

The Female-moneme in English: Semantic Considerations in Testing Moneme-Identity

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Introductory

Let me preface my discussion with definitions of some key Axiomatic Functionalist terms and notions used in the present paper:

Definitions (1)

"Moneme" for "minimum morphological (plerematic) entity. This implies minimum grammatical entity." Monemes are the grammatical analogues of distinctive features in phonology.

"Plereme" for "word or grammateme" .

"Complex plereme" for "morphological complex". A morphological complex may be viewed as a simultaneous bundle of at least two monemes in a relation of simultaneity with one another.

"Hyponym" for "signum whose denotation class is properly included in the denotation class of another signum"

"Hyperonym" for "signum whose denotation class properly includes the denotation class of another signum" .

The purpose of the present paper is to explore the possibility of testing hypotheses for moneme-identity by using an additional criterion of adequation with respect to semantic factors: a criterion concerning the assumption of *recoverability of denotations* of complex pleremes from the denotations of their constituents. I have taken the position that, in the final analysis, a particular complex plereme is a combination of two or more monemes holds on condition that the *overall* denotation of the complex in question is recoverable from the denotations of its constituents, plus, of course, from having a relatively clear (though necessarily rather approximate) idea of the semantic role played by the constructional relation between these constituents.

I must admit that the basic idea of requiring grammatical solutions to be semantically adequate is not, as such, a novel notion-though it may be a controversial one (Hervey 1975). The attempt to supplement the testing of moneme-identity by the use of considerations of semantic adequacy should be seen in the light of five core factors which seem to be embedded in the literature on Axiomatic Functionalist Linguistics particularly in *Theory of the Linguistic Sign* (Mulder and Hervey, 1972), *The Strategy of Linguistics: Papers on the Theory and Methodology of Axiomatic Functionalism* (Mulder and Hervey, 1980) and *Axiomatic Semantics: A Theory of Linguistic Semantics* (Hervey 1979). My interpretation of the five core factors run as follows:

- * a constituent sign is , by definition , an element with a certain form *and a certain denotation* , the latter being a constant function of that sign(a fact which follows from the very definition of the notion "sign");

- * each of the constituents of a particular complex sign can be identified as a constituent sign *only if* it plays the same constant denotational function in that complex of which it is said to be a constituent, as it does in other complexes;
- * constituents of different complex signs may be identified as the *same sign only if they can be attributed the same denotational function*;
- * each constituent in a complex sign contributes its own denotation to the overall denotation of that complex as a whole, which implies the constraint that from hypothesizing the denotation of each constituent sign, plus, of course, having a relatively clear (though rather approximate) idea of the semantic role played by the constructional relations between them, we should be able to envisage the reconstruction of the denotation of the complex as a whole, and
- * all morphological relations are *one* type (namely simultaneity); there is, therefore, reason to believe that the semantic function of this simultaneity relation is also of *one* single type (i.e. proliferation of the semantic functions of this relation must be precluded). This semantic function is unlikely to be more specific than what can be roughly captured by the paraphrase "has something to do with", and is, in all probability, a *symmetrical* function.

The "Female"-moneme

In what follows, I propose to hypothesize the identity of the tentative moneme, which I have labeled the "Female"-moneme. The hypothesis tentatively advanced takes the form that each

member of the set of complex pleremes presented in the Table below is a combination of a moneme-which for reasons of convenience might be called "base"-and the tentative "Female"-moneme. For each item in the table below tests were performed according to a methodology consisting of the step-by-step application of four successive criteria stipulated by Axiomatic Functionalist Theory:

- * A morphological complex must be a self-contained potential constituent in grammar.
- * A morphological complex must contain at least two *fully-fledged* signs, and no constituents that are *not* fully-fledged signs, otherwise it is not complex on the grammatical level.
- * A morphological complex must contain only simple signs, i.e. all immediate constituents of a morphological complex must, at the same time, be its ultimate constituents.
- * The Constituents of a morphological complex (simple signs) must be constituents of a construction that does not tolerate any potential for constructional asymmetry within itself.(2)

These tests were designed for the identification of morphological complexes as opposed to syntactic complexes. All the items retained in the table below are *bona fide* morphological complexes. I have refrained from spelling out the demonstrations in the main body of the text for limitation of space, not to mention the fact that their inclusion would make for cumbersome, if not tedious, reading.

The hypothesis tentatively advanced below represents an exploration of the form a morphological

description might take if developed and tested not only against "formal", commutational, and distributional criteria but also against semantic considerations. It would be hard to claim that-even in the kind of semantic considerations against which the adequacy of "solutions" are measured-this hypothesis is necessarily the most effective or satisfactory one available. Nonetheless, it represents a genuine *attempt* at a particular way of going about the business of decision-making in morphology.

As a further remark to the method of stating my hypothesis in tabulated form, I must mention that in the table below an attempt has been made at specifying the allomorph representing the "Female"-moneme and at providing an *example* of the kind of context ("base") in which that allomorph occurs. The reason for not giving an exhaustive inventory of the "bases" a particular allomorph co-occurs with (though this is possible both in principle and in practice) is dictated purely by limitations of space. Consequently, a number of "bases" noted in the table is marked by *etc.* This is to indicate that the set of "bases" with which a particular allomorph co-occurs is relatively large, i.e. hard to inventorize. The absence of *etc.*, therefore, should be taken to mean that the set of "bases" is *closed*. For the purpose of further clarification, I have also attempted to supplement the tabulated version of my hypothesis with a sub-table marked "Distribution", giving more examples of "bases" with which the allomorphs of the "Female"-moneme co-occur.

The identity hypothesis concerning the Female-moneme runs as follows:

Table

The identity hypothesis concerning the Female-moneme, having the formal variants listed below and being denotationally equivalent to the rough paraphrase (female x)

Allomorph	Context	Complex Plereme
/es/	(lion), etc.	lioness
/res/	(archer), etc.	archeress
/iks/	(prosecutor), etc.	prosecutrix
/ret/	(usher), etc.	usherette
/es ~ r/	(sorcerer), etc.	sorceress
/e ~ r/	(comedian), etc.	comedienne
/es ~ Ou/	(negro)	negress
/res ~ rnt/	(inhabitant)	inhabitress
/e ~ Ri... in/	(hero)	heroine

Discussion

The hypothesis tentatively advanced in the table above is partly motivated by the assumption that it will need to be specifically tested for recoverability of denotations. I have taken the position that, in the final analysis, the hypothesis that a particular complex plereme is a combination of a moneme (base) and the Female-moneme holds only on condition that the overall denotation of that complex is recoverable from the denotation of its constituents. Thus, for instance, taking the overall denotation of the complex plereme lioness to be more or less equivalent to *female lion*, we find this denotation to be recoverable only on the hypothesis that the complex in question is a combination of

- (a) the moneme base (lion), having the normal denotation attributed to this sign in such contexts as *a lion is an animal of the carnivorous family*, and

(b) the tentative moneme-which I have labeled the Female-moneme - represented by the allomorph /es/ and having a denotational contribution equitable with *female* x.

The overall denotation emerges, thus, out of an interplay between the denotation of the *Female-moneme* and the designation of the appropriate base: e.g. (leopard) /leopardess, (tiger) / tigress, (sorcerer)/sorceress, etc.

It must be pointed out here that the plereme "lion" and the moneme "lion" (both as in "lion" and as in "lioness"), respectively must be attributed the same denotation, i.e. the sign "lion" (whether moneme or plereme in grammatical status) must have a denotation determinate only to species, but indeterminate as to sex. In this way, the plereme "lion" (containing as its sole constituent the moneme "lion-") is also indeterminate as to sex, whereas in the plereme "lioness" the denotational contribution of the "Female"-moneme is the sole factor determining sex. Consequently, the opposition between "lion" and "lioness" can be accounted for as an opposition between zero and the "Female"-moneme:

"lion"	R	∅	=	"lion"
"lion"	R	"Female"-moneme	=	"lioness"

Semantically speaking, the relation holding between the sign "lion" and the sign "lioness" is a hyperonym-hyponym relation. This is tantamount to saying that the denotation class of the sign "lioness" (hyponym) is properly included in the denotation class of the sign "lion" (hyperonym).

Analogous arguments involving hyperonym-hyponym relations seem to hold in cases like "actor"/actress,

"inventor"/inventress, etc. Thus, for instance, assuming the complex plereme "actress" to be a simultaneous bundle of three monemes, namely,

- (a) the moneme "to act" represented in other contexts by the allomorph "/akT/",
- (b) the moneme traditionally termed "agent" ("-or") represented by the allomorph "/r/", and
- (c) the "Female-moneme represented by the allomorph "/es/", we find that the base of the complex plereme in question namely (actor)-is analogous with monomonematic moneme bases such as "lion", "tiger", "author", "poet", etc. (in "lioness", "tigress", "authoress", "poetess", respectively) in that its denotation is also indeterminate as to sex. The denotational contribution of the "Female"-moneme in "actress" can be seen as the sole factor determining sex. Accordingly, the opposition between the plereme "actor" and the plereme "actress" can be accounted for as an opposition between zero and the "Female"-moneme. In semantic terms, "actor" is the hyperonym of "actress" and the latter is a hyponym of the former.

Another angle from which the adequacy of treating "actress", etc. by analogy with "lioness" may be considered is that of "proportionality". This notion plays, for instance, an important part in the adequation of phonological hypotheses, and may do so in grammatical description as well, with the proviso that, whereas phonological correlations should be phonetically plausible, the comparative plausibility of grammatical "proportions" has to be assessed in 'semantic' terms. The satisfactory nature of the proportions in question can be seen in

actor : actress :: lion : lioness ::
(indet.) (female) (indet.) (female)

hunter : huntress :: author : authoress :: etc.
(indet.) (female) (indet.) (female)

Particular problems arise with pleremes designating titles: e.g. "countess", "baroness", "duchess", "marchioness", etc. These pleremes cannot be treated analogously with cases like

"lion" ~ "lioness"
"tiger" ~ "tigress"
"actor" ~ "actress"
"hunter" ~ "huntress"
etc.

In the first place, occurrences of "count", "baron", "duke", "marquis", etc. in other contexts do not seem to be indeterminate to sex (as are occurrences of "lion", "tiger", "actor", "hunter", etc.) but strictly denote persons of the male sex-which means that, whereas

"lion" (of indeterminate sex) R \emptyset
can be interpreted as a hyperonym of
"lion" R "Female"-moneme (i.e. female lion),

such a hyperonym-hyponym relation cannot be posited between, say, "count" (male) and "countess" (wife of a count or female holder of the title "countess"). This situation is not consistent with interpreting the opposition

"count" ~ "countess" as "count" (male) R \emptyset ~ "count" (indet.) R "Female"-moneme.

In the second place, "countess" cannot be interpreted as "member of the female subset of the class of

counts" (compare) on the other hand, "lioness" interpretable as "member of the female subset of the class of lions"). While "lioness" constitutes an antonym of the sign "male lion", "countess" is not an antonym of "male count"-the latter in any case being nonsensically tautological. If anything, "countess" designates the female 'equivalent' or "counterpart" to "count"-a person of female sex holding the title in question either by marriage or by birth.

Proportionality also shows up the inadequacies of treating *countess*, *baroness*, *duchess*, *marchioness*, etc. by analogy with lioness, tigress, actress, etc. (i.e. by identifying in the former the same *Female-moneme* as one identifies in the latter). The unsatisfactory nature of the proportions in question can be seen in

lion	:	lioness	::	count	:	countess
(indet.)		(female)		(male)		(female)

Under these circumstances, one could at best suggest that *countess*, etc. may be analyzed by hypothesizing a moneme different in sign identity and in denotational contribution from the normal *Female-moneme*. One could, in this event, need to imagine the denotation of this additional tentative moneme as being something like female equivalent / counterpart of a particular male x (by marriage or by birth). Such a solution would not, however, obviate the problem that, for instance *countess* does not designate *the female holder of the title of count*, but the holder of a title *countess*, which happens to be restricted to females. It would seem, therefore, that countess is far too specialized in denotation - the cultural/ social/ historical factors governing the acquisition of the title being, themselves, rather specialized (3) - to allow this plereme to be analyzed as though it merely designated *the female version of a count*.

With this in mind, it seems preferable to classify *countess, baroness, duchess, marchioness*, etc. as unanalysable pleremes (pseudo-composites).

Distribution

Generally speaking, the Female-moneme is not frequently used. This, may, perhaps, be due to the fact that indeterminate reference is socially preferred: e.g. *doctor, author, poet*, etc. The Female-moneme may occur in the context of monomonematic bases (e.g. *lion/lioness, author/ authoress*, etc.) as well as poly-monematic ones (e.g. *actor/ actress*, etc.). The complex plereme *actress*, for instance, may be represented as follows:

(to act + or) + Female-moneme

As can be seen from the table below, the allomorphs of the Female-moneme are not, with regard to distribution, in perfect contextual variance.

Allomorph

/es/	Occurring in the context of the bases (tiger), (leopard), (lion), (host), (poet), (author), (priest), (heir), (arbiter), (proprietor), (spectator), (ambassador), (act + or), (invent + or), etc. We may also note that the allomorph /es/ and the allomorph /ikS/ are in mixed variance in the context of the bases (arbiter), (proprietor) and (spectator).
/res/	(doctor), (millionaire), (tutor), (tailor), etc.
ikS/	(executor), (testator), (inherit + or), etc.
/res ~ r/	(emperor), (fruiterer), (sorcerer), etc.

Notes

1. cf. *Postulates for Axiomatic Functionalism*, (reprinted in Mulder and Hervey, 1980) and *Pseudo-composite and Pseudo-words: Sufficient and Necessary Criteria for Morphological Analysis*, *La Linguistique*, 9 (Hervey and Mulder, 1973). The reader is also referred to *Postulates for Axiomatic Functionalist Semantics in The Strategy of Linguistics* (Mulder and Hervey, 1980).
2. cf. *Pseudo-composite and Pseudo-words: Sufficient and Necessary Criteria for Morphological Analysis*, *La Linguistique*, 9, pp.41-69
3. It must be noted that pleremes like countess, baroness, duchess, etc. have come into English as a result of wholesale borrowing from French and Latin (cf. Hans Marchand, *The Categories and Types of Present-Day English Word-Formation*, Munchen, 1969, and Otto Jespersen, *A Modern English Grammar on Historical Principles*, Vol. VI, *Morphology*, Copenhagen, 1942).

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