleichwohl hier unter den Hauptvorträgen figuriert. Das Thema der raum-zeitlichen und sozialen Schichtung der indogermanischen Grundsprache, das bei der letzten Fachtagung in Zürich nur zögernd, und fast mit Unlust, angenommen wurde, sollte auch diesmal wieder zur Sprache kommen und wurde auch in einigen Referaten angesprochen. Ich hatte vor, mich selbst dazu zu äußern, habe mich dann aber entschieden, einleitend das Thema „Kultur“ anzusprechen, da zwei Wunschkandidaten, Calvert Watkins und James Mallory, die ich eingeladen hatte, über die Kultur der Indogermanen auf sprachlicher Grundlage bzw. über das Indogermanenproblem in archäologischer Sicht zu referieren, mir aus privaten bzw. dienstlichen Gründen absagen mußten, obwohl sie gerne gekommen wären.

Die sonstigen Vorträge habe ich in diesem Band nach thematischen Gruppen geordnet, damit Zusammengehöriges und nahe Verwandtes auch im Zusammenhang studiert werden kann. Diese Themen reichen von prinzipiellen Fragen betreffend das indogermanische Ethnos über Probleme der Rekonstruktion der indogermanischen Grundsprache, weiters über Detailprobleme der indogermanischen Grammatik bis hin zur kulturellen Aussagekraft des Wort- und Namenschatzes und zuletzt zu Fragen der Religion, der Mythologie und des Rituals. Der Programmablauf der Tagung selbst war ähnlich konzipiert, doch erzwangen Terminprobleme einzelner Referenten, Absagen und Einschübe gewisse Inkonsequenzen, und außerdem war der wesentliche Inhalt der Mitteilungen nicht immer vorauszuahnen. Daher stimmt die jetzige Anordnung mit dem damaligen Ablauf nur im Prinzip überein.

Folgende Vorträge wurden bei der Tagung gehalten, aber von den Referenten nicht zum Druck eingereicht: A. Bammesberger, Urindogermanische Konstruktionen und ihre Erschließung; J. Corthals, Zur Entstehung der archaischen irischen Metrik und Syntax; M. Job, Altindogermanisches in kaukasischen Sprachen?; N. Oettinger, Zur Indo-Hittite Hypothese: pro und contra; K.T. Schmidt, „Der Klare aus dem Norden“: Tranken die Tocharer Whisky? Beobachtungen zur tocharischen Landwirtschaftsterminologie; D. Steinbauer, „Links“ und „rechts“ im Urindogermanischen und später.

Die Durchführung der Tagung wurde unterstützt durch großzügige finanzielle Zuwendungen und sonstige Unterstützung seitens des Bundesministeriums für Wissenschaft, Forschung und Kunst (heute Wissenschaft und Verkehr), der Tiroler Landesregierung und der Stadt Innsbruck, der Universität Innsbruck, der Österreichischen Forschungsgemeinschaft und der Innsbrucker Sprachwissenschaftlichen Gesellschaft. Die organisatorische Durchführung lag in den Händen der Mitarbeiter des Instituts für Sprachwissenschaft. Allen genannten Institutionen und verantwortlich tätigen Personen gilt der aufrichtige Dank der Indogermanischen Gesellschaft für ihre Hilfe und Unterstützung.

Die Akten der Fachtagung, deren Drucklegung dankenswerterweise ebenfalls vom Bundesministerium für Wissenschaft und Verkehr, dem Amt der Tiroler Landesregierung sowie dem Universitätsbund Innsbruck unterstützt wurde und für deren Herausgabe ich verantwortlich zeichne, wurden ebenfalls am Institut für Sprachwissenschaft redigiert und als Band der Innsbrucker Beiträge zur Sprachwissenschaft publiziert. Die Bandredaktion, welche die Konvertierung der von den Autoren angelieferten, nach Erfassungsart und -qualität höchst unterschiedlichen Disketten, die Textverarbeitung der nur als Manuskript eingelangten Beiträge und die größtmögliche Vereinheitlichung all dessen zu einem ästhetisch schönen Druckbild einschloß, lag in den Händen von Andrea Gruber, die dabei von Peter Anreiter und Helmut Kalb unterstützt wurde. Auch ihnen gebührt Dank für ihre kompetente Arbeit.

Mögen die in diesem Bande vereinten Arbeiten ein Impuls sein für die zielstrebige Weiterentwicklung einer integrierten, interdisziplinär engagierten indogermanischen Sprach- und Kulturwissenschaft. Möge der Band auch, in Zeiten, wo die Daseinsberechtigung des Faches an unseren Universitäten mancherorts in Zweifel gezogen oder gar negiert wird, ein Zeugnis dafür sein, was eine solche Wissenschaft zum historisch vertieften Selbstverständnis unserer Kultur beizutragen vermag.

Innsbruck, 1. September 1998

Wolfgang Meid

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Indogermanische Sprach- und Kulturwissenschaft

Zur Einheit des Faches

WOLFGANG MEHR

Hauptreferate

Dieses Referat, das am Beginn der Tagung steht, möchte, ohne detailliert auf Dinge einzugehen, die im späteren Verlauf ebenfalls von verschiedener Seite angesprochen werden, in einem grundsätzlichen Sinne ein Plädoyer sein für eine integrierte indogermanische Sprach- und Kulturwissenschaft. Was die Kulturwissenschaft in Bezug auf die Indogermanen betrifft, so herrscht so vielfach die meiste Meinung nach übertrieben skeptische Auffassungen, daß mit nur spärlichen Mitteln keine sicheren die bezüglichen Aussagen gemacht werden könnten, daß die Sprache nur das bestmögliche Können, was aufgrund allgemeiner Einsichten oder der Angaben lokaler Wissenschaftler, im besonderen der Bodenforschung, der Tier- und Pflanzengeographie usw. ohnehin schon bekannt oder wahrscheinlich sei. Als beschränkt abschreckendes Beispiel gibt das Vorgehen der linguistisch-historischen Methode (auch linguistische Paläontologie genannt) bei der Bestimmung der sogenannten „Urheimat“, wobei infolge der nicht eindeutig abgrenzbaren linguistischen Indizien und verschiedenen archäologischen Prämissen verschiedene Forscher zu diametral verschiedenen Ergebnissen gelangt sind. In eben durch diesen Umstand sich selbst in Frage stellen, ist ebenfalls eine Beschränkung in Verbindung mit unvollständigem Wissenstand, vorgefallener Meinung und elementaren methodischen Fehlern können zum Beispiel nicht zu vertrauenswürdigem Ergebnis führen, und auf diesem Gebiet, wo die richtige Einschätzung auch vom Wissensstand anderer Disziplinen abhängt, ist methodische Sauberkeit doppelt notwendig, und im Zweifelsfall weise Selbstbeschränkung. Die Archäologie, und im besonderen die Archäozoologie, Paläobotanik, Paläoklimatologie, die zu einer paläogeographischen Gesamtsystem hinwärtlich versucht werden können, erheben heute präzisere Aussagen, welche die Linguistik vor festem wissenschaftlichen Schluß zu beachten hat, so z. B. im Falle des berühmten „Buchen-Argumentes“, das als Beweis für eine westliche (nordwestliche) „Urheimat“ der Indogermanen in Anspruch genommen wurde, da die Buche östlich der Linie Königsberg-Ortowa nicht vorkommt.

- Festschrift for Jacek Fisiak on his 60th Birthday* (Trends in Linguistics: Studies and Monographs 101), Berlin: Mouton de Gruyter, 879-908.
- 1997b. „Atlantiker in Nordwesteuropa: Pikten und Vanen“, in: Stig Eliasson und Ernst Håkon Jahr, Hrsg., *Language and its Ecology: Essays in Memory of Einar Haugen*. (Trends in Linguistics: Studies and Monographs 100), Berlin: Mouton de Gruyter, 451-476.
 - 1997c. „Zur Etymologie der Sippe von engl. *knife*, franz. *canif*, bask. *kanibet*“, in: Martha Berryman et al., Hrsg., *Germanic Studies in Honor of Anatoly Liberman* (= *NOWELE: North-Western European Language Evolution* 31/32).
 - i.E.a. „Pre-Indo-European toponyms in Central and Western Europe: *Bid-/Bed-* and *Pit-* names“, 19. Internationaler Kongreß für Namenforschung, Aberdeen, 4-11 August 1996. Akten hrsg. v. Wilhelm F.H. Nicolaisen.
 - i.E.b. „Zur Frage der vorindogermanischen Substrate in Mittel- und Westeuropa“, Gedenkveranstaltung für Johannes Hubschmid am 18. Januar 1996, Universität Heidelberg. Akten hrsg. v. Edgar Radtke und Jens Lüdtke.
 - i.E.c. „Etymology and phonotactics: Latin *grandis/grande* and Basque (*h*)*andi* ‘big’: For Hans-Heinrich Lieb on his 60th birthday“. (Auszug aus: „The influence of Vasco-Iberian at the time of its greatest expansion upon Latin and other Indo-European languages“, Paper presented at The First International Conference on Linguistic Contact, Valencia, 19-22 September 1995.)

The Migrations of the Indo-Iranians and the Iranian Sound-Change *s > h*

ALMUT HINTZE

1. Introductory

Like¹ nearly all the peoples of Indo-European origin, both the Iranians and Indians first came as immigrants into the lands which they later inhabited. It has been argued that their immigration must have taken place in pre-historic times². At any rate, apart from a few traces in Near-Eastern texts, outside India and Iran no linguistic document of an Aryan language dating from the second millennium B.C. has survived.

The linguistic sources available for reconstructing the routes of migration followed by the Indo-Iranian peoples are residues of Indo-Aryan language dating from about the middle of the second millennium B.C. They are found in texts chiefly related to the Hurrian Mitanni kingdom, and, to a lesser extent, also to the Kassites of Babylonia³. Most important linguistic sources are furthermore the oldest preserved texts in Indo-Iranian languages, especially the Rigveda and the Avesta, and the Old Persian inscriptions of Achaemenid times. In addition, some evidence is provided by Aryan loan-words in the Uralic languages, pointing to prehistoric language contacts, and by the reports of neighbouring peoples in historical times, recorded especially by Assyrian and Greek authors.

However, the reconstruction of historical events on the basis of linguistic sources alone is hampered by the fragmentary and allusive character of the evidence. Being religious and liturgical texts, Rigveda and Avesta give only indirect information about their cultural and geographic background⁴.

¹ For comments and points of discussion I am grateful to Elizabeth Tucker, Manfred Mayrhofer, François de Blois, Stefan Maul, Fred Hiebert, Asko Parpola as well as Raymond and Bridget Allchin.

² Most scholars assume that Proto-Indo-Aryans and Proto-Iranians immigrated into India and Iran. One of the few exceptions is the view of the anthropologist E. LEACH that an Aryan immigration would never have happened. However, he admits himself: "no one is going to believe that" (LEACH 1990, 245). Theories according to which the Indo-Aryans in India would be autochthonous cannot be substantiated: cf. WITZEL 1995, 116f. with n. 80.

³ MAYRHOFFER 1966, 25.

⁴ Cf. WITZEL 1995, 91. As a reflex of Central Asian origin have been interpreted the river names *Rasā* and *Sīndhu* of the Rigveda. The ethnic names *pañi-* and *dāsa-/dāsā-*, which refer

Many questions remain open. Let us take, for instance, the problem of the geographic location of the Indo-Iranian community, which can be postulated only on the basis of linguistic evidence. Where in place and time did the ancestors of the later Iranians part way with those of the Indo-Aryans? Which processes led to the geographical division of Proto-Indo-Aryan into, respectively, the language spoken in India, on the one hand, and, on the other, the language attested to in the texts of the Ancient Near East? Equally unclear is the relationship between Iranian, Indo-Aryan and the third Indo-Iranian branch, the Nuristani or Kafir languages⁵. In view of the rather insufficient linguistic and textual evidence there is much room for speculation.

Unless new texts are discovered, more precise and probably less speculative results may be achieved by a careful reasoning combined with an analysis of the texts available which tries, as far as possible, to avoid a prejudiced assessment of their historical and cultural background. Along these lines, Michael WITZEL, for instance, has been able to gain a number of remarkable insights into the history and prehistory of the Vedic dialects⁶. Moreover, a dialogue with the disciplines exploring the non-linguistic material culture, especially archaeology, may result in a more reliable reconstruction of the processes which led to the historically attested distribution of the Indo-Iranian languages. In this respect, Asko PARPOLA has attempted in a series of articles to trace the history of Indo-Aryans and Iranians back to Proto-Indo-European times. Based on the view most convincingly outlined by MALLORY 1989 that the homeland of the Proto-Indo-Europeans is probably to be sought in the Sredny Stog culture north of the Black Sea, PARPOLA develops a scenario of how the various groups of Indo-Iranian tongue may have moved into their historical habitats⁷. Admittedly, the correlation of non-linguistic evidence with a linguistic ethnic group is always problematic, because, as Karl HOFFMANN put it, "Töpfe sprechen nicht"⁸.

Nevertheless, in what follows I shall attempt to correlate linguistic evidence derived from Indo-Iranian toponomastics with recent archaeological data.

to enemies of the Indo-Aryans in the Rigveda (cf. also Av. *dahāka-*), have been claimed to reflect contact with people in Central Asia, see WITZEL 1995, 110.

⁵ MORGENSTIERNE 1975, 327-343, esp. 338, 341ff., cf. HOFFMANN 1986, 33 (= 1992, 828); WITZEL 1995, 110.

⁶ WITZEL 1989, 97-265; 1995, 85-125.

⁷ PARPOLA 1988 etc. Details such as the identification of the supposedly Indo-Aryan component of the BMAC with the Dāsas of the Rigveda, may, however, go too far, cf. NORMAN 1990, 294f.

⁸ Quoted by WITZEL 1995, 89. Similarly also T.C. Young Jr. 1985, 369: "we know we have the people, and that they are newcomers to the region [= east and northeast of Iran], but we cannot find the pots". Cf. FALK 1995, 68 n. 231.

As a corollary of this, some criteria for a dating of the pan-Iranian sound-change s to h are put forward.

2. The Bactria-Margiana Archaeological Complex and the Yaz I Culture

In the course of the past thirty years settlements dating from the beginning of the second millennium B.C. have been excavated in the ancient oases of the Kara Kum desert⁹. In the southern area of Central Asia between the Caspian Sea and the Amu-Daryā river, and in particular in Margiana¹⁰ and Bactria¹¹, material remains were recovered corresponding to similar finds in the northern area of Central Asia¹². By contrast, there is only little archaeological evidence of a settlement of the Margiana and Bactria before the end of the third millennium B.C. Because such cultural assemblage was first discovered in these two regions, it was called the Bactria-Margiana Archaeological Complex or BMAC, although in the meantime objects belonging to that culture were also found in more distant regions, such as in the Gurgan-area south-east of the Caspian sea, in Kerman, Sistan¹³ and Baluchistan¹⁴. HIEBERT and LAMBERG-KARLOVSKY have convincingly argued that the BMAC spread from Margiana to Bactria and to the more distant southern regions due to a movement of people¹⁵. It is very likely that the people of the BMAC were in contact with the Indus civilization, whose northernmost outpost, Shortughai, is located in eastern Bactria¹⁶. The BMAC ended around 1700 B.C. with a so-called "collapse"¹⁷, but continued in an impoverished form at Tureng Tepe until about 1600 B.C.¹⁸.

The distinctive characteristics of this cultural complex are luxury objects pointing to a socially stratified community, monumental architecture with fortifications, an economy based on irrigation, the burial customs and grave goods, glyptics and sphragistics, bronze art and stone carvings, etc., all of which testify to "very similar mythological ideas, cults and religious beliefs

⁹ For the location of geographical names referred to in this article, see the map on p.150.

¹⁰ Places of finds are e.g. Kelleli, Gonur, Togolok.

¹¹ Places of finds in North-Bactria are Sapalli Depe and Djarkutan, in South-Bactria Dashli and in East-Bactria Shortughai, the latter being also the most northern outpost of the Harappa civilization, see HIEBERT/LAMBERG-KARLOVSKY 1992, 4. On the expansion of the BMAC see PARPOLA 1988, 202f.; HIEBERT 1995.

¹² HIEBERT 1994; FRANCFORT 1989; P'YANKOVA 1989, 1993; PARPOLA 1995, 363.

¹³ Places of finds are e.g. Shahdad in Kerman, Khinaman, Shahr-i Sokhta, Khurab, Tepe Yahya.

¹⁴ Places of finds are e.g. Mehi, Sibri, Quetta, Mehrgarh und Nausharo.

¹⁵ HIEBERT/LAMBERG-KARLOVSKY 1992; LAMBERG-KARLOVSKY 1993; HIEBERT 1995, cf. PARPOLA 1995, 361.

¹⁶ LYONNET 1994, 429 states that "at Shortughai, as in Bactria and Margiana, peaceful contacts with the Andronovo Culture start with Period II (Mature Harappan) and go on increasingly".

¹⁷ HIEBERT/LAMBERG-KARLOVSKY 1992, 3, 12.

¹⁸ PARPOLA [1998] 9, 11.

among the tribes of the area covered” by the BMAC¹⁹. In temple-fortresses excavated in Togolok and Gonur-Tepe, in ancient Margiana, pithoi-like vessels, mortars and pestles were found containing microscopically little remains of organic substances. Initially these remains were identified by laboratory analysis as ephedra, poppy and cannabis²⁰. This, however, has been seriously questioned by later studies. The samples from Togolok were re-examined by Harri NYBERG in 1991 and he stated that most of the pollen had been destroyed. In those cases where pollen was preserved it proved to be neither from ephedras nor from poppies²¹.

Positive evidence for ephedra, however, comes from recent finds in Sinkiang. CHEN and HIEBERT 1995, 253, 257 report several instances of small parcels containing twigs of ephedra found on the chest of the bodies in burials of the Gumugou I culture southeast of the Taklamakan Desert, dating from about 2000-1500 B.C.²². These finds of ephedra may be of some significance for the BMAC insofar as there is other evidence such as the cultivation of wheat and irrigation-based oasis settlement which suggests that both the western oasis agriculturalists of Margiana and Bactria and the eastern ones of Sinkiang “had close interactions with the Alakul’-Fedorovo type Andronovo pastoralist of the steppe and highlands between the oasis areas”²³.

In spite of the negative results concerning the pollen remains from the Merv oasis, fire altars, strainers and ceramic stands, known from the Rigveda to have been used in the Soma sacrifice, may be interpreted as evidence that the temples in Togolok and Gonur-Tepe were “connected ... with a religious cult during which veneration of the sacred fire”, libations, and maybe also the preparation of a hallucinogenic juice, took place²⁴.

Although horse bones have not been found so far in BMAC sites²⁵, there is indirect evidence for the presence of the horse and chariot in a Gurgan cylinder seal from Tepe Hissar IIIb. Miniature gold and silver trumpets, also found in Bactria, were probably used in chariot warfare and in training horses. From the large amount of weapons it was concluded that the ruling class of the BMAC society was much involved in warfare²⁶.

¹⁹ Cf. SARIANIDI 1993, 251.

²⁰ SARIANIDI 1993, 252f.

²¹ See H. NYBERG 1995, 400. HIEBERT 1994, 124-129 interprets the rooms in which the vessels allegedly containing ephedra were found as communal rooms for large-scale production or storage, see PAPPOLA [1998, 9f.].

²² Cf. PAPPOLA [1998, 10].

²³ CHEN/HIEBERT 1995, 287.

²⁴ SARIANIDI 1993, 252.

²⁵ Cf. PAPPOLA [1997, 5]. PAPPOLA 1995, 361 points out that horse bones have been found in Gurgan (Shah Tepe), but so far not in Margiana and Bactria.

²⁶ HIEBERT/LAMBERG-KARLOVSKY 1992, cf. PAPPOLA 1995, 361; LYONNET 1994, 428.

These new elements traced by archaeological investigation have been connected with the emergence of new ethnic groups. Archaeologists consider it probable that those newcomers spoke an Indo-Iranian language, a hypothesis which linguists seem to support, especially because tribes of Indo-Iranian origin are expected to have appeared in this area and at that time²⁷. Evidence that the Indo-Iranian intruders belonged to the Proto-Indo-Aryan branch comes from BMAC finds in Quetta, Mehrgarh and Sibri near the Bolan Pass in Sindh. Seals of Bactrian affinity were found in the post-urban²⁸ Harappan context of the Jhukar culture in Sindh²⁹. This evidence testifies to the expansion of people from the area of the BMAC into the northwestern part of India.

In the ensuing time from about 1500 B.C. profound cultural changes have been observed in Margiana and southern Bactria. It resulted in the so-called Yaz I culture³⁰. This culture is characterized by hand-made pottery, sometimes painted with geometrical decorations, sometimes black polished. Bertille LYONNET states that "most of the occupation is on newly founded sites, and the general impression of this phase is that of a rather rural society"³¹. This culture is connected with the Chust culture of the Ferghana valley, with Mundigak V-VI in Sistan as well as with Pirak I-III on the Kachi plains in Baluchistan, all of which seem to be related to the Haladun culture (1750-1200 B.C.) of Sinkiang on the north-western rim of the Taklamakan Desert³².

The most remarkable feature, however, is that no graves have been found in the area after 1500 B.C. until the arrival of the Greeks in the Hellenistic

²⁷ Cf. e.g. HIEBERT 1995, 192: "the appearance of the Central Asian peoples on the Iranian plateau for this brief period [BMAC 1900-1700 B.C.] at the beginning of the second millennium B.C. is the best candidate for an archaeological correlate of the introduction of Indo-Iranian speakers to Iran and South Asia", cf. also *ibid.* 202; HIEBERT/LAMBERG-KARLOVSKY 1992, 10.

²⁸ F.R. ALLCHIN 1995, 29f., following G.L. POSSEHL, has argued in favour of the term "post-urban", because, by comparison to the term "Late Harappan", it relates "to the observable consequences of the breakdown of the urban structure of society".

²⁹ See HIEBERT 1995, 192f.; PARPOLA 1995, 361f. F.R. ALLCHIN 1995, 31, with reference to post-urban material from Chanhu-daro states: "While it is possible to argue, as some have done, that the metal artefacts of 'foreign' type may be no more than the products of trade, the presence of the stamp seals is to our mind unequivocal. The absence of Harappan seals, the symbols of the Harappan style and, presumably, of Harappan political and economic power, and their displacement by these foreign seal types, which too were doubtless the symbols of a group with a different identity, must indicate that a new power was dominant at Chanhu-daro and by inference in the middle and lower Indus region". F.R. ALLCHIN 1995, 39 dates the Jhukar culture in Sindh broadly between 1600 and 1200 B.C.; cf. also *ibid.* 47ff.

³⁰ LYONNET 1994, 431f., 432 n.1; FRANCFORT 1989, 422ff.; PARPOLA [1997b], 13f.

³¹ LYONNET 1994, 431.

³² PARPOLA [1997, 14]. CHEN/HIEBERT 1995, 267-269. On the connection of Yaz I with Mundigak V and Pirak cf. also LYONNET 1994, 431 (with references) who, however, prefers to link the Yaz I culture with eastern Anatolia and Transcaucasia.

period³³. It has been concluded that a new way of disposing of the dead was then practised, namely exposing their bodies. Some scholars have gone further, and have interpreted the alleged exposition of the dead as evidence of an East-Iranian Zoroastrian population³⁴. This argument, however, is not conclusive, as the custom of exposing the dead could well have been pre-Zoroastrian. But there is much evidence that it was practised by Iranians.

3. Geographic names in Indo-Aryan and Iranian, and the Iranian sound change $s > h$

If we accept the hypothesis that the emergence of the Bactria-Margiana Archaeological Complex was caused by the appearance of Indo-Iranian speakers, of Proto-Indo-Aryans in particular, then it is to be assumed, following the model outlined by HIEBERT and LAMBERG-KARLOVSKY, that Proto-Indo-Aryans settled first in the area of Gurgan at the Caspian Sea, and spread to Margiana and Bactria and further southwards to Kerman, Sistan and Baluchistan³⁵. Moreover, it is to be assumed that later on Proto-Indo-Aryans moved on from there to the Panjab and to Sindh.

This hypothesis could find some support from hydronymy. A number of geographical names of the Rigveda, especially river names, corresponds to etymologically related names in Avestan and Old Persian. These names are the Vedic river *Rasā-*, a tributary of the Indus, which has its etymological equivalent in the Avestan name of the semi-mythical river *Raṅhā*³⁶. Apart from this, there are also two Vedic river names, whose Avestan equivalents denote a district³⁷. One of them is Vedic *Sarāyu-*, a river flowing into the Ganges, the Sarju-river of today. Its correspondent in Iranian is the thematic formation YAv *Harōiua-*³⁸, OP *Haraiva-* (< **Saraiua-*), NP *Harē*, the present day region of Herat. The Vedic river name *Sārasvatī-* has its equivalent in Av. *Haraxvaitī-*, OP *Harauvatiš*, the name of the country Arachosia³⁹. By contrast, Ved. *Sīndhu-* and its Iranian correspondent YAv. *Hiṇdu-*

³³ FRANCFORT 1989 I 437.

³⁴ PARPOLA 1995, 372; but cf. the scepticism of LYONNET 1994, 431: "But up to now, no firm connexion with any precise Iranian culture has been established".

³⁵ HIEBERT/LAMBERG-KARLOVSKY 1992; HIEBERT 1995, 200: the oases of Bactria were colonized from Margiana, while Margiana itself was colonized from the foothill zones of the Kopet Dag. In the latter characteristic features of the BMAC have evolved gradually, whereby new elements of Central Asian origin were further developed within an ongoing culture.

³⁶ While BOYCE 1989, 144 identifies the Avestan *Raṅhā* with the Jaxartes, GNOLI 1980, 64 locates it "between the Kābul and the Kurram, in the region where it seems likely that the Vedic river *Rasā* flowed".

³⁷ The principles of transposition of toponyms have been studied, with special reference to Iran, by EILERS 1977.

³⁸ Since this name is only attested in the acc.sg. *harōiium*, the stem formation in Avestan is not perfectly clear.

³⁹ As was shown by HOFFMANN in several publications, the Av. form *haraxvaitī-* instead of **harajhaitī-* contains an Arachotic dialectal feature, which is also reflected in the Elamite

or *Həndu-* and OP *Hiⁿdu-* denote the same geographic entity, namely the country and its river⁴⁰.

Since these etymologically related names are found in the Indo-Iranian borderlands, BURROW⁴¹ and WITZEL⁴² have suggested that Proto-Indo-Aryans settled in Iran and gave the names to the places in their native sound shape. Later, immigrating tribes of Iranian tongue would have taken over these names from the earlier, Proto-Indo-Aryan population which by then would have migrated further into India.

The phonetic differences between the Indo-Aryan and Iranian names have been explained by BURROW and WITZEL as being due to a substitution of *h* for *s*. However, one problem with this conclusion is that we may wonder why such a substitution should have taken place, as there are many words in East-Iranian dialects beginning with *s-* (< PIE **k̂*) before a vowel⁴³. On the other hand, even less convincing is the assumption that Proto-Indo-Aryans and Iranians would have given the names to these places independently from each other.

It cannot be excluded that names such as *sárasvatī-* and, as it was argued for by THIEME 1970⁴⁴, *síndhu-* were common nouns of Indo-Iranian stock which underwent the regular phonological developments in the separate Indo-Aryan and Iranian branches. Neither can it be ruled out that they, like e.g. the cognates of Vedic *dānu-* in Europe, could have been applied to different rivers at any place or time. Yet the fact that such names cluster in the borderlands between India and Iran is the strongest argument against this model. There remains, then, only the possibility that the sound change $s > h$ was still in progress at the time when the Proto-Iranians moved forward from north-east to south-east Iran, and took over the place names from the Proto-Indo-Aryan population. In one of his earliest articles, Karl HOFFMANN made such an assumption with reference to the name *hindu-*. He maintained that the pan-Iranian sound change *s* to *h* must still have been productive

writing *Har-ku-(ut)-ti* und *har-ku-(ut)-ti-iš*, see R. SCHMITT 1974, 101 n.15; K. HOFFMANN 1976, 641. – EILERS 1977, 288 assumes that *harax'aiti-* is was primarily a river name which was used later also for the country.

⁴⁰ In RV X 64.9 the three river names *Sárasvatī*, *Saráyu* and *Síndhu* occur next to each other. The Vedic expression *saptá síndhavaḥ* (RV VIII 24.27) corresponds to Av. *hapta həndu* (Vd 1.18).

⁴¹ BURROW, *JRAS* 1973, 126.

⁴² WITZEL 1980, 102f. n.5; 1995, 105.

⁴³ There is, however, a problem of relative chronology. The further development of Proto-Iranian **č* < PIE **k̂* took place after the splitting up of Proto-Iranian into various sub-dialects, whereas **s* > *h* is pan-Iranian.

⁴⁴ THIEME 1970 starts from an Ilr. appellative **síndhu-* 'natural frontier', a noun which would be continued regularly in both language branches. When the Iranians made acquaintance with the great Indian river they would have substituted their own form for the Indian one.

when the Iranians came in contact with India⁴⁵. This would then also be true for the names IIr. **sarasvatī*- und **sarajūa*-.

While the names *harax^aaiti-lsārasvatī*- and *harōiuua-lsarāyu*- refer to different localities in India and Iran, the Iranian and Indo-Aryan names *hindu-/sindhu*- refer to the same geographical entity (the Indus-river or the Indus-area). This implies that the Iranian sound change *s > h* had not been completed yet when the Indo-Aryans moved into India and named the river⁴⁶.

A similar assumption has also been made with respect to the Old Persian form of the name of the land of Elam, which is *u-v-j-* in the Old Persian inscriptions. This form has been interpreted by SZEMERÉNYI as /*Hūža*-/ or /*Ūža*-/. On the basis of the assumption that the name of the Elamite capital *Sūša* would be used also as the name of the country he argued that the change of initial antevocalic *s > h* was still in progress at the time the Persians made acquaintance with the Elamite capital⁴⁷. SZEMERÉNYI⁴⁸ went even so far as maintaining that the sound change *s > h* originated in Western Iranian and spread from there to the other Iranian dialects.

It is, however, by no means as "self-evident", as SZEMERÉNYI claims, "that *Hūža* is the Iranian form of what in the language of the native population was *Sūša*, or *Susa*"⁴⁹. The Achaemenid Elamite spelling of the town *Susa* is *šū-šā-(an)*⁵⁰ and this name is rendered in Old Persian as *ç-u-š-a*, a spelling which SZEMERÉNYI has to explain as due to a second borrowing from Elamite⁵¹. It is implausible that one and the same Elamite name should have given rise in Old Persian both to *u-v-j-* and to *ç-u-š-a*.. More convincing is, therefore, the view of F. de BLOIS that the name of the land of Elam, OP /*Hūja*-/⁵², and the one of the Elamite capital, OP /*Çūša*/, are two different names. The former may not be Elamite at all, but an Iranian ethnonym, presumably the self-designation of the *Uxii*, continued in NP *Xūzistān*,

⁴⁵ HOFFMANN 1940, 14 n.1 (= 1975, 14) remarks that the Iranian form *hindu-* for Rigvedic *sindhu-* is chronologically relevant, because it underwent the pan-Iranian sound change *s > h*. He concludes: "Da dieser Lautwandel gesamtiranisch ist und deshalb relativ alt sein muß, weist dies auf eine ziemlich frühe Bekantschaft der Iranier mit Indien hin. Wenn wir das in Betracht ziehen, kommen wir in die Zeit des Ṛgveda".

⁴⁶ SZEMERÉNYI 1966, 192f.

⁴⁷ SZEMERÉNYI 1966, 192f.; his view is accepted by MAYRHOFER 1989, 7 with n.9 (references). As *h-* before *u* is not written in Old Persian, a loss of *h-* in this position has been assumed (BRANDENSTEIN/MAYRHOFER 1964, 42). This is contradicted, however, by *hu-* preserved in Middle Persian of the Turfan texts, as pointed out by HOFFMANN 1976, 639. He admits, however, that *hu* became *u* in the language of the Achaemenid court, whereas *hu* was retained in the other Persian dialects, cf. also the alternation between the writing *ami* and *ahmi* in the OP inscriptions.

⁴⁸ 1966, 192f.; 1985, 785.

⁴⁹ SZEMERÉNYI 1966, 191; cf. the critical comments by GUSMANI 1972, 20.

⁵⁰ See EDEL/MAYRHOFER 1971, 3.

⁵¹ SZEMERÉNYI 1966, 194.

⁵² There is no need to interpret the spelling *u-v-j-* as /*Hūža*-/, since OP *j* is regularly continued by MP and NP *z* (*Xūzistān*) and Parthian *ž* (whence Armenian *Xoužastan*).

Armenian *Xoužastan*⁵³. It replaces the indigeneous name of the land of Elam, which is rendered in the Elamite versions of the Achaemenid inscriptions by *ha-tàm-ti*, *hal-tàm-ti*, etc., and in the Babylonian ones by *Elamtu*, the ancient name for 'Elam' in the two languages⁵⁴.

There is, however, one piece of evidence which might attest an unchanged intervocalic *s* in Iranian. It is this the divine name ^D*as-sa-ra* ^D*ma-za-áš* found in the neo-Assyrian ritual text III R 66 dating probably from the beginning of the first millennium B.C.⁵⁵. This name has been reinstated by MAYRHOFER as an Assyrian rendering of the name of the Iranian god Ahura Mazda⁵⁶. The problem with this name is that ^D*as-sa-ra* and ^D*ma-za-áš* could also be interpreted as names of two individual Assyrian gods, since both names are marked by the determinative DINGIR. In fact, this was the interpretation put forward by UNGNAD 1943, 199. However, the alleged gods ^D*as-sa-ra* and ^D*ma-za-áš* are not found elsewhere in the Assyrian-Babylonian pantheon. In addition, the occurrence of an Iranian god name in the Assyrian texts would insofar not be surprising as the list of the gods invited to the banquet comprises not only the gods from Assur but also those of other towns and parts of the Assyrian empire⁵⁷. Indeed, in the immediate context of ^D*as-sa-ra* ^D*ma-za-áš* Elamite gods are listed⁵⁸ such as ^D*Nap-ri-iš* (III R 66 IX 10)⁵⁹, ^D*Ia-ab-ri-tú* (III R 66 IX 19)⁶⁰.

The Persians and the Medians are first mentioned as tribes paying tribute to Salmanassar III in neo-Assyrian texts dating from the years 843 and 836 B.C. This implies that the Medians and the Persians with their kings had already established themselves in Western Iran in the ninth century B.C. Thus, the end of the second millennium B.C. is the latest possible date for the emergence of Iranian speaking tribes in Western Iran⁶¹. The interpretation of the Assyrian divine name ^D*as-sa-ra* ^D*ma-za-áš* as referring to the highest

⁵³ The connection of OP *u-v-j-* with the name of the tribe of the *Uxii* goes back at least to JUSTI 1896-1904, 417-418.

⁵⁴ I am grateful to François de BLOIS for having kindly shared his view on this matter with me first orally and then in a letter dated 16 April 1997.

⁵⁵ According to FRANKENA 1953, 3, 18, the text III R 66 (= K 252), which comes from the library of Assurbanipal, dates from the time of Sargon II. It would be a text or a copy of a text which was written between the reformation of Sennacherib and the fifth campaign of Sargon and would be the neo-Assyrian copy of a middle-Assyrian text. The theory of UNGNAD 1943, 195 that the original of III R 66 would date from the time of Tukulti-Nimurta I., i.e. 1253-1207 B.C., is rejected by FRANKENA 1953, 3f., 128.

⁵⁶ MAYRHOFER 1971, 51-52; 1989, 7 and n.10.

⁵⁷ FRANKENA 1954, 130.

⁵⁸ For advice in Assyriological matters I am grateful to Professor Stefan MAUL, Heidelberg, to whom I owe this observation.

⁵⁹ FRANKENA 1953, 105.

⁶⁰ FRANKENA 1953, 92.

⁶¹ T.C. YOUNG 1985 sees the earliest archaeological indications for the presence of the Medes and the Persians in Western Iran in the eleventh century B.C.

Iranian god implies that intervocalic and final postvocalic *s* was still retained in Western Iranian dialects when those who spoke them came into this area.

The interpretation of the Assyrian name ^D*as-sa-ra* ^D*ma-za-áš* as reflecting the name of the highest Zoroastrian god could also have a further implication: if the god name is indeed one of the religious innovations introduced by Zarathushtra, the Assyrian evidence provides a *terminus ante quem* for the life time of the prophet. However, it may equally be possible that the god name *Ahura Mazda* existed in the pre-Zoroastrian Proto-Iranian religion as the name of one among several Asuras. At least the petrified Old Avestan formula of invocation *mazdâscā ahurâñhō* 'the Mazda and the (other) Ahuras' could be interpreted in this way⁶². Yet *Ahura Mazda* is so much characteristic of the religion inaugurated by Zarathushtra, that it is unlikely that this name should be mentioned by the Assyrians just by a quirk of chance.

4. Conclusion

From the fact that most rivers in the north of India, and in the Indus valley in particular, bear names of Indo-Iranian origin, we can infer that, apart from a few exceptions, the Indo-Aryans coming into India did not take over the hydronymy of the Harappan pre-population. Given the fact that hydronymy is normally very conservative, this further indicates that the Harappan civilization was in a social and political decline at the time the Indo-Aryans arrived⁶³.

The concentration of etymologically related place names in the Indo-Iranian borderlands is probably not accidental. It rather speaks for the hypothesis that the migrating Proto-Indo-Aryans settled first in Iranian lands and left the place names to the following Iranians, who took them over. Geographically the area of contact coincides, at least partly, with the expansion of the BMAC.

Since these names appear in Old Iranian texts not in their Indo-Aryan, but in their Iranian form, having undergone the specifically Iranian sound-change *s > h*, it may be assumed that such sound change was still productive when the Iranians took over these names. Further evidence may be provided by the name *Assara Mazaš* in an Assyrian list of gods, as this is possibly a reference to the Iranian god *Ahura Mazda*.

⁶² NARTEN 1982, 66 has shown that the functioning of the syntagma *mazdâscā ahurâñhō* as a nominative in Y 31.4 is secondary. This reveals that the expression was used as a petrified formula already by the time the Gathas were composed.

⁶³ WITZEL 1995, 107. The possible causes for the decline of the Indus civilization are summarized by F.R. ALLCHIN 1995, 27-29. – Substrate influence in Vedic Sanskrit are evidence that the final redaction of the R̥gveda was preceded by a period of acculturation between the immigrated Indo-Aryans and the indigenous culture they encountered in India, see KUIPER 1967, 81-102; 1991; WITZEL 1995, 108.

This hypothesis implies that the sound change $s > h$ was still in progress at the time when Iranian speaking tribes moved into the Indo-Iranian borderlands and took over geographical names from a previous population of Proto-Indo-Aryan tongue. On the basis of archaeological evidence, the Yaz-I culture in particular, it can be assumed that this process took place in the middle of the second millennium B.C. On the other hand, if the Assyrian *as-sa-ra- ma-za-aš* helps to date the sound change $*s > h$ to the beginning of the first millennium B.C. in Western Iran, and it is accepted that this sound change is pan-Iranian, 500 years seems an excessively long time for it to have been in operation. An alternative hypothesis of two separate sound changes in Eastern and Western dialects is equally difficult to assume, as the identical effects throughout Iranian make it look like a Proto-Iranian change. In order to bridge the chronological gap, one could argue that Proto-Indo-Aryan *sindhu-* etc. was borrowed in the mid second millennium B.C. when Yaz I culture (= Proto-Iranians) replaced BMAC culture (= Proto-Indo-Aryans) in Eastern Iran, and then remained unchanged until a shift of $*s > h$ occurred throughout Iranian a few centuries later. Alternatively, it might be argued that *as-sa-ra ma-za-aš* is older than the text in which it is attested. Perhaps it can even be argued that an earlier Iranian form of the name has remained fossilized as a loan-word. This possibility implies either that the name of the highest Iranian god existed before Zarathushtra or, if this name is one of Zarathushtra's creations, that the prophet lived several centuries before the turn of the millennium. As far as we can trust Avestan evidence, however, in Zarathushtra's language the change $*s > h$ had already taken place.

Either of these alternatives would make it possible to argue for a sound change nearer 1500 B.C. that affected the whole of Proto-Iranian. Thus the presence of Iranian people in East Iran in the middle of the second millennium B.C. is suggested by both archaeological and linguistic evidence.

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