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PLAIN MORPHOLOGY AND EXPRESSIVE MORPHOLOGY*

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1. Introduction.

Not every regularity in the use of language is a matter of grammar. There are many which incorporate or build upon aspects of grammatical organization (including phonology, morphology, syntax, and semantics), but which can be seen as grammatical rules only by stretching the idea of a grammatical rule beyond all recognition; familiar examples are the regularities of sociolinguistic competence, poetic form, and language games. But in the domain of word formation it has often (and usually tacitly) been assumed that all regularities are to be expressed in rules of (derivational) morphology.

On the basis of this assumption, fundamental conclusions have been drawn about morphology, phonology, and syntax. For instance, it has been claimed by Manaster-Ramer (1983) that English can be shown to be trans-context-free solely on the basis of the deprecative construction (borrowed from Yiddish) seen in locutions like (1a) (with a meaning something like "Who cares about transformations?").

(1) a. transformations shmansformations
b. recursion shmecursion
c. variables shmariables

This pithy way of expressing scorn gives rise, in Manaster-Ramer's opinion, to an infinite sublanguage of English (perhaps just of the English lexicon, but the consequences are the same) in which the strings are of the form ...*X*...*X*..., as in (1) versus (2).

(2) a. *transformations shmariables
b. *recursion shmansformations
c. *variables shmecursion

He apparently assumes that English has a rule of *Shm-* Reduplication forming expressions of the shape in (3b), given base expressions as in (3a).

(3) a. base: $Z = WX$, W a syllable onset
b. derivative: $Z' = WX\ shmX$

He argues that if the base expressions are chosen from any of a class of infinite finite-state languages (the one he uses involves the number names *one point two, one point six five, one point two two four*, etc., but the point could be made with less artificial classes of expressions), then the identity requirement imposed via the rule is beyond the reach of context-free grammar.

It has also been claimed that the possibility of a derivational form (and not merely the choice among its phonological shapes) can be conditional on phonological properties of the base. Thus, Siegel (ms 1971, 1974: 180-1) and Aronoff (1976: 69-70) observe that the insertability of such (mostly obscene) expletives as *bloody*, *blooming*, *frigging*, *fuckin(g)*, *(god)damn*, *motherfuckin(g)*, *pissing*, *sodding*, etc. into a word

depends on the stress pattern of that word. According to Siegel and Aronoff, only base words with a 3...1 stress pattern (tertiary followed, not necessarily immediately, by primary stress) are eligible for expletive infixation, as the examples in (4) versus (5) illustrate (stress-level sequences shown in brackets).

(4) a. Abso-blooming-lutely. [3 0 *X* 1 0]
b. Off we go to Massa-friggin-chusetts. [3 0 *X* 1 0]
c. To hell with Kalama-fuckin-zoo. [3 0 0 *X* 1]

(5) a. *What the hell is the ablative abso-blooming-lute? [1 0 *X* 3]
b. *Off we go to Flori-friggin-da. [1 0 *X* 0]
c. *To hell with Chi-fuckin-cago. [0 *X* 1 0]

Finally, it has been claimed that hierarchical (metrical) phonological representations are required for the statement of morphological rules. McCarthy (1982), on these same infixed expletives, notes first that the (purported) rule of expletive insertion should be stated in terms of syllables rather than segments, in order to describe the contrast between (6) and (7).

(6) fan-fuckin-tastic
(7) *fant-fuckin-astic, *fa-fuckin-ntastic

McCarthy also claims, *contra* Aronoff and Siegel, that *any* following stress will do to license expletive insertion, as in (8), and that a preceding stress in unnecessary, as shown in (9).

(8) every-bloody-body, emanci-motherfuckin-pator [1 *X* 3]
(9) to-bloody-gether, im-fuckin-portant [0 *X* 1 3]

McCarthy states the insertion rule as in (10), crucially referring to the *foot*, a phonological unit larger than the syllable.

(10) Insert expletive before a foot.

Similar data appear to be relevant to the claim that morphological representations must be multi-tier autosegmental constructs, in particular to Marantz's (1982) more specific claim that all reduplication is to be described by autosegmental copying followed by segmental matching. Data from expletive insertion cases may also bear on the claim of Lexical Phonology (Kiparsky 1982) that derivation and inflection can be intermingled with one another.

The formation of words ending in *-eria*, *-teria*, or *-eteria* as cutesy names for retail outlets, which Siegel (1971, 1974) has discussed, is another case of a morphological phenomenon that has been claimed to hold major implications for morphological theory. Siegel notes three forms of the suffix in three different phonological environments in attested forms:

(11) a. *-eria*: basketeria, garmenteria, casketeria, chocolateria
b. *-teria*: candyteria, honeyteria, drygoodsteria, radioteria
c. *-eteria*: caketeria, cleaneteria, luncheteria, healtheteria, smoketeria

The *-eria* variant, clearly, is found with bases ending in /t/, as seen in (11a). After vowels or consonants other than /t/, the *-teria*) version is generally found, as seen in (11b). Siegel's account of where *-eteria* is found is that it occurs with bases that have

final stress. Her examples do not demonstrate this, however, since the forms cited above happen also to be compatible with the hypothesis that *-eteria* occurs if and only if the base is monosyllabic. For what it is worth, Siegel's hypothesis is supported, however, by the following (invented) examples, which seem acceptable to us:

(12) a. ballooneteria, cartooneteria, chandeliereteria, designeteria
b. ?balloonteria, ?cartoonteria, ?chandelierteria, ?designteria

Whichever analysis we assume — whether it is Siegel's stress-sensitive analysis of the affixing condition or one based on monosyllabicity, we seem to have a case showing that allomorph choice can be determined by purely phonological considerations.

The same data imply support for another unusual claim: that inflectional affixes can appear internally in a derived form. The form *drygoodsteria* has the compound *dry goods* inside it, and on the end of *goods* is the plural morpheme. If examples like *Metseteria* or *Raidersteria* (names of imaginary retail outlets dedicated to memorabilia and promotional items associated with the Mets and the Raiders, respectively) are also acceptable, they would constitute further support for internal inflections.

Our purpose in this paper is not to dispute the theoretical claims just reviewed, some of which we believe be true, some false, some merely not proven. Some of the claims have been supported on the basis of other, more straightforward data. For example, although we will suggest below that Manaster-Ramer's argument from *Shm*-Reduplication is suspect (cf. Pullum (1984, 116) on this point), Culy (1985) has since shown that Bambara does indeed have the kind of unbounded reduplication in morphology that leads to non-context-freeness in the overall language. Some other claims listed above seem thoroughly dubious. What we wish to do here is simply to observe that the evidence supporting the claims is suspect in places, given that it depends on treating two things as a uniform phenomenon: *plain morphology*, i.e. the ordinary productive (and nonproductive) word formation and word structure rules of a language, and what we will call *expressive morphology*, examples being processes like expletive infixation, *shm-* reduplication, and word formation with *-(e)teria*. Almost certainly in some cases, we believe, these two are not assimilable under the same heading. We will address the topic of expressive morphology after brief considerations of language games (section 2) and ideophones (section 3).

2. Language games.

Closely allied to the artistic use of language is the playful use of language — in secret languages, riddling, punning, insult games, and the like. Just as the restrictions and deviations of poetic language are extraordinary from the point of view of the grammar of prosaic language, so are the deformations, extensions, and restrictions found in verbal play. Like schemes of poetic form, these constitute an overlay (Zwicky 1986) on the basic linguistic system. And as with poetic forms, there is good reason for their extraordinary character:

> Although the forms that the rules for play languages take are very much like those written by generative phonologists in their descriptions of language (whether synchronic or diachronic), the actual substance or details of the rules are unlike those typically found in ordinary language (again, viewed from either a synchronic or a diachronic perspective). That is, there are no documented cases of ordinary linguistic processes in which the syllables of all or most words are

> reversed or the same sound sequence is prefixed to all or more syllables of words. The explanation for this difference between ordinary linguistic processes and those that occur in play languages cannot be given in purely linguistic terms. Rather it has to do with one of the common social functions of play languages: concealment. Most ordinary phonological rules (e.g. the voicing of intervocalic consonants or the merger of two similar vowels) do not result in a new language so different from the original as to be difficult for native speakers to understand. On the other hand, most play languages are unintelligible to persons who do not know them (even if they are native speakers of the source language). Thus one major linguistic task of a play language is to produce distinct and hard-to-recognize forms by means of one or two relatively simple rules. This is done most efficiently by making use of the rule structure or rule format of ordinary language but at the same time filling in this structure or format with possibilities not exploited in ordinary language. (Sherzer 1976: 31)

There are important lessons to be drawn from Sherzer's discussion. No one could say that play languages are not languages in the sense that linguists use. Full command of a play language based on some natural language implies a full command of the natural language involved. Facts about play languages can clearly be relevant to a broad understanding of the human language capacity. As Yip (1982, 637) observes about play languages (which she calls secret languages):

> Precisely because they provide an unusual insight into the structure of language, their study has a real contribution to make to our understanding of the grammars of languages. In particular, they can offer evidence that bears on the internal structure of the morpheme and syllable, as well as evidence for the types of morphological and phonological processes found in language... Speakers have very strong intuitions about them, as they do about natural languages.

Nonetheless, there is a sense in which play languages are a special class, from which not every kind of data would be judged suitable as the basis for linguistic generalizations. For example, there is a British Pig Latin-like dialect in which *every* lexical syllable onset is followed phonetically by the sequence [eyg], which is then followed by the rest of the underlying syllable. This surely does not imply that insertion of [eyg] after all syllable onsets is a possible phonological rule, or a possible historical change. Although the result of applying this change is a language that can be used to discuss anything that can be discussed in English, and the statement of what the change is has to be stated in terms of phonological units, generalizations about the resulting language (every word contains [g]; [ey] is the only initial vowel nucleus; no words or formatives are phonetically monosyllabic; etc.) are not facts that one would record in a survey of phonological typology; rather, they are facts about a human language game, a kind of oral cipher based on a natural language but not constituting an example of one.

Yip suggests that "secret language rules are more extreme varieties of ordinary phonological or morphological rules." She proposes that for functional reasons natural languages "select the simpler alternatives from the set of possible rules, whereas secret languages, with fewer functional constraints (unintelligibility often being a desirable attribute), make use of the full power of such rules." This view makes the expression of

the formal differences between play (secret) languages and natural languages depend on degrees of extremeness rather than on an absolute distinction. Such a view may be correct, but we do not think that it goes so far as to obliterate the line between play languages and natural languages.

What we wish to draw from this discussion is not any conclusion of the relevance of play language rules to investigations of the general properties of linguistic rule systems, but simply the observation that to some extent evidence from languages invented for play would be misleading data if introduced without caveat into a discussion of natural language structure.

3. Ideophones.

There are expressive word formation phenomena in many languages — namely principles of ideophone creation — that clearly call for a description separate from garden-variety morphology, since they involve special phonetics, phonology, syntax, semantics, and pragmatics as well as exhibiting discontinuities with the morphology of the rest of the vocabulary. According to Johnson (1976, 240),

> Ideophones in the Bantu languages make a class of items comparable to the English word *kerplop* in the sentences below.
>
> [(13)] The stone went "kerplop" into the pool.
> [(14)] The stone fell "kerplop" into the pool.
>
> In English, as in Bantu, verbs and nouns may freely be derived from ideophones, to yield sentences like:
>
> [(15)] The stone kerplopped into the pool.
> [(16)] We heard the kerplop of the stone into the pool.
>
> The current literature on words of this type suggests that they exhibit with remarkable consistency a number of recurrent structural features across a very diverse range of language families... For example, ideophones are frequently introduced by a pause. They describe with vivid clarity and eloquence the perceptual qualities of objects and events. They demonstrate a general antipathy toward negation and question-formation. They are characterized formally by the total absence of inflection and by a freedom in their phonotactic construction not shared by any other class of items in a language. Moreover, there are restrictions on the appropriateness of ideophones in difference social contexts which are peculiar to them and not to any other lexical class. (Johnson 1976: 240)

There are ideophone types in some languages that are very like *shm-* reduplication in English. For instance, in the Mon-Khmer language Pacoh there is a great variety of ideophonic formations involving reduplication of morphological units, among them a set of forms that "consist of two main syllables which differ only in initial consonants. The initial consonant of the second member can be any consonant other than *t-*" (Watson 1966: 15). Examples cited by Watson (16-25) include:

(17) a. tung-bung 'news or smoke spreading quickly'
b. tuj-chuj 'sitting rejectedly'
c. toq-qoq 'big chested but short necked'
d. ter-yer 'standing thin and tall'

Here the formula is (18):

(18) a. base: $Z = CX$, where C is any consonant other than /t/
b. derivative: $Z' = tX\ \ CX$

while in the English playful reduplication the formula is (3) above. The formations differ in two minor respects: (a) in Pacoh the replacive element is *t*, in English *shm*; (b) in Pacoh the altered version precedes the original, while in English it follows.

Ideophones can depart far more strikingly from the typical pattern of phonological and morphological structure for a language. For example, Derbyshire (1979, 190-191) reports that several ideophones in Hixkaryana (a Carib language of Brazil) have variable numbers of syllables on different occasions of use. He cites several, giving in each case an estimated mean number of syllable repetitions (examples in roughly orthographic transcription; *x* = [š]):

(19) a. wih wɨ
'shaking the head'
b. tohutay txetay txetay txeta
'reaching up and picking fruit from a tree'
c. xek xek xek xek
'washing (clothes or body)'
d. sɨk sɨk sɨk sɨk sɨk sɨk
'sharpening (knife on stone), planing'
e. xɨk xɨk xɨk xɨk xɨk xɨk xɨk xɨk xɨk xɨk
'pulling in fishing line'

There surely are no examples of ordinary, non-ideophonic lexical items from natural languages in which the number of syllables is, say, from 5 to 15 with a mean of 10, as in (19e).

From examples like these, we see that playful word formation, like ideophone formation, is not necessarily bound by the constraints that appply in ordinary morphological processes, though these formations may be entirely regular.

4. Expressive morphology.

So far we have pointed to two sorts of special language use, in language games and in ideophone systems. But less obviously special formations can show characteristics that set them off from ordinary morphology, both within their languages and across languages. The phenomenon that we will call expressive morphology, as distinct from plain morphology, is a kind of derivational morphology that has all or most of the special characteristics listed in the following subsections.

4.1. *Pragmatic effect.* Expressive morphology is associated with an expressive, playful, poetic, or simply ostentatious effect of some kind. A clear example is seen in the commercial names in -(*e*)*teria* studied by Siegel. It is not the case that a speaker could, in a serious context of discussion like a business meeting, refer to a specialist retail outlet for laser equipment as a laserteria without raising chuckles. The words formed

by *-(e)teria* suffixation are whimsical coinages, carefully contrived for dubbing commercial enterprises, and carry an effect lacking in plain derivational morphology.

4.2. *Promiscuity with regard to input category.* Rules of plain derivational morphology standardly take a base belonging to some category α and produce a derived word stem of some category β. Thus from the adjective *white* we can form the noun *whiteness*, the verb *whiten*, the adverb *whitely*), and so on. Sometimes, though not so frequently, β may be identical to α; thus from the adjective *white* we can also get the adjective *whitish*, from the (intransitive) verb *whiten* we get the (transitive) verb *whiten*, and so on. The important point is that a rule of derivational morpology will apply to a specific, determinate input category α.

Rules of expressive morphology, in contrast, have variable and peculiar effects on syntactic categories, and (in the cases we have looked at) apply promiscuously to a variety of categories. Indeed, rules for deriving verbs from nouns, nouns from adjectives, or whatever, seem never to be expressive morphology in our terms.

Expletive infixation applies to words of any category whatsoever, and produces items of exactly the same category: *Kalamazoo* is a proper noun, and so is *Kalama-goddam-zoo*; *instantiate* is a transitive verb, and *in-fuckin-stantiate* is a transitive verb.

Shm- Reduplication also applies to words of any category whatsoever, and produces outputs that do not seem to belong to any category at all (see section 4.7).

With *-(e)teria*, a variety of different base categories are again permitted, though some times it is not clear which of two homophonous items the rule has applied to. *Washeteria* seems to be based on a verb, likewise *smoketeria*, whereas many cases involve mapping a noun denoting a commodity into a new noun denoting a retail outlet for that commodity — as with the business in New York called *Caviarteria*. But the output of the rule is always a noun, so the rule seems to be promiscuous in its input but determinate in its output.

We do not have a good enough basis for a theory of this small and heterogeneous class of cases yet, but we note that it does not seem to fit well with the standard theory of derivational morphology.

4.3. *Promiscuity with regard to input basehood.* Rules of plain derivational morphology apply to bases, never (despite occasional appearances) to forms that happen to be inflected (though they can be restricted to applying to particular inflected forms as inputs); inflectional affixes are outside (i.e., farther from the root stem than) derivational affixes. Rules of expressive morphology, in contrast, can apply to (inflected) word forms (*drygoodsteria*) as well as to bases.

Rules of expressive morphology usually apply quite readily to compound constructions (*Madison goddam Avenue*) and even syntactic phrases (*the first goddam time that I saw Paris*; *trip the fucking light fantastic*; *kick the frigging bucket*).

In fact, in this particular case, Zonnefeld (1984) has argued that there is an appropriate comparison between expletive infixation and the custom of constructing names with infixed nicknames, as in *Johnny "Guitar" Watson*, *Nat "King" Cole*, *Eric "Slowhand" Clapton*, *Ray "Boom-boom" Mancini*, etc. While we would not go so far as to agree with Zonnefeld that infixed expletives can simply be regarded "as extended cases of 'middle names'" (p. 56), we think it is arguably true that the phenomenon "is *not a grammatical rule* at all, but rather an extragrammatical phenomenon (p. 55), that it is "a language game rather than a rule of grammar" (p. 59). But at the very least, expletive infixation, with its clear applicability to phrases alongside words and its highly expressive colloquial effect, cannot be regarded as a part of plain morphology, which is all we are concerned with here.

4.4. *Imperfect control.* For most expressive morphological phenomena, there are speakers who have no productive control of them at all, in much the same way that some (otherwise entirely competent) speakers are no good at Pig Latin, inventing knock-knock jokes, punning, or improvised rhyming. McCawley (1978) has verified this empirically, with some results from a class of students who varied considerably in their ability to effectively produce examples of expletive infixing.

4.5. *Alternative outputs.* Many speakers have alternative forms derived from the same source by the same rule (*drygoodseteria* alongside *drygoodsteria*, *Kala-goddam-mazoo* alongside *Kalama-goddam-zoo*). McCawley (1978) and McMillan (1980) provide clear evidence of this.

In plain derivational morphology there is only one output for a given rule applying to a given base. Different rules can apply to the same base, of course (*normalcy* and *normalness* alongside *normality*), the same rule can apply to different but related bases (*grammatize*, *grammaticize*, *?grammaticalize*), and a particular rule can be blocked from applying to a particular base (so that there is no **kindity* alongside *kindness*), but the effect of one rule on one base is determinate. For example, if both *-ish* and *-ful* could be affixed to the base *hope* to produce a form meaning 'more or less hopeful', we would not expect that the *-ish* affixation would have freedom to position the suffix in either of two positions, yielding *hope-ish-ful* and *hope-ful-ish* as synonyms; one or the other would be the output of the word formation rules. The rare cases that apparently violate this in English (in inflectional morphology, for instance, some people vacillate between *court-martials* and *courts-martial*) seem to be due to uncertain learning of compounds that have two possible analyses between which some speakers have remained undecided.

4.6. *Interspeaker variation.* There is considerable variation from speaker to speaker with respect to the conditions eligible sources must satisfy. This is distinct from variation as regards outputs within a single idiolect. Again, McCawley (1978) provides interesting evidence that speakers do not agree on which bases admit expletive infixation. To give one example, McCawley's subjects split between *dis-fuckin-covery* and *dis-fuckin-scovery* when asked to insert *fuckin* into *discovery*. The first form was judged to be completely natural by three subjects, and the second by one subject. But the first was also judged completely *un*natural by one subject, and so was the second by two subjects. Seven reported a degree of awkwardness about the first form and four reported the same about the second. Such data (provided by McCawley for 41 bases) clearly refute the (unsupported) assertions McCarthy has made about expletive infixation:

> Judgements of well-formedness are normally quite robust for individual speakers and remarkably consistent across speakers. All of these facts are incompatible with any sort of true adult learning or with metalinguistic activities like language games. (McCarthy 1981, 223)

4.7. *Special syntax* As is the case with ideophones, the results of expressive word formation often have special syntactic properties. Consider the *shm-* reduplication case. The typical use of an instance of the construction would be something like (20).

(20) Kalamazoo, Shmalamazoo! Let's talk about Detroit; that's a real city.

To the extent that the process can be regarded as forming words at all, it surely does not form syntactically normal words. *Kalamazoo, Shmalamazoo* is presumably a proper noun if it is anything at all, but it does not have the syntax of a proper noun:

(21) a. *Let's not talk about Kalamazoo Shmalamazoo.
b. *Is Kalamazoo Shmalamazoo in Michigan?

There is no parallel that we know of for this in plain morphology. For example, a plain morphological process that forms adjectives from noun bases does not yield a class of adjectives that can only be used in attributive position, or only in two-word exclamations.

5. *Conclusions.*

We claim, then, not that rules accounting for such phenomena are marginal in their grammar, as some analysts have said, but that the definition of the phenomena in question lies in a domain orthogonal to the grammar. They constitute a linguistic phenomenon that is not within the province of the theory of grammar as ordinarily understood, though it is certainly within the broader sphere of human linguistic abilities.

We must stress that we are *not* claiming that such formations lack regularity or that they are not a proper object of study for linguists.[1] As we have said, the study of language games can probably contribute to linguistic theory in more or less indirect ways (cf. Churma (1985, chapter 5) for analysis of some arguments from external evidence in phonology that are based on language games). The same is doubtless true for phenomena of expressive morphology.

It should also be noted that we have not said that the properties listed above will never be found attaching to plain morphology. Conceivably there is a slight expressive effect attaching to some instances of ordinary word formation rules; certainly we do not rule this out. One example of a morphological process that might be seen as having a limited expressive element to it would be diminutive formation with *-ito* in Spanish (see Varela 1986 for some discussion). But for a phenomenon to be classified as expressive morphology, it *must* have a significant number of the above criterial properties, insofar as the relevant questions can be appropriately brought to bear on it.

We do not believe this means that there is simply a continuum from plain to expressive morphology. Occasional intrusions of expressive elements into plain morphology do not nullify the case for viewing the former as a distinct phenomenon, with ostentatious and whimsical linguistic devices like the English *shm-* and *-(e)teria* formations as clear examples.

Although this brief paper cannot be regarded as a thorough study of expressive word formation in natural languages, we hope to have established it as credible that rules of expressive morphology are not subject to the same conditions as rules of plain morphology. Indeed, as remarked above, the fact that they use linguistic resources in ways that grammatical rules do not enables them to stand out, to call attention to themselves — and so to serve their expressive function. As Sherzer observed of the rules governing language games, they succeed by employing grammatical means in ostentatiously nongrammatical ways. Consequently — and this is our modest conclusion — it may be inappropriate to use them as the sole basis for arguments that support revisions to the general theory of grammar.

Notes

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1. On this point, the reader might consult the references in such works as Crystal (1969), Robins (1971), Wescott (1975), and Lyons (1977) to 'allolinguistics' versus 'microlinguistics' within the larger domain of 'macrolinguistics', and also on 'extralinguistics'.

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