Kenneth SHIELDS Jr. (Millersville)

THE "NEW IMAGE" OF INDO-EUROPEAN AND
THE NOSTRATIC HYPOTHESIS:
A POSSIBLE RECONCILIATION OF RECONSTRUCTIONS

Abstract. According to what Adrados (1992: 1) calls the "new image" of Indo-European, the proto-language originally lacked the inflectional complexities associated with traditional Brugmannian reconstruction. Such complexities were acquired only at later stages of development, including the immediately predialectal period. On the basis of this perspective, I argue in Shields (2001) that there exists an incompatibility between reconstructions proposed by Nostraticists and by those espousing the "new image" of Indo-European. However, in this brief paper, I present a possible means of reconciling the two theoretical viewpoints.

One of the most interesting bodies of historical/comparative linguistic research which emerged in the second half of the twentieth century concerned the Nostratic Hypothesis. The work of such scholars as Illič-Svityč (1965), Dolgoplosky (1984, 1998), Bomhard (1996, 2002), and Greenberg (2000) (via his closely related Eurasiatic Hypothesis, cf. Bomhard 1998: 26)[1] has elevated the rather obscure original formulations of Pedersen (1903, 1931: 335-339) in support of the existence

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[1]   Despite methodological differences, Bomhard (1998: 26) notes the close conceptual connection between the Nostratic Hypothesis and Greenberg's Eurasiatic Hypothesis when he says:

> My own opinion is close to that of Greenberg. As I see the situation, Nostratic includes Afroasiatic, Kartvelian, and Elamo-Dravidian as well as Eurasiatic, in other words, I view Nostratic as a higher-level taxonomic entity. Afroasiatic stands apart as an extremely ancient, independent branch—it was the first branch of Nostratic to separate from the rest of the Nostratic speech community. Younger are Kartvelian and Elamo-Dravidian. It is clear from an analysis of their vocabulary, pronominal stems, and morphological systems that Indo-European, Uralic-Yukaghir, Altaic, Gilyak, Chukchi-Kamchatkan, and Eskimo-Aleut are more closely related as a group than any one of them is to Afroasiatic, Kartvelian, and Elamo-Dravidian, and this is the reason I follow Greenberg in setting up a distinct subgroup within Nostratic.

of a macro-family of languages including "Indo-European, Semitic, Samoyed and Finno-Ugric, Turkish, Mongolian, Manchu, Yukaghir, and Eskimo" (Bomhard 2002: 2) to one of the most hotly debated subjects in the field. Assessments of the validity of the Nostratic Hypothesis differ widely, from outright rejection (cf. Ringe 1995), to cautious neutrality (cf. Vine 1998), to enthusiastic support (cf. Manaster Ramer et al. 1998); and Nostraticists themselves are most certainly not of one mind about the particular language families which claim their origin in this pre-neolithic parent language (cf. Bomhard 1996: 1-4). I myself (2001) have expressed concerns about the nature of some of the Indo-European data on which Nostraticists have based their conclusions. Specifically, I maintain that their methodology does not guarantee what I have termed "internal consistency" (1992: 4-10, 1996: 249, 2001: 369-370) in reconstructing Proto-Nostratic. By "internal consistency", I mean that one part of a reconstructed system must be logically and typologically compatible with other parts of that system. Thus, any reconstructions of Proto-Indo-European used to reconstruct Proto-Nostratic itself must not ultimately contradict the structural properties ascribed to the latter. Although I have pointed out these potential contradictions elsewhere (2001) and shall briefly review them here, my goal in this brief paper is to offer a general recommendation about the reconstruction of Proto-Nostratic which, from the point of view of the Indo-European data at least, would help it to achieve "internal consistency".

Controversy regarding the fundamental structure of Proto-Indo-European has also been evident in recent decades. According to the traditional Brugmannian view, Indo-European was a language with a rich inflectional morphology similar to that attested in such daughter languages as Sanskrit and Greek. However, today many Indo-Europeanists (cf. Adrados 1985, 1987, 1992, 2007, Lehmann 1974, 1993, Meid 1971, 1979, Polomé 1982, 1984, Schmalstieg 1977, 1980, Erhart 1970, 1993, Fairbanks 1977, Shields 1982, 1992, 1998, 1999, 2004) espouse what Adrados (1992: 1) has called "the new image" of Indo-European, according to which

> one should attempt to reconstruct not one sole type of Indo-European (IE., henceforth) without spatial or temporal definition, but three. The most ancient of those, IE. I (also called Protoindoeuropean or PIE.) would not yet be inflected. Then there would come IE. II, inherited by Anatolian, some of whose archaisms, though, would be preserved in other languages: in this type, there would already be inflexion, although merely on the basis of using endings and other resources, not the opposition of

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Greenberg (2000: 5), too, observes that there have been significant changes in the views of Nostraticists in recent years, as the result of which differences [between his views and theirs] have been greatly reduced. Even "Russian comparativists have revised their classification so that it is now closer to the Eurasiatic stock…" (2000: 5).

stems. Finally, the most recent phase would be IE. III, which is practically that of traditional reconstruction: in this type, stems were opposed to mark tenses and moods in the verb, the masc. and fem. genders, and degrees of comparison in the adjective (Adrados 1992: 1).

In contrast to the traditional Brugmannian reconstruction, then, the "new image" ascribes the inflectional complexity of Indo-European to later periods, including that just before the dialectal disintegration of the Indo-European speech community. Thus, the appearance of such features as adverbial case categories, the differentiation of masculine and feminine genders from a common animate gender, the opposition of the second and third persons in conjugation, and the development of verbal morpho-syntactic categories like the subjunctive, aorist, and future were largely immediately predialectal in origin (see Shields 1982, 1992).[2]

In my opinion and in the opinion of many other adherents to the "new image", deictic particles, not inflections, played a key role in the morpho-syntax of early Indo-European. In subsequent stages of the language, these particles underwent grammaticalization as exponents of the morpho-syntactic categories characteristic of later Indo-European and embraced by Brugmannian reconstruction. Such grammaticalization proceeded according to what Fox (1995: 194-195) terms "'laws' of language development", or "general principles of change", many of which have been identified in contemporary typological theory. Thus, Markey (1979: 65) observes that "at an early stage of Indo-European deictic markers constituted the formal indication of grammatical categories expressing time, place and person". He explains further:

> Lexical or grammatical deixis is the formal indication of proximity or distance relative to a speech situation, and deictic markers yield 'the "orientational" features of language which are relative to the time and place of utterance' [Lyons 1968: 275]. They denote the spatio-temporal location of discourse (here : now) and the situation of its participants in terms of roles (speaker : hearer = *I* : *you*) and status-relations… Moreover, they refer to time and space and individuals and objects 'beyond' the immediate speech act. The categorical incidence of deictic markers therefore ranges over those grammatical categories which express time, place, and person; namely, case in nouns and pronouns and tense in verbs, as well as the formal categories of demonstrative and anaphoric pronouns and situationally-bound adverbs of time and place (1979: 66-67).

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[2] Of course, there are differences of opinion among proponents of the "new image" regarding the relative archaism of particular linguistic features. However, they share a common vision of the inflectional simplicity of earlier stages of Indo-European.

"'Laws' of language development", such as the frequent grammaticalization of deictics as adverbial case suffixes (cf. Heine, Claudi & Hünnemeyer 1991: 167),

> predict cross-linguistic similarity in paths of development. The degree of cross-linguistic similarity that recent studies have uncovered suggests that forces in language are pushing toward the selection of particular source material and movement along particular paths propelled by certain common mechanisms of change (Bybee, Perkins & Pagliuca 1995: 14-15).

Interestingly, the same deictic element may undergo various grammaticalizations according to "the characteristic of 'divergence'", whereby "the original lexical form may remain as an autonomous element", subject to further linguistic changes, including grammaticalization (Hopper & Traugott 1993: 116-117). Hazelkorn (1983: 110) thus notes, for example, that in Finno-Ugric languages,

> deictic particles, which originally referred to the participants in the communication act and to their location, came to be used as definiteness markers [i.e., demonstratives, personal pronouns, possessive suffixes, and subject agreement markers in verbs], in order to indicate the focus of an utterance. In subsequent developments, these same elements came to be interpreted as on the one hand, person markers and, on the other hand, accusative markers, plural markers, etc.

For what follows, I should point out that for Indo-European, too, Markey (1987: 93) ascribes the origin of plural (non-singular) markers to deictic/demonstrative elements as part of a widespread typological principle.

As I observe in Shields (2001: 370-371), Nostraticists are distinctly Brugmannian in their view of Indo-European, for they typically use such a structural perspective on Indo-European in their reconstruction of the morpho-syntax of Nostratic.[3] Therefore, in his discussion of Eurasiatic grammar, Greenberg (2000) reconstructs an inflectionally rich case system with an absolutive (in *-*k*), a vocative (in *-*e*), an accusative (in *-*m*), a genitive (in *-*n*), a dative (in *-*ka*), an ablative (in *-*t*), a locative (in *-*m, *-bh, *ru, *-n, *-i*, and *-*ta*), and a comitative (in *-*ko*[*n/m*]) with Indo-European reflexes for each (the absolutive being realized as a nominative and the comitative as an adprep, cf. Lat. *cum*). Similarly,

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[3] I find it interesting—and ironic—, however, that some Nostraticists favorably cite "new image" reconstructions of Indo-European and even utilize these in their reconstructions of Proto-Nostratic (cf., e.g., Bomhard 1996: 89).

Bomhard & Kerns (1994: 173) ascribe a nominative, accusative, genitive, dative, locative, and ablative to Nostratic. Such a formulation is difficult to reconcile with the earliest case system for Indo-European proposed by Lehmann (1993: 154) consisting of

> only the grammatical cases—nominative and accusative, and the adjective case, the genitive. The remaining cases were added to these when selected postpositions [or adpreps/deictics] came to be affixed to noun stems.

A preinflectional Indo-European like that posited by Adrados (2007) is even more problematic for such a reconstructon of Nostratic. Moreover, six inflectional exponents of a Eurasiatic non-singular category are reconstructed by Greenberg (2000), five of which he identifies as plural (*-i, *-t, *-r(i), *-ku, and *-s), and one of which he identifies as dual (*-ki(n)). According to Greenberg, all but two have Indo-European reflexes. Bomhard & Kerns (1996: 169) also, in more general terms, argue for a singular : non-singular inflectional opposition in Nostratic. However, Lehmann (1974: 201-202) emphatically says about Indo-European:

> The system of verb endings clearly points to an earlier period in which there was no verbal inflection for number… For the dual and plural endings are obviously defective. We cannot reconstruct endings in these two numbers which are as well supported as are those on the singular, except for the third plural… The number system is defective in substantival as well as in verbal inflection. The personal pronoun never did introduce expressions for plurality, as suppletive paradigms indicate, e.g., Hitt. *uk* 'I', *uēš* 'we', etc., in contrast with demonstratives, e.g., *kāš, kē* 'this, these', and nouns, e.g., *antuhšaš, antuhšeš* 'man, men'… Number… was not consistently applied in late PIE and the early dialects in accordance with natural reference. Subsequently application became more regular, and number congruence was carried out for both substantives and verbs.

As a final example of current thinking about the rich inflectional nature of Proto-Nostratic among Nostraticists, Greenberg (2000) and Bomhard & Kerns (1994: 188) ascribe a three-person system of inflectional markers to Eurasiatic/ Nostratic conjugation (cf. 1 pers. *-m, *-k, *-n; 2 pers. *-t, *-s, *-n; 3 pers. *-i ~ -e, according to Greenberg). Yet, in regard to early Indo-European verbal paradigms, Erhart (1970: 113) states: "Es bestand wohl damals noch kein Unterscheid zwischen der 2. und der 3. Person"—a conclusion based on formal similarities of second and third person desinences in the dialects themselves (cf., e.g., OCS 2/3 pers. sg. aor.

načę-tъ 'you, he began,' Gk. 2/3 pers du. *estón* 'you two, they two are') (see Shields 1992: 14-16 for further details).

Because it is highly unlikely that early Indo-European lost various morpho-syntactic categories and their exponents which it inherited from Nostratic and then reacquired these same categories with the same exponents at later stages of development, I conclude in Shields (2001) that proponents of the "new image", on the basis of "internal consistency", should remain skeptical of the Nostratic Hypothesis. However, what I would like to propose here is that some reconciliation between Nostraticists and New-Imagists is possible if Nostraticists were to entertain the possibility that the morpho-syntax of Proto-Nostratic may itself have been more deictically-based than inflectionally-based. In other words, Proto-Nostratic may have possessed a set of deictic particles which served as its fundamental means of grammatical expression. As this set of particles was inherited by various daughter groups, they became subject to grammaticalization processes. Since grammaticalization proceeds according to "universal paths", similarities in subsequent paradigmatic use of these particles would have appeared in the emergent "dialects". However, some significant variation among groups would also have been possible since "'laws' of languages development" "do not disallow language-specific or even unique instances of grammaticalization which can arise by the idiosyncratic selection of source material" (Bybee, Perkins & Pagaliuca 1995: 14). Indeed, Bomhard & Kerns (1996: 188) seem cognizant of the original deictic-like nominal morpho-syntactic variation found in the Nostratic Family when they note:

> It seems to have been common, in Nostratic languages, to be rather flexible in assigning (and changing) the meanings applied to case markers, especially those for the local cases… Even in a single language a given marker could eventually develop a variety of meanings.

A concrete example of such variation within Nostratic is instructive. Greenberg (2000: 153-154) reconstructs a locative case ending in *-i* for Eurasiatic/Nostratic—a form with a direct reflex in the Indo-European locative singular ending *-i* (cf. Szemerényi 1996:160) and a corresponding Indo-European deictic particle *i* (cf. Hirt 1927: 11-12). According to Greenberg, a locative in *-i* is found directly in Eskimo, Korean, and Ainu, but with limitation to place names and adverbs in the latter.

> In Chukchi locatives such as *k-j-it* contain an 'extra' *-j-* in addition to other locative markers… This *-j-* is also found in the ablative *-j-peŋ*… The only evidence for an *-i* locative in Altaic appears to be Manchu *-i*, an instrumental-locative suffix…

He also notes the possibility that Finno-Ugric *-j*, with lative value, may be considered here, but "its basic sense is motion towards, rather than location in a place". No reflexes of the form are to be found in Yukaghir or Samoyed—other branches of Uralic. Similarly, among major Eurasiatic subgroups, *-*i* is not attested in Gilyak. Although he posits no direct etymological connection to locative *-*i*, I believe it to be significant that Greenberg (2000: 108-110) reconstructs a parallel Eurasiatic/Nostratic plural desinence in *-*i* as well. This suffix also has what appears to be a clear Indo-European reflex (cf. Burrow 1973: 237-238). Beyond Indo-European, Greenberg finds the clearest examples of its reflexes in Uralic:

> In Uralic, the Finnic languages have *-i-* in all plural oblique cases, contrasting with *-t* in the nominative. The same pattern is found in Saami and Kamassian Samoyed. Another function in Uralic is to indicate the plural of the thing possessed with pronominal possessive suffixes, e.g., Hungarian *ház-am* 'my house,' *háza-i-m* 'my houses.' A similar construction occurs in Northern Samoyed. In Yurak Samoyed *-i-* occurs in the objective verb conjugation to indicate plurality of objects, e.g. *mada-i-n* 'I cut them.' We also find *-i* as an indicator of the plural in independent pronouns, e.g. Hungarian *mi* 'we,' *ti* 'you.' The same phenomenon occurs in Mordvin and in the Permian languages of the Finnic branch of Finno-Ugric, e.g. Udmurt *mi* 'we,' *ti* 'you.' It is possible that the vowel in Yukaghir *mit* 'we,' *tit* 'you,' as compared with the singular forms *met* 'I,' *tet* 'thou,' is to be identified with the *-i* plural.

In Chukotian *-*i* is a plural marker in some dialects and a dual marker of pronouns in others, while in Eskimo its distribution as a plural maker depends on the dialect (e.g., only in the Sirenik dialect is *-j* the general noun plural). "In Gilyak it occurs in the variant *bej* of the plural imperative, alongside of *be*", and traces may be present in Tungus and Ainu. However, reflexes of the desinence are lacking in Turkic, Mongolian, Korean, and Japanese. Clearly, the complex distributional and functional similarities and differences in evidence here between and within Eurasiatic subgroups are consistent with and even suggestive of the effects of the grammaticalization of deictic elements.

In summary, those Indo-Europeanists who share a "new image" perspective of early Indo-European need not automatically reject Nostratic Theory because it appears "internally inconsistent" with their reconstructions. If the morpho-syntax of Nostratic were viewed as less inflectionally complex and more deictically-based, then some of the interesting insights of Nostraticists into phonological and lexical correspondences among Nostratic "dialects" may still prove to be the starting point for a valuable dialogue between Nostraticists and New-Imagists

regarding the possibility of the development of Proto-Indo-European from an ancestor language which it shares with a large number of other major language families.

Kenneth Shields Jr.
Millersville University
English Department
P. O. Box 1002
Millersville, PA 17551-0302 (USA)
[kshields@millersville.edu]

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