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Eva van Lier

# Reconstructing multifunctionality

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## 1 Introduction

Chung argues against multifunctionality in Chamorro by showing that such “apparent” (p. 4) multifunctionality in fact involves conversion. In this commentary, I would like to argue that multifunctionality can be understood differently, i.e. as a phenomenon distinct not only from conversion but also from zero-coded derivation from a common root. I will refer to multifunctionality defined in my way as ‘real’ multifunctionality, simply in order to distinguish it from multifunctionality defined in Chung’s way. From my analysis it follows that:

- i. Showing that a language displays (large-scale) conversion and/or zero-coded root-derivation does not warrant the conclusion that it does not (also) display real multifunctionality.
- ii. Showing that a language displays real multifunctionality is not the same as proving that a language has just “one monolithic” lexical category (p. 2).
- iii. Showing that a language does not have one monolithic lexical category is not the same as proving that it has universal classes of nouns, verbs, and adjectives.

Specifically, I will show that languages that have figured prominently in “discussions of monolithic category systems” (Chung, p. 28) display both conversion and real multifunctionality.<sup>1</sup> Chamorro is no exception to this: some of the Chamorro examples in Chung’s paper reflect real multifunctionality. Crucially, these are not the examples discussed in Chung’s Section 5, where she claims to “deconstruct multifunctionality”.

My argument will proceed as follows: In Section 2, I will first explain my understanding of real multifunctionality, and how it differs from conversion. In Section 3, I will take up the difference between conversion and zero-coded derivation from a common root, and propose that neither of them corresponds to

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1 The analyses presented in this commentary are partly based on Don and van Lier (fc.).

real multifunctionality. In Section 4 I draw a parallel between zero-coded and overtly coded derivations. Section 5 concludes that my analyses account for the empirical data without recourse to universal lexical categories. Rather, I assume that languages universally distinguish between predicative and referential functions, onto which lexical categories are mapped in language-specific and construction-specific ways. For more discussion on this final issue, the reader is referred to Croft and van Lier (this issue).

## 2 Recurrent patterns of conversion versus real multifunctionality

Chung draws a parallel between the situation in Chamorro on the one hand, and English conversion on the other hand (see her Sections 5.2.4 and 5.3). Following Clark and Clark (1979), conversion is characterized as (i) productive, (ii) innovative, and (iii) involving appeal to non-linguistic knowledge. Let me briefly illustrate these characteristics, claiming that they are not applicable to real multifunctionality, which is defined subsequently.

Consider Chung's example *to wait-list (a patient)* (p. 32), analyzed as a "location verb", resulting from "noun-verb" conversion and meaning 'to put a patient on a waiting list'.<sup>2</sup> Notably, the 'location' in the "verbal" interpretation of *wait-list* and the placement of the patient in that location are not interpreted literally but rather metaphorically or metonymically: 'add the name of the patient to a list by writing or typing it'. Note also that as a "locatum verb" *wait-list* doesn't seem to make sense – this would involve putting a wait-list on a patient. However, ruling out this interpretation is a matter of lexically specific world-knowledge.<sup>3</sup> For real multifunctionality, these kinds of semantic idiosyncrasies are irrelevant.

Furthermore, the location interpretation of "verbs" produced by conversion, together with the two other common types of interpretation discussed – locatum and instrument "verbs" – constitute "only the tip of the iceberg" (Chung, p. 33). In other words, even though there are clearly recurrent patterns in the interpretation of output forms of conversion (both within and across languages), there are many different possibilities. This is not the case with real multifunctionality.

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<sup>2</sup> I add the quotation marks here, in order to make clear that I do not agree with Chung's understanding of double "verb" as a universal category.

<sup>3</sup> Perhaps there are societies where a patient, upon coming into the waiting room of a hospital, gets a little piece of paper or a label attached to his/her body or clothes by the receptionist, specifying which doctor he/she should see for a certain treatment. In that case, 'to waitlist a patient' could make sense as locatum verb.

With respect to the productivity of conversion, it is not altogether clear which point Chung tries to make, as she shows that there are “more or less arbitrary lexical gaps” (p. 35). In English, not all “nouns” participate in the pattern of conversion (cf. *\*vase the flowers*, p. 35). Similarly, Chung’s example (57c) from Chamorro shows that *tali* ‘rope’, which in principle lends itself to a locatum or an instrument interpretation, only has the latter meaning after conversion. Such productivity gaps also represent a characteristic of conversion that is not shared by real multifunctionality.

The most crucial aspect of real multifunctionality, in my understanding, corresponds to what Evans and Osada (2005: 367) have called the “compositionality criterion”. This criterion states that “any semantic differences between the uses of a putatively ‘fluid’ [i.e. multifunctional – EvL] lexeme in two syntactic positions (say, argument and predicate) must be attributable to the function of that position”. More specifically, real multifunctionality involves the productive use of a certain semantic group of lexical items in multiple syntactic functions with fully compositional interpretations, i.e. interpretations that follow predictably from the sum of the meaning of the lexical material plus the construction in which it appears.

Real multifunctionality can go in different directions, depending on the combination of (i) the semantic class to which the relevant lexical items belong and (ii) the function in which they appear.<sup>4</sup> I will focus here on two types of semantic classes – object words (which denote either ‘things’ or ‘persons’) and action words – and two types of functions – predication and reference. The use of object words in predicative function and the use of action words in referential function corresponds most closely to what is sometimes understood as *noun-verb flexibility* or *mono-categoriality*.<sup>5</sup> For object words in predicative function, the predicted compositional semantic interpretation corresponds to ‘be X’ (potentially modified only by inflectional markers)<sup>6</sup>; for action-words in referential function it corresponds to the meaning of what is traditionally termed an *action nominalization*: ‘(the act of) X-ing’.

Finally, I should make explicit that real multifunctionality presupposes zero coding. This characteristic it does share with conversion. Specifically, there should be no morpho-syntactic marking of object words in predicative function

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4 Evans and Osada (2005: 375) claim that “true flexibility” should always be bi-directional. I do not adopt that position, as will become clear below. See also Beck *fc.* on “uni-directional flexibility”.

5 See van Lier and Rijkhoff (*fc.*) for an overview.

6 William Croft (p.c.), referring to Stassen (1997: 100–106), points out that the actual semantic load of ‘be X’ is not straightforward, as there is a difference between “identity statements” and “predicational statements”. Here, the meaning ‘be X’ is meant to include only the latter.

that is not also used when action words appear in that function, and – conversely – there should not be additional marking of action words in referential function, compared to object words in the same function. Notably, this requirement applies only to function-indicating morpho-syntax or *structural coding*, not to *behavioural potential*, which involves the expression of categories that are associated with a specific function – e.g. tense marking in predicative function – but don't mark the function as such (for further discussion of *structural coding* and *behavioural potential* see Croft 2001, van Lier 2009, Croft & van Lier, this issue).

Let us now consider the Chamorro evidence for the first type of real multifunctionality, involving object words used in predicative function. Some representative Chamorro examples of this phenomenon appear in (1) (= Chung's (4d), (8c), (26b), and (26c)):

- (1) a. *Para batângga-n karabão esti.*  
 FUT shed-L carabao this  
 'This is going to be a carabao shed.'
- b. *Laña' na puñeta-n tãotao hao*  
 INTJ COMP expletive-L person you  
 'My, what a person you are.'
- c. [...] *para gatbesa ha'*  
 FUT decoration EMP  
 '[... she] is going to be a decoration.'
- d. [...] *hãyi para maestrãm-mu?*  
 who FUT teacher-AGR  
 '[...] who will be your teacher?'

The following two characteristics of these examples are crucial: first, their semantic interpretation is fully compositional, corresponding to 'be X', where X is the meaning of the object word. The interpretations vary only according to the tense marking. Second, these examples don't require additional structural coding, compared to action words in predicative function. They do show a difference in behavioral potential in that they don't show agreement (but they do combine with tense marking).

These examples differ from the cases in Chamorro where object words are converted to action denoting words before being used in predicative function, as in (2) below (= Chung's (44a)):

- (2) *Ma se'si' i babui*  
 AGR knife the pig  
 'They stabbed the pig.'

As expected, and in contrast to (1), the interpretation here is not ‘be X’, but something else: the meaning of the action-denoting word is dependent on the meaning of its base in a non-predictable way: *se’si* ‘knife’ → *se’si* ‘stab’. As mentioned above, this “instrument verb” interpretation (roughly corresponding to ‘action in which the object denoted by the base is typically used as an instrument’) instantiates only one of multiple possible meaning relations between the object-denoting and the action-denoting members of lexical pairs that are related through conversion. Moreover, the lexical category change undergone by the form in (2), as opposed to the forms in (1), is evident from the fact that the former, but not the latter, displays agreement.

Considering the pattern established for Chamorro in (1), one expects that *se’si* ‘knife’ can be used predicatively without agreement as well, with the meaning ‘be a knife’. For pragmatic reasons such usage is not expected to very frequent. This does not mean, however, that it ungrammatical (it isn’t with other object-denoting words). The available data do not allow any firm statements about the productivity of the pattern in (1). However, as mentioned above, Chung makes clear that the pattern in (2), i.e. the conversion pattern, is not productive in that not all object words (Chung’s “nouns”) participate in it. This is illustrated in (3) (= Chung’s (47b)):<sup>7</sup>

- (3) \**Ha guma’ i istudiánti siha*  
 AGR house the student PL  
 ‘He housed the students.’

I turn now to the second type of multifunctionality: the use of action words in referential function, compositionally interpreted as ‘(the act of) X-ing’. In Chamorro, this interpretation is covered at least partly by the infinitive construction in (4) below (= Chung’s (15b)). This is clearly not a case of multifunctionality, as it involves additional structural coding, compared to object words in referential function.

- (4) *Malagu’ yu’ [l(um)i’i’ i tanu’ Roma un diha*  
 AGR.want I (INFIN)see the land.L Rome one day  
 ‘I want to visit Rome one of these days.’

Notably, this construction is used only under same-subject conditions. Chung does not discuss the encoding of different-subject complement clauses, such as ‘I

<sup>7</sup> Again, based on the pattern in (1) I expect that *guma’* can appear in predicative function without agreement, meaning ‘be a house’.

want you to visit Rome'. What is important, however, is that Chung does not consider any of these facts when discarding the claim of multifunctionality in Chamorro.<sup>8</sup>

In order to further illustrate the difference between multifunctionality and conversion, I will discuss some data from Teop, an Oceanic language spoken in the north-east of the island of Bougainville (Mosel in prep.). Just like Chamorro, it shows some of the same conversion patterns as English, in combination with real multifunctionality. Mosel (in prep.: 27) refers to conversion as “regular homonymy”. Some examples of interpretation patterns, equivalent to the ones discussed for English and Chamorro, are provided in (5)–(7) (Mosel in prep. 27ff):

- (5) Object word → action word with meaning ‘locate an object in X’  
(= Chung’s “location verbs”):
- a. *oi* ‘basket’ → ‘put something into a basket’
  - b. *vateen* ‘backpack’ → ‘carry something in a backpack’
- (6) Object word → action word with meaning ‘locate X on an object’  
(= Chung’s “locatum verbs”):
- taboo* ‘wall’ → ‘make the walls of something (a house)’ (i.e. ‘put walls on something (a house)’, EvL)
- (7) Object word → action word with meaning ‘action involving X as an instrument’  
(= Chung’s “instrument verbs”):
- a. *kaporo* ‘specific type of tongs’ → ‘use a pair of *taporo* tongs to remove something’
  - b. *raa* ‘fishing rod’ / ‘fish or catch with a fishing rod’

Apart from these conversion patterns, Teop also displays multifunctionality: both object words and action words can be used in referential and predicative func-

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**8** Chung mentions another pattern that may look like the use of an action word in referential function. This is shown in (i) (= Chung’s (10b)):

- (i) *Pâtgun i malingu*  
child the AGR.disappear  
‘The one who disappeared was a child.’

Here, the interpretation is ‘the one that X-s’, where X corresponds to the meaning of the action-denoting base. However, this interpretation results only when the action-word displays agreement, meaning that this construction is in fact a headless relative clause, in which *malingu* functions as a predicate. As pointed out in van Lier and Rijkhoff (fc.) a similar pattern is found in languages such as Lushootseed (Beck fc.) and Mundari (Evans and Osada 2005).

tion, without any difference in structural coding, and with fully compositional semantic interpretations. This is illustrated in examples (8) and (9) (from Mosel, in prep.):<sup>9</sup>

- (8) a. *a moon na hio nana matana.*  
 the woman TAM sit IPFV.3SG at.the.bow  
 ‘The woman was sitting at the bow.’
- b. *E Magaru na aba nana*  
 the Earthquake TAM person IPFV.3SG  
 ‘Earthquake was a human being.’<sup>10</sup>
- (9) a. *saka paku haa ta meha taba*  
 NEG do NEG ART other thing  
 ‘He didn’t do another thing.’
- b. *Eve kou to vaasusu ni bona paku sinivi*  
 3SG PART REL teach APPL ART make canoe  
 ‘It was him who taught the canoe making.’

It is important to realize that the examples in (8) and (9) represent construction-specific instances of multifunctionality. That is, the specific constructions involved do not carve out a lexical distinction between object words and action words: the two semantic word classes show exactly the same distributional behaviour. However, when we look at different construction types in Teop, such as those in which lexical heads are modified by property words, we find that these constructions do define two distinct word classes: when an object word is modified, the property word is unmarked, as in (10a). In contrast, when an action word is modified, the property word must take the prefix *va-*, as in (10b):

- (10) a. *e kara beera teve*  
 ART brother big PREP.3SG  
 ‘his big brother’
- b. *paa no paku va-mataa haa bona kiu*  
 TAM go do va-good NEG ART work  
 ‘[He] would not go and do his work well.’

<sup>9</sup> The following abbreviations in this paper do not occur in Chung’s paper, nor in the Leipzig Glossing Rules: CV = conveyance voice; DIR = directional particle; LV = locative voice; MID = middle voice; MSD = masdar; PART = particle; PREP = preposition; RDP = reduplication; SPEC = specifier; TAM = tense/aspect/mood marker.

<sup>10</sup> *Magaru* ‘Earthquake’ is the name of a person in mythological story.



The examples in (11) below show, moreover, that this difference is really a lexical distinction, in the sense that it is independent of whether object words and action words are used in predicative or in referential function. In (11a) the object word functions predicatively but is nonetheless modified by an unmarked property word; in (11b) the action word functions referentially, but is modified by a derived property word:

- (11) a. *me-paa moon beera maa*  
 and-TAM woman big DIR  
 ‘and she had become a big woman’  
 b. *a paku va-hata*  
 ART do va-bad  
 ‘the doing badly’

We may compare the Teop data with the Chamorro examples in (1) above. In Chamorro, like in Teop, there is no distinction between object words and action words used in predicative function, in terms of structural coding. However, we do find a distributional difference between Chamorro object words and action words when we take into account subject agreement. In both Teop and Chamorro, then, we find that only some language-specific constructions fail to provide distributional evidence for distinguishing object words from action words. In other constructions, we do find evidence for distinct lexical classes. The relevant constructions are language-specific, and so are the lexical classes defined by them (see Croft & van Lier, this issue).

In sum, in this Section I have argued that conversion and real multifunctionality are different phenomena. The Chamorro examples given in Chung’s Section 5 are instances of conversion and as such should not be interpreted as evidence for or against real multifunctionality. Real multifunctionality is attested in Chamorro, but this does not mean that there are no lexical categories in Chamorro. There are, but these categories are not universal; they are language- and construction-specific.

### 3 Conversion versus root-derivation

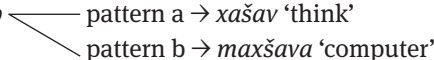
In her Section 5.3.3, Chung considers the Chamorro conversion data from the perspective of *Distributed Morphology*, making use of analyses of English and Hebrew by Kiparsky (1997) and Arad (2003), respectively. The relevant observa-

tion concerns a distinction between the semantic interpretation of two different types of zero-coded derivation. In one type of process, which I will call *tape*-type, the meaning of the action-denoting member of a semantically related and phonologically identical pair of lexemes includes the meaning of the object-denoting member (cf. Chung's example (66)). In the other type of process, coined *hammer*-type, this is not the case (cf. Chung's example (67)). Put simply, the difference is that one cannot *tape* something without tape, but one can *hammer* something without a hammer (for instance, with a shoe). To explain this difference, it is proposed that the latter case involves zero-coded derivation from a common uncategorized root, while the former involves a two-step procedure that first derives a noun from a root, and then a verb from that noun.

In this Section, I argue that one should actually distinguish between (at least) three types of processes, as in (12):

- (12) a. Semantically irregular root-based zero-coded derivation, corresponding to *hammer*-type formations;  
 b. Semantically more regular word-based zero-coded derivation, corresponding to *tape*-type formations;  
 c. Semantically compositional syntactic categorization without additional structural coding, corresponding to real multifunctionality

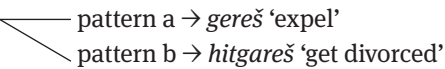
Similarly, Arad (2005) describes two lexical derivation types (comparable to the processes in (12a–b)), contrasting them with a syntactic one (comparable to (12c)). However, according to her analysis both lexical processes involve root-derivation. The difference is semantic only: in the first case, the meanings of each of the members of a derivational pair are “quite far apart” (p. 66). An example is given in (13) (Arad 2005: 63):<sup>11,12</sup>

- (13)  $\sqrt{xšb}$  

<sup>11</sup> The “patterns” refer to different kinds of so-called *binyanim* in Hebrew: constructions of specific vowels and consonants that are combined with a root consisting of (most often) three-consonants; the “a/b” labels are arbitrary and don't reflect the same thing in different examples; they merely indicate that there are two different types of *binyanim* involved.

<sup>12</sup> Note that, while in this example the two derivational outcomes have “verbal” and “nominal” meanings, respectively, Arad (2005) gives ample evidence of cases where multiple “verbal” or multiple “nominal” meanings are derived from the same root.

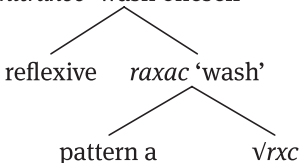
In other cases the meanings are less irregular, but still have some unpredictable, lexically specific element. Consider for instance (14) (Arad 2005: 67):

- (14)  $\nu grs$  

Pattern b in example (14) corresponds to Arad's pattern 7, which adds a meaning element of reflexivity or reciprocity, but in a not fully compositional way (cf. for instance *peʔer* 'glorify' and *hitpaʔer* 'boast' from  $\nu pʔr$ ). As Arad (2005: 67) puts it: "One could argue that [ . . . ] a divorce is a mutual act of expulsion. [However] the 'reflexive' has acquired a meaning that is narrower than the standard reflexive meaning".

Even though the Hebrew *binyanim* derivations constitute a special, language-specific case, the semantic difference between examples such as those in (13) and those in (14) are comparable to the difference noted by Kiparsky for English *hammer* versus *tape* and by Chung for Chamorro, in her examples (70) and (69), respectively. In cases such as (13) above, the meanings of the derivational pairs are further apart than in cases like (14), but in neither case are we dealing with a purely compositional meaning that follows automatically from the construction in which the lexical item is used.

This brings us to the third type of derivation. According to Arad, this type involves a two-stage derivational process, represented in (15) below. The crucial point is that the upper half of this process, i.e. the second derivational step, "takes place in the syntax" (Arad 2005: 217; emphasis in the original).

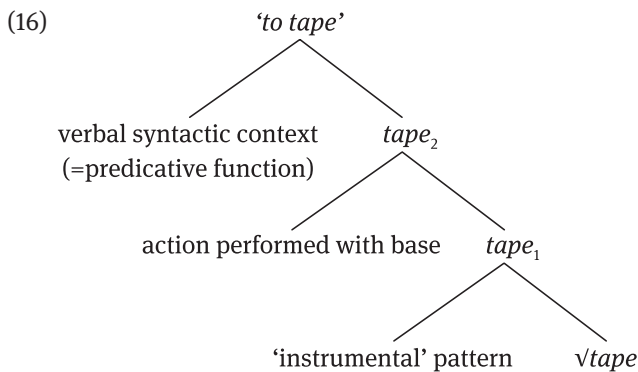
- (15) *hitraxec* 'wash oneself'
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As Arad points out, the interpretation of *hitraxec* 'wash oneself' is fully compositionally supplied by the syntactic context. In other words, once this syntactic context is "stripped away [ . . . ] *raxac* and *hitraxec* have exactly the same semantic content" (Arad 2005: 68). Another crucial observation is that processes such as those in (15) do not exhibit any gaps in productivity of the type described by Chung for English and Chamorro (Arad 2005: 69).

The important point for our purpose is that Kiparsky and Chung analyze English and Chamorro *tape*-type derivations as instantiations of the process in

(15), while they are not.<sup>13</sup> On the other hand, the weakness of Arad's analysis is that it does not distinguish between *tape*-type and *hammer*-type derivations (i.e. the two processes in (12a) and (12b)); both are analyzed as root-derivations (cf. (13) and (14)). On the other hand, the analysis of *tape*-type derivations as involving two steps rather than one – so that the action word *tape* is not a direct root derivation – provides a principled explanation for the difference in interpretation between *tape*-type and *hammer*-type derivations.

I propose to represent the structure of *tape*-type derivations as in (16) below, where only the third step of the derivation represents a syntactic operation, parallel to the second step of (15).



From the *Distributed Morphology* perspective, this analysis is problematic, because it violates the DM requirement that the first derivational step from a root constitutes a *phase* in the Minimalist sense, i.e. determines not only the root's semantic interpretation but also its phrase-structural destiny: whether it becomes the head of a verb phrase or the head of a noun phrase (Marantz 2001).

**13** From the Chamorro data in Section 5.3.3, I get the impression that the two types of interpretation documented by Chung for what she labels “noun-adjective” pairs does correspond to a difference between lexical derivation and syntactic categorization. In particular, while the “irregular” pattern clearly shows the idiosyncratic semantic characteristics of a lexical derivation, the “regular” pattern does seem to be fully compositional: it follows directly from the modifying function in which the words are used and does not vary for different semantic sub-types of words (such as ‘hill’ vs. ‘fever’). As such, this regular pattern would contrast with lexical regular patterns of the type exemplified in (69), where we are looking at only one (the ‘instrumental’ one) of multiple different types of relations between the “nominal” and “verbal” meanings associated with a single phonological form. However, it’s hard to determine the status of the former regular pattern, in terms of compositionality and productivity, on the basis of only a few examples.

However, there is ample evidence that semantic (and phonological) interpretation and phrase-structural categorization are separate dimensions; they don't necessarily go together in the first derivational step from a root. Specifically, there are (i) examples of structures that are semantically interpreted but remain (phrase-structurally) un-categorized, and also (ii) examples of structures derived from bases that seem to be phrase-structurally categorized, but nonetheless display unpredictable semantics. Such examples come from languages that are traditionally analyzed as having “the familiar trio of lexical categories” (Chung, p. 3), such as English and Dutch (see De Belder 2011: 288 and references therein), as well as from languages that have been argued to lack those categories, such as Kharia (Peterson 2006, 2011).

Starting with an example of type (i) above, consider so-called *masdars* in Kharia. Masdars are derived from action-denoting base forms. In some cases, the derivational process involves no overt marking, while in other cases it involves reduplication of the base. The choice depends on the number of syllables of the base: polysyllabic bases have zero-coded masdars, while monosyllabic bases have reduplicated masdars. Semantically, the interpretation of masdars is fully regular: they denote the action expressed by the base form from a global perspective, without reference to its temporal structure. As such, their interpretation corresponds to a traditional ‘nominalization’ meaning (hence, presumably, Peterson’s choice for the term “masdar”). However, Kharia masdars are not nominalizations, in the sense that they are not phrase-structurally categorized. They can be used in both ‘verbal’ (predicative) and ‘nominal’ (referential) syntactic contexts, without any difference in relative structural coding. This is illustrated in (17) with two reduplicated masdar forms (Peterson 2006: 73):

- (17) a. *ijŋ daʔ biʔd~biʔd=ki=jŋ*  
 1SG water pour.out~MSD=MID.PST=1SG  
 ‘I used to pour water out.’
- b. *oʔ=yaʔ bay~bay um=iŋ baʔj=ta.*  
 house=GEN build~MSD NEG=1SG like=MID.PRS  
 ‘I don’t like (the act of) building houses.’ (Peterson 2006: 73)

Thus, while Kharia masdar formation has no effect on the phrase-structural possibilities of the output form, at the same time the process does not exhibit the non-compositional types of semantic interpretation that are typical of other non-syntactic derivations.

There are also examples of type (ii) above: semantically irregular interpretations of words derived from bases that are traditionally analysed as phrase-structurally categorized. Consider for example the English verb *naturalize*. In

terms of traditional word classes, the structure of this word would be analysed as: [[[*nature*] *al*]<sub>A</sub> *ize*]<sub>V</sub>, with the verb derived from the adjective *natural*. However, the adjective does not have a meaning component ‘born in the country’: one cannot refer to original inhabitants of a country as ‘natural citizens’. In other words, *naturalize* has a meaning component that is neither present in the underlying adjectival form nor follows compositionally from a verbal syntactic context. A similar example is the Dutch word *maatschappelijk* ‘pertaining to the society’, traditionally analysed as: [[[*maat*] *schap*]<sub>N</sub> *elijk*]<sub>A</sub>. Unexpectedly, the meaning of the noun *maatschap* is not ‘society’ but ‘partnership’. ‘Society’ translates to *maatschap-ij* in Dutch, including a derivational suffix *-ij*.

The apparently anomaly of all these examples disappears once one accepts that lexical categories do not map onto syntactic categories in a one-to-one fashion (cf. Sasse 1993; Himmelmann 2007; and De Belder 2011, who makes the same point from a generativist perspective). In other words, if one relinquishes the idea of universal, phrase-structurally defined lexical classes, then one doesn’t need to assume that Kharia *masdars* and Dutch *maatschap* are nouns (defined as a universal class of words that function as heads of noun phrases), or that English *natural* is an adjective (defined as a universal class of words that function as heads of adjectival phrases). Instead, these lexical items belong to (derived) lexical classes specific to Kharia, Dutch, and English, respectively. As such, they display their own unique (but not random) set of distributional properties in terms of how they map onto syntactic functions and how this affects their structural coding and behavioural potential.

## 4 Converging evidence from overtly- and zero-coded processes in other languages

Comparing zero-coded instances of the processes listed in (12) above with their overtly marked counterparts further supports the mismatch between lexical and syntactic categorization. The examples given in the previous sections already show that both types of categorization can be instantiated by overt forms (as with the Hebrew *binyanim*), or by zero coding (as with Chamorro and Teop conversion versus multifunctionality). Sometimes the same type of formation can have both a zero and an overt manifestation (as with the Kharia *masdars*); and sometimes different types of formations can be expressed by the same form.

The latter situation obtains in the Oceanic languages Samoan and Maori, where the same suffix *-ga* (Samoan) / *-hanga* (Maori) is used for lexical word formation and for syntactic categorization. In the first case, the meaning of the out-

LANGUAGE	BASE	LEXICAL FORM/MEANING	SYNTACTIC FORM/MEANING
SAMOAN	<i>amo</i>	<i>āmo-ga</i>	<i>amo-ga</i>
	‘carry’	‘person(s) carrying loads’	‘carrying’
	<i>tīpi</i>	<i>tīpi-ga</i>	<i>tīpi-ga</i>
	‘cut’	‘surgical operation’	‘cutting’
	<i>pule</i>	<i>pulē-ga</i>	<i>pule-ga</i>
	‘control’	‘unit of church administration’	‘controlling’
MAORI	<i>tangi</i>	<i>tangi-hanga</i>	<i>tangi-hanga</i>
	‘cry’	‘funeral’	‘crying’

**Table 1:** Samoan and Maori -ga/-hanga formations

put is variable and unpredictable, while in the second case the meaning is fully compositional (corresponding to ‘(the act of X-ing’)), as illustrated in Table 1 below (Mosel and Hovdhaugen 1992: 195; Bauer 1993: 48). Note also that in Samoan the semantic irregularity of the lexical process has a phonological counterpart in the form of vowel-lengthening in the base form.

Importantly, example (18) from Samoan shows that lexical *ga*-derivations are not phrase-structurally categorized as nouns: they can be used in predicative function, without any difference in relative markedness and with fully compositional semantic interpretation (Mosel 2004: 267):

- (18) *‘Ua to-gā-niū            ‘ātoa le mea maupu’epu’e*  
 TAM plant-gā-coconut whole ART place hill  
 ‘The whole hilly place was now a coconut plantation.’

It’s relevant for our discussion that this pattern, i.e. the multifunctionality of object words, is typical for Samoan and potentially also for other Polynesian languages (cf. Broschart 1997 on Tongan). Another example from Samoan is given in (19) (Mosel and Hovdhaugen 1992: 77):

- (19) *E uō            Tanielu ma Ionatana*  
 TAM friend Daniel and Jonathan  
 ‘Daniel and Jonathan are friends.’

At the same time, Samoan displays many examples of conversion, with the by now familiar patterns of more and less regular interpretations, as shown in (20) (Mosel and Hovdhaugen 1992: 82, 83):

- (20) a. *fana*: ‘gun’ / ‘shoot’  
 b. *lama*: ‘torch’ / ‘fish by torch light’  
 c. *gaoi* ‘steal’ / ‘thief’  
 d. *solo* ‘move forward’ / ‘procession’  
 e. *tusi*: ‘write’ / ‘letter, book’  
 f. *eklaesia* ‘church’ / ‘be a church-member, regularly attend church’

We may close this Section by considering the further examples of claimed multifunctionality, adduced and rejected in the final part of Chung’s paper. As we will see, these data fit squarely into the framework I have outlined so far. First, consider the Tokelauan case. As Chung points out, the semantic interpretations of lexical conversion in Tokelauan are in line with what we have seen in other languages (English, Chamorro, Teop, Samoan). However, there is a range of options, rather than a single fully compositional interpretation, of the type ‘be X’ or ‘X-ing’, that follows directly from the syntactic context. As such, these patterns do not represent instances of multifunctionality. At the same time, though, in the quotation Vonen mentions the interpretation ‘be president’ when the word meaning ‘president’ is used in predicative function. Given the close genetic relationship between Tokelauan and Samoan (but depending on the language-specific details in terms of structural coding and behavioural potential), this may well involve an instance of real multifunctionality in Tokelauan. Notably, the ‘be X’ interpretation does not feature in Vonen’s list of possible interpretations of noun-verb conversion, just as it does not feature in Chung’s discussion of Chamorro conversion.

Turning finally to the Tagalog data, Chung again points out recurrent patterns of interpretation in conversion processes. These patterns are expected if, following Himmelmann (2007), we analyse voice-marking in Tagalog as a lexical process, that has no consequences for the phrase-structural possibilities of the output forms it produces. This multifunctionality is illustrated in (21) below, where a form marked for locative voice appears in a referential function marked by *ang*. The *ang* form marks the relevant type of referential phrase independently of the categorial status of the lexical material filling the functional slot. In other words, there is no difference in structural coding with respect to forms that are not voice-marked (Himmelmann 2007: 266):

- (21) *i-u-uwi’*                                      *niya*                      ***ang***    ***a-alaga’an***                      *nya*  
 CV-RDP~returned\_home    3.SG.POSS    SPEC    RDP~cared\_for-LV    3SG.POSS  
 ‘He would return the ones he was going to care for.’

The status of voice-marking in Tagalog as a process that is not phrase-structurally categorizing is corroborated by its semantic properties. While the interpretation



of voice-marked forms is broadly based on the meaning of the base and the meaning of the voice-marker, there are many idiosyncrasies. Example (22) provides some examples of unpredictable semantic interpretations of voice-marked forms (Foley 1998):

- (22) a. *bus* ‘bus’ → *mag-bus* ‘ride a bus’  
 b. *kamay* ‘hand’ → *mag-may-an* ‘shake hands’  
 c. *langgam* ‘ant’ → *langgam-in* ‘be infested with ants’  
 d. *lubid* ‘rope’ → *lubir-in* ‘be made into rope’

## 5 Conclusion

This commentary argued that real multifunctionality does not involve lexical zero-coded derivation, be it root-based or word-based. Rather, it involves the possibility of using lexical material (whether simple or derived) in multiple syntactic functions with fully compositional semantic interpretation, under identical structural coding conditions. The reason why multifunctionality and lexical zero-coded derivation are mutually independent is because lexical categorization is independent from syntactic categorization. On the syntactic level, all languages distinguish between referential and predicative functions. However, the ways in which vocabulary items map onto these functions differ from language to language, and from construction to construction.

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