Short Note for JPCL

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#### THE NATURE OF DERIVATIONAL MORPHOLOGY

### IN CREOLES AND NON-CREOLES

Ingo Plag

University of Siegen

# Introduction<sup>1</sup>

In her column 'What do creole studies have to offer to mainstream linguistics' Claire Lefebvre has raised some important issues concerning the development of our field. I thank the editors for having been invited to comment. For reasons of space, I will focus on only one aspect of Lefebvre's paper, the question of whether creoles can be defined as a special class of languages on typological, i.e. synchronic structural, grounds.

Recently, McWhorter (1998) has revived this idea by arguing that the prototypical creole is characterized by "little or no inflectional affixation", "little or no use of tone to lexically contrast monosyllables or encode syntax" and the presence of (only) "semantically transparent derivational affixation". With Lefebvre, I am sceptical about this hypothesis, but - also with Lefebvre - I hope that McWhorter's paper will provoke more research on a topic that has been largely neglected by

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creolists, derivational morphology. McWhorter's interesting hypothesis that creoles have only semantically transparent derivational morphology raises important empirical and theoretical questions that I would like to address in this note. I will show that the main problem with the hypothesis is not contra Lefebvre - that it is formulated in vague terms, but that it is not tenable if we take heed of some basic tenets of morphological theory. As predicted by the theoretical considerations, available data falsify the hypothesis.

## Theoretical problems

The first problem with McWhorter's hypothesis concerns the nature and role of semantic transparency in derivational morphology. In general, a morphologically complex form is considered semantically transparent if it is "interpretable from the morphs it obviously contains" (e.g. Bauer 1983:19). Bauer's examples of transparent vs. opaque formations (in this case compounds) are airmail and blackmail, respectively. The crucial problem, however, is whether a word such as blackmail should be considered morphologically complex at all. With transparent formations this is no problem because the individual elements are formally and semantically related to other elements. Semantically non-transparent formations are only formally related to other elements. But is this enough to make these forms morphologically complex? Recent psycholinguistic research strongly suggests that "it is semantic transparency [...] which determines whether a morphological relationship is lexically represented" (McQueen and Cutler 1998;426).<sup>2</sup> In other words, semantically non-

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<sup>&</sup>lt;sup>2</sup> Thus only semantically transparent formations prime other formations of the same morphological category whereas opaque forms do not. For example, *friendly* primes *friend*, *confession* primes *confessor*, but *successful* does not prime *successor*, neither does *casualty* prime *casual*. Note also

transparent forms are treated in the mental lexicon as morphologically simplex forms, which makes semantically non-transparent morphology a non-issue. Relationships such as *blackmail* to *mail* are therefore at best etymological and phonological but not morphological in nature. Only the mapping of form AND meaning makes a lexical relationship morphological in nature and purely formal relationships that are unaccompanied by a semantic relationship simply are not morphological. This has the serious consequence that the whole hypothesis that creoles have only semantically transparent morphology is vacuous.

Critics of this position might argue that we should not throw out the baby with the bathwater, but clarify the hypothesis accordingly. The reformulated hypothesis could be that creoles have no phonologically and etymologically related words that are semantically unrelated. I will show that this reformulation also runs into serious theoretical and empirical problems.

McWhorter's main reason for postulating the existence of only semantically transparent morphology in creoles is that "the semantic irregularity of derivation arises from the inevitable processes of semantic drift and metaphorical inference, which ensure that, over millenia, the original meaning of such an affix will be obscured in many, if not all of its uses" (1998:798). True, but this argument is only compelling if semantic drift were the only mechanism by which transparency is obscured. However, and crucially, there are at least two other important ways in which semantic irregularity can and often does arise.

that semantic transparency is a graded concept (e.g. Gonnerman and Anderson 2000), which creates an additional problem for the transparency hypothesis, because an independent measure would be needed to establish where on the transparency cline 'non-transparency' begins. For reasons of space I will ignore this problem in the following.

The first and very common way is the spontaneous extension of the possibilities of a word formation pattern by a speaker in the moment of his or her first use of a newly created complex word. For example, the rather idiosyncratic formation *winterize* did not arise due to a millenia-long drift in the semantics of *-ize*, but was created to meet the needs of a speaker in the speech situation where it was first used (see Plag 1998 for a detailed discussion of the semantics of *-ize* derivatives). Thus the meanings of derived words is "inevitably shaped by pragmatic inferences at the very outset of their existence", as Stump (1998:17) puts it.<sup>3</sup> There is no reason to believe that this inherent characteristic of derivation is suspended in a situation where a new language is created, i.e. in creolization.

The second, and in our case more pertinent, avenue on which semantic idiosyncrasy comes in is lexical borrowing. The significance of lexical borrowing for derivational morphology is obvious in English, where the massive borrowing of derived words from French (and Latin, Greek etc.) has not only dramatically increased the number of derivational affixes (through later reanalysis of borrowed

The role of the individual speech situation should not be overestimated, though. In order to be understood, the speakers' freedom and creativity, and thus possible idiosyncrasy, are heavily constrained. Upon closer inspection, derivational processes that look rather irregular, often turn out to be quite regular, if properly analyzed. For example, my own work on English derived verbs (Plag 1998, 1999) has shown that apparent idiosyncrasies in both phonological form and semantic interpretation of verbal derivatives are not nearly as idiosyncratic and frequent as traditionally assumed. This also calls into question McWhorter's claim that "the derivational apparatus, be this affixes or particles, tends to be semantically irregular" (p.798).

complex words), but also the number of non-transparent complex words (which were not reanalyzed as morphologically complex). Especially in a contact situation like creolization we would expect massive borrowing of morphologically complex forms from the languages involved in the contact, sometimes accompanied by reanalysis, sometimes not (see below for exemplification). Hence, even without millenia of development, idiosyncrasy in derivation can and will arise easily through contact (and did so in only a few centuries e.g. in English, see e.g. Dalton-Puffer 1996).

## Empirical problems

Based on these theoretical considerations we can predict exactly the opposite of what McWhorter suggests. The following illustrative empirical analysis of word-formation in Early Sranan will show that this prediction is correct. I have collected data from Schumann's Sranan-German dictionary of 1783, a point in time at which Sranan is only about 100 years old.

The first type of possibly complex formations found in Schumann (1783) are words that are complex in the donor language but have made it into Sranan without morphological decomposition. For example, English-based *krosibai* (< *close by*) and *kukru* (< *cookroom*) belong to this category. There seem to be no other words in Sranan to which these words are morphologically related. However, there is the phonological (though not semantic!) relationship with the stem *krosi* ('clothes, cloth'), so that we might have a real case of semantically opaque derivation, i.e. a phonological relationship unaccompanied by a semantic one. Semanticists might however argue that we are dealing with an accidental formal similarity, i.e. with an instance of homophony. This raises the more general question on which basis we can decide whether we are dealing with accidental or non-accidental phonological similarity. Only an accompanying semantic relationship could tell us that the phonological similarity is not accidental. In synchronic terms this is impossible and etymological

arguments (of the kind McWhorter adduces for *withstand* and *with*) should not be confused with morphological ones. To summarize the discussion of this data, under the assumption that a phonological relationship without a semantic relationship is a case of opaque morphology, *krosi* and *krosibai* refute the hypothesis. Under the alternative assumption that the absence of a semantic relationship indicates that we are not dealing with a morphologically complex form, the hypothesis is vacuous, because semantic opacity in derivational morphology does not exist. Either way, the hypothesis must be abandoned. This argumentation applies to most of the cases to be discussed in the following.

Let us leave the slippery ground of would-be unanalyzed borrowings and turn to those cases where morphological reanalysis or the establishment of a word-formation pattern on the basis of borrowed morphemes has taken place. As we will see, this area is no less problematic. Prima facie, everything looks fine. We find, among others, the following apparently regular derivational processes:<sup>4</sup>

- the verbal suffix -weh (< away) as in goweh (< go away), hitiweh (< hit away),
- the person noun forming suffix -man ('-er', < -man, man) as in drunguman (< drunk 'drunk person, drunkard'), dressiman (< dress 'doctor'),
- reduplication of adjectives indicating intensification as in bunbun 'very good', krinikrin 'very clear',
- reduplication indicating nominalizations fumfumm 'hits (N)', baribari 'screaming, noise' from fumm 'hit', bari 'scream').

<sup>4</sup> Sometimes the nature of a process as being either compounding or derivation may be controversial.

Nothing I say here hinges on the decision on this problem, since, by extension of the hypothesis, compounding (like derivation) should also lead to semantically transparent forms.

However, some of the formations that seem to belong to the regular morphological categories just mentioned do not behave according to the transparency hypothesis. For example, *lukuman* has a transparent meaning ('someone who looks/watches'), but also a more opaque one ('sorcerer'). For many reduplicated forms we do not have evidence of a semantic relationship (be it more or less transparent) to a base form because there simply is none. This holds for a whole class of reduplications creating species names (e.g. *bus(i)bus(i)* 'cat', *kummakumma* 'fish species') but also for many isolated reduplications like *gobbogobbo* ('a small type of peanut') or *biribiri* 'rush' (the plant). These cases must therefore be either analyzed as semantically irregular reduplication or as morphologically simplex words (that happen to rhyme internally), again either refuting the hypothesis or making it vacuous (depending on the theoretical stance one takes).

Similar problems arise with a considerable number of words where the semantic relationships and morphological segmentations are not clear. For example, *gumarra* ('good morning', < *good morrow*) and *guneti* ('good night', < *good night*) seem to be both formally and semantically related, but is this relationship transparent? Should we analyze these two words as complex in the first place? *Gu* (or *gu*-) is not attested outside the two words in question as a potentially meaning-bearing element (only *gudu* 'goods, riches' is), so that it is hard, if not impossible, to determine its semantics on independent grounds. A similar problem arises with *-marra*, which also surfaces in only one other formation, *tamarra* ('tomorrow', < *tomorrow*), which in turn raises the question of the status of *ta*-. Again, we are dealing with either semantically rather opaque morphology, or with non-complex forms that are listed. Similar cases are not hard to find. For instance, there are five formations with *alla*- ('all') as their first element. Three of these are sufficiently transparent (*allapeh* 'everywhere', *allasanni* 'everything', *allatem* 'always'), but *allamal* (< D. *allemale* 'all') features the bound form - *mal* which is otherwise unattested, and *allawan* (literally 'all-one') means 'indifferent'. Or take

bukudumm ('bend (down)' < D. bukken, E. down), faddom ('fall', < fall down), siddom ('sit', < sit down), liddom ('lie', < lie down), which could be analyzed as containing a stem and a suffix - dom. However, are they transparent complex verbs? Only buku is attested independently whereas for the other four verbs no related word exists on the basis of which we could establish the meaning of the putative stem independently.

Finally, let us turn to compounding, which is another frequent (and often transparent) word-formation process in Early Sranan. However, non-transparent compounds like *drai-hai* (dizzyness, literally 'spin-eye') or *dre-watra* ('thirst, thirsty', literally 'dry-water') are not uncommon and show that loan-translations of complex forms (in this case probably of African origin) are certainly another frequent source of semantic opacity in creole, accompanied by some exocentric compounds, which can also be found in Early Sranan (e.g. *jarrabakka* 'yellow-back', a fish species with a yellow back).

#### Conclusion

To summarize, we have seen that McWhorter's hypothesis that the creole prototype is characterized by semantically transparent morphology is extremely problematic, both theoretically and empirically. Why should this be so? In essence, the very nature of creolization as a contact-induced process is responsible for the quick and inevitable rise of non-transparent morphology in these languages due to the wholesale borrowing of - analyzed and unanalyzed - complex forms. This does not mean that the study of creole derivational morphology is futile. Quite to the contrary, I hope to have shown in my sketchy remarks on Early Sranan derivation that the study of creole morphology is as intriguing and challenging as that of non-creole languages. And even if McWhorter is wrong, he is to be commended for having directed our attention to a neglected but promising area of research.

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