

## FREE ALLOMORPHY OR SYNONYMY<sup>[\*]</sup>

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(edited and annotated by Aleš Bičan with James Dickins)

*Abstract.* Originally presented at the 10<sup>th</sup> International Conference of Functional Linguistics in 1983 in Quebec, the paper is published here for the first time. It discusses the notion *free allomorphy* which was rejected by Jan W. F. Mulder and Sándor G. J. Hervey in their works. Arguments are given to show the notion is viable and need not be abandoned. The text was prepared for publication and annotated by Aleš Bičan with the help of James Dickins.

Hypothesize i:ðə/aiðə<sup>[1]</sup> are one sign. Similarity of expression makes this a reasonable hypothesis. Hypothesis unrefuted, so these are free allomorphs. Even gross variance like ‘parallelepiped’ or ‘veterinary’ can be handled in this way.<sup>[2]</sup>

Mulder and Hervey’s counter-example is not analogous: to hypothesize fellow/bloke are one sign is procedurally bizarre in the first place given the lack of similarity of expression (intuition alone is good enough for this)<sup>1</sup> but in any case the hypothesis would be refuted the moment someone said “I’m not a bloke. I may be a fellow, but I’m not a bloke” which seems likely enough. So obviously one hypothesizes different grammatically distinctive function. The fact that the denotata can be the same is a matter of semantic realization. They are parallel to homophones which have different phonologically distinctive function but are impressionistically similar in terms of phonetic realization.<sup>2</sup>

To hypothesize i:ðə/aiðə are different signs is invalid, however, as it is irrefutable. Different distinctive function will never be attested but, if intuition is disregarded, it is always possible to argue that some day, it might be. Disproving the existence of the extra sign would be as impossible as disproving the existence of unicorns. However to hypothesize the existence of even one unnecessary sign is disallowed by the canon of simplicity and the claim of synonymy for such cases is reduced ad absurdum by gross variance like that of ‘parallelepiped’ and ‘veterinary’.

I would argue that Contents themselves *imply* connotations, attitudes etc. They wouldn’t be doing their job if they didn’t.<sup>[3]</sup>

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[\*] Previously unpublished. [Editor’s note]

<sup>1</sup> Actually, this is shorthand. Logically, the onus is always on demonstrating distinctive function – a minimum of two distinctive functions in the first place, to have a semiotic system at all, and then all additional distinctive functions as they prove necessary. In a lexicon one has as it were in prehistory hypothesized two signs with allomorphs from A–M and N–Z and proceeded from there. E.g. “cool” and “cold” might invite the hypothesis that they are one sign, but this is refuted by “It’s cool, but not cold”.

<sup>2</sup> Obviously real-life denotational circumstances are as crude with relation to contents as real-life phonetic noises are with relation to expressions.

This is the only way to make sense of Mulder's dictum "the connotation changes but the denotation remains the same". However, if indeed two or more non-intersecting sets of obviously unrelated allomorphs<sup>3</sup> have the same content, this could be called true synonymy,<sup>4</sup> and by analogy with free allomorphy and homonymy, it should be possible to call it 'free allonymy'. However, whereas allomorphs and homomorphs are allo- and homo- in terms of their morphs in the first instance, but also in respect of their C's<sup>[4]</sup>, 'allonyms', homonyms, but not necessarily synonyms (i.e. only 'true synonyms') would be allo- etc. in terms of their E's qua total form classes (or 'onymy') with respect to their C's, and the actualizing of the concept 'onymy' would preclude the use of 'hyperonymy', 'hyponymy' and 'paronymy' for what I would like to call 'hyperosemy', 'hyposemy' and 'parasemy', though by making clear the function of the element 'syn', it would give us 'symmorphy' for free allomorphy, 'symphony' for free allophony and 'synsemy' for free allosemy.<sup>5</sup> If, on the other hand, one leaves 'nym' undefined and discontinues the use of 'homonymy' because of its implications, replacing it with "total homomophy", as in the Definitions, true Synonymy could be defined as "total homosemy". However, the implication that 'homonymy' is identical with 'homosemy' would seem to be unavoidable in such a nomenclature. I doubt whether such a failure to square with common parlance would be acceptable but if it were, one might as well go the whole hog and introduce synsemy by analogy with synonymy. This would give 'symmorphy' for total homomophy but would mean surrendering 'symphony' to the musicologists for want of a coherent use for it. But on the whole it really does look as though forms in -nym are unusable in any way consistent with common parlance. The element syn- however is useful for 'total homomophy' and 'total homosemy' or 'true synonymy', so we could adopt the less cumbersome 'symmorphy' and 'synsemy'.<sup>[5]</sup>

All in all, the 'realizational' associations of allo-, homo- etc. make it ill-advised to use them with 'nym' or anything which might be construed as one aspect of the signum with respect to another. These relationships are *correspondence* on the same level, and any implication of ontological difference is misleading. Total homomophy and total homosemy correctly describe correspondence on different levels. Symmorphy and synsemy can be assumed to do likewise. Total homophony or homoceny would of course be nonsense as phonemes or cenemes are purely formal entities. Signa on the other hand can exhibit total homosemy with respect to their E's and total homomophy with respect to their C's.

All this is quite consistent with the Saussurian notion of the signum as a biunity of expression and content, but I would much prefer it if we could take it to its logical conclusion and recognise that signa, like figurae, do not *have* distinctive function – they *are* distinctive function. They are only secondarily (i.e. realizationally, or adequationally) sets of allos

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<sup>3</sup> Total heteromophy is a requirement of synonymy. If the sets of allomorphs intersect there is obviously only one signum-identity, and all members of those sets are merely allomorphs of one expression, which is to say one content and one signum, given the identical grammatically distinctive function.

<sup>4</sup> As opposed to what I call 'homosemy' or 'pseudo-synonymy', a phenomenon associated with polysemy or contextual semantic variance (of symbols). There is no reason why this should shock. The wonder is that contextual variance is as predictable as it is in semantics as compared with phonetics. It should by now be clear that I regard denotational reference as a realizational matter like phonetics. They belong to the adequational aspect.

<sup>5</sup> 'Allosemes' and 'homosemes' do correspond to allomorphs and homomorphs, since they are similarly allo- etc. in terms of their semes (or *subsets* of their total reference classes) in the first instance.

with distinctive function<sup>[6]</sup>. The allos themselves, of course, do have distinctive function, as do the signum and figura *utterances* of which they are merely impressionistically similar sets (or alternatively phonologically identical sets, in the case of allomorphs) – i.e. they have the capacity of representing the hypothesized models, while being themselves in the first instance sets of material entities. Thus the formula  $\{(\{f\} Rd) Rd\} RD$ <sup>[7]</sup> is in fact a realizational one. It stands for the set of all material: Ro, a model for a signum utterance which implies a phonological analysis<sup>[8]</sup>. However, the theoretical separation between signum and figura entitles us to propose a model for a signum utterance without phonological analysis (mRs, where m is for morphete, and s is for semete, implying no denotational analysis either<sup>[9]</sup>), and this is more or less what Hjelmslev intended. It is not hard to understand why he was so cavalier about phonology, and indeed given the central rôle of the signum function, there is an important sense in which the first d of our formula is a function of the second. The establishment of purely cenologically distinctive function depends on whether a cenological difference is *ever* relevant in differentiating signa at the upper limit of distinctive realization, although once it has *been* established it operates purely cenologically.

It was perhaps an awareness of all this that prompted Mulder's use of s instead of the second d in earlier writings<sup>[10]</sup>, but it is entirely proper that both should be recognized as the same differential function provided that the theoretical separation between signum and figura is scrupulously observed.<sup>[11]</sup>

Distinctive function – like love – is all you need. Any implication of semantic function as distinct from it would obscure the adequational character of denotational semantics which is such an invaluable feature of Axiomatic Functionalism. What I would like us to recognise is that the distinctive function proper to the signum can be a function of either the C *or* the E. This is after all only common sense – it is just as true of the C's of 'homonyms' that if the E's of 'synonyms' were not discrete there would only *be* one signum, with one distinctive function, which must therefore be that of the E itself, i.e. its identity. Moreover it would make it clear that the D's are redundant in the definitions and can instead be used for adequation. Thus 'homonymy':  $\{p\}^x Rd^x \sim \{p\}^x Rd^y$ <sup>[12]</sup>, where  $x \neq y$ , and 'synonymy' (or 'total homosemy'):  $\{s\}^x Rd^x \sim \{s\}^x Rd^y$ <sup>[13]</sup>, where  $x \neq y$ , the d being a function of the {s} and the {p} respectively. A revised realizational formula for the signum taking account of all this would be  $(\{f\} Rd) Rd \ \& \ d\check{R}(\{f\} Rd) \ \& \ (\{o\} Rd) Rd \ \& \ d\check{R}(\{o\} Rd)$ <sup>[14]</sup>. The traditional tendency was to have the horse of the expression drawing the cart of the content. It may have seemed a necessary corrective to put the cart, with its indisputably functional load, before the horse. What is needed now is to put the horse-and-cart before either the horse or the cart. After all, whenever either changes, we have a different horse-and-cart.

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## Editorial notes

This article is a reproduction of a conference paper read by Michael A. L. Lamb in 1983 at the 10<sup>th</sup> International Colloquium of Functional Linguistics (*Colloque International de Linguistique Fonctionnelle*; 7–13 August 1983, Quebec), a regular meeting of *Société Internationale de Linguistique Fonctionnelle* (SILF). Not published in the proceedings of that conference, it has only circulated privately in manuscript form (actually, a typescript). However, the paper has had an undeniable value, if for nothing else, than for the fact that it was referred to in the works of several linguists. This is one of the reasons a decision has been made to publish it. Michael Lamb has agreed with this, though he has not seen the final form. The original manuscript contains five typewritten pages, four pages of the text plus a one-page handout. The latter is not included in this edition, because it presents a lot of obscure information which would confuse the matter more than it would enlighten it. I have otherwise left the text in its original form, correcting only a few typographical errors. I would like to thank to James Dickins for his help with preparing Lamb's paper. Some of the comments below are reproductions of his ideas.

In this paper Lamb discusses the problem of so-called *free allomorphy*. This notion was rejected by Jan W. F. Mulder and Sándor G. J. Hervey, the main proponents of an approach called Axiomatic Functionalism. Michael Lamb has also been an adherent of this approach (since the 1960s), but he became increasingly dissatisfied with aspects of the linguistic descriptions engendered by the standard version of Axiomatic Functionalism developed by Mulder and Hervey since the 1960s (cf. also Dickins 2009: 1). He not only recognizes free allomorphy as a viable notion in this paper but has eventually developed his own version of the approach which became known as Extended Axiomatic Functionalism (EAF). Lamb has published very little in his academic career, but this type of approach has been later developed by students of his—Barry Heselwood and James Dickins. The latter has subsequently published an extensive account of EAF (Dickins 1998). The readers are directed to the latter work where the problem of free allomorphy is discussed in detail (*op. cit.*, ch. 4.1).

[1] These are different realizations of *either* in English. Lamb refers here to an example used by Mulder and Hervey (1972: 30–1).

[2] The words *parallelepiped* and *veterinary* can have several phonologically variant pronunciations (realizations). For instance, according to Webster's New International Dictionary (1961) *parallelepiped* can be pronounced as [pærələlepaɪpɛd], [pærələleɪpɪpɛd], [pærələleɪpəpɛd], and [pærələleɪpəpɛd]; *veterinary* similarly has a large number of alternative pronunciations.

[3] Page 1 of the typescript ends here.

[4] I.e. of Contents. In Axiomatic Functionalism, the sign (or signum) is defined as a conjunction of Expression and Content, sc. as E & C, see Mulder & Hervey 2009: 16.

[5] Page 2 of the typescript ends here.

[6] Lamb seems to be drawing a distinction between a signum and a figura considered intentionally, and a signum and figura considered extensionally. A signum considered intentionally is part of the lexology in EAF, i.e. it is a lexicid, lexeme, lexotagm, or para-lexotagm, or some part of these (cf. Dickins 1998: 149, 2009, Appendices). The formula for lexicid is  $s$ ; that for lexeme  $\{s\}$ , that for lexotagm a set of ordered pairs of lexemes plus the position in which they stand (however this is actually notated). An ‘intensional signum’ in the lexology is thus a purely abstract entity, consisting only of the element on the extreme right of the extensional formulae which are used in what is termed in EAF the ‘lexologies’. Notions in the signum ontology (corresponding Mulder and Hervey’s signum-theory), such as ‘morphonete’, ‘allomorphon’, and ‘allomorph’ are clearly realisational in EAF: their left-hand element is either a phonetic image (the model for an instance of a speech sound) in the case of morphonete, a set of phonetic images (a phonetic form) in the case of allomorphon, and a set of sets of phonetic images (a set of phonetic forms) in the case of allomorph. However, an expression in the lexologies (morphologies) is itself a set ultimately deriving from the phonetic image (its left-hand element is a set of set of set of phonetic images; i.e. a set of set of phonetic forms). In this sense, an expression (also a signum; and a content) in the lexologies can be regarded as realizationally—albeit that it represents (as a set) all the actual and potential occurrences of the particular ‘intensional signum’ (i.e. lexicid; i.e. lexicid, lexeme, lexotagm, or para-lexotagm (or parts thereof?)) in the lexology. — Similarly, a phono, in phonology as understood in Extended Axiomatic Functionalism, is purely intensional: a phonid (distinctive feature) can be symbolized as  $d$ ; a phoneme as  $\{d\}$ , etc. To these correspond phonological forms in phonologies: as an entity whose left-hand element is a set of a set of phonetic images (i.e. a set of phonetic forms) a phonological form is extensional, and thus realizational—albeit that it represents (as a set) all the actual and particular occurrences of the intensional entities of the phonology (phonid, phoneme, etc.).

[7] In their theory of sign (signum-theory) Mulder and Hervey use symbolization from set-theory and express notions of their theory in its terms. The symbolization has been revised through the years (see the editorial note 10), which makes the matter more confusing. Lamb also uses similar formulae but his formulae do not always correspond to any found in Mulder’s or Hervey’s writings (on the formalization of signum-theory see Mulder 1989, ch. IV, 2). — In the first formula ‘ $\{\{f\} Rd\} RD$ ’ Lamb seems to be describing Expression or Signum with additional reference to Denotation (= D). Let us look at the formula in steps. The symbol ‘ $f$ ’ stands for “phonetic form”; ‘ $\{f\}$ ’ is a class of phonetic forms. The symbols ‘ $Rd$ ’ may be read “each member in capacity of standing in a relation with distinctive function  $d$ ” (cf. Mulder 1989: 156). The formula ‘ $\{f\} Rd$ ’ then symbolizes “phonological form” (cf. Mulder & Hervey 1980: 60). The second ‘ $Rd$ ’, which is added to it, means again “each member in capacity of standing in a relation with distinctive function  $d$ ”, though this time the distinctive function must obtain for grammar, whereas the first obtained for phonology. It means that a certain phonological form has a distinctive function in grammar. If this is what Lamb meant, then the formula ‘ $\{\{f\} Rd\} Rd$ ’ stands for “allomorph” (cf. Mulder & Hervey 1980: 61). Once again, the curly brackets ‘ $\{\}$ ’ indicate a set, hence ‘ $\{\{f\} Rd\}$ ’ is a class of allomorphs—or Expression (*ibid.*). Alternatively, this could stand for Signum, because, as Mulder has repeatedly noted, Expression, Content and

Signum mutually imply each other, and thus the formula for Expression can also express Signum. Finally, the symbols ‘RD’ most probably mean “having a certain denotation”. In fact, the symbol ‘D’ may be a key to understanding Lamb’s formula. Mulder (Mulder & Hervey 1980: 61) used this symbol in a formal definition of synonymy (which is one of topics of Lamb’s paper): ‘ $(\{p\}^x R s^x) R D^x \sim (\{p\}^y R s^y) R D^x$ ’. This formula compares two different signa with the same denotation, i.e. synonyms. If we take only one signum and ignore the superscripts, we get ‘ $(\{p\} R s) R D$ ’. In the next step we should replace the ‘s’ with ‘d’ (see the note 10) and substitute ‘p’ (phonological form) with its formula ‘ $\{f\} Rd$ ’ (see above). After this we get ‘ $(\{\{f\} Rd\} Rd) RD$ ’. This formula is conspicuously similar to Lamb’s one: ‘ $\{\{\{f\} Rd\} Rd\} RD$ ’! It may actually be that Lamb really meant this. Lamb’s paper was typed and the curly brackets were later added by hand. We cannot thus rule out Lamb’s hand slipped, and this, after all, holds for the whole paper, in particular for the formulae used there.

[8] By ‘a model for a signum utterance which implies a phonological analysis’ Lamb might mean what is termed a ‘morphonete’ in EAF: symbolized ‘F’, formula: ‘ $F = (iRd)Rs$ ’. In this case, the ‘o’ in Lamb’s formula would be equivalent to the elements ‘d)Rs’ in the formula ‘ $(iRd)Rs$ ’—although, admittedly, this seems very odd.

[9] These seem to be the same as ‘morphete’ and ‘semete’ in EAF, where semete is defined as ‘ $iRs$ ’ and morphete is defined as ‘ $jRs$ ’. EAF distinguishes between ‘morphonete’ (‘form’, as used by Mulder) and morphete (‘form’, as used by Hervey) (cf. Dickins 1998: 422–3), also between ‘semete’ and ‘semonete’. Lamb’s notion of a conjunction of a morphete and a semete, which he defines as ‘ $mRs$ ’, corresponds to logete (lexete) in EAF (see Dickins 2009, Def. F1b0a). Logete contrasts with a logonete (lexonete), which is the conjunction of a morphonete and a semonete (*ibid.*, Def. F1b0b).

[10] Lamb alludes here to a revision of signum-theory which Mulder made in the years 1980–1989. Originally, he distinguished between *d* and *s*, the former standing for “phonologically distinctive function”, the latter for “grammatically distinctive function”; later, however, he declared this distinction redundant and used *d* for distinctive function in phonology as well as for distinctive function in grammar (see Mulder 1989: 156–9; cf. also Bičan 2009: 11–3 and Dickins 1998: 422–3). Lamb apparently adopted this change here and used ‘d’ for distinctive function at both levels.

[11] Page 3 of the typescript ends here.

[12] The symbol ‘ $\sim$ ’ is to be read as “in comparison with”. The formula ‘ $\{p\}^x Rd^x \sim \{p\}^y Rd^y$ ’ should thus apparently read as “state of affairs in which total class of allomorphs of one signum is compared with, and has the same phonological forms as, those of the total class of allomorphs of another signum” (cf. Dickins 1998: 402).

[13] Compare this with the definition of synonymy in EAF (see Dickins 1998: 403): “state of affairs in which total class of allosemes of one signum is compared with, and has the

same delological forms as, those of the total class of allosemes of another signum”. In this paper Lamb does not use the notion *delological form* but *semete*.

[14] This formula can be interpreted against the formalization of signum-theory in EAF as reproduced in the following figure (see also Dickins 1998, ch. 3.1.1). The formula ‘ $\{f\}Rd$ ’ is the same as ‘ $\{p^{i..n}Rs\}$ ’: ‘ $p^{i..n}$ ’ is another way of saying  $\{f\}$  (or more fully ‘ $f^{i..n}$ ’). It is not clear why Lamb follows this by a converse definition ‘ $d\check{R}(\{f\}Rd)$ ’ (where ‘ $d\check{R}$ ’ is the converse of ‘ $Rd$ ’), but it may parallel the way Mulder and Hervey define the signum (i.e. as a conjunction of expression and content, see 1980: 60). The formula ‘ $\{o\}Rd$ ’ looks like the formula for Content in EAF (cf. Fig. 2), i.e. ‘ $\{q^{i..n}Rs\}$ ’ or ‘ $\{q\}Rs$ ’, i.e. a set of allosemes in relation to a specific distinctive function in grammar. The formula ‘ $\{q\}Rs$ ’ could also be rewritten as ‘ $\{(gRe)\}Rs$ ’.

		signum $S = E \& C$			
		expression $E = \{p^{i..n}Rs\}$	content $C = \{q^{i..n}Rs\}$		
		phonological form $p = \{f^{i..n}Rd\}$	alloseme $qRs$ or $\{(gRe)Rs\}$	delological form $q = \{g^{i..n}Re\}$	
phonetic form $f = \{i\}$	allophone $fRd$ or $\{i\}Rd$	allomorphon $\{fRd\}Rs$ or $\{iRd\}Rs$	allosemon (reference-type) $\{(gRe)Rs\}$ or $\{(jRe)Rs\}$	allodele (denotatum-type) $gRe$ or $\{j\}Re$	semantic form $g = \{j\}$
phonetic image $i$	phonete $iRd$	lexonete (utterance) $U = F \& R$ morphonete (form) $F = \{iRd\}Rs$	semonete (reference) $R = \{jRe\}Rs$	delete (denotatum) $jRe$	semantic image (denotable) $j$

Key to symbols:

R	in relation to	d	distinctive function in phonology
&	conjunction of	s	distinctive function in lexology
{}	a set of	e	distinctive function in delology
i..n	[a] certain [set of]		

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