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EXTENDED AXIOMATIC FUNCTIONALISM: POSTULATES[*]

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Abstract. These postulates, comprising six axioms plus ensuing definitions, provide a formal account of the semiotic (including linguistic) theory of extended axiomatic functionalism. They are organised to be maximally comparable with Mulder and Hervey's postulates for standard axiomatic functionalism. The axioms are the primitive statements of the theory, introducing new theoretical propositions. The definitions introduce technical terms by linking them to notions in the theory.

Axiom A and ensuing definitions detail the functional principle, dominating both components of the theory: the system ontology and the signum ontology. The system ontology deals with the abstract semiotic entities in cenology (linguistics, phonology), logology (linguistics, lexology), and delology (denotational semantics). The signum ontology provides a set-theoretically based account of the relationship between system-ontological entities and semiotic occurrences (utterances). Axiom B and ensuing definitions treat almost all aspects of the system ontology, except para-ontotactics, Axiom C and ensuing definitions treat para-ontotactics, and Axiom D and ensuing definitions detail the notion 'sentence' (the maximal unit covered by the theory). Axiom E and ensuing definitions principally treat the allontic level, while Axiom F and ensuing definitions treat remaining aspects of the signum ontology.

Figure 1 *Extended axiomatic functionalism: semiotics* and Figure 2 *Extended axiomatic functionalism: linguistics* (at the end of the postulates) represent visually the main entities and notions of the theory.

The scope of extended axiomatic functionalism compared to that of standard axiomatic functionalism

Extended axiomatic functionalism has its origins in early 1980s, when Michael Lamb became increasingly dissatisfied with aspects of the linguistic descriptions engendered by the standard version of axiomatic functionalism (henceforth standard axiomatic functionalism) developed by Mulder and Hervey since the 1960s (e.g. Mulder 1968; Mulder and Hervey 1972; Hervey 1979; Mulder and Hervey 1980; also Mulder 1989).

Lamb's initial concerns focused around Mulder and Hervey's rejection of free allomorphy, i.e. phonological variance which is not conditioned by phonological or grammatical context. At its simplest free allomorphy is a case in which a single word can be pronounced in two or more phonologically distinct ways. An example is English /aiðr/ (rhym-

[*] Previously unpublished. An earlier version can be found in James Dickins's book *Extended Axiomatic Linguistics* (1998). [Editor's note]

ing with ‘blither’) and /iRðr/ (rhyming with ‘breather’) as phonologically distinct pronunciations of the word ‘either’. On the basis that relatively dissimilar forms having identical denotations should be regarded as synonyms, i.e. different signa, Mulder and Hervey (1972: 29–30) argue that similar forms having identical denotations should be also regarded as synonyms, i.e. different signa (for the distinction between sign and signum, see Mulder 1989, 437, Def. 2a2; Dickins, below, Def. 2a2). Thus, for Mulder and Hervey not only are /felOu/ and /blOuk/ different but synonymous signa, so are /aiðr/ and /iRðr/. In justification of this position, they say:

> As just an example of what difficulties we would let ourselves in for if we used formal SIMILARITY (e.g. /aiðr/~/iRðr/) rather than formal IDENTITY as a criterion to distinguish between SYNONYMS and other types of free variants, we should like to say the following. If we cannot give a precise criterion for what is still similar and what is not, the whole procedure would remain an arbitrary one, and nothing would prevent us from regarding *fellow* and *bloke* as just free variants, but identical signs [signa], as they have the phonological feature /lOu/ in common (Mulder and Hervey 1972: 30–31).

In response to this, Lamb argues:

> Hypothesize i:ðə/aiðə [/aiðr/~/iRðr/] are one sign [signum]. Similarity of expression makes this a reasonable hypothesis. Hypothesis unrefuted, so these are free allomorphs. Even gross variance like *parallelepiped* and *veterinary* can be handled in this way [according to Webster’s New International Dictionary *parallelepiped* can be pronounced as [pærəlɛlɛpaɪpɛd], [pærəlɛlɛpɪpɛd], [pærəlɛlɛpəpɛd], and [pærələlɛpəpɛd]; *veterinary* similarly has a large number of alternative pronunciations].
>
> Mulder and Hervey’s counter-example is not analogous: to hypothesize *fellow*/*bloke* are one sign [signum] is procedurally bizarre in the first place given the lack of similarity of expression (intuition alone is good enough for this) [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 pre-history hypothesized two signs [signa] 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 [signum], but this is refuted by “It’s cool, but not cold” – *Footnote in original*.] ... in any case the hypothesis [that fellow and bloke are one signum] 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 realisation. They are parallel to homophones which have different phonological distinctive function but are impressionistically similar in terms of phonetic realisation. [Obviously real-life denotational circumstances are as crude with relation to contents as real-life phonetic noises are with relation to expressions – *Footnote in original*.]
>
> To hypothesize /aiðr/~/iRðr/ are different signs [signa] 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 [signum] would be as impossible as disproving the existence of unicorns. However, to hypothesize the existence of even one unnecessary sign [signum] 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 *parallelipiped* and *veterinary* (Lamb [1983] 2009: 3).

Mulder and Hervey's prohibition of free allomorphy is not theorematic. There is nothing in the postulates of standard axiomatic functionalism which rules out free allomorphy in theory. Rather, Mulder and Hervey argue that if free allomorphy were allowed in practice, there would be no coherent means of controlling its application (a view contested by Lamb, as seen). However, standard axiomatic functionalism not only rules out such allomorphy ('polymorphy') – i.e. formal variance (of a specific kind) of a signum. It also rules out polysemy (allosemy) – i.e. semantic variance (of a specific kind) of a signum. This it does in an explicitly theoretical manner (as can be theorematically deduced from the postulates in Mulder 1989: 435–457; Mulder and Hervey 1980; 203–211: see, especially Def. 2a1, Def. 24, Def. 5, Def. 5a, Def. 6). Thus, for Mulder and Hervey, 'hand' in the sense 'prehensile part of the body' is a different signum from 'hand' in the sense 'pointer on a dial, indicator, or gauge, which is a different signum from 'hand' in the sense 'labourer or manual worker', and a fortiori a different signum from 'hand' in one of its verbal senses, e.g. 'transmit or offer by the hand', or 'hand' as part of a compound word such as 'hand-out' = 'clothing, food, money, etc. given to a needy person', or in a phrasal verb such as 'hand in' = 'submit', or in an idiom such as 'hand in glove' = 'in close association'. By the early 1980s, Lamb had come to the view that Mulder and Hervey's insistence on analysing all cases of the type 'hand' as different signa, rather than as polysemy (of various types) of a single signum was so contrary to common sense that it undermined the acceptability of the theory of standard axiomatic functionalism.

In *Extended axiomatic linguistics* (Dickins 1998: 351–417), I explored arguments in favour of polysemy in more detail, as well as providing a preliminary set of postulates for extended axiomatic functionalism which explicitly incorporated polysemy into the theory. The major arguments which I put forward in favour of polysemy in that book were:

1. As argued by Lamb (above), Mulder and Hervey's rejection of polysemy as a theoretical notion runs counter to common sense, and produces linguistic descriptions which are intuitively inadequate.
2. Our 'everyday metalanguage' (Lyons 1991: 32) – that is, the way we talk and write about language in a non-technical context – presupposes polysemy, as can be seen from a phrase such as 'funny in both senses', i.e. both amusing and odd. In order to describe such language uses involving everyday metalanguage, we need a theoretical-type apparatus which incorporates the notion of polysemy. We could either introduce this apparatus as an adjunct to our linguistic theory – as would have to be done in the case of standard axiomatic functionalism. Or we can fully incorporate it into our linguistic theory, as is done in extended axiomatic functionalism. All other things being equal, the strategy of full incorporation is preferable because it eliminates the ad-hoc element inherent in employing notions adjunct to the theory proper.
3. Like aspects of everyday metalanguage, figurative language – and most obviously metaphor – implies polysemy. This is obvious in the case of a dead metaphor (cf. Dickins 1998: 258), what I have elsewhere (Dickins 2005) termed a lexicalised metaphor, such as 'foot' as in 'foot of a mountain'. Common sense tells us that 'foot' here is the same word as 'foot' = 'the part of the vertebrate leg below the ankle joint'. The recognition that 'foot' as in 'foot of a mountain' is

> metaphorical also implies a relationship between the two meanings, such that 'foot' in 'foot of a mountain' is a non-basic sense, while 'foot' = 'the part of the vertebrate leg below the ankle joint' is the basic sense of the word. The same relationships hold also for original, non-lexicalised metaphors (Dickins 2005; termed 'live metaphors' in Dickins 1998: 260, 286), such as 'tree' as in 'Tom is a tree', for example. Here, we may not know how 'tree' is to be precisely interpreted. Are we claiming that Tom is a tree because much of his personality remains hidden, just as the extensive root system of a large tree remains hidden beneath the ground? Or, in another context, might we be claiming that Tom is a tree because he provides moral or psychological protection? (E.g. 'Tom is a tree whose leaves protect us all.') Regardless of the metaphorical interpretation of 'tree', the word here seems to involve a kind of polysemy: the metaphorical sense implies the basic non-metaphorical sense, and the existence of the two senses for the single word implies polysemy.

Mulder makes the telling point that in a well-organised theory:

> … there is usually one all-pervading principle that characterises the whole approach. All the other principles are subordinate to it, or, at least, they are interpreted in terms of it. For Functionalists this all-pervading principle, i.e. their primary point of view, is embodied in A. Martinet's dictum: "Function is the criterion of linguistic reality" (Mulder and Hervey 1980: 10).

In Dickins (1998), I argue that the manner in which additional notions, such as polysemy, are incorporated into extended axiomatic functionalism yields a theory in which the functional principle is applied in a more thorough-going manner than in standard axiomatic functionalism, such that the notion of distinctive function is generalised to provide analyses not only of phonology and grammar (as in standard axiomatic functionalism), but also of denotational semantics (more precisely termed *delology* in extended axiomatic functionalism). The resulting theory exhibits complete symmetry between the expression-side and content-sides of the signum (Dickins 1998: 249), and is thus significantly simpler than standard axiomatic functionalism, which is asymmetrical (Dickins 1998: 176). In addition, I argue that any standard axiomatic-functionalist description can be unambiguously recovered from an extended axiomatic-functionalist description; an extended axiomatic-functionalist description cannot, conversely however, be recovered at all from a standard axiomatic-functionalist description (Dickins 1998: 250–251). Extended axiomatic functionalism in this sense subsumes standard axiomatic functionalism. The greater scope, integration, symmetricality and inclusiveness of extended axiomatic functionalism are all features which I believe make it a superior theory to standard axiomatic functionalism.

The separate application of distinctive function to phonology, grammar and denotational semantics (delology) in extended axiomatic functionalism yields three distinct, but interlocking, areas of analysis (description). As in standard axiomatic functionalism, cenology (in linguistics, phonology) is the analysis of semiotic entities which have form but not content (i.e. they are 'empty' of all semantic considerations). Denotational semantics (delology) is the analysis of semiotic entities which have content but no form (i.e. they are entities of a purely semantic nature). Grammar – what is more precisely termed *logology*, and

with respect to linguistics *lexology*, in extended axiomatic functionalism – is the analysis of semiotic entities which have both form and content – i.e. their physical and their meaningful realisations are both relevant to their identity.

Phonology in extended axiomatic functionalism is virtually the same as in standard axiomatic functionalism. Delology is similar to the plerology (grammar) of standard axiomatic functionalism, stripped of the association which plerological entities have with formal considerations. Extended axiomatic-functionalist lexology, however, opens up new vistas for linguistic analysis, allowing for the incorporation of features such as non-denotative (connotative) word-sequencing (word order) into an axiomatic-functionalist approach.

Extended axiomatic-functionalist lexological analyses are still at a very early stage. Within lexology, I have done some work on the morphology (more technically known as *lexematics*) of Sudanese Arabic (Dickins 2006; Dickins *forthcoming*). The results are much more compatible with traditional Arabic morphological notions than are descriptions of Arabic produced using standard axiomatic functionalism.

Lexotactics (comparable to the traditional notion of syntax), and para-lexotactics (further grammatical organisation beyond the level of lexotactics/'syntax') present more challenging problems. The following are some preliminary ideas for English. Consider 'he jumped the gun' in various senses: 1. 'he jumped over the tubed weapon; 2. 'he acted prematurely'; and 3. 'he jumped over the gunman' ('gun' = 'gunman', as in 'he's a hired gun'). Under an extended axiomatic-functionalist analysis, these are all the same lexotactically (the same morphemes in the same combinations with the same 'subject-verb-object' lexotactic structure). The fact that 'jump the gun' in the sense 'act prematurely', for instance, is an idiom is irrelevant here (for a semantic analysis of idioms in terms of what I have called allosemic amalgamation, see Dickins 1998: 241–244).

More interesting is a form like 'The gun he jumped' (as in, for example, 'The gun he jumped, but the cannon was too big, so he had to go round it'). I believe that this should be regarded as lexotactically the same as 'He jumped the gun', albeit that 'He jumped the gun' can mean 1. 'he jumped over the tubed weapon'; 2. 'he acted prematurely'; and 3. 'he jumped over the gunman', while 'The gun he jumped' can only mean, out of the senses given above 1. 'he jumped over the tubed weapon'; and 3. 'he jumped over the gunman' (it cannot have the idiomatic sense 2. 'he acted prematurely'). If this proposal is reasonable, the analytical domain of lexotactics would correspond closely to that of traditional syntax – covering areas of traditional syntactic concern such as the analysis of subject, verb and object for English.

Para-lexotactics by definition deals with the organisation of grammatical entities beyond the lexotactic, and will certainly include intonation within its domain. It appears, however, that para-lexotactics also includes word order patterns which are functional, and which go beyond the analytical notions covered by lexotactics. Thus, 'He jumped the gun' and 'The gun he jumped' are, as argued, the same lexotactically. There is a grammatical difference between them: this, however, is para-lexotactic, rather than lexotactic.

That this kind of word order difference should be part of grammar seems clear in an extended axiomatic-functionalist approach. Signa (i.e. grammatical entities) have both a formal and a semantic aspect. The word order difference between 'He jumped the gun' and 'The gun he jumped' clearly involves a formal difference: in the first case 'the gun' is real-

ised as the end of the sentence, and in the second at the beginning. This word order difference also involves semantic difference: one obvious semantic difference is that in 'He jumped the gun', 'jump […] the gun' can be interpreted idiomatically, but in 'The gun he jumped' it cannot. Of more generalisable semantic importance however, is that the fact that in 'The gun he jumped', 'The gun' is an emphatic, contextually known, element. In functional-sentence perspective terms, 'The gun' might be described as an emphatic theme. While there is apparently no denotative meaning difference between 'He jumped the gun' and 'The gun he jumped' (at least if we ignore the idiomatic sense of the former), there is a connotative meaning difference. Mulder (e.g. 1989: 80, 148, 164, 195–196) specifically excludes connotative meaning, of which functional sentence perspective features are an aspect, from the scope of standard axiomatic functionalism. Inasmuch as these features belong to the system of conventions for communication, extended axiomatic functionalism, by contrast, recognises them as semiotic (cf. Def. 1c in both standard and extended axiomatic functionalism, 'Semiotic system' for 'system of conventions for communication', Mulder 1989: 436; also below).

The account which I have sketched out above of the distinction between aspects of lexotactics and para-lexotactics in English is somewhat hazy, and draws on traditional distinctions in English between subject, verb and object to identify a dividing line between lexotactics and para-lexotactics. This is properly speaking unsatisfactory. Functionalist linguistics (in the sense in which the term 'functionalist' is used in axiomatic functionalism) attempts to provide ex nihilo linguistic descriptions: its goal is not to explicate or develop more traditional accounts of languages.

There may, however, be a more coherent basis to the way in which lexotactics and para-lexotactics have been distinguished above in relation to English clausal grammar. There is a certain correlation (albeit imperfect) in the account which I have given between denotative meaning : lexotactics and connotative meaning : para-lexotactics. There is no theoretical bar to lexotactics conveying connotative meaning, or to para-lexotactics conveying denotative meaning. We cannnot, therefore, simply identify the two levels on these grounds. In this particular instance, however, the fact that there are two clearly distinct types of meaning involved (denotative meaning vs. connotative meaning – and specifically 'functional-sentence-perspective-type' meaning) combined with the fact that there are two fairly obvious ways of looking at the structuring of the material ('abstract structure'-oriented vs. word-order-oriented) suggests that the distinction between what is lexotactic and what is para-lexotactic has at least been drawn at an appropriate point.

The account of aspects of lexotactics and para-lexotactics which I have given in relation to English clause structure above is no more than an initial sketch. It also fails to take into account intonation. As a functional feature, intonation, as noted above, is certainly part of para-lexotactics (fairly obviously, it operates independently from any kind of structuring of words into phrases). However, there can be a very close relationship between the ordering of words and intonation structures. Thus, in 'The gun he jumped', 'The gun' and 'he jumped' must each constitute a separate intonation unit. For a proper extended axiomatic-functionalist account, it would be necessary to ascertain which intonation features are functional, that is 'separately relevant to the purport of which [they are] a part' (Def 1a; Mulder 1989: 436; Def. 1a below). That is to say, we would need to determine which intonation

features have a semiotic identity proper and are not simply additional realisational features of para-lexotactic structures which are more obviously realised by word order differences.

The difficulty of defining what belongs to lexotactics from what belongs to para-lexotactics reflects a more general issue of the scientificity of extended axiomatic-functionalist descriptions. Scientific theories yield descriptions which are in principle refutable: we could in principle find data which demonstrate that the proposed description is wrong (e.g. Popper 1973: 38). Mulder consistently intended axiomatic functionalism to be a scientific theory of semiotics and linguistics. Because of this, he excluded areas such as connotation which he regarded as unamenable to rigorous scientific enquiry. The analyses produced under an extended axiomatic-functionalist lexology (morphology/lexematics, lexotactics/'syntax', and para-lexotactics) are not rigorously scientific: in some case at least, they do not yield analyses (descriptions) which are unambiguously refutable. I have explored this with respect to the morphology/lexematics of Sudanese Arabic in Dickins (2006), and have discussed it from a more theoretical perspective with respect to both morphology/lexematics and lexotactics in Dickins (1998). The difficulties can in fact be seen in Lamb's counter-argument to Mulder and Hervey's 'fellow'/'bloke' and /aiðr/~/iRðr/ example above. Lamb is quite reasonable to argue that similarity of expression allows us to claim that /aiðr/~/iRðr/ are a single sign (signum), and that the lack of similarity of expression of 'fellow' and 'bloke' means that we have to regard these two words as two different signs (signa). This, however, begs the question of how dissimilar two synonymous forms would have to be for us to be forced to analyse them as different signs (signa). It seems to me clear that there can be no precise answer to this question: at the margins judgements of allomorphy vs. sign difference (homosemy; cf. Def. 26e below) have an irreducibly unscientific element. (For further discussion, see Dickins 1998: 169–178.)

More generally, I believe that Mulder's claim that semiotics, including linguistics, is a fully scientific discipline – or at least a potentially fully scientific discipline – is open to doubt. There are many aspects of linguistics, even within standard axiomatic functionalism, where I believe descriptive claims are not unambiguously refutable, e.g. phonematics (for discussion, see Dickins 2007: 109–111). In this regard, it is noteworthy that while Mulder and Hervey in principle seek to remove connotative meaning from the domain of standard axiomatic functionalism, they unambiguously incorporate intonation within the theory (treating it at the level of para-plerotactics and para-phonotactics; e.g. Mulder 1989: 388–389, Def. 18b; 390, Def. 19a; see also Def. 18b, Def. 19a below). Intonation patterns are generally, however, regarded as having connotative rather than denotative meanings. As such, intonation should be expected to fall outside the domain of standard axiomatic functionalism.

Extended axiomatic functionalism, I have argued, offers a broader-scope semiotic (including linguistic) analysis than standard axiomatic functionalism, based on a more symmetrical and therefore simpler overall theory. While extended axiomatic-functionalist analyses may in some instances be less scientific than those of standard axiomatic functionalism, this is justified by the greater common-sense adequacy and scope of the extended axiomatic-functionalist analyses.

Introduction to the postulates

The following postulates for extended axiomatic functionalism are based on the provisional postulates given in Dickins (1998: 355–417, and are intended to be maximally comparable with those for standard axiomatic functionalism in *The strategy of linguistics* (Mulder and Hervey 1980: 40–63) and in *Foundations of axiomatic linguistics* (Mulder 1989: 435–457) as well as Hervey's postulates for axiomatic-functionalist semantics in *The strategy of linguistics* (Mulder and Hervey 1980: 203–211).

Accordingly, I have done two things in drawing up these postulates. Firstly, I have largely confined the postulates to notions in extended axiomatic functionalism which correspond to those already found in standard axiomatic functionalism, only introducing novel notions where these are essential for an understanding of extended axiomatic functionalism. This means that a small number of notions which I have discussed elsewhere (e.g. protocolised allomorph in Dickins 1989: 51, 131) are not formally defined here. Secondly, I have tried as far as possible to maintain the order of the postulates found in Mulder and Hervey (1980) and Mulder (1989). Where there are differences between these two I have attempted to follow the order of Mulder (1989), rather than that of Mulder and Hervey (1980). Since Mulder (1989) does not include postulates for axiomatic-functionalist semantics, the postulates here which correspond to the postulates for axiomatic-functionalist semantics (i.e. Axiom F and associated Definitions) are to be related directly to Hervey's semantic postulates (Mulder and Hervey 1980).

In the case of those definitions ensuing from Axiom F, I have placed a letter F before the main definition "label". Thus Def. F1a provides a definition of utterance, corresponding to Hervey's Def. 1a for utterance (Mulder and Hervey 1980: 203). This preceding letter F makes it possible to distinguish definition labels linked to Hervey's semantic definitions (Mulder and Hervey 1980: 435–457) from definition labels linked to definitions in Mulder (1989; also Mulder and Hervey 1980: 40–63). Thus, in the current Postulates, Def. 1a, which provides a definition of 'functional' (corresponding to Def. 1a in Mulder 1989: 436, and Def. 1a in Mulder and Hervey 1980: 41), is distinguished, by virtue of being given a different label, from Def. F1a.

The attempt to make the order of the present postulates cohere with the orders in Mulder and Hervey (1980) and Mulder (1989) has the disadvantage that it yields a version of the postulates whose order is in some cases less than ideal for the theory which it presents. It is, however, more useful, I believe, to provide a formal presentation of extended axiomatic functionalism which is maximally comparable with standard axiomatic functionalism than one which displays maximum internal elegance.

The postulates for axiomatic functionalism provide a formal exposition of the theory, and comprise two types of statement: (i) a set of axioms, (ii) a set of definitions. The axioms are the "primitive statements" (Mulder and Hervey 1980: 33). Their function is to introduce new theoretical propositions (cf. Mulder and Hervey 1980: 33). Axioms may contain both primitive and non-primitive terms, a primitive term being "a term whose further definition, we are satisfied, would add nothing further to our understanding of that term" (Mulder and Hervey 1980: 25). Definitions, by contrast, "do not introduce new propositions, but merely introduce technical terms by linking them to notions in the theory" (Mulder and Hervey 1980: 33). The chains of definitions accompanying each axiom "ulti-

mately reduce the terms in these axioms to primitive terms" (Mulder and Hervey 1980: 33). That is to say, while definitions may contain terms which are further defined by other definitions, the defined terms ultimately lead to undefined, primitive terms in the axioms or other definitions. This is a necessary state of affairs; the alternative would be to have a theory of infinite length, in which at least some terms were defined and their definitions further defined ad infinitum.

On the basis of the postulates (axioms and definitions) it is also possible to deduce an unlimited number of theorematic notions (theorems), i.e. notions which follow logically from the axioms and definitions. Such theorematic notions can themselves be designated by technical terms. Any technical term, therefore, which does not appear in the postulates, but whose definition can be derived logically from notions in the postulates is a theorematic term. Those terms introduced in Dickins (1998; esp. Chapter Three), for example, which are properly defined via terms in the postulates, but which do not themselves appear as terms in the postulates are thus theorematic terms.

Within the postulates, the fact that a term is theoretically primitive (regardless of whether it is part of an axiom or a definition) does not preclude its further discussion and elucidation outside the formal framework of the theory. That is to say, in the above definition of a primitive term as "a term whose further definition, we are satisfied, would add nothing further to our understanding of that term", the phrase "whose further definition" is to be understood as meaning "whose further definition within the postulates". This is only common sense. The alternative would be to impose a ban on informal discussion of terms in the theory - something which would hardly aid the comprehensibility or scrutability of axiomatic functionalism. In the earlier version of the postulates in particular (Mulder and Hervey 1980: 41–63, 203–211), but also in the more recent version (Mulder 1989: 435–457), some postulates are accompanied by "explanations" (Mulder 1989: 435). In these postulates for extended axiomatic functionalism, I have retained such explanations, particularly for the axioms, since they provide useful guidance to the scope and direction of particular features of the theory. To make it clearer, however that these explanatory statements are not part of the postulates themselves, I have in all cases introduced them by the word *Comment*, and indented the explanatory material on both the left and right margins.

It should be noted that definitions may be applied at both the level of theory and that of description (cf. Dickins 1998: 35–39). They are, however, normally stated in terms of their applicability to the level of description. Thus, system ontology (Def. 3a1a), for example, is not only "logology (Def. 2a4a), cenology (Def. 2b1a), and delology (Def. 2c1a)", i.e. it is not only concerned with description at these levels. It can also be regarded as the name of the sub-theory in terms of which relevant descriptions are made. In a number of cases, however, it seemed more sensible to frame definitions in purely theory-oriented terms. Thus, allomorphics (Def. 24b1b), for example, is defined as "the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allomorphs (second sense) (Def. 24b1a) and related notions".

The main body of the postulates is preceded by five preliminary definitions, for *lex* (Def. 0a), *phon* (Def. 0b), and *graph* (Def. 0c) (as stems), *linguistics* (Def. 0d), and *ont* (Def. 0e) (as a stem). The first three of these terms, *lex*, *phon*, and *graph* provide definitions which allow for the generation of set of terms for spoken natural language from general semiotic terms. The fourth, *linguistics*, defines the overall scope of extended axiomatic

functionalism in relation to natural language. This usage of 'linguistics' as a technical term within extended axiomatic functionalism corresponds roughly to what has elsewhere (e.g. Dickins 12; 310–315) been referred to as 'core-linguistics'. The technical use of the term 'linguistics' here does not imply a wish to replace more general usages of 'linguistics' (cf. definitions of 'linguistics' in Crystal 2003) – just as, for example, the use of a term such as 'theme' as a technical term in Functional Sentence Perspective does not replace more general usages of 'theme' (e.g. in "the theme of this book is as follows"). The fifth preliminary definition, for *ont*, provides a cover term for notions in the theory generally. The preliminary definitions do not form part of the postulates for standard axiomatic functionalism in any versions. They are included in these provisional postulates in order to simplify subsequent axioms and definitions, by removing specific reference from these axioms and definitions to natural language in all cases, and to generalising cover terms in most cases.

To make these postulates easier to relate to the postulates for standard axiomatic functionalism, I have included full references to both versions of the postulates for standard axiomatic functionalism (including Hervey's postulates for standard axiomatic-functionalist semantics). In order to make the current postulates easier to use, I have included full internal cross-references. The figures in the Appendix to the postulates, Figure 1 *Extended axiomatic functionalism: semiotics* and Figure 2 *Extended axiomatic functionalism: linguistics*, provide a visual representation of the main entities and notions of the theory, and are intended to make it easier for the reader to see how key aspects of it relate to one another.

Postulates for Extended Axiomatic Functionalism

Comment: The general organisation of the postulates is as follows: Axioms A–F (and ensuing Definitions for each Axiom) together cover the whole of the theory of extended axiomatic functionalism.

Axiom A states the all-pervading point of view of the theory.

Axioms B, C and D deal mainly with the system ontology (Def. 3a1a).

Axioms E and F deal with the signum ontology (Def. F4.4).

For a corresponding statement of the scope of each of the axioms in standard axiomatic functionalism, cf. Mulder (1989: 457).

Preliminary definitions

Def. 0a. '*lex*' (as stem) for '*log* (as stem) in natural language throughout'.

Def. 0b. '*phon*' (as stem) for '*cen* (as stem) in spoken natural language throughout'.

Comment: In accordance with the intention of the preliminary definitions, no terms involving *lex*, *phon* or *graph* are included in the definitions below. All terms for natural language can be generated by substituting *phon* for *cen*, and *lex* for *log* throughout the definitions. This allows a rather neater presentation of the postulates for extended axiomatic functionalism than was possible for the versions of standard axiomatic functionalism.

Def. 0c. '*graph*' (as stem) for '*cen* (as stem) in written natural language throughout'.

Comment: In accordance with the intention of the preliminary definitions, no terms involving *lex*, *phon* or *graph* are included in the definitions below. All terms for natural language can be generated by substituting *phon or graph* for *cen*, and *lex* for *log* throughout the definitions. This allows a rather neater presentation of the postulates for extended axiomatic functionalism than was possible for the versions of standard axiomatic functionalism.

Def. 0d. 'Linguistics' for 'semiotics (Def. F4.5) in natural language'.

Def. 0e. '*ont*' (as stem) for '*log*, *cen*, or *del* (as stems) throughout'.

Comment: In principle the preliminary definition of *ont* should allow for the elimination of terms involving *ont* throughout. In practice, a number of terms involving *ont* have been retained; e.g. allont (Def. 26o), onto (Def. 3a1), ontotactics (Def. 3b), etc. A more radical strategy would be to define *log*, *cen*, and *del* as varieties of *ont* here, and to eliminate the use of the terms *log*, *cen*, and *del* in the postulates wherever possible. I have not adopted this strategy, as it would have meant significantly altering the form of the postulates, and rendering them far less easily comparable with versions of the postulates for standard axiomatic functionalism.

Axiom A. All features (Def. 1c1) in semiotic sets are functional (Def. 1a) (cf. Mulder and Hervey 1980: 41, Axiom A; Mulder 1989: 436, Axiom A).

Comment: Axiom A states the point of view of the theory, i.e. the functional principle. The definitions under Axiom A give an interpretation to the axiom, and provide a system-ontological (cf. Def. 3a1a) definition of semiotic system

(Def. 1c, Def. 5). The reason why the term 'semiotic system' (Def. 1c, Def. 5) is not used in the axiom itself is that otherwise the recognition of functionality for features (Def. 1c1) in sub-systems (cf. Def. 1b) of semiotic systems (Def. 1c, Def. 5) (e.g. cenology (Def. 2b1a), cenotactics (Def. 2b1c), logology (Def. 2a4a), logotactics (Def. 2a4c), etc.) would be precluded (adapted from Mulder 1989: 436).

Def. 1a. 'Functional' for 'separately relevant to the purport of the whole to which it is a part' (cf. Mulder and Hervey 1980: 41, Def.1a; Mulder 1989: 436, Def. 1a).

Def. 1b. 'System' for 'self-contained (Def. 1b1) set of features (Def. 1c1) with a common purport' (cf. Mulder and Hervey 1980: 41, Def.1b; Mulder 1989: 436, Def. 1b).

Def. 1b1. 'Self-contained' for 'representing all relative dependencies (cf. Def. 6a, Def. 6b, Def. 11a, Def. 11b, Def. 11c) of its members as members of the set in question'.

Comment: The notions functional (Def. 1a.) and self-contained can be applied to combinations (Def. 6c) (of items) as well as to sets. In the case of combinations (Def. 6c) the term members has to be replaced by constituents (Def. 7f1) (adapted from Mulder and Hervey 1980: 41, Def. 1b1; Mulder 1989: 436, Def. 1b1).

Def. 1c. 'Semiotic system' for 'system (Def. 1b) of conventions for communication'.

Comment: Alternative definition to Def. 5 (cf. Mulder and Hervey 1980: 42, Def. 1c; Mulder 1989: 436, Def. 1c).

Def. 1c1. 'Features' for 'elements, analytical properties of elements, or relations between elements or properties of elements' (cf. Mulder and Hervey 1980: 42, Def. 1c1; Mulder 1989: 436, Def. 1c1).

Def. 1c2. 'Entity' for 'element or discrete disjunct analytical property of element' (cf. Mulder and Hervey 1980: 42, Def. 1c2; Mulder 1989: 436, Def. 1c2).

Def. 1c2a. 'Basic entity' or 'minimum entity' for 'entity in ontomics (Def. 3a1a1), ontidics (Def. 3a1a2), ontematics (Def. 3a1b), or ontotactics (Def. 3b) which is not further analysable at that level'.

Comment: Basic entity (or minimum entity) means essentially the same thing as ultimate constituent (Def. 7f1b). There is, however, a difference in point of view. Ultimate constituent (Def. 7f1b) implies a decompositional analysis, whereas basic entity implies a compositional analysis. It is theorematic that in ontomics (Def. 3a1a1) and ontidics (Def. 3a1a2), the basic entity is also the unit (Def. 9e). See also: base (Def. 20a).

Def. 1c3. 'Semiotic entity' for 'entity (Def. 1c2) in semiotic system (Def. 1c, Def. 5)' (cf. Mulder and Hervey 1980: 42, Def. 1c3; Mulder 1989: 437, Def. 1c3).

Comment: In *Foundations of axiomatic linguistics*, Mulder includes a Def. 1d. " 'Communication' for 'subjective (i.e. involving choice or optionality) conveyance of information'. This rules out 'labels', 'names' or 'designations', not to be confused with 'communicating' these or about these, from being 'communication' in our sense" (Mulder 1989: 437). For reasons why I have excluded this definition from this set of postulates, see Dickins 1998: 418; Note 1).

Axiom B. Semiotic systems (Def. 1c, Def. 5) contain simple (cf. Def. 4a), and may contain complex (cf. Def. 6c) ordered (cf. Def. 4b2), or complex (cf. Def. 6c) unordered (cf. Def. 4b1) logos (Def. 2a4), cenos (Def. 2b1), and delos (Def. 2c1) (cf. Mulder and Hervey 1980: 42, Axiom B; Mulder 1989: 437, Axiom B).

Comment: Axiom B is the most powerful axiom of the whole theory. It harbours (after being given an interpretation by means of definitions that follow it) the theory of semiotic systems (Def. 1c, Def. 5) (which is one of the sub-theories), as well as almost the whole of the system ontology (Def. 3a1a) of any semiotic system (Def. 1c, Def. 5) (i.e. cenology (Def. 2b1a), logology (Def. 2a4a) and delology (Def. 2c1a)) with the exception of the para-ontotactic (cf. Def. 19f) sub-systems (Def. 1b). The latter are covered by Axioms C and D. The system ontology (Def. 3a1a) is unfolded in Definitions 2–16c, together with the basic methodology for descriptions in logology (Def. 2a4a), cenology (Def. 2b1a), and delology (Def. 2c1a). Definitions 2–2a3b and 2b develop that part of the theory of indices which is relevant to semiotic systems (Def. 1c, Def. 5) (adapted from Mulder 1989: 437–8).

Def. 2. 'Index' for 'class of items with information-value (Def. 2a)' (cf. Mulder 1989: 437, Def. 2).

Comment: Index is here formally defined as a class. The term "index", however, can also be used for an item (i.e. member) of the class making up the index. See Dickins 1998: 418; Note 2; also Def. F4, below.

Def. 2a. 'Information-value' or 'specific set of potential interpretations' (cf. Mulder and Hervey 1980: 42, Def. 2; Mulder 1989: 436, Def. 2a).

Def. 2a1. 'Signum' (symbolised: 'S') for 'sign (Def. 2a2)' or 'symbol (Def. 2a3)'. Alternative definition: 'Semiotic entity (Def. 1c3) which has both morphontic (cf. Def. F3h) and semantic (cf. Def. F4.3) aspects'. Also: 'Entity in signum ontology (Def. F4.4) corresponding to logo (Def. 2a4) in system ontology (Def. 3a1a).

Comment: Alternative definition to Def. 24 (cf. Mulder and Hervey 1980: 42, Def. 2a; Mulder 1989: 437, Def. 2a1).

Def. 2a2. 'Sign' for 'signum (Def. 2a1, Def. 24) the information-value (Def. 2a) of all of whose allosemes (Def. 24c1a) is determined by wholly fixed conventions' (cf. Mulder and Hervey 1980: 42, Def. 2a1; Mulder 1989: 437, Def. 2a2).

Comment: Cf. extended axiomatic functionalism Def. 2c.

Def. 2a3. 'Symbol' for 'signum (Def. 2a1, Def. 24) the information-value (Def. 2a) of at least one of whose allosemes (Def. 24c1a) is not determined by wholly fixed conventions, i.e to which a temporary information-value (Def. 2a) can be attached by a definition' (cf. Mulder and Hervey 1980: 42, Def. 2a2; Mulder 1989: 437, Def. 2a3).

Def. 2a3a. ‘Proper symbol’ for ‘symbol (Def. 2a3) with partially fixed conventional information-value (Def. 2a)’ (cf. Mulder and Hervey 1980: 42, Def. 2a2a; Mulder 1989: 436, Def. 2a3a).

Def. 2a3b. ‘Nonce symbol’ for ‘symbol (Def. 2a3) with wholly non-fixed conventional information-value (Def. 2a), i.e. with no fixed information-value (Def. 2a) at all’ (cf. Mulder and Hervey 1980: 42, Def. 2a2b; Mulder 1989: 436, Def. 2a3b).

Comment: Definitions for both proper symbol (Def. 2a3a) and nonce symbol (Def. 2a3b) have been included here. However, it may be that the notion nonce symbol in particular should be excluded from the postulates. As Shimizu and Lamb note, “The subdivision of symbols into proper symbols and nonce symbols ... we both consider problematic” (Shimizu and Lamb 1985: 118; cf. Dickins 1998: 13–16).

Def. 2a4. ‘Logo’ for ‘entity (Def. 1c2) in system ontology (Def. 3a1a) corresponding to a signum (Def. 2a1, Def. 24) in system ontology (Def. F4.4)’ (cf. Mulder and Hervey 1980: 42, Def. 2a3; Mulder 1989: 436, Def. 2a4).

Def. 2a4a. ‘Logology’ for ‘system (Def. 1b) of logos (Def. 2a4)’. This may be either a simple (cf. Def. 4a) logology (logomics (Def. 2a4a1) or logidics (Def. 2a4a2)) or a complex (cf. Def. 6c) logology (cf. Mulder and Hervey 1980: 42, Def. 2a3a; Mulder 1989: 438, Def. 2a4c).

Comment: Logology is the level of description in the system ontology (Def. 3a1a) which corresponds to logologics (Def. F1b2a4) (also morphologics (Def. F1b1a3) and semologics (Def. F1b2a3)) in the system ontology (Def. F4.4).

Def. 2a4a1. ‘Logomics’ for ‘simple (cf. Def. 4a) logology (Def. 2a4a) which does not interlock (cf. Def. 3c2a) with a complex (cf. Def. 6c) logology (Def. 2a4a)’.

Comment: It follows that a logology (Def. 2a4a) which has a logomics will have only a logomics; i.e. the logology (Def. 2a4a) will consist entirely of an unordered set of logomes (Def. 8b5) in opposition to one another.

Def. 2a4a2. ‘Logidics’ for ‘simple (cf. Def. 4a) logology (Def. 2a4a) which interlocks (cf. Def. 3c2a) with a complex (cf. Def. 6c) logology (Def. 2a4a), i.e. which interlocks (cf. Def. 3c2a) with a logematics (Def. 2a4b) or with a logidotactics (Def. 2a4c1)’.

Def. 2a4b. ‘Logematics’ for ‘complex (cf. Def. 6c) unordered (cf. Def. 4b1) logology (Def. 2a4a)’ (cf. Mulder and Hervey 1980: 42, Def. 2a3b; Mulder 1989: 438, Def. 2a4a).

Comment: A logematics interlocks (cf. Def. 3c2a) with a logemotactics (Def. 2a4c2).

Def. 2a4c. ‘Logotactics’ for ‘complex (cf. Def. 6c) ordered (cf. Def. 4b2) logology (Def. 2a4a)’. Alternative definition: ‘logidotactics (Def. 2a4c1) or logemotactics (Def. 2a4c2)’ (cf. Mulder and Hervey 1980: 42, Def. 2a3c; Mulder 1989: 438, Def. 2a4b).

Comment: A logotactics interlocks (cf. Def. 3c2a) with a para-logotactics (Def. 19c).

Def. 2a4c1. ‘Logidotactics’ for ‘logotactics (Def. 2a4c) in a compound (cf. Def. 5a) logology (Def. 2a4a) which does not include a logematics (Def. 2a4b)’.

Def. 2a4c2. ‘Logemotactics’ for ‘logotactics (Def. 2a4c) in a compound (cf. Def. 5a) logology (Def. 2a4a) which includes a logematics (Def. 2a4b)’.

Def. 2b. ‘Figura’ for ‘semiotic entity (Def. 1c3) which has only a morphontic (cf. Def. F3h) aspect’. Alternative definition: ‘Entity in signum ontology (Def. F4.4) corresponding to a ceno (Def. 2b1) in system ontology (Def. 3a1a)’ (cf. Mulder and Hervey 1980: 43, Def. 2b; Mulder 1989: 438, Def. 2b).

Def. 2b1. ‘Ceno’ for ‘entity (Def. 1c2) in system ontology (Def. 3a1a) corresponding to a figura (Def. 2b) in signum ontology (Def. F4.4)’ (cf. Mulder and Hervey 1980: 43, Def. 2b1; Mulder 1989: 438, Def. 2b1).

Def. 2b1a. ‘Cenology’ for ‘system (Def. 1b) of cenos (Def. 2b1)’. This may be either a simple (cf. Def. 4a) cenology (cenomics (Def. 2b1a1) or cenidics (Def. 2b1a2)) or a complex (cf. Def. 6c) cenology (cf. Mulder and Hervey 1980: 43, Def. 2b1a; Mulder 1989: 438, Def. 2b1c).

Comment: Cenology is the level of description in the system ontology (Def. 3a1a) to which corresponds cenologics (Def. F3g) in the signum ontology (Def. F4.4).

Def. 2b1a1. ‘Cenomics’ for ‘simple (cf. Def. 4a) cenology (Def. 2b1a) which does not interlock (cf. Def. 3c2a) with a complex (cf. Def. 6c) cenology (Def. 2b1a)’.

Comment: It follows that a cenology (Def. 2b1a) which has a cenomics will have only a cenomics; i.e. the cenology (Def. 2b1a) will consist entirely of an unordered set of cenomes (Def. 8a5) in opposition to one another.

Def. 2b1a2. ‘Cenidics’ for ‘simple (cf. Def. 4a) cenology (Def. 2b1a) which interlocks (cf. Def. 3c2a) with a complex (cf. Def. 6c) cenology (Def. 2b1a), i.e. which interlocks (cf. Def. 3c2a) with a cenematics (Def. 2b1b) or with a cenidotactics (Def. 2b1c1)’.

Def. 2b1b. ‘Cenematics’ for ‘complex (cf. Def. 6c) unordered (cf. Def. 4b1) cenology (Def. 2b1a)’ (cf. Mulder and Hervey 1980: 43, Def. 2b1b; Mulder 1989: 438, Def. 2b1a).

Comment: A cenematics interlocks (cf. Def. 3c2a) with a cenemotactics (Def. 2b1c2).

Def. 2b1c. ‘Cenotactics’ for ‘complex (cf. Def. 6c) ordered (cf. Def. 4b2) cenology (Def. 2b1a)’. Alternative definition: ‘cenidotactics (Def. 2b1c1) or cenemotactics’ (Def. 2b1c2) (cf. Mulder and Hervey 1980: 43, Def. 2b1c; Mulder 1989: 438, Def. 2b1b).

Comment: A cenotactics interlocks (cf. Def. 3c2a) with a para-cenotactics (Def. 18c).

Def. 2b1c1. ‘Cenidotactics’ for ‘cenotactics (Def. 2b1c) in a compound (cf. Def. 5a) cenology (Def. 2b1a) which does not include a cenematics (Def. 2b1b)’.

Def. 2b1c2. ‘Cenemotactics’ for ‘cenotactics (Def. 2b1c) in a compound (cf. Def. 5a) cenology (Def. 2b1a) which includes a cenematics (Def. 2b1b)’.

Def. 2b1d. ‘Cenological form’ (symbolised: *p*) for ‘notion in signum ontology (Def. F4.4), corresponding to feature (Def. 1c1) potentially belonging to cenology (Def. 2b1a)’ (cf. Mulder and Hervey 1980: 43, Def. 3a4; Mulder 1989: 438, Def. 2b1d). Alternative definition to Def. 23. Formal definition: $p = \{f^{i\ldots n}\mathrm{Rd}\}$.

Def. 2c. ‘Denotation’ for ‘semiotic entity (Def. 1c3) which has only a semantic (cf. Def. F4.3) aspect’. Alternative definition ‘Entity in signum ontology (Def. F4.4) corresponding to delo (Def. 2c1) in system ontology (Def. 3a1a)’.

Comment: Cf. standard axiomatic functionalism Def. 2a2a.

Def. 2c1. ‘Delo’ for ‘entity (Def. 1c2) in system ontology (Def. 3a1a) corresponding to a denotation (Def. 2c) in signum ontology (Def. F4.4)’.

Def. 2c1a. ‘Delology’ for ‘system (Def. 1b) of delos (Def. 2c1)’. This may be either a simple (cf. Def. 4a) delology (delomics (Def. 2c1a1) or delidics (Def. 2c1a2)) or a complex (cf. Def. 6c) delology.

Comment: Delology is the level of description in the system ontology (Def. 3a1a) to which corresponds delologics (Def. F4.2) in the signum ontology (Def. F4.4).

Def. 2c1a1. ‘Delomics’ for ‘simple (cf. Def. 4a) delology (Def. 2c1a) which does not interlock (cf. Def. 3c2a) with a complex (cf. Def. 6c) delology (Def. 2c1a)’.

Comment: It follows that a delology (Def. 2c1a) which has a delomics will have only a delomics; i.e. the delology (Def. 2c1a) will consist entirely of an unordered set of delomes (Def. 8c5) in opposition to one another.

Def. 2c1a2. ‘Delidics’ for ‘simple (cf. Def. 4a) delology (Def. 2c1a) which interlocks (cf. Def. 3c2a) with a complex (cf. Def. 6c) delology (Def. 2c1a), i.e. with a delematics (Def. 2c1b) or with a delidotactics (Def. 2c1c1)’.

Def. 2c1b. ‘Delematics’ for ‘complex (cf. Def. 6c) unordered (cf. Def. 4b1) delology (Def. 2c1a)’.

Comment: A delematics interlocks (cf. Def. 3c2a) with a delemotactics (Def. 2c1c2).

Def. 2c1c. ‘Delotactics’ for ‘complex (cf. Def. 6c) ordered (cf. Def. 4b2) delology (Def. 2c1a)’. Alternative definition: ‘delidotactics (Def. 2c1c1) or delemotactics (Def. 2c1c2)’.

Comment: A delotactics interlocks (cf. Def. 3c2a) with a para-delotactics (Def. 18i).

Def. 2c1c1. ‘Delidotactics’ for ‘delotactics (Def. 2c1c) in a compound (cf. Def. 5a) delology (Def. 2c1a) which does not include a delematics (Def. 2c1b)’.

Def. 2c1c2. ‘Delemotactics’ for ‘delotactics (Def. 2c1c) in a compound (cf. Def. 5a) delology (Def. 2c1a) which includes a delematics (Def. 2c1b)’.

Def. 2c1d. ‘Delological form’ (symbolised: *q*) for ‘notion in signum ontology (Def. F4.4), corresponding to feature (Def. 1c1) potentially belonging to delology (Def. 2c1a)’. Formal definition: $q = \{gi^{\cdots n}\mathrm{Re}\}$. Alternative definition to Def. 23c.

Comment: Def. 3a in Mulder and Hervey (1980: 43) and Mulder (1989: 438), which provides a definition for phonology, and more generally for forms with *phon*, is rendered unnecesary in the extended version by the inclusion of Def. 0b.

Def. 3a1. ‘Onto’ for ‘logo (Def. 2a4), ceno (Def. 2b1), or delo (Def. 2c1)’.

Def. 3a1a. ‘System ontology’ for ‘logology (Def. 2a4a), cenology (Def. 2b1a), and delology (Def. 2c1a)’ (cf. Mulder 1989: 438, Def. 2b2).

Comment: Cf. extended axiomatic functionalism, Def. 0a, Def. 0b.

Def. 3a1a1. ‘Ontomics’ for ‘logomics (Def. 2a4a1), cenomics (Def. 2b1a1), or delomics (Def. 2c1a1)’.

Comment: It follows that a system ontology (Def. 3a1a) which has an ontomics will have only an ontomics; i.e. the system ontology (Def. 3a1a) will consist entirely of an unordered set of ontomes (Def. 8d5) in opposition to one another.

Def. 3a1a2. ‘Ontidics’ for ‘logidics (Def. 2a4a2), cenidics (Def. 2b1a2), or delidics (Def. 2c1a2)’.

Def. 3a1b. ‘Ontematics’ for ‘logematics (Def. 2a4b), cenematics (Def. 2b1b), or delematics (Def. 2c1b)’.

Comment: An ontematics interlocks (cf. Def. 3c2a) with an ontemotactics (Def. 3a1c2).

Def. 3a1c1. ‘Ontidotactics’ for ‘logidotactics (Def. 2a4c1), cenidotactics (Def. 2b1c1), or delidotactics (Def. 2c1c1)’.

Def. 3a1c2. ‘Ontemotactics’ for ‘logemotactics (Def. 2a4c2), cenemotactics (Def. 2b1c2) or delemotactics (Def. 2c1c2)’.

Def. 3a1d. ‘Ontological form’ for ‘cenological form (Def. 2b1d, Def. 23), or delological form (Def. 2c1d, Def. 23c)’.

Def. 3b. ‘Ontotactics’ or ‘articulation’ for ‘logotactics (Def. 2a4c), cenotactics (Def. 2b1c), or delotactics (Def. 2c1c)’ (cf. Mulder and Hervey 1980: 43, Def. 3b; Mulder 1989: 439, Def. 3b).

Comment: An ontotactics interlocks (Def. 3c2a) with a para-ontotactics (Def. 19f).

Def. 3c. ‘Double articulation (Def. 3b)’ for ‘both logotactics (Def. 2a4c) and cenotactics (Def. 2b1c), or both logotactics (Def. 2a4c) and delotactics (Def. 2c1c)’ (cf. Mulder and Hervey 1980: 43, Def. 3c; Mulder 1989: 439, Def. 3c).

Def. 3c1. ‘Language’ for ‘semiotic system (Def. 1c, Def. 5) with double articulation (Def. 3c) with respect to both morphontics (Def. 3h) and semantics (Def. F4.3)’ (cf. Mulder and Hervey 1980: 43, Def. 3c1; Mulder 1989: 439, Def. 3c1).

Comment: That is to say, a “language” in this technical sense has a cenotactics (Def. 2b1c), a logotactics (Def. 2a4c), and a delotactics (Def. 2c1c).

Def. 3c2. ‘Proper language (Def. 3c1)’ for ‘semiotic system (Def. 1c, Def. 5) with a cenology (Def. 2b1a) containing both a cenematics (Def. 2b1b) and a cenotactics (Def. 2b1c), a delology (Def. 2c1a) containing both a delematics (Def. 2c1b) and a delotactics (Def. 2c1c), and a logology (Def. 2a4a) containing both a logematics (Def. 2a4b) and a logotactics (Def. 2a4c)’ (cf. Mulder and Hervey 1980: 43, Def. 3c2; Mulder 1989: 439, Def. 3c2).

Comment: All natural languages known to date are proper languages, but not necessarily vice versa. Natural languages, in addition, incorporate para-ontotactics (Def. 19f), but so do some other semiotic systems (Def. 1c, Def. 5) (adapted from Mulder 1989: 439). In *Foundations of axiomatic linguistics* Mulder (1989: 439) implies that all semiotic systems (Def. 1c, Def. 5) by definition have para-tactic levels (cf. para-ontotactics: Def. 19f). This is not the position adopted in earlier versions of the theory (cf. Mulder and Hervey 1980: 43), nor is it the position adopted in the extended version.

Def. 3c2a. ‘Interlocking’ for ‘in system ontology (Def. 3a1a) the one system (Def. 1b) providing the forms of the realisations (Def. F4.7) of the entities (Def. 1c2) of the other system (Def. 1b), termed transformational interlock’, or for ‘the one sub-system (Def. 1b providing the basic entities (Def. 1c2a) – i.e. the ultimate constituents (Def. 7f1b) – of the other sub-system (Def. 1b), termed ontological interlock’.

Comment: A cenology (Def. 2b1a) and a logology (Def. 2a4a), also a delology (Def. 2c1a) and a logology (Def. 2a4a), interlock transformationally. A cenology (Def. 2b1a) provides the cenos (Def. 2b1) to which correspond the cenological forms (Def. 2b1d, Def. 23) of the allomorphs (Def. 24b1a) which are the morphontic (cf. Def. F3h) manifestations (Def. 26o) of expressions (Def. 24a), corresponding to logos (Def. 2a4). Similarly a delology (Def. 2c1a) provides the delos (Def. 2c1) to which correspond the delological forms (Def. 2c1d, Def. 23c) of the allosemes (Def. 24c1a) which are the semantic (cf. Def. F4.3) manifestations (Def. 26o) of contents (Def. 24b), corresponding to logos (Def. 2a4).

A logidics (Def. 2a4a2) and a logematics (Def. 2a4b), a cenidics (Def. 2b1a2) and cenematics (Def. 2b1b), a delidics (Def. 2c1a2) and a delematics (Def. 2c1b), a logematics (Def. 2a4b) and a logotactics (Def. 2a4c), a cenematics (Def. 2b1b) and a cenotactics (Def. 2b1c), a delematics (Def. 2c1b) and a delotactics (Def. 2c1c), also a logidics (Def. 2a4a2) and a logidotactics (Def. 2a4c1), a cenidics (Def. 2b1a2) and a cenidotactics (Def. 2b1c1), and a delidics (Def. 2c1a2) and a delidotactics (Def. 2c1c1) interlock ontologically.

There is also a kind of interlock, similar to ontological interlock, between cenotactics (Def. 2b1c) and para-cenotactics (Def. 18c), logotactics (Def. 2a4c) and para-logotactics (Def. 19c), and delotactics (Def. 2c1c) and para-delotactics (Def. 18i), but this is of a different kind. In these cases the ontotactics (Def. 3b) provide the entities (Def. 1c2) that correspond to the base (Def. 20a) of entities (Def. 1c2) in para-ontotactics (Def. 19f) (cf. Mulder 1989: 440).

Def. 4a. ‘Simple system (Def. 1b)’ for ‘system (Def. 1b) without combinations (Def. 6c) of entities (Def. 1c2)’ (cf. Mulder and Hervey 1980: 44, Def. 4a; Mulder 1989: 440, Def. 4a).

Def. 4b. ‘Complex system (Def. 1b)’ for ‘system (Def. 1b) with combinations (Def. 6c) of entities (Def. 1c2)’ (cf. Mulder and Hervey 1980: 44, Def. 4b; Mulder 1989: 440, Def.4b).

Def. 4b1. ‘Unordered system (Def. 1b)’ for ‘system (Def. 1b) without ordering relations (Def. 6a) between entities (Def. 1c2)’ (cf. Mulder and Hervey 1980: 44, Def. 4b1; Mulder 1989: 440, Def. 4b1).

Comment: This may be an ontomics (Def. 3a1a1), an ontidics (Def. 3a1a2), or an ontematics (Def. 3a1b).

Def. 4b2. ‘Ordered system (Def. 1b)’ for ‘system (Def. 1b) with ordering relations (Def. 6a) between entities (Def. 1c2)’ (cf. Mulder and Hervey 1980: 44, Def. 4b2; Mulder 1989: 440, Def.4b2).

Def. 5. ‘Semiotic system’ for ‘system (Def. 1b) constituted by the transformational interlock (Def. 3c2a) of one logology (Def. 2a4a) with one cenology (Def. 2b1a) and one delology (Def. 2c1a)’. Alternative definition to Def. 1c (cf. Mulder and Hervey 1980: 44, Def. 5; Mulder 1989: 440, Def. 5).

Comment: "Definitions 3b–5 are specially geared to clarifying the notion proper language. All natural languages are proper languages, but there is at least a theoretical possibility that the reverse does not hold" (Mulder 1989: 440).

Def. 5a. 'Compound semiotic system' for 'semiotic system (Def. 1c, Def. 5) that is itself a system (Def. 1b) of ontologically interlocking (Def. 3c2a) systems (Def. 1b)' (cf. Mulder and Hervey 1980: 83-84).

Comment: Compound semiotic systems (Def. 1c, Def. 5), as defined here, involve interlock (cf. Def. 3c2a) between different levels within the system ontology (Def. 3a1a). Thus a cenology (Def. 2b1a) is compound if there is at least either a cenematics (Def. 2b1b) or a cenidotactics (Def. 2b1c1) interlocking (Def. 3c2a) with the basic inventory of elements (this basic inventory being by definition in this case a cenidics (Def. 2b1a2), and not a cenomics (Def. 2b1a1)).

Def. 6a. 'Ordering relations' for 'asymmetrical (cf. Def. 11a) relations between entities (Def. 1c2) in combinations (constructions) (Def. 6c, Def. 7f)' (cf. Mulder and Hervey 1980: 44, Def. 6a; Mulder 1989: 440, Def. 6a).

Def. 6b. 'Relations of simultaneity' for 'symmetrical (cf. Def. 11b, Def. 11c) relations between entities (Def. 1c2) in combinations (constructions) (Def. 6c, cf. Def. 7f)' (cf. Mulder and Hervey 1980: 44, Def. 6b; Mulder 1989: 440, Def. 6b).

Comment: "By Axiom A, only functional criteria may be brought to bear in deciding whether a relation is symmetrical or not" (Mulder 1989: 440).

Def. 6c. 'Construction (cf. Def. 7f)' or 'combination' or 'complex' for 'self-contained (Def. 1b1) complex of entities (Def. 1c2) in cenology (Def. 2b1a), delology (Def. 2c1a) or logology (Def. 2a4a)' (cf. Mulder 1989: 440, Def. 6c).

Comment: The terms imply such notions as: complex ceneme (Def. 8a), cenotagm (Def. 9a), complex para-cenotagm (Def. 18e), complex deleme (Def. 8c), delotagm (Def. 9c), complex para-delotagm (Def. 18k), complex logeme (Def. 8b), logotagm (Def. 9b), complex para-logotagm (Def. 19e), complex sentence (Def. 21) (i.e. consisting of more than one clause (Def. 21a) as its immediate constituents (Def. 7f1a)), and self-contained (Def. 1b1) bundle of immediate constituents (Def. 7f1a) (cf. Mulder 1989: 440–441).

Def. 7a. 'Paradigmatic' for 'the oppositional aspect of semiotic entities (Def. 1c2)' (cf. Mulder and Hervey 1980: 44, Def. 7a; Mulder 1989: 441, Def. 7a).

Def. 7a1. 'Paradigmatic (Def. 7a) relations' for 'relations of opposition between members of sets' (cf. Mulder and Hervey 1980: 44, Def. 7a1; Mulder 1989: 441, Def. 7a1).

Def. 7a2. 'Commutation' for 'alternation (or: choice) between semiotic entities (Def. 1c3) (or 'zero' and semiotic entities (Def. 1c3)) in functional (Def. 1a) opposition as immediate constituents (Def. 7f1a), in a given context' (cf. Mulder and Hervey 1980: 44, Def. 7a2; Mulder 1989: 441, Def. 7a2).

Def. 7a3. 'Distinctive function' (symbolised: d, for distinctive function in cenology; s, for distinctive function in logology; and e, for distinctive function in delology) for 'the set of oppositions in which an entity (Def. 1c2) may par-

take' (cf. Mulder and Hervey 1980: 44, Def. 7a3; Mulder 1989: 441, Def. 7a3).

Comment: Distinctive function (d in cenology, s in logology, and e in logology) can be expressed symbolically: "In symbols a~(b∪c∪d), which states the distinctive function of a, in case the set of oppositions a enters into is (a~b, a~c, a~d), and no other. In fact, a~(b∪c∪d) = a~b∪a~c∪a~d" (Mulder 1989: 441).

Def. 7a4. 'Neutralization' for 'suspension of opposition between members of a correlation (Def. 7a4a) in given contexts, and governed by those contexts' (cf. Mulder and Hervey 1980: 44, Def. 7a3; Mulder 1989: 441, Def. 7a4).

Def. 7a4a. 'Correlation' for 'set of ontotactic (Def. 7c) entities (Def. 1c2, Def. 9d1) which have an immediate constituent (Def. 7f1a) in common' (cf. Mulder and Hervey 1980: 44, Def. 7a3; Mulder 1989: 441, Def. 7a4a).

Def. 7a4b. 'Archionteme' for 'ontotactic (Def. 7c) entity (Def. 1c2) resulting from neutralization (Def. 7a4)'. Alternative definition: 'Simultaneous (cf. Def. 6b) bundle of ontids (Def. 8d2) in particular contexts, common to two or more ontemes (Def. 8d) in other contexts, i.e. equalling the intersection of those ontemes (Def. 8d)' (cf. Mulder and Hervey 1980: 44, Def. 7a3; Mulder 1989: 441, Def. 7a4b).

Comment: As is predictable from Def. 0a, Def. 0b, and Def. 0c (preliminary definitions), the term archionteme allows for the generation of the following terms: archilogeme (also, archimoneme, archimorpheme, in natural language: archilexeme), archiceneme (in spoken natural language: archiphoneme; in written natural language archigrapheme), archideleme. Mulder's definition (Mulder 1989: 441, Def. 7a4b) of archi-features (Def. 1c1) in terms of intersection has been followed in definition 7a4b. here. However, there is reason to believe that a definition of archionteme (etc.) in terms of disjunction might be more globally coherent (cf. Dickins 1998: 427–428; Note 21).

Def. 7b. 'Syntagmatic' for 'the ordering (cf. Def. 6a) aspect of semiotic entities (Def. 1c3)' (cf. Mulder and Hervey 1980: 45, Def. 7b; Mulder 1989: 441, Def. 7b).

Def. 7b1. 'Syntagmatic (Def. 7b) relations' for 'ordering relations (Def. 6a) between semiotic entities (Def. 1c3) in combinations (constructions) (Def. 6c, Def. 7f)' (cf. Mulder and Hervey 1980: 45, Def. 7b1; Mulder 1989: 441, Def. 7b1).

Comment: "Though the term permutation may seem the syntagmatic equivalent of 'commutation' [Def. 7a2], it is used in a realizational, rather than structural sense, though there may be structural implications. I use it as a primitive term, i.e. I refrain from defining it" (Mulder 1989: 441).

Def. 7b2. 'Syntagmatic (Def. 7b) entity (Def. 1c2)' for 'ontotactic (Def. 7c) entity (Def. 9d1)' (cf. Mulder and Hervey 1980: 45, Def. 7b2; Mulder 1989: 441, Def. 7b2).

Comment: This implies that it is orderable, and/or has constituents (Def. 7f1) that commute (cf. Def. 7a2) with orderable entities (Def. 1c2), provided it is not intrinsically uncombinable at the level of ontotactics (Def. 3b), (such as 'yes' in English, except in conjunctive constructions (Def. 6c) such as 'yes or no') (adapted from Mulder 1989: 441-442).

Def. 7c. ‘Ontotactic’ for ‘logotactic (cf. Def. 2a4c), cenotactic (cf. Def. 2b1c) or delotactic (cf. Def. 2c1c)’ (cf. Mulder and Hervey 1980: 45, Def. 7c; Mulder 1989: 442, Def. 7c).

Def. 7c1. ‘Ontotactic (Def. 7c) relations’ for ‘logotactic relations (Def. 7d1), cenotactic relations (Def. 7e1) or delotactic relations (Def. 7e3)’. Alternative definition: ‘constructional relations (Def. 7f) (whether ordering (Def. 6a) or not) between syntagmatic (Def. 7b) entities (Def. 7b2), as immediate constituents (Def. 7f1a) in combinations (constructions) (Def. 6c, cf. Def. 7f)’ (cf. Mulder and Hervey 1980: 45, Def. 7c3; Mulder 1989: 442, Def. 7c2).

Comment: Note that ontotactic (Def. 7c) relations are not necessarily syntagmatic (Def. 7b) relations (Def. 7b1), although syntagmatic (Def. 7b) relations (Def. 7b1) are necessarily ontotactic (Def. 7c) relations. Ontotactic (Def. 7c) relations are relations between syntagmatic (Def. 7b) entities (Def. 7b2) (cf. Mulder 1989: 442, Def. 7c2).

Def. 7d. ‘Logotactic entity (Def. 1c2)’ for ‘ontotactic (Def. 7c) entity (Def. 1c2) in logology (Def. 2a4a)’ (cf. Mulder and Hervey 1980: Def. 7d); Mulder 1989: 442, Def. 7d).

Def. 7d1. ‘Logotactic relations’ for ‘ontotactic (Def. 7c) relations (Def. 7c1) in logology (Def. 2a4a)’ (cf. Mulder and Hervey 1980: Def. 7d1); Mulder 1989: 442, Def. 7e).

Def. 7e. ‘Cenotactic entity (Def. 1c2)’ for ‘ontotactic (Def. 7c) entity (Def. 1c2) in cenology (Def. 2b1a)’ (cf. Mulder and Hervey 1980: 45, Def. 7c1); Mulder 1989: 442, Def. 7e1). Alternative definition to Def. 9a2.

Def. 7e1. ‘Cenotactic relations’ for ‘ontotactic (Def. 7c) relations (Def. 7c1) in cenology (Def. 2b1a)’ (cf. Mulder and Hervey 1980: 45, Def. 7e); Mulder 1989: 442, Def. 7e1).

Def. 7e2. ‘Delotactic entity (Def. 1c2)’ for ‘ontotactic (Def. 7c) entity (Def. 1c2) in delology (Def. 2c1a)’. Alternative definition to Def. 9c1.

Def. 7e3. ‘Delotactic relations’ for ‘ontotactic (Def. 7c) relations (Def. 7c1) in delology (Def. 2c1a)’.

Def. 7f. ‘Constructional relations’ for ‘relations between immediate constituents (Def. 7f1a)’ (cf. Mulder and Hervey 1980: 45, Def. 7f; Mulder 1989: 442, Def. 7f).

Comment: “Definitions 6a–7f lay the foundations for further terminological developments necessary for an effective description of semiotic systems” (Mulder 1989: 442).

Def. 7f1. ‘Constituents’ for ‘entities (Def. 1c2) (of the same kind, i.e. of the same level of abstraction) in self-contained (Def. 1b1) combinations (Def. 6c)’ (cf. Mulder and Hervey 1980: 45, Def. 7f1; Mulder 1989: 442, Def. 7f1).

Def. 7f1a. ‘Immediate constituents’ for ‘constituents (Def. 7f1) that are not constituents (Def. 7f1) of constituents (Def. 7f1) within the combination (Def. 6c) in question’ (cf. Mulder and Hervey 1980: 45, Def. 7f1a; Mulder 1989: 442, Def. 7f1a).

Def. 7f1b. ‘Ultimate constituents’ for ‘constituents (Def. 7f1) that are basic (or: minimum) entities (Def. 1c2a) at the level in question’ (cf. Mulder and Hervey 1980: 45, Def. 7f1b; Mulder 1989: 442, Def. 7f1b).

Comment: It is theorematic that in cenematics (Def. 2b1b), logematics (Def. 2a4b) and delematics (Def. 2c1b), in contradistinction with cenotactics (Def. 2b1c), logotactics (Def. 2a4c) and delotactics (Def. 2c1c), immediate constituents (Def. 7f1a) are always at the same time ultimate constituents (adapted from Mulder 1989: 442–443). See also: basic entity (Def. 1c2a).

Def. 7g. ‘Positions’ for ‘divisions within an ontotactic (Def. 7c) construction (Def. 6c), such that in every such division an entity (Def. 1c2), as an immediate constituent (Def. 7f1a), can stand and alternate (i.e. commute: cf. Def. 7a2) with other entities (Def. 1c2), or with zero’. Alternative definition: ‘divisions within a construction (Def. 6c) corresponding to immediate constituents (Def. 7f1a) as relata of ontotactic (Def. 7c) relations (Def. 7c1)’ (cf. Mulder and Hervey 1980: 46, Def. 7g; Mulder 1989: 443, Def. 7g).

Def. 7h. ‘Archi-position’ for ‘the intersection of two or more positions (Def. 7g)’ (cf. Mulder 1989: 443, Def. 7h).

Comment: Mulder argues that in phonotactics (Def. Ob, Def. 2b1c), intersection can only occur between adjacent positions. In lexotactics (Def. 0a, Def. 2a4c) and delotactics (Def. 2c1c), intersection can occur between any two or more peripheral (cf. Def. 13b) positions (Def. 7g) (cf. Mulder 1989: 443). Mulder’s approach to the archi-position appears problematic. In order for there to be intersection, the sets involved need to have a member (or members) in common. Different positions considered as sets (of one member each) have no members in common with one another. Therefore, it is not possible for them to intersect. This has led Heselwood (1992: 110) to suggest that neutralization (cf. Def. 7a4) be treated not in terms of intersection, but in terms of disjunction (cf. Dickins 1998: 427–428; Note 21; also comment under Def. 7a4b, relating to the archionteme).

Def. 8a. ‘Ceneme’ for ‘self-contained (Def. 1b1) bundle of one or more cenids (distinctive features) (Def. 8a2) as its immediate (Def. 7f1a), and at the same time ultimate (Def. 7f1b), constituents (Def. 7f1)’. Alternative definitions: ‘basic (or: minimum) syntagmatic (Def. 7b) entity (Def. 1c2a, Def. 7b2) in cenology (Def. 2b1a)’, ‘basic (or: minimum) cenotactic (cf. Def. 2b1c) entity (Def. 1c2a, Def. 7e, Def. 9a2)’ (cf. Mulder and Hervey 1980: 46, Def. 8a; Mulder 1989: 443, Def. 8a).

Def. 8a1. ‘Cenematic (cf. Def. 2b1b) complex (cf.Def. 6c)’ for ‘complex (cf. Def. 6c) ceneme (Def. 8a)’ (cf. Mulder and Hervey 1980: 46, Def. 8a1; Mulder 1989: 443, Def. 8a1).

Comment: A complex (cf. Def. 6c) ceneme (Def. 8a) is a cenematic (cf. Def. 2b1b) complex (Def. 6c), as opposed to a cenotactic (cf. Def. 2b1c) complex (Def. 6c). A complex (cf. Def. 6c) ceno (Def. 2b1) is either cenematically (cf. Def. 2b1b) complex (Def. 6c) or cenotactically (cf. Def. 2b1c) complex (Def. 6c), or para-cenotactically (cf. Def. 18c) complex (Def. 6c) (adapted from Mulder 1989: 443).

Def. 8a2. ‘Cenid’ or ‘distinctive feature’ for ‘unit (Def. 9e) in cenidics (Def. 2b1a2)’ (cf. Mulder and Hervey 1980: 46, Def. 8a3; Mulder 1989: 443, Def.

8a2). Alternative definitions: 'Basic (or: minimum) entity (Def. 1c2a) in cenematics (Def. 2b1b)', 'basic (or: minimum) entity (Def. 1c2a) in cenidotactics (Def. 2b1c1)'.

Comment: Since cenidics (Def. 2b1a2) is a simple system (Def. 1b), the cenid (distinctive feature) is not only the unit (Def. 9e) in cenidics (Def. 2b1a2), but is also the basic (or: minimum) entity (Def. 1c2a) in cenidics (Def. 2b1a2). I have avoided using a definition of the cenid along these lines (although it accords with the form of the definitions given by Mulder (Mulder and Hervey 1980: 46, Def. 8a3; Mulder 1989: 443, Def. 8a2), since the presentation of the cenid as the basic (or: minimum) entity (Def. 1c2a) in both cenidics (Def. 2b1a2), cenematics (Def. 2b1b), and cenidotactics (Def. 2b1c1) suggests a greater similarity between these two levels than they in fact possess.

Def. 8a3. 'Hypercenid' or 'hyperfeature' for 'cenid (distinctive feature) (Def. 8a2) in a particular cenematic (cf. Def. 2b1b) context, equivalent to two or more cenids (distinctive features) (Def. 8a2) in at least one other cenematic (cf. Def. 2b1b) context' (cf. Mulder 1989: 443, Def. 8a3).

Def. 8a4. 'Hyperceneme' for 'ceneme (Def. 8a) consisting of, or containing, one or more hypercenids (hyper-features) (Def. 8a3)' (cf. Mulder 1989: 443, Def. 8a4).

Def. 8a5. 'Cenome' for 'unit (Def. 9e) in cenomics (Def. 2b1a1)'.

Comment: Since cenomics (Def. 2b1a1) is a simple system (Def. 4a) ontology (Def. 3a1a) the cenome is not only the unit (Def. 9e) in cenomics (Def. 2b1a1), it is also the basic (or: minimum) entity (Def. 1c2a).

Def. 8b. 'Logeme' for 'self-contained (Def. 1b1) (by definition: simultaneous; cf. Def. 6b) bundle of one or more logids (monemes) (Def. 8b2) as its immediate (Def. 7f1a), and at the same time ultimate (Def. 7f1b), constituents (Def. 7f1)'. Alternative definitions: 'basic (or: minimum) syntagmatic (Def. 7b) entity (Def. 1c2a, Def. 7b2) in logology (Def. 2a4a)', 'basic (or: minimum) entity (Def. 1c2a) in logotactics (Def. 2a4c)' (cf. Mulder and Hervey 1980: 47, Def. 8b; Mulder 1989: 443, Def. 8b).

Def. 8b1. 'Logematic (cf. Def. 2a4b) complex (Def. 6c)' for 'complex (cf. Def. 6c) logeme (Def. 8b)' (cf. Mulder and Hervey 1980: 47, Def. 8b2; Mulder 1989: 444, Def. 8b1).

Comment: A complex (cf. Def. 6c) logeme (Def. 8b) is a logematic (cf. Def. 2a4b) complex (Def. 6c), as opposed to a logotactic (cf. Def. 2a4c) complex (Def. 6c). A complex (cf. Def. 6c) logo (Def. 2a4) is either logematically (cf. Def. 2a4b) complex (Def. 6c) or logotactically (cf. Def. 2a4c) complex (Def. 6c), or para-logotactically (cf. Def. 19c) complex (Def. 6c), i.e. it consists of more than one clause (Def. 21a) (adapted from Mulder 1989: 444, Def. 8b1).

Def. 8b2. 'Logid' or 'moneme' or 'morpheme' for 'unit (Def. 9e) in logidics (Def. 2a4a2)' (cf. Mulder and Hervey 1980: 47, Def. 8b3; Mulder 1989: 444, Def. 8b2). Alternative definition: 'Basic (or: minimum) entity (Def. 1c2a) in logematics (Def. 2a4b)', 'basic (or: minimum) entity (Def. 1c2a) in logidotactics (Def. 2a4c1)'.

Comment: Since logidics (Def. 2a4a2) is a simple system (Def. 1b), the logid (moneme, morpheme) is not only the unit (Def. 9e) in logidics (Def. 2a4a2), but

is also the basic (or: minimum) entity (Def. 1c2a) in logidics (Def. 2a4a2). See comment under cenid (Def. 8b2).

Def. 8b3. 'Hyperlogid', or 'hyper-moneme', or 'hypermorpheme' for 'logid moneme, morpheme) (Def. 8b2) in a particular logematic (cf. Def. 2a4b) context, equivalent to two or more logids (monemes, morphemes) (Def. 8b2) in at least one other logematic (cf. Def. 2a4b) context'.

Def. 8b4. 'Hyperlogeme' for 'logeme (Def. 8b) consisting of, or containing, one or more hyperlogids (hyper-monemes) (Def. 8b3)'.

Def. 8b5. 'Logome' for 'unit (Def. 9e) in logomics (Def. 2a4a1)'.

Comment: Since logomics (Def. 2a4a1) is a simple system (Def. 4a) ontology (Def. 3a1a) the logome is not only the unit (Def. 9e) in logomics (Def. 2a4a1), it is also the basic (or: minimum) entity (Def. 1c2a).

Def. 8c. 'Deleme' for 'self-contained (Def. 1b1) (by definition: simultaneous; cf. Def. 6b) bundle of one or more delids (Def. 8c2) as its immediate (Def. 7f1a), and at the same time ultimate (Def. 7f1b), constituents (Def. 7f1)'. Alternative definitions: 'basic (or: minimum) syntagmatic (Def. 7b) entity (Def. 1c2a, Def. 7b2) in delology (Def. 2c1a)', 'basic (or: minimum) delotactic (cf. Def. 2c1c) entity (Def. 1c2a, Def. 7e, Def. 9c1)'.

Def. 8c1. 'Delematic (cf. Def. 2c1b) complex (Def. 6c)' for 'complex (cf. Def. 6c) deleme (Def. 8c)'.

Comment: A complex (cf. Def. 6c) deleme (Def. 8c) is a delematic (cf. Def. 2c1b) complex (Def. 6c), as opposed to a delotactic (cf. Def. 2c1c) complex (Def. 6c). A complex (cf. Def. 6c) delo (Def. 2c1) is either delematically (cf. Def. 2c1b) complex (Def. 6c) or delotactically (cf. Def. 2c1c) complex (Def. 6c), or para-delotactically (cf. Def. 18i) complex (Def. 6c).

Def. 8c2. 'Delid' for 'unit (Def. 9e) in delidics (Def. 2c1a2)'. Alternative definition: 'Basic (or: minimum) entity (Def. 1c2a) in delematics (Def. 2c1b)', 'basic (or: minimum) entity (Def. 1c2a) in delidotactics (Def. 2c1c1)'.

Comment: Since delidics (Def. 2c1a2) is a simple system (Def. 4a), the delid is not only the unit (Def. 9e) in delidics (Def. 2c1a2), but is also the basic (or: minimum) entity (Def. 1c2a) in delidics (Def. 2c1a2). See comment under 'cenid' (Def. 8b2).

Def. 8c3. 'Hyperdelid' for 'delid (Def. 8c2) in a particular delematic (cf. Def. 2c1b) context, equivalent to two or more delids (Def. 8c2) in at least one other delematic (cf. Def. 2c1b) context'.

Def. 8c4. 'Hyperdeleme' for 'deleme (Def. 8c) consisting of, or containing, one or more hyperdelids (Def. 8a3)'.

Def. 8c5. 'Delome' for 'unit (Def. 9e) in delomics (Def. 2c1a1)'.

Comment: Since delomics (Def. 2c1a1) is a simple system (Def. 4a) ontology (Def. 3a1a) the delome is not only the unit (Def. 9e) in delomics (Def. 2c1a1), it is also the basic (or: minimum) entity (Def. 1c2a).

Def. 8d. 'Onteme' for 'ceneme (Def. 8a), logeme (Def. 8b), or deleme (Def. 8c)'.

Def. 8d1. 'Ontematic (cf. Def. 3a1b) complex (Def. 6c)' for 'cenematic (cf. Def. 2b1b) complex (cf. Def. 8a1), logematic (cf. Def. 2a4b) complex (cf. Def. 8b1), or delematic (cf. Def. 2c1b) complex (Def. 8c1)'.

Def. 8d2. 'Ontid' for 'cenid (Def. 8a2), logid (Def. 8b2), or delid (Def. 8c2)'.

Def. 8d3. ‘Hyperontid’ for ‘hypercenid (Def. 8a3), hyperlogid (‘hypermoneme’, ‘hypermorpheme’ (Def. 8b3), or hyperdelid (Def. 8c3)’.

Def. 8d4. ‘Hyperonteme’ for ‘hyperceneme (Def. 8a4), hyperlogeme (Def. 8b4), or hyperdeleme (Def. 8c4)’.

Def. 8d5. ‘Ontome’ for ‘unit (Def. 9e) in ontomics (Def. 3a1a1)’.

Comment: Since ontomics (Def. 3a1a1) is a simple system (Def. 4a) ontology (Def. 3a1a1) the ontome is not only the unit (Def. 9e) in ontomics (Def. 3a1a1), it is also the basic (or: minimum) entity (Def. 1c2a).

Def. 9a. ‘Cenotagm’ or ‘distributional unit’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in cenotactics (Def. 2b1c)’, or for ‘instance of a self-contained bundle of positions (Def. 7g) in cenotactics (Def. 2b1c)’. Alternative definition for ‘distributional unit’ in the former, i.e. abstract, sense: ‘minimum type of structure within which the distribution (Def. 9a1) of cenotactic (cf. Def. 2b1c) entities (Def. 7e, Def. 9a2) can be described completely and exhaustively’. Alternative definition for cenotagm, in the second sense, ‘unit (Def. 9e) in cenotactics (Def. 2b1c)’. Alternative definition for cenotagm allied to the second sense, ‘base (Def. 20a) in para-cenotactics (Def. 18c)’ (cf. Mulder and Hervey 1980: 47, Def. 9, Def. 9a; Mulder 1989: 444, Def. 9a).

Comment: “That is to say that nothing outside such a structure can determine the distribution [Def. 9a1] of immediate constituent [Def. 7f1a] entities [Def. 1c2] within the structure. It is possible that we may in some cases have to describe further the distribution of types of distributional unit with respect to one another. In fact, I tend to use the term ‘distributional unit’ in the more abstract sense, and the term ‘cenotagm’ (phonotagm) or an instance of a distributional unit” (Mulder 1989: 444).

Def. 9a0a. ‘Cenidotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in cenidotactics (Def. 2b1c1)’, or for ‘instance of self-contained (Def. 1b1) bundle of positions (Def. 7g) in cenidotactics (Def. 2b1c1)’. Alternative definition for cenidotagm, in the second sense, ‘unit (Def. 9e) in cenidotactics (Def. 2b1c1)’. Alternative definition allied to second sense, ‘base (Def. 20a) in para-cenotactics (Def. 18c) in the case of a compound (cf. Def. 5a) cenology (Def. 2b1a) which does not contain a cenematics (Def. 2b1b) but does contain a para-cenotactics (Def. 18c)’.

Def. 9a0b. ‘Cenemotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in cenemotactics (Def. 2b1c2)’ or for ‘instance of self-contained (Def. 1b1) bundle of positions (Def. 7g) in cenemotactics (Def. 2b1c2)’. Alternative definition for cenemotagm, in the second sense, ‘unit (Def. 9e) in cenemotactics (Def. 2b1c2)’. Alternative definition allied to second sense, ‘base (Def. 20a) in para-cenotactics (Def. 18c) in the case of a compound (cf. Def. 5a) cenology (Def. 2b1a) which contains a cenematics (Def. 2b1b) and a para-cenotactics (Def. 18c)’.

Def. 9a0c. ‘Cenotheme’ for ‘in cenotactics (Def. 2b1c) self-contained (Def. 1b1) (by definition: simultaneous; cf. Def. 6b) bundle of two or more cenos (Def. 2b1) as its immediate constituents (Def. 7f1a)’.

Def. 9a1. ‘Distribution’ for ‘the set of occurrences of an entity (Def. 1c2) in constructional relations (Def. 7f) with other entities (Def. 1c2) as immediate constituents (Def. 7f1a) in the same construction (Def. 6c)’ (cf. Mulder and Hervey 1980: 47, Def. 9a1; Mulder 1989: 444, Def. 9a1).

Def. 9a2. ‘Cenotactic (cf. Def. 2b1c) entity (Def. 1c2)’ for ‘ceneme (Def. 8a) or cenotagm (Def. 9a)’ (cf. Mulder 1989: 445, Def. 9b1). Alternative definition to Def. 7e.

Def. 9b. ‘Logotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in logotactics (Def. 2a4c)’, or for ‘instance of a self-contained bundle of positions (Def. 7g) in logotactics (Def. 2a4c). Alternative definition for ‘logotagm’ in the first sense ‘underlying structure (Def. 14c) of a self-contained (Def. 1b1) bundle of logotactic entities (Def. 7d, Def. 9b1)’. Alternative definitions for logotagm in the second sense ‘self-contained (Def. 1b1) bundle of logotactic entities (Def. 7d, Def. 9b1), as immediate constituents (Def. 7f1a)’, or ‘logotactic complex (Def. 6c)’. Alternative definition for logotagm, in the second sense, ‘unit (Def. 9e) in logotactics (Def. 2a4c)’. Alternative definition for logotagm allied to second sense, ‘base (Def. 20a) in para-logotactics (Def. 19c)’ (cf. Mulder and Hervey 1980: 47, Def. 9b; Mulder 1989: 444, Def. 9b).

Def. 9b0a. ‘Logidotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in logidotactics (Def. 2a4c1)’, or for ‘instance of self-contained (Def. 1b1) bundle of positions (Def. 7g) in logidotactics (Def. 2a4c1)’. Alternative definition for logidotagm, in the second sense, ‘unit (Def. 9e) in logidotactics (Def. 2a4c1)’. Alternative definition allied to second sense, ‘base (Def. 20a) in para-logotactics (Def. 19c) in the case of a compound (cf. Def. 5a) logology (Def. 2a4a) which does not contain a logematics (Def. 2a4c2) but does contain a para-logotactics (Def. 19c)’.

Def. 9b0b. ‘Logemotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in logemotactics (Def. 2a4c2)’, or for ‘instance of self-contained (Def. 1b1) bundle of positions (Def. 7g) in logemotactics (Def. 2a4c2)’. Alternative definition for logemotagm, in the second sense, ‘unit (Def. 9e) in logemotactics (Def. 2a4c2)’. Alternative definition allied to second sense, ‘base (Def. 20a) in para-logotactics (Def. 19c) in the case of a compound (cf. Def. 5a) logology (Def. 2a4a) which contains a logematics (Def. 2a4b) and a para-logotactics (Def. 19c)’.

Def. 9b0c. ‘Logotheme’ for ‘in logotactics (Def. 2a4c) self-contained (Def. 1b1) (by definition: simultaneous; cf. Def. 6b) bundle of two or more logos (Def. 2a4) as its immediate constituents (Def. 7f1a)’.

Def. 9b1. ‘Logotactic (cf. Def. 2a4c) entity (Def. 1c2)’ for ‘logeme (Def. 8b), or logotagm (Def. 9b)’ (cf. Mulder 1989: 445, Def. 9b1). Alternative definition to Def. 7d.

Def. 9c. ‘Delotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in delotactics (Def. 2c1c)’, or for ‘instance of a self-contained bundle of positions (Def. 7g) in delotactics (Def. 2c1c)’. Alternative definition for delotagm, in the second sense, ‘unit (Def. 9e) in delotactics (Def. 2c1c)’. Alter-

native definition allied to second sense, ‘base (Def. 20a) in para-delotactics (Def. 18i)’.

Def. 9c0a. ‘Delidotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in delidotactics (Def. 2c1c1)’, or for ‘instance of self-contained (Def. 1b1) bundle of positions (Def. 7g) in delidotactics (Def. 2c1c1)’. Alternative definition for delidotagm, in second sense, ‘unit (Def. 9e) in delidotactics (Def. 2c1c1)’. Alternative definition allied to second sense, ‘base (Def. 20a) in para-delotactics (Def. 18i) in the case of a compound (cf. Def. 5a) delology (Def. 2c1a) which does not contain a delematics (Def. 2c1b) but does contain a para-delotactics (Def. 18i)’.

Def. 9c0b. ‘Delemotagm’ for ‘self-contained (Def. 1b1) bundle of positions (Def. 7g) in delematics (Def. 2c1b)’, or for ‘instance of self-contained (Def. 1b1) bundle of positions (Def. 7g) in delemotactics (Def. 2c1c2)’. Alternative definition for delemotagm, in second sense, ‘unit (Def. 9e) in delemotactics (Def. 2c1c2)’. Alternative definition allied to second sense, ‘base (Def. 20a) in para-delotactics (Def. 18i) in the case of a compound (cf. Def. 5a) delology (Def. 2c1a) which contains a delematics (Def. 2c1b) and a para-delotactics (Def. 18i)’.

Def. 9c0c. ‘Delotheme’ for ‘in delotactics (Def. 2c1c) self-contained (Def. 1b1) (by definition: simultaneous; cf. Def. 6b) bundle of two or more delos (Def. 2c1) as its immediate constituents (Def. 7f1a)’.

Def. 9c1. ‘Delotactic (cf. Def. 2c1c) entity (Def. 1c2)’ for ‘deleme (Def. 8c) or delotagm (Def. 9c)’. Alternative definition to Def. 7e2.

Def. 9d. ‘Ontotagm’ for ‘cenotagm (Def. 9a), logotagm (Def. 9b), or delotagm (Def. 9c)’.

Def. 9d0a. ‘Ontidotagm’ for ‘cenidotagm (Def. 9a0a), logidotagm (Def. 9b0a), or delidotagm (Def. 9c0a)’.

Def. 9d0b. ‘Ontemotagm’ for ‘cenemotagm (Def. 9a0b), logemotagm (Def. 9b0b), or delemotagm (Def. 9c0b)’.

Def. 9d0c. ‘Ontotheme’ for ‘cenotheme (Def. 9a0c), logotheme (Def. 9b0c), or delotheme (Def. 9c0c).

Comment: cf. Dickins 1998: 138–150.

Def. 9d1. ‘Ontotactic (Def. 7c) entities (Def. 1c2)’ for ‘cenotactic entities (Def. 7e, Def. 9a2), logotactic entities (Def. 7d1, Def. 9b1), or delotactic entities (Def. 7e2, Def. 9c1)’ or for ‘ontemes (Def. 8d) or ontotagms (Def. 9d)’.

Def. 9e. ‘Unit’ for ‘onto (Def. 3a1) in a particular non-compound (cf. Def. 5a) semiotic system (Def. 1c, Def. 5) which constitutes a self-contained (Def. 1b1) set or combination (Def. 6c) in that semiotic system (Def. 1c, Def. 5)’.

Def. 10. ‘Syntagmeme’ for ‘paradigmeme (Def. 10a) in a particular position (Def. 7g) and in its capacity of standing in that position (Def. 7g)’ (cf. Mulder and Hervey 1980: 48, Def. 10; Mulder 1989: 445, Def. 10).

Def. 10a. ‘Paradigmeme’ for ‘member of a self-contained (Def. 1b1) set of entities (Def. 1c2) in functional (Def. 1a) opposition in a given context’. Alternative definition: ‘member of a paradigm (Def. 10b)’ (cf. Mulder and Hervey 1980: 48, Def. 10a; Mulder 1989: 445, Def. 10a).

Def. 10b. ‘Paradigm’ for ‘set of entities (Def. 1c2) in functional (Def. 1a) opposition in a given context’ (cf. Mulder and Hervey 1980: 46, Def. 7g1); Mulder 1989: 445, Def. 10b).

Comment: Definitions 7–10b refer to general notions in the description of semiotic systems (Def. 1c, Def. 5). Definitions 8a-8a4, 9a–9a0b, and 9b2 are specifically relevant to cenology (Def. 2b1a). Definitions 8b-8b4 and 9b–9b1 are specifically relevant to logology (Def. 2a4a). Definitions 8c–8c4 and 9c–9c1 are specifically relevant to delology (Def. 2c1a). Definitions 8d–8d4 and 9d–9e are general statements.

Def. 11a. ‘Relation of sub-ordination (or: determination)’ for ‘direct ontotactic (Def. 7c) asymmetrical (cf. Def. 6a) relation (Def. 15) of functional (Def. 1a) dependency’ (cf. Def. 1b1, Def. 6a, Def. 11b, Def. 11c). Alternative definition: ‘direct ontotactic (Def. 7c) relation (Def. 15) of unilateral functional (Def. 1a) dependency (cf. Def. 1b1, Def. 6a, Def. 11b, Def. 11c)’ (cf. Mulder and Hervey 1980: 48, Def. 11a); Mulder 1989: 445, Def. 11a).

Comment: The converse of sub-ordination is super-ordination (or: government). If *a* and *b* are in direct ontotactic (Def. 7c) relation (Def. 15), and *a* is for its function dependent on *b*, but not vice versa (in symbols *a*→*b*), a is said to be sub-ordinate to *b*, and *b* super-ordinate to *a*. Furthermore, *a* is said to be standing in peripheral (cf. Def. 13b) and *b* in nuclear (cf. Def. 13a) position (Def. 7g) in the construction (Def. 6c) in question. Super-ordination (or: government) and the notions nuclear (cf. Def. 13a) and peripheral (cf. Def. 13b) are hereby defined as well (adapted from Mulder 1989: 445).

Def. 11b. ‘Relation of coordination’ for ‘direct ontotactic (Def. 7c) (by implication: symmetrical (cf. Def. 6a, Def. 11c) relation (Def. 15) of mutual functional (Def. 1a) independency (cf. Def. 1b1, Def. 6a, Def. 11a, Def. 11c)’. Alternative definition: ‘direct ontotactic (Def. 7c) relation (Def.15) of bilateral functional (Def. 1a) independency (cf. Def. 1b1, Def. 6a, Def. 11a, Def. 11c)’ (cf. Mulder and Hervey 1980: 48, Def. 11b); Mulder 1989: 445, Def. 11b).

Comment: If *a* and *b* are in direct ontotactic (Def. 7c) relation (Def. 15), and *a* is for its ontotactic (Def. 7c) function independent of *b*, and vice versa, *a* and *b* are said to be coordinated (in symbols: *a*←/→*b*) (adapted from Mulder 1989: 445–446).

Def. 11c. ‘Relation of interordination’ for ‘direct ontotactic (Def. 7c) (by implication: symmetrical (cf. Def. 6a, Def. 11b) relation (Def. 15) of mutual functional (Def. 1a) dependency (cf. Def. 1b1, Def. 6a, Def. 11a, Def. 11b)’. Alternative definition: ‘direct ontotactic (Def. 7c) relation (Def. 15) of bilateral functional (Def. 1a) dependency (cf. Def. 1b1, Def. 6a, Def. 11a, Def. 11b)’ (cf. Mulder and Hervey 1980: 49, Def. 11c); Mulder 1989: 446, Def. 11c).

Comment: If *a* and *b* are in direct ontotactic (Def. 7c) relation (Def. 15), and *a* is for its ontotactic (Def. 7c) function dependent on *b*, as well as vice versa, *a* and *b* are said to be inter-ordinated (in symbols: *a*↔*b*) (adapted from Mulder 1989: 446).

Def. 12a. ‘Relation of unilateral occurrence dependency’ for ‘relation such that one of two entities (Def. 1c2) in direct relation (Def. 15) which are immediate con-

stituents (Def. 7f1a) in a construction (Def. 6c) can occur in the construction (Def. 6c) in question, whilst the other is zero' (cf. Mulder and Hervey 1980: 49, Def. 12b); Mulder 1989: 446, Def. 12a).

Comment: "In symbols [*a*]*b* or *a*[*b*], the square brackets indicating the occurrence-dependent entity [Def. 1c2], i.e. in the above case it requires the other item, or an item in the same position [Def. 7g], for its occurrence, but not vice versa. The dependent item is called an 'expansion' [Def. 13c]" (Mulder 1989: 446).

Def. 12b. 'Bilateral occurrence independency' for 'relation such that either of two entities (Def. 1c2) in direct relation (Def. 15) which are immediate constituents (Def. 7f1a) in a construction (Def. 6c) can occur in the construction (Def. 6c) while the other is zero' (cf. Mulder and Hervey 1980: 50, Def. 12c); Mulder 1989: 446, Def. 12b).

Comment: "In symbols [*a*][*b*]. Both items are 'expansions' [Def. 13c] in respect of one another" (Mulder 1989: 446).

Def. 12c. 'Bilateral occurrence interdependency' for 'relation such that neither of two entities (Def. 1c2) in direct relation (Def. 15) which are immediate constituents (Def. 7f1a) in a construction (Def. 6c) can occur in the construction (Def. 6c) in question, whilst the other is zero' (cf. Mulder and Hervey 1980: 49, Def. 12a); Mulder 1989: 446, Def. 12c).

Comment: "In symbols *ab*. Neither of the items are 'expansions' [Def. 13c] in respect of one another" (Mulder 1989: 446).

Def. 13a. 'Nucleus' or 'governing entity (Def. 1c2)' for 'in a relation of sub-ordination (Def. 11a) the identity element for the ontotactic (Def. 7c) functions of the elements' (cf. Mulder and Hervey 1980: 50, Def. 13a); Mulder 1989: 446, Def. 13a).

Comment: In symbols: *b*→*a*, [*b*]→*a*, *a*←*b*, or *a*←[*b*], in which *a* is the nucleus. That is, the ontotactic (Def. 7c) relations (Def. 7c1) of the other immediate constituents (Def. 7f1a) depend for their ontotactic (Def. 7c) function on their relation with the nucleus (adapted from Mulder 1989: 446).

Def. 13b. 'Peripheral entity (Def. 1c2)' or 'governed entity (Def. 1c2)' or 'determinant entity (Def. 1c2)' for 'in a relation of sub-ordination (Def. 11a), a non-nuclear (cf. Def. 13a) immediate constituent (Def. 7f1a)' (cf. Mulder and Hervey 1980: 50, Def. 13b); Mulder 1989: 447, Def. 13b).

Comment: In symbols: *b* in the representations for Def. 11a, and Def. 13a (adapted from Mulder 1989: 447).

Def. 13c. 'Expansion' for 'immediate constituent (Def. 7f1a) that commutes (cf. Def. 7a2) with zero' (cf. Mulder and Hervey 1980: 50, Def. 13c; Mulder 1989: 447, Def. 13c).

Comment: In symbols *a*→[*b*], i.e. sub-ordination (cf. Def. 11a, Def. 13a), in which *a* is an expansion; also [*a*]←/→[*b*], i.e. coordination (cf. Def. 11b), in which both *a* and *b* are expansions. The term 'expansion' is always used with reference to another entity (Def. 1c2) with which the other entity (Def. 1c2) is in direct ontotactic (Def. 7c) relation (Def. 15). Complex (cf. Def. 6c) expansions may contain entities (Def. 1c2) that are themselves not expansions, e.g. [[*a*]→*b*]→*c*, or even [*a*→*b*]→*c* (adapted from Mulder 1989: 447).

In both the earlier version of the postulates (Mulder and Hervey 1980: 50–51) and the revised version (Mulder 1989: 447-448) a distinction is made between diverse determination (Def. 14a; cf. also Def. 11a) and parallel determination (Def. 14b; cf. also Def. 11a). It seems that this distinction cannot be coherently applied (cf. Heselwood 1995; also Dickins 1998: 138–150). It is therefore excluded from these postulates for extended axiomatic functionalism along with the corresponding definition numbers.

Def. 14c. 'Underlying structure' for 'abstract representation of an ontotactic (Def. 7c) complex (Def. 6c) in terms of positions (Def. 7g), with or without indication of occurrence dependency (cf. Def. 12a, Def. 12b, Def. 12c)' (cf. Mulder and Hervey 1980: 51, Def. 14c); Mulder 1989: 448, Def. 14c).

Def. 15. 'Direct relation' for 'relation between constituents (Def. 7f1) (not necessarily immediate constituents (Def. 7f1a)) that is not a relation via other constituents (Def. 7f1)' (cf. Mulder and Hervey 1980: 51, Def. 15; Mulder 1989: 448, Def. 15).

Def. 16a. 'Conflation' for 'a single realisation (Def. F4.7) corresponding to more than one constituent (Def. 7f1) (not immediate constituents (Def. 7f1a)) having a similar ontotactic (Def. 7c) function, in a construction (Def. 6c)' (cf. Mulder 1989: 448, Def. 16a).

Comment: "Example: 'John likes but I hate him', where 'hate' functions in two different but equivalent positions [Def. 7g]. Representation: 'John likes ⎸him⎹ but I hate him'. ... The unshaded box around 'him' indicates that there is conflation at that point" (Mulder 1989: 448). As Mulder also notes (1989: 448), in the earlier version of the postulates, conflation was termed ellipsis (Mulder and Hervey 1980: 57, Def. 21). I suspect that the attempt to treat ellipsis, of any type, as a structural matter may be ill-conceived (cf. Dickins 1998: 343–348).

Def. 16b. 'Functional (Def. 1a) amalgamation' for 'one single entity (Def. 1c2) having different ontotactic (Def. 7c) functions (and therefore corresponding to more than one constituent (Def. 7f1)) on different level of the analysis' (cf. Mulder 1989: 448, Def. 16b).

Comment: "In phonology [Def. 0b, Def. 2b1a] an example is a single phoneme [Def. 8a] standing in a 'final' position [Def. 7g] in one phonotagm [Def. 9a], but in an initial position [Def. 7g] in another phonotagm [Def. 9a]" (Mulder 1989: 448).

Def. 16c. 'Antecedence' or 'post-cedence' for 'a case in which an ontotagm (Def. 9d) from the structural (but not the realisational (cf. Def. F4.7)) point of view is only partly well-formed, but the "missing" entity (Def. 1c2) is represented elsewhere' (cf. Mulder 1989: 448, Def. 16c).

Comment: Mulder (1989: 449) provides further discussion of the notions of antecedence and postcedence. It seems possible, that as with ellipsis, these notions will not be required in the extended version.

Definitions 11a to 16c in the standard version further develop the whole of syntax (plerotactics). The relevant notions are presented and the methodology is developed in some detail (cf. Mulder 1989: 449). As has been noted, the applicability of some of these notions to the extended version may be doubted. It also remains to be seen whether the notions presented in these definitions are equally applicable to logotactics (Def. 2a4c) and to delotactics (Def. 2c1c).

Axiom C. Ontos (Def. Def. 3a1) may have para-ontotactic features (Def. 17), i.e. cenos (Def. 2b1) may have para-cenotactic features (Def. 18), delos (Def. 2c1) may have para-delotactic features (Def. 18f), and logos (Def. 2a4) may have para-logotactic features (Def. 19) (cf. Mulder and Hervey 1980: 52, Axiom C; Mulder 1989: 449, Axiom C).

Comment: Axiom C and related definitions deal with the para-ontotactics (Def. 19f), i.e. principally with para-cenotactic features (Def. 18), para-logotactic features (Def. 19) and para-delotactic features (Def. 18f). To para-cenotactic features (Def. 18) in natural language (i.e. para-phonotactics features) belong features (Def. 1c1) such as tone (cf. Def. 18b), and accent and juncture. To para-logotactic features (Def. 19) in natural language (i.e. para-lexotactic features) belong features (Def. 1c1) such as intonation (cf. Def. 19a) (adapted from Mulder 1989: 452).

Def. 17. 'Para-ontotactic features' for 'para-cenotactic (cf. Def. 18c) features (Def. 18), para-logotactic (cf. Def. 19c) features (Def. 19), or para-delotactic (cf. Def. 18i) features (Def. 18f)' (cf. Mulder and Hervey 1980: 52, Def. 16; Mulder 1989: 449, Def. 17). Alternative definition: 'features (Def. 1c1) in para-ontotactics (Def. 19f)'.

Comment: cf. Mulder (1989: 450–451) on an extended discussion of corresponding notions in standard axiomatic functionalism.

Def. 18. 'Para-cenotactic features' for 'features (Def. 1c1) corresponding to cenological form (Def. 2b1d, Def. 23), accompanying, but not determining the identity of cenotactic entities (Def. 7e, Def. 9a2)' (cf. Mulder and Hervey 1980: 53, Def. 17; Mulder 1989: 451, Def. 18).

Comment: A cenotactic entity (Def. 7e, Def. 9a2) in combination (Def. 6c) with para-cenotactic features assumes an identity of its own at the level of para-cenotactics (Def. 18c) (adapted from Mulder 1989: 451).

Def. 18a. 'Contrastive para-cenotactic features' for 'para-cenotactic features (Def. 18) with the function of groupment over and above cenotactic (cf. Def. 2b1c) groupment' (cf. Mulder and Hervey 1980: 53, Def. 17a; Mulder 1989: 451, Def. 18a).

Comment: One should not be misled by the terminology into thinking that contrastive para-ontotactic features (Def. 17) are not functional (Def. 1a). They are, as so many other things, e.g. logotactic relations (Def. 7d1), distinctive (cf. Def. 7a3) in a systemic (cf. Def. 1b), not in a directly oppositional sense (adapted from Mulder 1989: 451).

Def. 18b. 'Distinctive (cf. Def. 7a3) para-cenotactic features' for 'para-cenotactic features (Def. 18) that are in a relation of direct opposition with one or more other para-cenotactic features (Def. 18), or with zero' (cf. Mulder and Hervey 1980: 53, Def. 17b; Mulder 1989: 451, Def. 18b). Alternative definition: 'features (Def. 1c1) in para-cenotactics (Def. 18c)'.

Comment: "A typical example is distinctive 'tone', as, for instance, in Chinese. Trivially, unless there is no one-one correspondence (in which case it would not be trivial), also the phonological [cf. Def. 0b] forms [Def. 2b1d, Def. 23] of dis-

tinctive intonations are distinctive para-cenotactic (para-phonotactic) features" (Mulder 1989: 451).

Def. 18c. 'Para-cenotactics' for 'system (Def. 1b) of para-cenotactic entities (Def. 18d)'.

Def. 18d. 'Para-cenotactic entity' for 'ceno (Def. 2b1) over and above the level of cenotactics (Def. 2b1c)'. Alternative definition, 'entity in para-cenotactics (Def. 18c).

Def. 18e. 'Para-cenotagm' for 'unit (Def. 9e) in para-cenotactics (Def. 18c)'.

Def. 18f. 'Para-delotactic features' for 'features (Def. 1c1) corresponding to delological form (Def. 2c1d, Def. 23c), accompanying, but not determining the identity of delotactic entities (Def. 7e2, Def. 9c1)'. Alternative definition: 'Features (Def. 1c1) in para-delotactics (Def. 18i)'.

Def. 18g. 'Contrastive para-delotactic features' for 'para-delotactic features (Def. 18f) with the function of groupment over and above delotactic (cf. Def. 2c1c) groupment'.

Def. 18h. 'Distinctive (cf. Def. 7a3) para-delotactic features' for 'para-delotactic features (Def. 18f) that are in a relation of direct opposition with one or more other para-delotactic features (Def. 18f), or with zero'.

Def. 18i. 'Para-delotactics' for 'system (Def. 1b) of para-delotactic entities (Def. 18j)'.

Def. 18j. 'Para-delotactic entity' for 'delo (Def. 2c1) over and above the level of delotactics (Def. 2c1c)'. Alternative definition: 'entity in a para-delotactics (Def. 18i)'.

Def. 18k. 'Para-delotagm' for 'unit (Def. 9e) in para-delotactics (Def. 18i)'.

Def. 19. 'Para-logotactic features' for 'features (Def. 1c1) accompanying, but not determining the identity of, logotactic entities (Def. 7d, Def. 9b1) or conglomerations of logotactic entities (Def. 7d, Def. 9b1; cf. Def. 21, Def. 21a)' (cf. Mulder and Hervey 1980: 54, Def. 18; Mulder 1989: 451, Def. 19).

Comment: Para-logotactic entities (Def. 1c2) or conglomerations of para-logotactic entities (Def. 1c2) in combination (Def. 6c) with para-logotactic features assume an identity of their own on the sentential level, i.e. they become sentential entities (Def. 21b), that is sentences (Def. 21) or clauses (Def. 21a) (adapted from Mulder 1989: 451).

Def. 19a. 'Contrastive para-logotactic (cf. Def. 19c) features (Def. 19)' for 'features (Def. 1c1) with the function of groupment over and above logotactic (cf. Def. 2a4c) groupment' (cf. Mulder and Hervey 1980: 54, Def. 18a; Mulder 1989: 451, Def. 19a).

Comment: "In language the suspensive, i.e. 'comma' or 'semi-colon' intonation type belong to this, but also the 'distinctive' types such as 'finality' ('full-stop type'), 'finality with emphasis' ('exclamation-type'), and 'question', though having a directly distinctive function [Def. 7a3], correspond, from another point of view, to contrastive features [Def. 1c1], as they too provide groupment" (Mulder 1989: 452).

Def. 19b. 'Distinctive (cf. Def. 7a3) para-logotactic (cf. Def. 19c) features (Def. 19)' for 'para-logotactic (cf. Def. 19c) features (Def. 19) that are in a direct rela-

tion of opposition with other para-logotactic features (Def. 19) or with zero' (cf. Mulder and Hervey 1980: 54, Def. 18b; Mulder 1989: 452, Def. 19b).

Def. 19c. 'Para-logotactics' for 'system (Def. 1b) of para-logotactic entities (Def. 19d)'.

Def. 19d. 'Para-logotactic entity (Def. 1c2)' for 'logo (Def. 2a4) over and above the level of logotactics (Def. 2a4c)'. Alternative definition, 'entity in para-logotactics (Def. 19c)'.

Def. 19e. 'Para-logotagm' for 'unit (Def. 9e) in para-logotactics (Def. 19c)'.

Def. 19f. 'Para-ontotactics' for 'para-logotactics (Def. 19c), para-cenotactics (Def. 18c), or para-delotactics (Def. 18i)'.

Def. 20. 'Para-ontotagm' for 'unit (Def. 9e) in para-ontotactics (Def. 19f)'. Alternative definition: 'ontotactic (Def. 7c) entities (Def. 1c2) or conglomeration of ontotactic (Def. 7c) entities (Def. 1c2), together with accompanying para-ontotactic features (Def. 17), such that the whole assumes an identity on a level different from the ontotactic (Def. 7c) level (i.e. the level of ontotactics (Def. 3b))' (cf. Mulder and Hervey 1980: 55, Def. 19; Mulder 1989: 452, Def. 20).

Def. 20a. 'Base' for 'in a para-ontotagm (Def. 20.), the total complex (Def. 6c) of those features (Def. 1c1) that correspond (on the level of para-ontotactics: Def. 19f) to the ontotactic (Def. 7c) entities (Def. 1c2)' (cf. Mulder – Hervey 1980: 56, Def. 20b; Mulder 1989: 452, Def. 20a).

Comment: See also "basic entity" (Def. 1c2a).

Def. 20b. 'Complex (cf. Def. 6c) para-ontotagm (Def. 20)' for 'self-contained (Def. 1b1) entity (Def. 1c2) constituted by two or more para-ontotagms (Def. 20), together with further accompanying para-ontotactic features (Def. 17)' (cf. Mulder and Hervey 1980: 56, Def. 19a; Mulder 1989: 452, Def. 20b).

Axiom D. All semiotic systems (Def. 1c, Def. 5) contain sentences (Def. 21) (cf. Mulder and Hervey 1980: 56, Axiom D; Mulder 1989: 453, Axiom D).

Comment: Axioms B, C and D together cover the whole of the cenology (Def. 2b1a), logology (Def. 2a4a) and delology (Def. 2c1a), i.e. the system ontology (Def. 3a1a) (cf. Mulder 1989: 452–453).

In Mulder's revised version of the postulates Axiom D reads, "All semiotic systems contain sentences, constituted by a base and para-syntactic features" (Mulder 1989: 453). This contrasts with Axiom D in the earlier version of the postulates, which reads, "All semiotic systems contain sentences" (Mulder and Hervey 1980: 56). I can see no need in specifying that all semiotic systems [Def. 1c, Def. 5] must have para-syntactic features [= para-logotactic features (Def. 19)], since in many cases these will merely be "zero" features (Def. 1c1). It seems more sensible to adopt the position indicated in the older version of the postulates that not all semiotic systems (Def. 1c, Def. 5) need have para-ontotactics (Def. 19f).

Axiom D sets the sentential level (as one aspect of the para-logotactics: Def. 19c) apart from the rest of the logology (Def. 2a4a), especially the logotactics

(Def. 2a4c). This separation is one of the more conspicuous features of axiomatic functionalism, and is designed to resolve some aspects of the dilemma of well-formedness vs. non-well-formedness (cf. Mulder 1989: 454).

In the following Definitions, I do not consider descriptive issues in paradelotactics (Def. 18i) paralleling those relating to sentence (Def. 21) and clause (Def. 21a). I have left these to be worked through in later and more developed versions of the postulates for extended axiomatic functionalism.

Def. 21. 'Sentence' for 'logo (Def. 2a4) (by definition corresponding to a signum (Def. 2a1, Def. 24)) with such features (Def. 1c1) that it cannot be a feature (Def. 1c1) (constituent (Def. 7f1) or other feature (Def. 1c1)) of another logo (Def. 2a4)'. Alternative definition: 'signum (Def. 2a1, Def. 24) such that it is a self-contained (Def. 1b1) vehicle for conveying messages' (cf. Mulder and Hervey 1980: 56, Def. 20; Mulder 1989: 453, Def. 21).

Def. 21a 'Clause' for 'immediate constituent (Def. 7f1a) (perhaps the only one) of a sentence (Def. 21)' (cf. Mulder and Hervey 1980: 56, Def. 20a; Mulder 1989: 453, Def. 21a).

Comment: A clause is therefore, by implication, also a para-logotactic entity (Def. 19d), and as all para-logotactic entities (Def. 19d) are sentential entities (Def. 21b), though not vice versa, a clause is a sentential entity (Def. 21b) (adapted from Mulder 1989: 453–454).

Def. 21b. 'Sentential features (Def. 1c1) or entities (Def. 1c2)' for 'such features (Def. 1c1) or entities (Def. 1c2) as determine particular signa (Def. 2a1, Def. 24) to be sentences (Def. 21)' (cf. Mulder and Hervey 1980: 56, Def. 20c; Mulder 1989: 454, Def. 21b).

Comment: These are not necessarily para-logotactic features (Def. 19), though the latter are necessarily sentential features (adapted from Mulder 1989: 454).

Def. 21c. 'Sentential markers' for 'occurrence dependent (cf. Def. 12a) sentential features or entities (Def. 21b) that are not para-logotactic features (Def. 19) or entities (Def. 19d), but correspond to logotactic (cf. Def. 2a4c) features (Def. 1c1) or entities (Def. 7d, Def. 9b1)' (cf. Mulder and Hervey 1980: 56, Def. 20c1; Mulder 1989: 454, Def. 21c).

Comment: cf. the long discussion of sentential markers in Mulder (1989: 454).

Axiom E. There may be a many-to-one relation between cenetic form (Def. 22a) and figura (Def. 2b) (alloceny (Def. 23a)), and between cenological form (Def. 2b1d, Def. 23) and expression (Def. 24a) (allomorphy (Def. 24b1)), and vice versa: homoceny (Def. 25a) and homomorphy (Def. 26a) respectively. There may also be a many-to-one relationship between semantic form (Def. 23b1) and denotation (Def. 2c) (allodely (Def. 23c1)), and between delological form (Def. 2c1d, Def. 23c) and content (Def. 24b) (allosemy (Def. 24c1)), and vice versa: homodely (Def. 26k) and homosemy (Def. 26f) respectively (cf. Mulder and Hervey 1980: 59, Axiom E; Mulder 1989: 454, Axiom E).

Comment: Axiom E and the ensuing Definitions deal with aspects of the signum ontology (Def. F4.4), principally at the allontic (cf. Def. 26o) level (i.e. the al-

lontics; cf. Dickins 1998: 137; also Mulder 1989: 457). They also deal with the protocolising levels of general cenetics (Def. 22d) and general semantics (Def. 23b4) allied to the signum ontology (Def. F4.4).

Def. 22. 'Cenetic image' (symbolised: *i*) for 'model for the unique form of a singular realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), in morphontics (Def. F3h)' (cf. Mulder and Hervey 1980: 59, Def. 22; Mulder 1989: 454, Def. 22), or for 'model for the unique form of a single entity (Def. 1c2) which is capable of being the instantiation (Def. F4.6) of a figura (Def. 2b)'.

Def. 22a. 'Cenetic form' (symbolised: *f*) for 'class of impressionistically similar cenetic images (Def. 22)' (cf. Mulder and Hervey 1980: 56, Def. 22a; Mulder 1989: 453, Def. 22a). Formal definition $f=\{i\}$, the braces indicating that it is a self-contained (Def. 1b1) class of *i*. (cf. Mulder 1989: 445).

Def. 22b. 'Image cenetics' for 'the sub-theory dealing with the description of cenetic images (Def. 22)'.

Def. 22c. 'Form cenetics' for 'the sub-theory dealing with the description of cenetic forms (Def. 22a)'.

Def. 22d. 'General cenetics' for 'image cenetics (Def. 22b) and form cenetics (Def. 22c)'.

Def. 23. 'Cenological form (symbolised: *p*)' for 'a particular self-contained (Def. 1b1) class of one or more particular cenetic forms (Def. 22a) (i.e. $\{f\}$), each member *f* in its capacity of having a particular distinctive function (Def. 7a3) d in cenology (Def. 2b1a)' (cf. Mulder and Hervey 1980: 60, Def. 23; Mulder 1989: 455, Def. 23). Formal definition: $p = \{f^{i...n}\mathrm{Rd}\}$, where $^{i...n}$ indicates 'each one of a particular class' (cf. Mulder 1989: 455). Alternative definition to Def. 2b1d.

Def. 23a. 'Alloceny' for 'one cenological form (Def. 2b1d, Def. 23), the manifestations (Def. 26o) of which corresponding to two or more cenetic forms (Def. 22a)' (cf. Mulder and Hervey 1980: 60, Def. 23a; Mulder 1989: 455, Def. 23a). Formal definition: '$f^{i}Rd^{i} \sim f^{j}\ Rd^{i}$', where also ^{j} stands for an integer, signifying 'a particular' but $^{i \neq j}$, and ~ can be read as 'compared with'. (cf. Mulder 1989: 455).

Def. 23a1. 'Allocene' either for 'one of the terms of 'alloceny' (Def. 23a) as a comparison', or for 'an allocenic entity (Def. 1c2) where there is no comparison with another allocenic entity (Def. 1c2), i.e. {i}Rd *or* f^{i}Rd' (cf. Mulder and Hervey 1980: 60, Def. 23a; Mulder 1989: 455, Def. 23a1).

Def. 23a2. 'Allocenics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allocenes (second sense) (Def. 23a1) and related notions'.

Def. 23a3. 'Monoceny' for 'state of affairs in which a figura (Def. 2b) has only one allocene (second sense) (Def. 23a1)'.

Def. 23a4. 'Polyceny' for 'state of affairs in which a figura (Def. 2b) has more than one allocene (second sense) (Def. 23a1)'.

Def. 23b. 'Semantic image' (symbolised: *j*) for 'model for the unique form of a singular realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), in semantics

(Def. F4.3)', or for 'model for the unique form of a single entity (Def. 1c2) which is capable of being the instantiation (Def. F4.6) of a denotation (Def. 2c)'. Alternative definition to Def. F4b.

Def. 23b1. 'Semantic form' (symbolised: *g*) for 'class of impressionistically similar semantic images (Def. 23b, Def. F4b)'. Formal definition: $g=\{j\}$, the braces indicating that it is a self-contained (Def. 1b1) class of *j* (cf. Mulder 1989: 445).

Def. 23b2. 'Image semantics' for 'the sub-theory dealing with the description of semantic images (Def. 23b, Def. F4b)'.

Def. 23b3. 'Form semantics' for 'the sub-theory dealing with the description of semantic forms (Def. 23b1)'.

Def. 23b4. 'General semantics' for 'image cenetics (Def. 23b2) and form semantics (Def. 23b3)'.

Def. 23c. 'Delological form (symbolised: *q*)' for 'a particular self-contained (Def. 1b1) class of one or particular semantic forms (Def. 23b1) (i.e. $\{q\}$), each member *q* in its capacity of having a particular distinctive function (Def. 7a3) e in delology (Def. 2c1a)'. Formal definition: $q= \{g^{i...n}\mathrm{Re}\}$, where $^{i...n}$ indicates 'each one of a particular class'. Alternative definition to Def. 2c1d.

Def. 23c1. 'Allodely' for 'one denotation (Def. 2c), the manifestations (Def. 26o) of which corresponding to two or more semantic forms (Def. 23b1)'. Formal definition: $g^{i}\mathrm{Re}^{i} \sim g^{j}\mathrm{Re}^{i}$, where also ^{j} stands for an integer, signifying 'a particular' but $^{i\neq j}$ and ~ can be read as 'compared with'.

Def. 23c2. 'Allodele' or 'denotatum-type' either for 'one of the terms of 'allodely' (Def. 23c1) as a comparison', or for 'an allodelic entity (Def. 1c2) where there is no comparison with another allodelic entity (Def. 1c2), i.e. $g\mathrm{Re}$ or $\{j\}\mathrm{Re}$'.

Def. 23c3. 'Allodelics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allodeles (second sense) (Def. 23c2) and related notions'.

Def. 23c4. 'Monodely' for 'state of affairs in which a denotation (Def. 2c) has only one allodele (second sense) (Def. 23c2)'.

Def. 23c5. 'Polydely' for 'state of affairs in which a denotation (Def. 2c) has more than one allodele (second sense) (Def. 23c2)'.

Def. 24. 'Signum' (symbolised: S) for 'the conjunction of a particular expression (Def. 24a) and a particular content (Def. 24b), which mutually imply one another'. Formal definition: S= E&C, or $S=\{p^{i...n}\mathrm{Rs}\}\&\{q^{i...n}\mathrm{Rs}\}$.

Comment: Alternative definition to Def. 2a1 (cf. Mulder and Hervey 1980: 60, Def. 24; Mulder 1989:455, Def. 24).

Def. 24a. 'Expression' (symbolised: E)) for 'a particular self-contained (Def. 1b1) class of one or more particular cenological forms (Def. 2b1d, Def. 23) (i.e. $\{p\}$) each member in its capacity of having a particular distinctive function (cf. Def. 7a3) s'. Formal definition: $\mathrm{E} = \{p^{i...n}\mathrm{Rs}\}$ (cf. Mulder and Hervey 1980: 60, Def. 24a; Mulder 1989: 455, Def. 24a).

Comment: Mulder defines expression formally as: $\mathrm{E}^{i} = \{f^{i...n}\mathrm{Rd}^{i}\}$, commenting, "As *p* has already distinctive function incorporated, i.e. $p^{i} = \{f^{i...n}\mathrm{Rd}^{i}\}$, the distinctive function d in 'Expression' (or in 'Content', or in 'Signum') is by impli-

cation distinctive function at a further level, i.e. on the signum-level" (Mulder 1989: 456). This elegant proposal seems to be ruled out in the extended version (and arguably also in the standard version) by virtue of the need to incorporate on a coherent basis a definition for both cenete (Def. F3d), i.e. *i*Rd, and morphete (or form in Hervey's sense) (Def. F1b1a0), i.e. *i*Rs (cf. Dickins 1998: 422–423; Note 9).

Def. 24b. 'Content' (symbolised: C)) for 'a particular self-contained (Def. 1b1) class of one or more particular delological forms (Def. 2c1d, Def. 23c) (i.e. {*q*}) each member in its capacity of having a particular distinctive function (Def. 7a3) s'. Formal definition: C = $\{q^{i...n}Rs\}$ (cf. Mulder and Hervey 1980: 61, Def. 24b; Mulder 1989: 456, Def. 24b).

Def. 24b1. 'Allomorphy' for 'one signum (Def. 2a1, Def. 24), the allomorphic (cf. Def. 24b1b) manifestations (Def. 26o) of which corresponding to two or more cenological forms (Def. 2b1d, Def. 23)'. Formal definition: $p^iRs^i \sim p^jRs^i$ (cf. Mulder and Hervey 1980: 61, Def. 24a1; Mulder 1989: 456, Def. 24b1).

Def. 24b1a. 'Allomorph' either for 'one of the terms of 'allomorphy' (Def. 24b1) as a comparison', or for 'an allomorphic entity (Def. 1c2) where there is no comparison with another allomorphic entity (Def. 1c2), i.e. $p^iRs^{i'}$ (cf. Mulder and Hervey 1980: 61, Def. 24a1; Mulder 1989: 456, Def. 24b1a).

Def. 24b1b. 'Allomorphics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allomorphs (second sense) (Def. 24b1a) and related notions'.

Def. 24b1c. 'Monomorphy' for 'state of affairs in which a signum (Def. 2a1, Def. 24) has only one allomorph (second sense) (Def. 24b1a)'.

Def. 24b1d. 'Polymorphy' for 'state of affairs in which a signum (Def. 2a1, Def. 24) has more than one allomorph (second sense) (Def. 24b1a)'.

Def. 24b1e. 'Allomorphon' for 'a particular cenetic form (Def. 22a) in its capacity of standing in relation to a particular distinctive function (Def. 7a3) in cenology (Def. 2b1a) in its capacity of standing in relation to a particular distinctive function (Def. 7a3) in logology (Def. 2a4a)'. Formal definition: (*f*Rd)Rs or {(*i*Rd)Rs}.

Def. 24b1f. 'Allomorphony' for 'one signum (Def. 2a1, Def. 24) the allomorphonic (cf. Def. 24b1h) manifestations (Def. 26o) of which corresponding to one cenological form (Def. 2b1d, Def. 23), but to more than one cenetic form (Def. 22a)'.

Def. 24b1g. 'Polymorphony' for 'state of affairs in which a signum (Def. 2a1, Def. 24) has more than one allomorphon (Def. 24b1e)'.

Def. 24b1h. 'Allomorphonics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allomorphons (Def. 24b1e)'.

Def. 24c1. 'Allosemy' for 'one signum (Def. 2a1, Def. 24), the allosemic (cf. Def. 24c1b) manifestations (Def. 26p) of which corresponding to two or more delological forms (Def. 2c1d, Def. 23c)'. Formal definition: $q^iRs^i \sim q^jRs^i$.

Def. 24c1a. 'Alloseme' either for 'one of the terms of 'allosemy' (Def. 24c1) as a comparison', or for 'an allosemic entity (Def. 1c2) where there is no comparison with another allosemic entity (Def. 1c2), i.e. $q^iRs^{i'}$.

Def. 24c1b. ‘Allosemics’ for ‘the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allosemes (second sense) (Def. 24c1a) and related notions’.

Def. 24c1c. ‘Monosemy’ for ‘state of affairs in which a signum (Def. 2a1, Def. 24) has only one alloseme (second sense) (Def. 24c1a)’.

Def. 24c1d. ‘Polysemy’ for ‘state of affairs in which a signum (Def. 2a1, Def. 24) has more than one alloseme (second sense) (Def. 24c1a)’.

Def. 24c1e. ‘Allosemon’ or ‘reference-type’ for ‘a particular semantic form (Def. 23b1) in its capacity of standing in relation to a particular distinctive function (Def. 7a3) in delology (Def. 2c1a) in its capacity of standing in relation to a particular distinctive function (Def. 7a3) in logology (Def. 2a4a)’. Formal definition: (*g*Re)Rs *or* {(*j*Re)Rs}.

Def. 24c1f. ‘Allosemony’ for ‘one signum (Def. 2a1, Def. 24) the allosemonic (cf. Def. 24c1h) manifestation (Def. 26o) of which corresponding to one delological form (Def. 2c1d, Def. 23c), but to more than one semantic form (Def. 23b1)’.

Def. 24c1g. ‘Polysemony’ for ‘state of affairs in which one signum (Def. 2a1, Def. 24) has more than one allosemon (Def. 24c1e)’.

Def. 24c1h. ‘Allosemonics’ for ‘the sub-theory within the signum ontology (Def. F4.4) dealing with the description of allosemons (Def. 24c1e)’.

Def. 25. ‘Homocene’ for ‘allocene (second sense) (Def. 23a1) of one figura (Def. 2b) in comparison with and having the same cenetic form (Def. 22a) as allocene (second sense) (Def. 23a1) of another figura (Def. 2b)’ (cf. Mulder and Hervey 1980: 61, Def. 25; Mulder 1989: 456, Def. 25).

Def. 25a. ‘Homoceny’ for ‘relationship obtaining between homocenes (Def. 25). Formal definition of homoceny: $f^{i}\mathrm{Rd}^{i} \sim f^{j}\mathrm{Rd}^{j}, {}^{i\neq j}$.

Def. 25b. ‘Heterocene’ for ‘allocene (second sense) (Def. 23a1) of one figura (Def. 2b) in comparison with and having a different cenetic form (Def. 22a) from allocene (second sense) (Def. 23a1) of another figura (Def. 2b)’.

Def. 25c. ‘Heteroceny’ for ‘relationship between heterocenes (Def. 25b). Formal definition of heteroceny: $f^{i}\mathrm{Rd}^{i} \sim f^{j}\mathrm{Rd}^{j}, {}^{i\neq j}$.

Def. 25d. ‘Cene’ for ‘allocene (second sense) (Def. 23a1), homocene (Def. 25b), or heterocene (Def. 25c)’.

Comment: Since homocene (Def. 25b) and heterocene (Def. 25c), but not allocene (second sense) (Def. 23a1) imply more than one entity (Def. 1c2), where only a single cene is referred to, this is necessarily an allocene (second sense) (Def. 23a1).

Def. 26. ‘Homomorph’ for ‘allomorph (second sense) (Def. 24b1a) of one signum (Def. 2a1, Def. 24), in comparison with and having the same cenological form (Def. 2b1d, Def. 23) as allomorph (second sense) (Def. 24b1a) of another signum (Def. 2a1, Def. 24)’ (cf. Mulder and Hervey 1980: 61, Def. 26; Mulder 1989: 456, Def. 26).

Def. 26a. ‘Homomorphy’ for ‘relationship obtaining between homomorphs (Def. 26)’. Formal definition of homomorphy: $p^{i}\mathrm{Rs}^{i} \sim p^{i}\mathrm{Rs}^{j}, {}^{i\neq j}$.

Def. 26b. ‘Heteromorph’ for ‘allomorph (second sense) (Def. 24b1a)) of one signum (Def. 2a1, Def. 24), in comparison with and having a different cenological form (Def. 2b1d, Def. 23) from, allomorph (second sense) (Def. 24b1a) of another signum (Def. 2a1, Def. 24)’.

Def. 26c. ‘Heteromorphy’ for ‘relationship obtaining between heteromorphs (Def. 26b)’. Formal definition of heteromorphy: $p^{i}\mathrm{Rs}^{i} \sim p^{j}\ \mathrm{Rs}^{j},\ ^{i\neq j}$.

Def. 26d. ‘Morph’ for ‘allomorph (Def. 24b1a), homomorph (Def. 26), or heteromorph (Def. 26b)’.

Comment: Since homomorph (Def. 26) and heteromorph (Def. 26b), but not allomorph (second sense) (Def. 24b1a) imply more than one entity (Def. 1c2), where only a single morph is referred to, this is necessarily an allomorph (second sense) (Def. 24b1a). Cf. standard axiomatic functionalism, Def. F6.

Def. 26e. ‘Homoseme’ for ‘alloseme (second sense) (Def. 24c1a) of one signum (Def. 2a1, Def. 24), in comparison with and having the same delological form (Def. 2c1d, Def. 23c) as alloseme (second sense) (Def. 24c1a) of another signum (Def. 2a1, Def. 24)’.

Def. 26f. ‘Homosemy’ for ‘relationship obtaining between homosemes (Def. 26e)’. Formal definition of homosemy: $q^{i}\mathrm{Rs}^{i} \sim q^{\ i}\ \mathrm{Rs}^{j},\ ^{i\neq j}$.

Def. 26g. ‘Heteroseme’ for ‘alloseme (second sense) (Def. 24c1a) of one signum (Def. 2a1, Def. 24), in comparison with and having a different delological form (Def. 2c1d, Def. 23c) from alloseme (second sense) (Def. 24c1a) of another signum (Def. 2a1, Def. 24)’.

Def. 26h. ‘Heterosemy’ for ‘relationship obtaining between heterosemes (Def. 26g)’. Formal definition of heterosemy: $q^{i}\ \mathrm{Rs}^{i} \sim q^{j}\mathrm{Rs}^{j},\ ^{i\neq j}$.

Def. 26i. ‘Seme’ for ‘alloseme (Def. 24c1a), homoseme (Def. 26e), or heteroseme (Def. 26g)’.

Comment: Since homoseme (Def. 26e) and heteroseme (Def. 26g), but not alloseme (second sense) (Def. 24c1a) imply more than one entity (Def. 1c2), where only a single seme is referred to, this is necessarily an alloseme (second sense) (Def. 24c1a).

Def. 26j. ‘Homodele’ for ‘allodele (second sense) (Def. 23c2) of one denotation (Def. 2c) in comparison with and having the same semantic form (Def. 23b1) as allodele (second sense) (Def. 23c2) of another denotation (Def. 2c)’.

Def. 26k. ‘Homodely’ for ‘relationship obtaining between homodeles (Def. 26j)’. Formal definition of homodely: $g^{\ i}\ \mathrm{Re}^{i} \sim g^{\ i}\ \mathrm{Re}^{j},\ ^{i\neq j}$.

Def. 26l. ‘Heterodele’ for ‘allodele (second sense) (Def. 23c2) of one denotation (Def. 2c) in comparison with and having a different semantic form (Def. 23b1) from allodele (second sense) (Def. 23c2) of another denotation (Def. 2c)’.

Def. 26m. ‘Heterodely’ for ‘relationship obtaining betwen heterodeles (Def. 26m). Formal definition of heterodely: $g^{\ i}\ \mathrm{Re}^{i} \sim g^{j}\mathrm{Re}^{j},\ ^{i\neq j}$.

Def. 26n. ‘Dele’ for ‘allodele (Def. 23c2), homodele (Def. 26j), or heterodele (Def. 26l)’.

Comment: Since homodele (Def. 26j) and heterodele (Def. 26l), but not allodele (second sense) (Def. 23c2) imply more than one entity (Def. 1c2), where only a

single dele is referred to, this is necessarily an allodele (second sense) (Def. 23c2).

Def. 26o. ‘Allont’ or ‘manifestation’ for ‘allomorph (Def. 24b1a), allomorphon (Def. 24b1e), alloseme (Def. 24c1a), allosemon (Def. 24c1e), allocene (Def. 23a1), or allodele (Def. 23c2)’.

Comment: See also: instantiation (Def. F4.6), realisation (Def. F4.7).

Def. 27. ‘Homonym’ for ‘total homonym (Def. 27a) or partial homonym (Def. 27b)’ (cf. Mulder and Hervey 1980: 61, Def. 27; Mulder 1989: 456, Def. 27).

Def. 27a. ‘Total homonym’ for ‘total class of allomorphs (second sense) (Def. 24b1a) of one signum (Def. 2a1, Def. 24) in comparison with, and the cenological forms (Def. 2b1d, Def. 23) of its members being the same as, those of the total class of allomorphs (second sense) (Def. 24b1a) of another signum (Def. 2a1, Def. 24)’ (cf. Mulder and Hervey 1980: 61, Def. 27; Mulder 1989: 456, Def. 27).

Def. 27b. ‘Partial homonym’ for ‘at least one member of class of allomorphs (second sense) (Def. 24b1a) of one signum (Def. 2a1, Def. 24), in comparison with and having the same cenological form (Def. 2b1d, Def. 23) as at least one member of class of allomorphs (second sense) (Def. 24b1a) as another signum (Def. 2a1, Def. 24), but the two signa (Def. 2a1, Def. 24) not being totally homonymous (Def. 27a)’ (cf. Mulder and Hervey 1980: 61, Def. 27; Mulder 1989: 456, Def. 27).

Def. 27c. ‘Homonymy’ for ‘total homonymy (Def. 27d) or partial homonymy (Def. 27e)’.

Def. 27d. ‘Total homonymy’ for ‘state of affairs in which total class of allomorphs (second sense) (Def. 24b1a) of one signum (Def. 2a1, Def. 24) is compared with, and has the same cenological forms (Def. 2b1d, Def. 23) as, those of the total class of allomorphs (second sense) (Def. 24b1a) of another signum (Def. 2a1, Def. 24)’.

Def. 27e. ‘Partial homonymy’ for ‘state of affairs in which at least one member of class of allomorphs (second sense) (Def. 24b1a) of one signum (Def. 2a1, Def. 24), is compared with and has the same cenological form (Def. 2b1d, Def. 23) as at least one member of class of allomorphs (second sense) (Def. 24b1a) of another signum (Def. 2a1, Def. 24), but the two signa (Def. 2a1, Def. 24) are not totally homonymous (cf. Def. 27a)’.

Def. 28. ‘Synonym’ for ‘total synonym (Def. 28a) or partial synonym (Def. 28b)’ (cf. Mulder and Hervey 1980: 61, Def. 28; Mulder 1989: 456, Def. 28).

Def. 28a. ‘Total synonym’ for ‘total class of allosemes (second sense) (Def. 24c1a) of one signum (Def. 2a1, Def. 24) in comparison with, and the delological forms (Def. 2c1d, Def. 23c) of its members being the same as, those of the total class of allosemes (second sense) (Def. 24c1a) of another signum (Def. 2a1, Def. 24)’ (cf. Mulder and Hervey 1980: 61, Def. 28; Mulder 1989: 456, Def. 28).

Def. 28b. ‘Partial synonym’ for ‘at least one member of class of allosemes (second sense) (Def. 24c1a) of one signum (Def. 2a1, Def. 24), in comparison with and having the same delological form (Def. 2c1d, Def. 23c) as at least one member of class of allosemes (second sense) (Def. 24c1a) of another signum (Def. 2a1, Def. 24), but the two signa (Def. 2a1, Def. 24) not being totally synonymous (Def. 28a)’ (cf. Mulder and Hervey 1980: 61, Def. 28; Mulder 1989: 456, Def. 28).

Def. 28c. ‘Synonymy’ for ‘total synonymy (Def. 28d) or partial synonymy (Def. 28e)’.

Def. 28d. ‘Total synonymy’ for ‘state of affairs in which total class of allosemes (second sense) (Def. 24c1a) of one signum (Def. 2a1, Def. 24) is compared with, and has the same delological forms (Def. 2c1d, Def. 23c) as, those of the total class of allosemes (second sense) (Def. 24c1a) of another signum (Def. 2a1, Def. 24)’.

Def. 28e. ‘Partial synonymy’ for ‘state of affairs in which at least one member of class of allosemes (second sense) (Def. 24c1a) of one signum (Def. 2a1, Def. 24), is compared with and has the same delological form (Def. 2c1d, Def. 23c) as at least one member of class of allosemes (second sense) (Def. 24c1a) of another signum (Def. 2a1, Def. 24), but the two signa (Def. 2a1, Def. 24) are not totally synonymous (cf. Def. 28a)’.

Comment: In extended axiomatic functionalism a distinction is made between two senses of ‘utterance’: ‘logete’ (Def. F1b0a), and ‘logonete’ (Def. F1b0b).

Axiom F. Signa (Def. 2a1, Def. 24) may be instantiated (cf. Def. F4.6) an unlimited number of times each resulting utterance (Def. F1a, Def. F1b0a, Def. F1bab) being a member of a potentially infinite class of utterances (Def. F1a, Def. F1b0a, Def. F1bab).

Comment: Axiom F in the standard version deals with the semantics (cf. Mulder and Hervey 1980: 203–211; Mulder 1989: 457). In the extended version, some of what is covered by standard axiomatic-functionalist semantics is subsumed under the system ontology (Def. 3a1a), and as such is dealt with by Axioms B, C and D and ensuing Definitions. Other aspects of what is covered by the standard axiomatic-functionalist semantics are subsumed under the extended axiomatic-functionalist signum ontology (Def. F4.4), and as such are dealt with partially by Axiom E and ensuing Definitions.

In the extended version, Axiom F – though closely related in form to Axiom F in the standard version – deals not with semantics (cf. Def. F4.3 for a definition of semantics under the extended version), but with aspects of the signum ontology (Def. F4.4) not dealt with by Axiom E.

In the following Definitions I have attempted as far as possible to retain the numbers used by Hervey in his postulates for axiomatic-functionalist semantics (Mulder and Hervey 1980: 203–211). Hervey’s Definitions are numbered from 1a. As noted in the Introduction to these Postulates, I have prefixed “F” to each of the corresponding Definition numbers in this version of the postulates in order to specify that the following Definitions relate to Axiom F, and to differen-

tiate them from what would sometimes otherwise be identically labelled Definitions under Axioms A and B.

Def. F1a. 'Utterance (both senses: see Def. F1b0a, Def. F1b0b below)' for 'member of a signum (Def. 2a1, Def. 24) (as a class) such that it is a model for a single realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), of that signum (Def. 2a1, Def. 24)' (cf. Mulder and Hervey 1980: 203, Def. 1a).

Comment: "This means that "utterance" is to be understood, not in the sense of single communication-act as such, but as a construct or model accounting for and applying to a single communication-act. Furthermore, it is to be noted that this model applies only to communication-acts that are realisations of signa, i.e. realisations that convey information as determined by the conventions governing the appropriate signa. In actual fact only sentences are realised in communications, but since sentences may contain several signa, we may also say that each of these signa is, itself 'separately' realised (within the sentence). Consequently, every signum, whether it is a sentence, or can correspond to, or be part of, a sentence-base (Mulder's Def. 20b), can be said to be realised in actual communication. This gives us the right to account or individual realisations of any signum by setting up a unique model, i.e. "utterance", for each of these realisations. In this way we are entitled to regard every signum as a class of "utterances", each member of which class is a model for a single realisation of the appropriate signum" (Hervey 1980: 203).

Def. F1b0a. 'Logete' or 'Utterance (1st sense; Def. F1a)' for 'a conjunction of a morphete (Def. F1b1a0) and a semete (Def. F1b2a0)' (cf. Mulder and Hervey 1980: 203, Def. 1b). Formal definition: *i*Rs & *j*Rs.

Comment: Cf. standard axiomatic functionalism Def. F1b.

Def. F1b0b. 'Logonete' or 'Utterance (2nd sense: Def. F1a)' (symbolised: U) for 'a conjunction of a morphonete (Def. F1b1a4) and a semonete (Def. F1b2a5)' (cf. Mulder and Hervey 1980: 203, Def. 1b). Formal definition: U = (*i*Rd)Rs & (*j*Re)Rs *or* U = F&$\underline{R}$.

Comment: Cf. standard axiomatic functionalism Def. F1b.

Def. F1b0c. 'Logetics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with logetes (Def. F1b0a) or logonetes (F1b0b)'.

Def. F1b0d. 'Logotics' for 'morphotics' (Def. F1b1a2) and 'semotics' (Def. F1b2a2).

Def. F1b0e. 'Logonetics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with logonetes (F1b0b)'.

Def. F1b1a0. 'Morphete' or 'form (1st sense: cf. Def. F1b1b)' for 'cenetic image (Def. 22) in its capacity of having the particular distinctive function (cf. Def. 7a3) appropriate to a particular signum (Def. 2a1, Def. 24)'. Formal definition: *i*Rs (cf. Mulder and Hervey 1980: 204, Def. 11b1a).

Def. F1b1a1. 'Morphetics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with morphetes (Def. F1b1a0)'.

Def. F1b1a2. 'Morphotics' for 'morphologics (Def. F1b1a3), allomorphics (Def. 24b1b), morphonetics (Def. F1b1a5), and morphetics (Def. F1b1a1)'.

Def. F1b1a3. ‘Morphologics’ for ‘the sub-theory within the signum ontology (Def. F4.4) corresponding to logology (Def. 2a4a) in the system ontology (Def. 3a1a) and dealing with expressions (Def. 24a)’.

Def. F1b1a4. ‘Morphonete’ or ‘form (2nd sense: cf. Def. F1b1b)’ (symbolised: F) for ‘cenetic image (Def. 22) in its capacity of having the particular distinctive function (cf. Def. 7a3) appropriate to a particular figura (Def. 2b), in its capacity of having the distinctive function (cf. Def. 7a3) appropriate to a particular signum (Def. 2a1, Def. 24)’. Symbolised: F. Formal definition: F = (*i*Rd)Rs (cf. Mulder and Hervey 1980: 204, Def. 1b1a).

Def. F1b1a5. ‘Morphonetics’ for ‘the sub-theory within the signum ontology (Def. F4.4) dealing with morphonetes (Def. F1b1a4)’.

Def. F1b1b. ‘Form (both senses)’ for ‘member of an expression (Def. 24a) as a class, such that it is a model for a single realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), of that expression (Def. 24a)’ (cf. Mulder and Hervey 1980: 204, Def. 1b1b).

> *Comment*: “Informally, we may say that the form of an utterance accounts for the necessary aspect of ‘substance’ without which a signum cannot be realised in actual communication. At the same time the form of an utterance is a ‘token’ of the expression (see Mulder’s Def. 24a) of the signum whose realisation the given utterance is a model for. That is to say, a form is an intrinsic aspect of an utterance, in the same way that an expression is an intrinsic aspect of a signum” (Hervey 1980: 203–204).
>
> “Thus the form of an utterance accounts for the spatio-temporally unique nature of the realisation for which the given utterance is a model, at the same time as incalculating the fact of that unique realisation being the realisation of a signum with a particular grammatically [cf. logologically (Def. 2a4a)] distinctive function” (Hervey 1980: 204).

Def. F1b2a0. ‘Semete’ or ‘reference (1st sense)’ for ‘semantic image (Def. 23b, Def. F4b) in its capacity of having the particular distinctive function (cf. Def. 7a3) appropriate to a particular signum (Def. 2a1, Def. 24)’. Formal definition: *j*Rs (cf. Mulder and Hervey 1980: 204, Def. 1b2a).

Def. F1b2a1. ‘Semetics’ for ‘the sub-theory within the signum ontology (Def. F4.4) dealing with semetes (Def. F1b2a0)’.

Def. F1b2a2. ‘Semotics’ for ‘semologics (Def. F1b2a3), allosemics (Def. 24c1b), semonetics (Def. F1b2a6), and semetics (Def. F1b2a1)’.

Def. F1b2a3. ‘Semologics’ for ‘the sub-theory within the signum ontology (Def. F4.4) corresponding to logology (Def. 2a4a) in the system ontology (Def. 3a1a) and dealing with contents (Def. 24b)’.

Def. F1b2a4. ‘Logologics’ for ‘the sub-theory within the signum ontology (Def. F4.4) corresponding to logology (Def. 2a4a) in the system ontology (Def. 3a1a) and dealing with signa (Def. 2a1, Def. 24)’.

Def. F1b2a5. ‘Semonete’ or ‘reference (2nd sense)’ (symbolised: R) for ‘semantic image (Def. 23b, Def. F4b) in its capacity of having the particular distinctive function (cf. Def. 7a3) appropriate to a particular denotation (Def. 2c), in its capacity of having the distinctive function (cf. Def. 7a3) appropriate to a par-

ticular signum (Def. 2a1, Def. 24)'. Formal definition: $\underline{R} = (j\text{Re})\text{Rs}$ (cf. Mulder and Hervey 1980: 204, Def. 1b2a).

Def. F1b2a6. 'Semonetics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with semonetes (Def. F1b2a5)'.

Def. F1b2b. 'Reference (both senses)' for 'member of a content (Def. 24b) as a class, such that it is a model for a single realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), of that content (Def. 24b)' (cf. Mulder and Hervey 1980: 204, Def. 1b2b).

Comment: "A reference accounts for the necessary information-bearing aspect without which no act could be construed as a communication-act, let alone the realisation of a signum. Form and reference are merely two equally relevant and equally important ways of looking at the same thing (i.e. utterance). Form and reference as 'tokens' of expression and content respectively, may be conceived as the converse of one another. This is analogous with the way expression and content, themselves, are each other's converse (see Mulder's Def. 24). In intuitive terms this view of form and reference can be explained by pointing out that form accounts for the fact that an utterance is not mere substance, but substance necessarily linked with information-content, whereas reference accounts for the fact that an utterance is not just an information-content, but an information-content necessarily linked to a substance" (Hervey 1980: 204).

"We may say that looking at an utterance from the aspect of reference is looking at that aspect of the realisation which links it to the actual piece of information conveyed by ... that realisation" (Hervey 1980: 205).

Def. F2. 'Class of equivalent logetes (Def. F1b0a) (or: utterances: Def. F1a, first sense)' for 'the set of all and only the logetes (Def. F1b0a) (or: utterances: Def. F1a, first sense) which are members of a given signum (Def. 2a1, Def. 24) as a class' (cf. Mulder and Hervey 1980: 205, Def. 2).

Def. F2.1. 'Class of equivalent logonetes (Def. F1b0b) (or: utterances: Def. F1a, second sense)' for 'the set of all and only the logonetes (Def. F1b0b) (or: utterances: Def. F1a, second sense) which are members of a given signum (Def. 2a1, Def. 24) as a class' (cf. Mulder and Hervey 1980: 205, Def. 2).

Comment: "A signum can now be treated ... as a class of equivalent utterances" (Hervey 1980: 205).

Def. F2a. 'Class of equivalent morphetes (Def. F1b1a0) (or: forms: Def. F1b1b, first sense)' for 'the set of all and only the morphetes (or: forms, Def. F1b1b, first sense) which are members of a given signum (Def. 2a1, Def. 24) as a class' (cf. Mulder and Hervey 1980: 205, Def. 2a).

Def. F2a1. 'Class of equivalent morphonetes (Def. F1b1a4) (or: forms, Def. F1b1b, second sense)' for 'the set of all and only the morphonetes (or: forms, Def. F1b1a4, second sense) which are members of a given signum (Def. 2a1, Def. 24) as a class' (cf. Mulder and Hervey 1980: 205, Def. 2a).

Comment: "... we may conceive of an expression as a class of equivalent forms" (Hervey 1980: 205).

Def. F2b. 'Class of equivalent semetes (Def. F1b2a0) (or: references, Def. F1b2b, first sense)' for 'the set of all and only the semetes (Def. F1b2a0) (or: references,

Def. F1b2b, first sense) which are members of a given signum (Def. 2a1, Def. 24) as a class' (cf. Mulder and Hervey 1980: 205, Def. 2b).

Def. F2b1. 'Class of equivalent semonetes (Def. F1b2a5) (or: references, Def. F1b2b, second sense)' for 'the set of all and only the semonetes (Def. F1b2a5) (or: references, Def. F1b2b, second sense) which are members of a given signum (Def. 2a1, Def. 24) as a class' (cf. Mulder and Hervey 1980: 205, Def. 2b).

Comment: "... we may conceive of a content as a class of equivalent references" (Hervey 1980: 205).

Defs. 3a, 3b, and 3c in Hervey (1980: 205–206) provide definitions for form class, reference class, and form-reference class. These definitions are no longer needed in the extended version, since they are superseded by the notions morphonete (Def. F1b1a1) and semonete (Def. 1b2a1). They do not therefore appear in the Postulates for Extended Axiomatic Functionalism.

Def. F3d. 'Cenete' for 'member of a figura (Def. 2b) (as a class) such that it is a model for a single realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), of that figura (Def. 2b)'. Formal definition: *i*Rd.

Def. F3e. 'Cenetics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with the description of cenetes (Def. F3d)'.

Def. F3f. 'Cenotics' for 'cenologics (Def. F3g), allocenics (Def. 23a2), and cenetics (Def. F3e)'.

Def. F3g. 'Cenologics' for 'the sub-theory within the signum ontology (Def. F4.4) corresponding to cenology (Def. 2b1a) in the system ontology (Def. 3a1a)'.

Def. F3h. 'Morphontics' for 'morphotics (Def.F1b1a2) and cenotics (Def. F3f)'.

Def. F4. 'Delete' or 'denotatum' for 'member of a denotation (Def. 2c) (as a class) such that it is a model for a single realisation (Def. F4.7), i.e. an instantiation (Def. F4.6), of that denotation (Def. 2c)'. Formal definition: *j*Re. Alternative definitions: 'model for an ostensible (Def. F4b1) entity denoted (cf. Def. 4a) by utterances (Def. F1a, Def. F1b0a, Def. 1b0b)'; 'model for an ostensible (Def. F4b1) entity expressed by an index (Def. 2) as an item (i.e. as a member of an index (Def. 2) as a class of items)' (cf. Mulder and Hervey 1980: 206, Def. 4).

Comment: In extended axiomatic functionalism, a delete (denotatum) is a model for a "piece of information". Entities which are such "pieces of information" "may be objects, qualities, processes, relations, or complex circumstances. They may, furthermore, be 'real' entities, 'candidates for reality', or purely abstract or fictional" (Hervey 1980: 206).

Def. F4.0. 'Deletics' for 'the sub-theory within the signum ontology (Def. F4.4) dealing with deletes (Def. F4)'.

Def. F4.1. 'Delotics' for 'delologics (Def. F4.2), allodelics (Def. 23c3), and deletics (Def. F4.0)'.

Def. F4.2. 'Delologics' for 'sub-theory within the signum ontology (Def. F4.4) corresponding to delology (Def. 2c1a) in the system ontology (Def. 3a1a)'.

Def. F4.3. 'Semantics' for 'semotics (Def. F1b2a2) and delotics (Def. F4.1)'.

Def. F4.4. 'Signum ontology' for 'morphontics (Def. F3h) and semantics (Def. F4.3)'.

Def. F4.5. ‘Semiotics’ for ‘system ontology’ (Def. 3a1a) and ‘signum ontology (Def. F4.4)’.

Def. F4.6. ‘Ontete’ or ‘instantiation’ for ‘cenete (Def. F3d), morphete (Def. F1b1a0), morphonete (Def. F1b1a4), logete (Def. F1b0a), logonete (Def. F1b0b), semete (Def. F1b2a0), semonete (Def. F1b2a5), or delete (Def. F4)’.

Comment: See also: manifestation (Def. 26o), realisation (Def. F4.7).

Def. F4.7. ‘Realisation’ for ‘allont (manifestation) (Def. 26o), or ontete (instantiation) (Def. F4.6)’.

Def. F4a. ‘Denote’ for ‘refer to by virtue of conventions relevant to semiotic systems (Def. 1c, Def. 5)’ (cf. Mulder and Hervey 1980: 206, Def. 4a).

Comment: See discussion in Dickins 1998: 117–125.

Def. F4b. ‘Semantic image’ for ‘model for the unique form of a single actually or potentially ostensible (Def. F4b1) entity which is capable of being expressed by the instantiation (Def. F4.6) of a least one denotation (Def. 2c)’ (cf. Mulder and Hervey 1980: 206, Def. 4b), or for ‘model for the unique form of a single entity which is capable of being the instantiation (Def. F4.6) of a denotation (Def. 2c)’; or for ‘model for an actually or potentially ostensible (Def. F4b1) entity capable of being expressed by an index (Def. 2) as an item (i.e. as a member of an index (Def. 2) as a class of items)’. Symbolised: *j*. Alternative definition to Def. 23b.

Comment: “By “potentially ostensible entity” is meant an entity which, although its existence has not been instanced in a concrete sense (e.g. a fictional entity), would be ostensible in certain specifiable ways. For instance, an entity unicorn, would if it ‘existed’, be ostensible via direct evidence of sight” (Hervey 1980: 206).

Def. F4b1. ‘Ostensible’ for ‘distinct from at least one other entity or from its own absence’ (cf. Mulder and Hervey 1980: 206, Def. 4b1).

Comment: “It will be noted that ‘ostension’ is interpreted here in terms of the functional principle, whereby any ‘positive’ term acquires its identity ‘negatively’, through opposition to other terms” (Hervey 1980: 206).

Hervey’s Def. 5 (Mulder and Hervey 1980: 206) provides a definition for denotation in standard axiomatic functionalism. The rather different notion of denotation in extended axiomatic functionalism is defined in these postulates by Def. 2c.

Hervey’s Defs. 5a and 5b (Mulder and Hervey 1980: 206) provide a definition for denotation class in standard axiomatic functionalism. Like the notions form class, reference class, and form-reference class (see comment above; Hervey’s definitions 3a, 3b and 3c), these notions are not required in the extended version.

Hervey’s Def. 6 (Mulder and Hervey 1980: 206–207) provides a definition of morph in terms of the intersection of a particular form class (Hervey’s Def. 3a: Mulder and Hervey 1980: 205) and a particular class of equivalent utterances (Hervey’s Def. 2: Mulder and Hervey 1980: 205). A similar definition would not hold for extended axiomatic functionalism. This numbered definition does not therefore appear in these postulates. The rather different notion of morph in extended axiomatic functionalism is defined in Def. 26d (cf. also Mulder and Hervey 1980: 61, Def. 24a1).

Hervey's Def. 6a (Mulder and Hervey 1980: 207) provides a definition for homomorphy in standard axiomatic functionalism. This is superseded in the current postulates by Def. 26a.

Def. F7a1. 'Hyperonym' or 'superordinate' for 'denotation (Def. 2c), the set of semantic forms (Def. 23b1) of whose allodeles (second sense) (Def. 23c2) considered in relation to, and properly including, the set of semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) of another denotation (Def. 2c)' (cf. Mulder and Hervey 1980: 207, Def. 7a1).

Comment: Def. F7a1 and all subsequent definitions are to be interpreted in the light of the proposed framework for semantic protocolisation presented in Dickins (1998: 103–117) and the additional comments related to this in Dickins (1998: 128–138). The provisional nature of the proposed framework for semantic protocolisation is also stressed, alongside the expectation that further development of this framework will entail changes to Def. F7a1 and all subsequent definitions.

In particular, it may be that forms of words such as "the set of semantic forms (Def. 23b1)" (in Def. F7a1, and other definitions), should be rephrased along the lines, "the set of (global) referential entities/situations of the semantic forms" (cf. Dickins 1998: 103–117 for a discussion of the notion referential entity and associated notions). This would make specific allowance for comparison of denotations (Def. 2c) corresponding to delos (Def. 2c1) of differing degrees of complexity (cf. Def. 6c); e.g. it would make it possible to describe forms such as "The adult horse ate the grass" as compared with "The grass was eaten by the stallion" in terms of a hyperonym (Def. F7a1)-hyponym (Def. F7a2) relationship (cf. Dickins 1998: 103–117).

Def. F7a2. 'Hyponym' for 'denotation (Def. 2c), the set of semantic forms (Def. 23b1) of whose allodeles (second sense) (Def. 23c2) considered in relation to, and properly included in, the set of semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) of another denotation (Def. 2c)' (cf. Mulder and Hervey 1980: 207, Def. 7a2).

Def. F7a1a. 'Direct hyperonym' or 'direct superordinate' for 'first denotation (Def. 2c) which is a hyperonym (Def. F7a1) of a second denotation (Def. 2c), without also being a hyperonym (Def. F7a1) of any third denotation (Def. 2c) which is itself a hyperonym (Def. F7a1) of the second denotation (Def. 2c)' (cf. Mulder and Hervey 1980: 207, Def. 7a1a).

Comment: If denotation (Def. 2c) A is a hyperonym (Def. F7a1) of denotation (Def. 2c) B, but there is no other denotation (Def. 2c) C which is also a hyperonym (Def. F7a1) of denotation (Def. 2c) B and a hyponym (Def. F7a2) of denotation (Def. 2c) A, denotation (Def. 2c) A is a direct hyperonym of denotation (Def. 2c) B.

Def. F7a2a. 'Direct hyponym' for 'first denotation (Def. 2c) which is a hyponym (Def. F7a2) of a second denotation (Def. 2c), without also being a hyponym (Def. F7a2) of any third denotation (Def. 2c) which is itself a hyponym (Def. F7a2) of the second denotation (Def. 2c)' (cf. Mulder and Hervey 1980: 207, Def. 7a2a).

Comment: If denotation (Def. 2c) A is a hyponym (Def. F7a2) of denotation (Def. 2c) B, but there is no other denotation (Def. 2c) C which is also a hypo-

nym (Def. F7a2) of denotation (Def. 2c) B and a hyperonym (Def. F7a1) of denotation (Def. 2c) A, denotation (Def. 2c) A is a direct hyponym of denotation B (Def. 2c).

Hervey includes a definition for the notion semantic feature (Mulder and Hervey 1980: 208, Def. 7a1b). This notion is not required in the extended version.

Hervey includes a definition for the notion of synonym (Mulder and Hervey 1980: 208, Def. 7b). This is not required in the extended version, since it is covered by Defs. 28, 28a, and 28b.

Def. F7c. 'Paronym' for 'first denotation (Def. 2c), the set of semantic forms (Def. 23b1) of whose allodeles (second sense) (Def. 23c2) considered in relation to the set of semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) of a second denotation (Def. 2c), and the sets of semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) of the first and second denotations (Def. 2c) not including one another, but these sets of semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) being properly included in the sets of semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) of a third denotation (Def. 2c)' (cf. Mulder and Hervey 1980: 208, Def. 7c).

Comment: The denotations (Def. 2c) *rose* and *tulip* are thus paronyms with respect to the denotation (Def. 2c) *flower*. In this case, the semantic forms (Def. 23b1) of the sets of allodeles (second sense) (Def. 23c2) of *rose* and *tulip* do not include one another; in fact they do not intersect at all. Partial overlap may also hold between the allodeles (second sense) (Def. 23c2) of paronyms, as in the case, for instance, of the denotations (Def. 2c) *red* and *orange* (adapted from Mulder and Hervey 1980: 208).

Def. F7c1. 'Paronymy set' for 'set of two or more paronyms (Def. 7c) the sum of the semantic forms (Def. 23b1) of whose allodeles (second sense) (Def. 23c2) exhausts the set of the semantic forms (Def. 23b1) of the allodeles (second sense) (Def. 23c2) of their common hyperonym (Def. F7a1)' (cf. Mulder and Hervey 1980: 208, Def. 7c1).

Def. F7c2. 'Exclusive paronyms' for 'paronyms (Def. 7c) the sets of the semantic forms (Def. 23b1) of whose allodeles (second sense) (Def. 23c2) do not intersect' (cf. Mulder and Hervey 1980: 208, Def. 7c2).

Comment: The denotations (Def. 2c) *stallion*, *mare*, *filly* and *colt* are all exclusive paronyms (Def. 7c), since there is no overlap between the members of the sets of the semantic forms (Def. 23b1) of their allodeles (second sense) (Def. 23c2) (adapted from Mulder and Hervey 1980: 209).

Def. F7c3. 'Overlapping paronyms' for 'paronyms (Def. 7c) the sets of the semantic forms (Def. 23b1) of whose allodeles (second sense) (Def. 23c2) do intersect' (cf. Mulder and Hervey 1980: 208, Def. 7c3).

Comment: The denotations (Def. 2c) *red* and *orange* illustrate the case of overlapping paronymy; whilst certain hues belong only to the set of the semantic forms (Def. 23b1) of allodeles (second sense) (Def. 23c2) of *red* and certain other hues only to the set of the semantic forms (Def. 23b1) of the allodeles (second sense) (Def. 23c2) of *orange*, there are also certain intermediate hues

that belong to an overlapping area (adapted from Mulder and Hervey 1980: 209).

Def. F7c1a. 'Antonym' for 'member of a set of paronyms (Def. 7c) containing only two terms' (cf. Mulder and Hervey 1980: 208, Def. 7c1a).

Comment: The bipolar semantic contrast displayed by antonyms is the result of the fact that all the members of the sets of the semantic forms (Def. 23b1) of the allodeles (second sense) (Def. 23c2) belonging to a certain "field" – i.e. the set of the semantic forms (Def. 23b1) of the allodeles (second sense) (Def. 23c2) of their common hyperonym (Def. F7a1) – are members of either one or the other, or possibly both, of the sets of the semantic forms (Def. 23b1) of the allodeles (second sense) (Def. 23c2) of the antonyms in question (adapted from Mulder and Hervey 1980: 209).

Def. F7c2a. 'Exclusive antonyms' for 'antonyms (Def. 7c2a) whose allodeles (second sense) (Def. 23c2) have non-intersecting sets of semantic forms (Def. 23b1)' (cf. Mulder and Hervey 1980: 210, Def. 7c2a).

Comment: The denotations (Def. 2c) *dog* and *cat* would appear to be exclusive antonyms with regard to their common hyperonym (Def. F7a1) *animal* (cf. Mulder and Hervey 1980: 210). Compare, however, the arguments presented regarding the semantic relationship between *cat* and *animal* in Cruse (1986: 141), and discussed in Dickins (1998: 225–226).

Def. F7c2b. 'Overlapping antonyms' for 'antonyms (Def. F7c1a) whose allodeles (second sense) (Def. 23c2) have overlapping sets of semantic forms (Def. 23b1)' (cf. Mulder and Hervey 1980: 210, Def. 7c2b).

Def. F7c1b. 'Paronymy series' for 'paronymy set (Def. F7c1) with three or more members' (cf. Mulder and Hervey 1980: 211, Def. 7c1b).

Comment: "Sets of colour terms in various languages give a paradigm example of paronymy series" (Mulder and Hervey 1980: 211).

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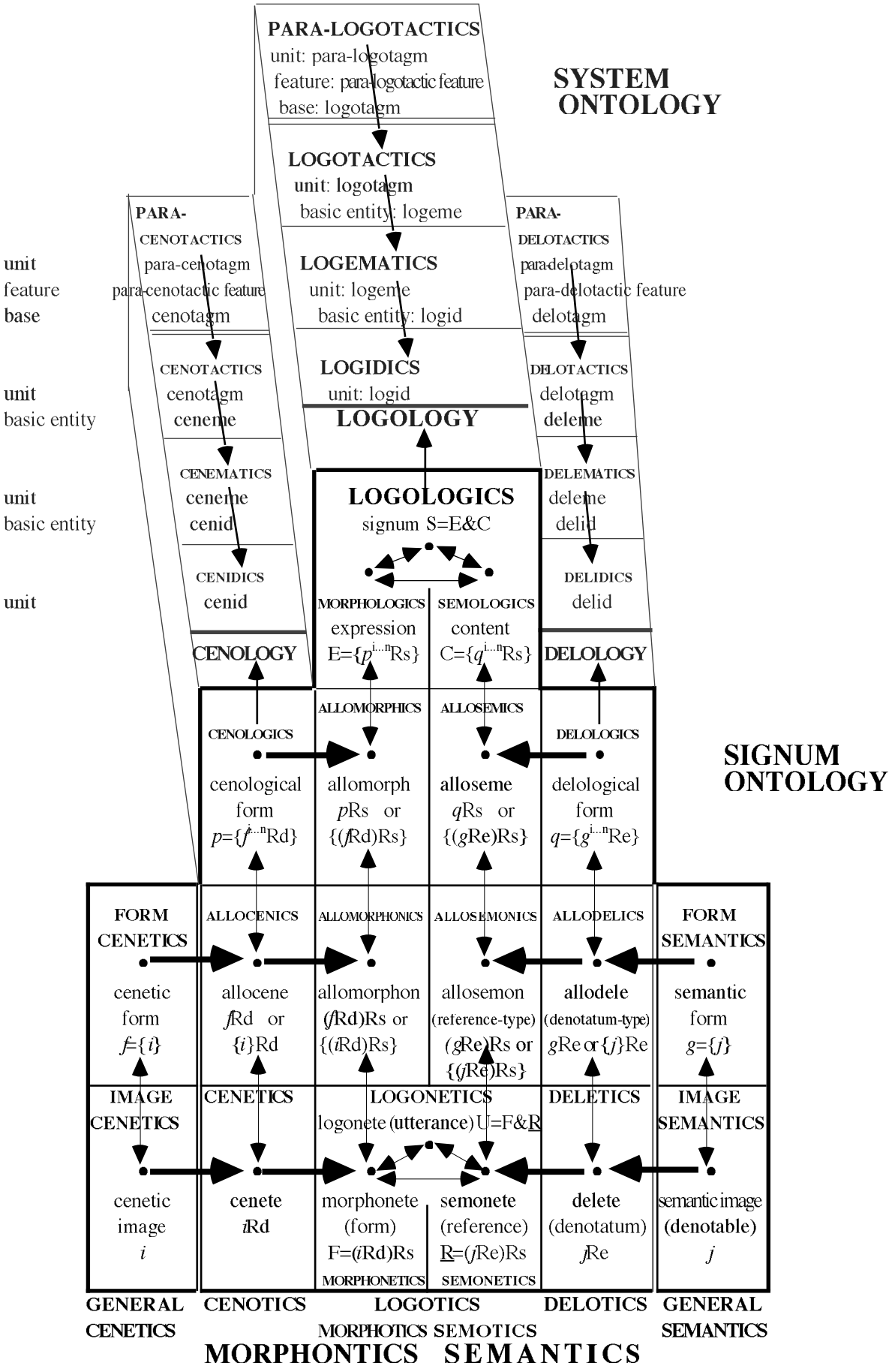
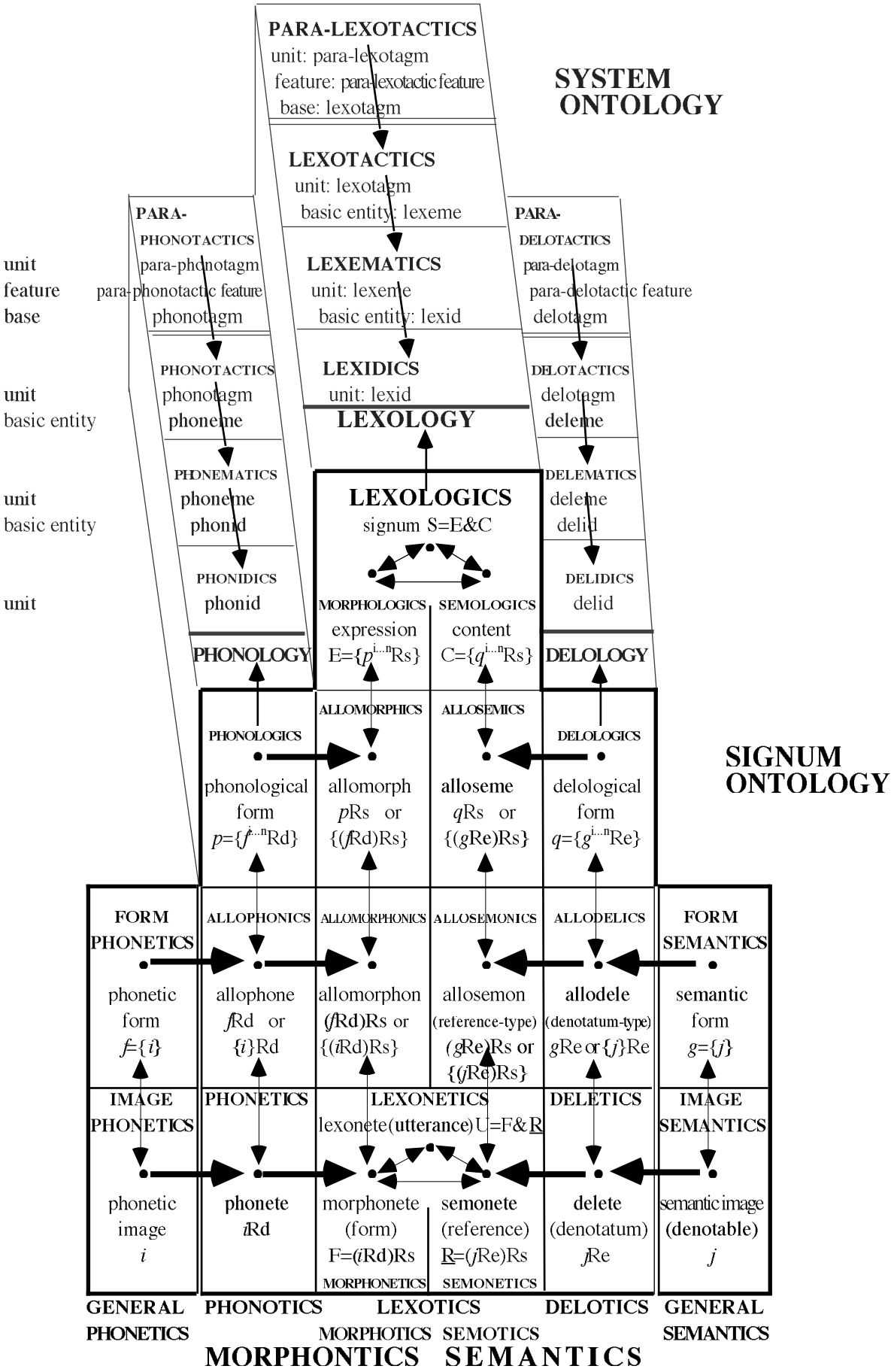
Appendix: Figure 1
EXTENDED AXIOMATIC FUNCTIONALISM: SEMIOTICS



Key to symbols

R	in relation to		relation of transformation
&	a conjunction of	d	distinctive function in cenology
{ }	a set of	s	distinctive function in logology
i...n	(a) certain (set of)	e	distinctive function in delology
⟶	relation of implication	UPPERCASE WORD	– system or area of analysis
⟷	relation of mutual implication	lowercase word	– entity

Appendix: Figure 2
EXTENDED AXIOMATIC FUNCTIONALISM: LINGUISTICS



Key to symbols

R	in relation to	→	relation of transformation
&	a conjunction of	d	distinctive function in phonology
$\{\ \}_{i...n}$	a set of (a) certain (set of)	s	distinctive function in lexology
		e	distinctive function in delology
→	relation of implication	UPPERCASE WORD	– system or area of analysis
↔	relation of mutual implication	lowercase word	– entity