· (Later called Circular 1)

Dr. Aharon Dolgopolsky Department of Hebrew Studies University of Haifa Haifa, Israel November 3, 1986 69 High Street Rockport, Massachusetts 01966

cc Porkhomovsky, Militariev, Starostin, Diakonov, Stolbova, Belova, Aihenvald, Zhvania and Vetoshkina (all in the Soviet Union): Rabin and Goldenberg (both of Israel): Petracek (Czechoslovakia): Mukarovsky (Austria): Phillipson and Sperber (both of France): Schadeberg (Holland), Banti, Triulzi, Ricci, and Fattovici (all in Italy): Zaborski (Poland): Andrzejewski, Hayward, Appleyard, Elderkin, Woodburn (all in the UK): Sasse, Jungraithmayer, Koehler, Vossen, Heine, Rottland, Behrens, Schenker, Wolfe, Strecker, Moehlig (all in BRD = Bundesrepublik Deutschland): Black, Murtonen, ten Raa (all in Australia): Trigger, David, Nurse, Sankoff (all in Canada): Traill, Jenkins, Westphal (all in South Africa): Rouse, Greenberg, Anttila, Watkins, Hodge, Newman, Steinberg, Ambrose, Brovarski, Hale, Hudson, Cavalli-Sforza, Bender, Dyen, Zimansky, Baer, Hetzron, Lewis, Vansina, McCall, Ehret, Clark, Brandt, Livingstone, Miller, Bennett, Friedrich, Kruskal, Christianson, Feinhandler, Lounsbury, Gragg, Pia (all in the USA): and, if possible, Ilena Swadesh in Mexico.

Dear Aaron,

This is like having a private telephone call broadcast over a public address system! So I included about 70 friends/colleagues in the conversation! All of them have some interest in what will become our (inclusive) conversation or can be asked from time to time to comment.

With all these people listening, I want to salute you for the great scholar that you are. When we have our "great break-through", you will deserve more credit than most of the rest of us for making it possible. That is a prediction, of course! But also thank you for reinforcing the inspiration I got in Moscow in August!

Thank you for your two reprints. The one on Nostratic pronouns would have been astounding twenty years ago. Now it comes through to me as intensely interesting and satisfying. There are two reasons for that: first, I've talked several times with Carl Hodge and you and others about Nostratic before and, second, a class of mine quite ignorant of the Nostratic hypothesis walked through most of the same data and came to about the same conclusion in 1970. Even more importantly, perhaps, Morris Swadesh had prepared the ground with his Vasco-Dene hypothesis shortly before he died. Like many non-Soviet scholars, I suspect, I have never read anything by Illich-Svitich and so cannot judge his work but I gather that he is the author of the Nostratic hypothesis.

Just for the record and for those listening in: Nostratic at least as proposed by you (there are other versions?) is a genetic hypothesis linking together major language phyla of the Old World, northern parts especially. The phyla grouped together are:

Indo-European Dravidian Chukchee-Kamchadal Altaic Elamitic South Caucasic (Kartvelian) Uralic Gilyak Afroasiatic (Semito-Hamitic)

This covers most of the territory from Mauretania to the Bering Straits, for heaven's sakes! Moreover, you clearly included Anatolian (Hittite, et al) in Indo-European, Japanese and Korean in Altaic, and Omotic in Afroasiatic, lest

there be any doubt.

More importantly, in the northern realms you do NOT include Basque, Etruscan, Sumerian, the old Southwest Asian bunch (Khatti, Hurrian, Urartean, Gutian, Subarean, Kassitic, lower Minoan, Cypriote, et al), nor North Caucasic, nor Burushaski, Nahali, Kusunda (the last three of northern greater India), or Ket of Siberia, or Yukaghir, or Ainu, or (not least) Sino-Tibetan. In fact it is interesting prehistorically that your Nostratic leaves about 12 unrelated phyla in its wake. By the funny way my mind works, I take that fact to be encouraging! (We'll come back to Nostratic in a moment)

Your second paper was also encouraging. To know that the Emphatic consonants of Semitic are derived from Glottalic consonants makes the reconstruction of proto-Afroasiatic much easier. It is also becoming clear, as you have mentioned yourself, that the South Arabian languages (modern) are usually glottalic, as are all the Ethiopian Semitic languages. That leaves Berber still Emphatic. Is that due to the influence of Punic and Arabic on Berber, do you think?

When I went to Moscow this August for the IXth Int'l. Conf. of Ethiopian Studies, I met an extraordinary group of your younger colleagues. You and Professor Diakonov surely can be pleased with your students. We had a number of intense, indeed exciting, discussions which ranged over practically the entire subject matter of historical linguistics. The number of times we were in complete agreement was truly astonishing! When one considers the stupid and disappointing discussions the social and cultural anthropologists and historians suffered through, the point is reinforced. Among other things the historical linguists found communication to be a matter of concern. Even more than our colleagues in western Europe, these first rate linguists miss most of their desired international audience when they publish in their mother tongue. If it is not in English, German or French, it is not going to be read widely by people who are interested in what you are talking about. And even German and French cut down on the audience appreciably. There doesn't seem to be very much that we can do about this problem. And we are left with serious gaps in exchange of views and data.

Half of my reason for including this large audience in our conversation is to introduce the ideas and data of Soviet scholars to my network of scholars — and vice versa. For example, no one in Moscow had heard much about the vigorous and important work done, and being done, by the Germans (BRD) on Afroasiatic, Khoisan and Nilo-Saharan. My reasons for wanting to make these introductions do not partake of civility or world peace. We can all do what we want to about those concerns. I believe we NEED each other for the great break-through which the Nostratic hypothesis has started. (Back to that in a moment)

The other half of my motivation is to report NEW things, both things which the Soviet group has pioneered and things which I have to add to that from the research I have done since returning from Moscow. Unless a person is devoid of interest in either prehistory or linguistics it has to be exciting. Underlyingly, as the Chomskyites are fond of saying, we find ourselves contemplating a significantly earlier period of human prehistory than we are accustomed to — notably closer to our common origins.

Militariev and Porkhomovsky and their colleagues insist that most of

the new things sprang from the brain of Starostin. He shared credit with Diakonov. So what is NEW? Here goes:

- (a) Afroasiatic is actually half of Nostratic, i.e., Afroasiatic is one coordinate branch of the super-phylum and all the rest of the phyla are in the other coordinate branch of Nostratic.
- (b) Now we know what to do with North Caucasic. It is related to roughly half of the old Southwest Asian bunch, particularly Hurrian, Urartean and Khatti (underneath Hittite). They didn't mention Subarean, Gutian or Kassitic but they denied that Sumerian was related.
- (c) Proto-North Caucasic has been reconstructed. Kuipers had earlier said that it could be done but it surprises me. Those are very difficult languages phonetically, second only to Khoisan.
- (d) North Caucasic is related to Sino-Tibetan. Wow! Very very different sound systems. Something like relating Niger-Congo to Khoisan. If this hypothesis remains standing after the criticism begins, then no other phylum is safe. This reminds me of a question I once asked Morris Swadesh. How could one possibly relate a clicking language (Khoisan) or a glottalizing language (Kabardian) to a very tonal non-clicking, non-glottalizing language like Chinese or Ewe? (Actually, Ewe like most west African languages has glottalic implosives). I couldn't understand Morris's answer. I repeated the question to Joseph Greenberg later. I couldn't understand his answer either. But at least my two gurus thought it could be done.
- (e) Finally, Starostin has invented a new method of calculating linguistic dates. The Moscow group was not scornful of glottochronology, by the way, but rather took the general idea of getting dates out of language's ceaseless changing and found a better dating device. It remains to be thoroughly checked empirically but preliminary results are said to be good. I would call it Root Dating. Fortunately, the Moscovites didn't know about Dyen, Kruskal, and Black's improved glottochronological formulae; then Starostin might not have bothered to invent a new method. Basically, it seems closer to biological dating methods than glottochronology does and seems to escape the numerous semantic and frequency-of-use criticisms of the latter. Rather exciting stuff! From a prehistoric standpoint, incidentally, Root Dating has another advantage. It does not run off the chart, i.e., run out of dates, for the remoter relationships. In glottochronology we are stuck with the Swadesh list and when that gets down to Zero cognates (ON THAT LIST!) we are in vague but huge amounts of time. For example, in Afroasiatic we get down frequently to 1% or 2% and the formulae show between 12,000 and 25,000 years ago. Much too wide a range of dates and inherently unconvincing and implausible. With Root Dating only non-relationship deprives you of a date.
- (f) If all of this holds up, we ought to nominate Starostin for a Nobel Prize.

Now to falsify all of this or to try to, as we are expected. Well, I found the first point (a) to be likely, since the pronoun argument does not do as well with Afroasiatic. And, of course my friend, I have not yet officially accepted either Nostratic or the membership of Afroasiatic in it. It is on what Ben Rouse would call "top of my list of working hypotheses". But as you will see, I am moving rapidly towards a larger view.

(b) Diakonov and Starostin have this out in English (hooray). I found the arguments and proofs fairly convincing. The quality level was about as good as that of Greenberg's Africa book —— more than adequate. In fact that level of quality was not reached in many of Swadesh's global attempts, which is part of the reason why many linguists rejected his hypotheses. Not all of the 168

proposed etymologies are convincing but most of them are. The authors are much more liberal than I would be in accepting metathesis and sometimes too liberal in semantics. But the crux of the matter is whether the form and meaning resemblances are CONVINCING or not. Most of theirs are. They included perhaps too many of what we would call "culture words" in America. Their discussions of morphology seemed competent but again I have almost no Northeast Caucasic data to compare with theirs.

- (c) Only a small part of the Diakonov-Starostin reconstruction is available in the "Hurro-Urartean as an Eastern Caucasic Language". There is no way to judge it and it is imperative that it be published. Some of the starred forms seem phonetically torturous but this is the famous Kabardian group and its kin. I suspect that Derek and Derek (Elderkin and Nurse) are crucial opinions here. Tony Traill too.
- (d) Same problem. Publication is needed. In this case the author would be strongly advised to do it in English. I poked around in the general suggestion, using mostly D-S reconstructions and promptly found two cognates weakly indicated. Not confirmed, not denied. Miller's opinion needed here, and elsewhere.
- (e) Everything that I have told you was based on hearing Militariev's paper at the Conference. He was very clear and his English is fluent. But we all need to see the whole Root Dating proposal published so it can be studied by an international audience. Again that requires either English or some fast translations into German and French. Since Starostin's English is also first rate, there seems to be no major obstacle. Possibly some one has ideas about helping Starostin?

The other new thing is what happened while I was reading D-S on Hurro-Urartean. I disrupted a Parisian restaurant yelling out loud when I discovered four very good Afroasiatic cognates on their HU-East Caucasic lists. In fact the Omotic versions of one of them --"smell, scent, odor" or "breath, soul, self" (Hurrian only) -- were better in form and meaning than the Hurrian example. Try East Caucasic /sunt'/ "smell" next to common Omotic /sint'/ "nose". No numerals had been reported because the Hurrian data was skimpy but on a whim I checked Caucasic against our best reconstructable Afroasiatic number. Northwest Caucasic "four" surely resembled Afroasiatic "four". (I have very little Northeast Caucasic data). That led to a more general pattern of poking around which carried "smell/nose" into Sino-Tibetan weakly but then, to my complete confusion, strongly into SAK (South African Khoisan). In fact it was one of Greenberg's original Khoisan etymologies. Indo-European also has a /sent/ root but with the data at my disposal I couldn't carry it beyond Latin. But in the process I found two very nice Indo-European cognates with Omotic. Try I-E /*suu/ and Omotic /*\$u7/, both meaning "to generate; bear children". I didn't pursue this very much because I knew that Carl Hodge had baskets of Afroasiatic-IndoEuropean cognates in his den and would produce them when the time came. Also number "four" performs less weakly in Sino-Tibetan than "nose" does.

What are we to make of this? Chance resemblances? Maybe. But those two Afroasiatic cognates are very conservative in Afroasiatic, being on a par with the famous morphological patterns dear to the hearts of all Afroasiaticists. Furthermore, I only looked at a few meanings and my data base is severely cramped in some phyla or specific languages. I am satisfied myself that, again as Rouse would say, this looks like a very good working hypothesis!

Yes, but what is it? Well, I am afraid, Aaron, that my working hypothesis is now a bit closer to Swadesh's Vasco-Dene (= Basque-Navaho) than

it is to Nostratic. I have thought for some time now that Afroasiatic and Khoisan had a lot of "chance" resemblances and the same for Afroasiatic and Indo-European. Now my working hypothesis is that Nostratic is part of a even larger "phylum", all of whose branches are not known, but which seems to have a strong African component. If this phylum holds up to the kind of intensive inquiry I think we ought to make, then I suspect it can easily be 25,000 years old. That would be a real break-through in Old World prehistory!

But, if we get involved with such a massive thing as Nilo-Saharan or Congo-Kordofanian, or with the American Indian side of Swadesh's Vasco-Dene, then I reckon the dates would have to be much greater, maybe doubled. But my mind retreats in disorder from the empirical chores involved in testing such a hypothesis! We already have our hands full trying to reconstruct proto-Afroasiatic, not to mention proto-Khoisan (or even getting colleagues to agree that there is such a phylum).

More than anything else the work demanded of us will be mind boggling. That is another reason for writing to my whole network. We need help badly. Other than the Moscow group, yourself, myself, Carl Hodge and the Vienna symposium group (Hans Mukarovsky, Carl Petraczek, Chaim Rabin, and Goosh Andrzejewski), I don't know anyone else who might be interested in working on this giant problem. Greenberg's hands are apparently full with his efforts in the Americas. Not only are there others, in all probability, but also many scholars may be marginally interested, such that they can help with particular problems or who might want to comment on the results from time to time or what not.

Also in general terms physical anthropologists may find the super-phylum, or even chunks of it, interesting. For example, if Starostin's North Caucasic -SinoTibetan class holds up, the problem of genetically connected so-called Caucasoids and so-called Mongoloids will confront them. We already have such problems in Afroasiatic, where great physical diversity co-exists with genetic unity in language. Uralic and Altaic have had the same problem for a long time. Actually, in Gammaglobulin terms, Sino-Tibetan itself has some of the problem already because Tibetans, Himalayans like Magar, and the north Chinese differ quite sharply from south Chinese, Burmese groups, and, of course, the main mass of linguistically unrelated Southeast Asians. Who knows what the Mitochondria research will show?

Another inspiration to me this Fall, while I was struggling to digest the Moscow "meal" and your two papers, was discovering Irving (Ben) Rouse's new book "Migration Theory". How to think about prehistoric problems, considering the languages, fossil cultures, and bodies involved. Do read it!

I am going to close for now but let us keep the conversation going. And let me tell you about some of the attributes of the "audience" so that you may realize, and the Moscow group may realize, what a great bunch of scholars are in this network! In the future I hope that some kind of a newsletter can be started up, like they have in Chadic studies, where we can keep each other informed and talk to each other. First, I have to see if anybody responds to this letter. Then I will generate a mailing list and collate comments and/or data and send it out.

We include scholars of the following language groups: Semitic, Chadic, Berber, Egyptian, Cushitic, and Omotic of Afroasiatic. Nilotic, Surma, Kuliak, Nubian, East Sudanic in general, Koman, Saharan and Nilo-Saharan in general.

Kordofanian, Mande, Bantu, and Niger-Congo in general. Hadza, Sandawe, SAK, and Khoisan in general. Indo-European. Hurrian & Urartean only. Kartvelian (South Caucasic). North Caucasic. Uralic. Altaic. Sino-Tibetan. Austronesian (Malayo-Polynesian). Indo-Pacific. Australian. North American Indian languages. And that is only what I know about them. They may inform us of much more! Since one of the key or pivotal phyla in all of this, in my opinion, is Indo-European, we have three real experts on P-IE (Watkins, Friedrich, and Anttila). Pray one of you abide with us!

We include some very good, genetically and/or serologically oriented, physical anthropologists. One is a world authority on classification; another is renowned for thinking a la Rouse and working with linguists and archeologists; a third is the world authority on Gammaglobulin. But I think we lack a Mitochondria-ist.

I am very fond of the six archeologists whose general knowledge plus specific area specializations could be very helpful, especially in thinking about strategy. At least two of them have extensive experience in surveying and summing up archeological hypotheses about vast continental areas. That is the sort of thing we are dealing with here! One of the continuing benefits of American style anthropology has always been the compatibility between archeologists, historical linguists, and what we call "four-field anthropologists" or general ethnologists. Our list includes some of those too.

Finally, we also include a (some) Africanist historian, mathematician, physicist, and social anthropologist(s).

Shalom!

Hal/ Harold C. Fleming 69 High Street Rockport, Massachusetts 01966

Just as a starter for the others, let me add here some crucial names and addresses in Moscow.

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K-9 Moscow, USSR

Dr. Anna Belova Institute of Oriental Studies 12, rue Jdanova (= Ulica Zdanova 12) Moscow 103777, USSR

Dr. S.A. Starostin & Natela Zhvania, same address as Anna Belova

Viktor Porkhomovsky Institute of Linguistics Academy of Sciences of USSR Semashko Str. 1/12 K-9 Moscow, USSR

Olga Stolbova, same address as Viktor

Alexandra Yu. Aihenvald & T.L. Vetoshina, same as Viktor

Prof. Igor M. Diakonov Institut Vostokovedeniya Dvorcovaya Nabereznaya 18 Leningrad, USSR 10/26/86 LANGUAGE (AFROEURASIAN) SOURCE (FL-STAROSTIN) MEANING (BASIC VOCAB) ...

External Etymology. NOSE. SMELL, SNIFF.

(A) Greenberg sets:. Afroasiatic: Chadic: Hausa /sunsuna/ - to smell

Klesam /siN/ = nose. Sukur /\$in/. NOSE

 $\mathcal{G} = \tilde{S} = S$ Kulung /asinan/

Cushitic: Somali /san/. Kamir /esiN/. Afar /san/. Chara /sinan/ (Omotic).

Egyptian: /snsn/ = to smell.

Sandawe /samu/, !kung /swe[~]/ = snuff the air. Khoisan: Naron /swe*/ = to snuff. Nama Hottentot /suni/ SNORT, = sniff. smell from. /Xam /suu*/ = flow, snore GROAN hum. \pm Khomani /su 7 wa/ = blow the nose.

Comments: Greenberg did not relate these two "nasal" sets. Indeed he rejected the potential Khoisan-Afroasiatic relationship. Also the Sandawe form is not necessarily cognate in form or meaning. The German source gives it as "schnaufen" (snort. pant. breathe heavily) and "sto"hnen" (groan). This suggest a neavy out breathing, more oral than nasal. The SAK forms cover the Northern pranch of SAK (!kung), the Central (Naron. Nama, and /kam). and the Southern $\overrightarrow{\mathcal{T}}$ Khomanı). Nence could easily be derived from proto-SAK and with a meaning the is much more clearly "to snuff, inhale/exhale nasally". Possibly a Semitic form (Arabic /\$um/ = "smell) is cognate with the Sandawe /samu/ but the semantics ar still less convincing.

(B) Diakonov and Starostin sets. (Hurrian & Urartean as part of N.E.Caucasic) P-East Caucasic: */ssun(t)V)/, Dargian /sunt'/ = scent. odour Laki /ssunt / = snuff: Awarian (Avar) /ssunt / = snuff & /ssunt'-ize/ = to smell. P-HU (Hurrian-Urartean): */sun-/ or */su-ne/?: Hurrian /sun-= breath. soul. self". Sono dupbio. semantics.

(C) Fleming sets: Indo-European: (seems weak; mostly Latin sent-in) Sino-

-Tibetan:	NOSE.	Tibetan		S		П	ā	
		Ladakhi		5		П	a	
		Spiti				n	ā	
		Gurung				Π	a	
		Janggali		s	i	п	æ	
		Nung		#	a	п	a	
		M1 ao		ts	5 i	ny	L.I.	
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Afroasiatic: NOSE.

> # 1 n t'-Omotic: Northern: Gondan: Boro

Amuru s 1 c -Antillo # 1:n t -Mocha \$ 1 τ'-Mao: Bambeshi Sezo ≇ 1 m Hozo

5 1 Gimojan: Janjero

sint, Gimira Chara sinb-Kovra s 1 D -

D -Dorza SI

wallamo S 1: 5 i Male Basketo **S** 1 N majoid: Nao 5 1 n t)-Shako Dizi (Maji)

10/26/86 LANGUAGE (AFROEURASIAN) SOURCE (FL-BUCK) MEANING (COMMON) PHONE CO. S. . .

External Etymology. GENERATE, BEAR, BEGET.

AFROASIATIC set:

Omotic: Northern: Gondan: Kafa # u / - o "placenta Mocha ≉ાપ∨ Anfillo Wombera 事 U W * U W Gimojan Male

Atroaslatic as a whole is dominated by the /*wld/ root whose reflex in Gimojan is /vel-/.

indo-European set: (From Buck, 1949) Proto-Indo-European *s u u Sanskrit s u u h u Avestan

Avestan /hu/ = to bear (of evil beings). See also later Sanskrit verbs for "bedet" such as /pra-suu/ and /sam-pra-suu/ and Sanskrit words for "son" as as /suca/ and /suunu/. Avestan /hunu/ and other I-E words for "son". e.a.. Gothic /su-nu-s/. See Ext. Etv. SON.

 $g^{-2}\hat{g}$ Indo-European as a whole is dominated by the /*g^en/ root. One can then propose that both the Afroasiatic and the Indo-European dominant forms are innovations. while /*suu/ derives from an older ancestral period.

10/26/86 LANGUAGE(AFROEURASIAN) SOURCE (FL-BUCK) - MEANING (COMMON) - PHONE (C T..

External Etymology. BEGET. BEAR. FUCK.

Afroasiatic set: Omotic: Galila /ti \mathbf{k} / = to fuck (tr). Others ? Indo-European set: Proto-Indo-European /*tek/ > Greek /ti/kto/ = beget. bear (of both parents), /tektontes/ = parents. /teknon/ = child

Sanskrit /takman/ = offspring, child: Old Norse /theon/ = freeman. free subject. Old English /thegn/ = nobleman. warrior, Old High German /degan/ = boy, servant. hero.

Note: The I-E forms for child seem to go Root + Suffix /n/. Of Ext. Etv. 30 This cognation is weak, partly because the data base is skimpy and very discovered the P-IE /* tek / root in Buck, 1949, and simply remembered the Galila form,

"beget, bear, fuck", continued

Form. A small search revealed that in the great majority of cases no word for "to copulate" or "fuck (tr)" had been recorded by field workers in Umotic.

10/26/86 LANGUAGE (AFROEURASIAN) SOURCE (FL-BUCK) MEANING (COMMON) PHONE (C S...

External Etymology. SON. CHILD.

Afroasiatic set: Omotic: (to generate, bear, beget) with /*\$u7/ or /*\$o7/.

Indo-European set: Proto-Indo-European /*suu/ = generate, beget, bear + suffi)

/*n/ leads to /*suunu/ and maybe /*suyu/ = son. Some
examples of this outcome are: Lithuanian /suunu-s/, Old
Prussian /soun-s/, Slavic /syn/ or /synu/, Gothic /sunu-s/
/syn/ or /synu/, Old Norse /sun-r/ or /son-r/, Tocharian H
/se/. genitive sg. /seyo/, nom. pl. /sewaany/, but
Tocharian B /soy/, gen. sg. /seyi/.

No attempt was made to search outside of these narrow confines. I have never in fact surveyed the vast field of Afroasiatic kinship terms. Part of the reason for not chasing this one farther was the chances of getting mixed up with the roots for "brother" which are similar in form.

11/01/86 LANGUAGE (AFROEURASIAN) SOURCE (FL-GREENBERG) MEANING (NUMBER) FHOM..

External Etymology: FOUR.

A. AFROASIATIC: (1) The Greenberg set:

Chadic: Hausa /fud'u/, Bolewa /podo/, Margi /fodu/, Hiji /fware/. Muffu /fooc Gioder /podo/, Mandara / ufalle/, Musgu /podu/, Bana /fidi.. Mubi /fad'a/. etc.

Egyptian: /fdw/

Cushitic: Beja /fad.ig/, Somali /afar/

q. = q \ q,

(2) The Fleming additions:

Chadic: Group	1 (incl. (a)	Hausa, Bole	wa): Gwandara (dial.)	puru	
			(dial.)	huru	
			Hausa of Kano	h u D u	
	(a)		Angas	i i r	
W			Angas-Sura		E = E
<u>=</u>	(b)		Bade	t H Ü U	
Ē			Bolanchi	o o Deo	
ī					
	(a)		Mana	райш	
			иā swo	n o ŭ o	
N		[T]	Úat to	р ш 7	
		Ö	Fver	o i:t	
		n	Sha	t u ū	
			Kulere	† u:d	
Group	2	(kataka)	risar	fidi	
Group	3 vinci.	Marqi, Hiji	Tera	v a c	
Group	4 (incl.	Muffu)	Matakam	f a L	
			Gisiga mi	i-faD	

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" four", continued
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                                                      t O:t
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                                                   mu-f a t
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                                                      podo
         Group 5 (just Gidaer)
                                                    ufade
                                          Wandala
         Group & (incl. Mandara)
                                                      f u:D i
                                          Muskum
         Group 7 (incl. Musqu)
                                                      f u:d i
                                   (city) Musgum
                                                      puDu
                                          Vlum
                                          Masa
         Group 8 (incl. Bana)
                                          Peve/Lame
                                                      fudi
                                          Dari/Lame
                                          Banana
                                                      w avt 1
                                          Ndam
                                (a)
         Group 9 (incl. Mubi)
                                          Somrai
                                          Tumak
                                          Gul eı
      Ë
                                          Miltu
                                          Chiri
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                                          Birait
                                          Sarwa
                                 (d)
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                                 (e)
                                          Tupuri-F
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                                          Kera
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                                          Danola
                                 (a)
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                                 (h)
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                                          Boheiric
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                Coptic
 Edvotian:
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                                         Hadendiwa
                Northern:
 Cushitic:
                 Eastern: Northern Lowland
                                              Afar
                                              Saho a f a:r
                                             Oromo a f u:r
                          Southern Lowland
                                             konso a f u:r
                                                    afara
                                             Boni
                                          Renaille
                                                     afar
                                          Somali
                                          6also
                                          Galab
                                          Arbore
                                          El Molo
                                          Kapardian
B. NORTH CAUCASIC: Western:
                                                      p ti'i
                                 (Turkey) Pakhy
                                          Apxaz
                                                       pπ
                                          UbyKh
        L = [tl] or [hl] unclear from source
```

```
r Jaky", Continue & ph L 1

Eastern: no data available to me.
```

Eastern: no data available to me. Hurrian-Urartean: no data on "4"

C. SINO-TIBETAN: Simitic Division: /*si/ (?). Uncog.

Miao-Yao (Not in Shafer): Miao plou
Yao pie
Karenic Division: Pwo li
Sqaw lwi
Karenbyu lwi
Burmic Division: Burmese le

Horpa hla Mikir p hli Baric Division: Baro h r 1

Baric Division: Garo b r 1
Tipura b r u 1
Sema Naga b 1 d 1

Bodic (Tibetan) Division: Tibetan b **Z** 1 Salti i-b **Z** 1

@ Note: I follow Grownberg Lnoke Z bi
here. Miao-yao some say Magar Murmi D ii
is Tai-kadai. It seems Rong fali
Neweri D

Sino-Tibetan to me.

Newari p

Kanashi p u

Rangkas p 1

Gurung v i

Takoa o i

Z = ž = zh

(metacnesis

11/02/86 LANGUAGE(AFROEURASIAN) SOURCE(FL) MEANING(KINSHIP) FHONE(C \$) E..

External Etymology. BROTHER. # 1.

A. AFROASIATIC:

Omotic : Northern : Gongan: Mocha \$ i
@ Kafa @ \$

G Boro e:\$ w 1 Wombera a \$ e w 3 Gimojan: common Ometo 71 \$ a

Southern: Dime i # :

@ Notes: The kafa form = sister but the final /o/ makes it formally masculine in Kafa.

The Shinasha forms (Boro, Wombera) have [w]

which is < /*m/ in northern Gondan.

```
Modern "
"brother" 1 , continued
                                       Mingrelian
                               Lezgian
G Tabas
C. NORTH CAUCASIC: EAST: Proto-East Caucasic (D & S)
                                                     * .ts:am V
   .ts: = ts: = back [ts]
                                                        c:a m
                and intense, (geminate to me)
                                    @ Tabasaran
                                                        Zam
                                    Nakh-Chechen
                                                       dza m o
                                   @ Ingush
                                   .@ Lak (metathesis) m a cca
                                       Awarian (")
                                                        maZ
 @ Notes: Tabasaran form means "fiance, betrothed man"
          Indush form means "best man"
          Lak form means "relative".
          Avar (Awarian) form means "3rd cousin" and is
          cited as /maZ-itl':/.
```

BROTHER. # 2

D. NORTH CAUCASIC:		HU: Proto-Hurrian-Urartean		n-Urartean	t		ts e n		
				Hurrian		5	e n ı		
		Western:	@	Pakny	(j.	i:hie:	1	
			<u>ਵ</u> ਿੱ	Bzhedux	1	\$h)	
			æ	Kabardian	(\$)	
E.	AFROASIATIC: Fr	om Greend	perg.						
	Chadic: Gr	oup 3 :	ä	Bachama		z	ino		

. AFRUASIATIC: From Greenberg.

Chadic: Group 3: & Bachama zin o

Group 9: Modgel sen

Somrai sen

Egyptian: Ancient s n
Cushitic: Northern: Beja s a n
Agau: Dembea Z a n
Z 1 n

Notes: Pakny form is NOT thought to be cognate.

Sznedux form is NOT thought to be "

Kabardian form is NOT thought to be "

Bachama citation was /2ino-gi/ = my brothers.