Morphology and the Web of Grammar: Essays in Memory of Steven G. Lapointe

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**CENTER FOR THE STUDY
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Preface

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Here we have an unnumbered introductory chapter with roman-numeral page numbers which will be the: Preface by U.C. Davis

Acknowledgments

The editors

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When Morphology . . . Disappears

GREG CARLSON

1.1

b. Petter spiser helst med *skje*.
Petter eats rather with spoon
'Petter would rather eat with a spoon.'

c. Jeg har bestilt *billett*.
I have ordered ticket
'I ordered a ticket.'

As Borthen clearly shows, these bare singulars have the semantic properties of bare plurals in terms of being uniformly non-specific weak indefinites; there are no wide-scope or specific readings for them. Bare singulars in other languages with articles and plurality marking have been shown to have an identical semantics, as in Albanian (Kallulli, 1999) Brazilian Portuguese, investigated in detail by Schmidt and Munn (1999) and Munn and Schmidt (1999), and Hungarian (Farkas and de Swart, to appear).

BesidesBesidsBesidBesidBesidho

press) for Chamorro, is presently not the point. Rather, the observation is that doubling, when it occurs, may only occur with truly incorporated nominals. Lack of doubling is not a diagnostic for lack of incorporation, but such phenomena suggest that not all instances of an absence of morphology should be analyzed as incorporated.

There are two other instances of "missing morphology" that I wish to suggest are also a part of this general pattern, though they have received less documentation in the literature. One instance is that of a lack of direct-object agreement markers on an apparently transitive verb, in languages which have direct object agreement markers. For instance, Perrot (1972) reports that in Swahili, verbs agree with definite objects but not indefinite ones.

(5) a. U- me- leta kitabu?
2sg Perf bring book
'Have you brought a book?'

b. U- me- ki- leta kitabu?
2sg Perf 3sg bring book
'Have you brought the book?'

Aissen (2003) takes another point of view, arguing that tense is the controlling feature, so we must look again at this phenomenon, at least in Swahili. However, another somewhat more secure is example is drawn from Palauan, though here the pattern is more complex. Woolford (1996) reports that in the perfective aspect, with non-human objects, verbs agree with only with specific singulars, and not with indefinites, or indefinite plurals. In the imperfective paradigm, verbs do not agree with any objects. However, when an object is non-human, specific and singular, a preposition is inserted before the definite singular NP. So while there is more going on here, the connection between lack of agreement and indefiniteness, and between NP marking and specificity, is in evidence. What is not so clearly established in this literature is whether the indefinites are non-specific only.

The other phenomenon is "clitic-doubling", illustrated by the Spanish example below. A lack of such doubling is associated with nonspecific indefinite readings. Suñer (1988) notes two things in Spanish. First, with bare plurals, one cannot get clitic doubling—this appears to be the same with Albanian bare singulars, discussed in Kallulli (1999).

(6) Les dejaré todo mi dinero a los pobres.
To-them I-will-leave all my money

(8) *Lo alabrán al niño que termine primero.
Him they-will-praise the boy who finishes first
(bad on the reading where winner is yet to be determined)

There is one vital issue that I have left unaddressed in the above, which will largely remain that way. This is the question of whether "missing morphology" as characterized is truly the absence of morphology, or whether such instances are actually exemplars of null morphology—that is, actual morphology with phonologically null expression. So, for example, the fact that Slavic languages, and many others, generally lack articles is not something I would consider "missing morphology". Rather, the strategy here is to examine morphology contrastively; that is, if something that looks like it "normally" takes a certain type of morphological marking, and in certain instances lacks the expected marking, I am taking it as "missing" rather than as "null". This assumption may misfire in some instances (e.g., whether the Hindi objects mentioned

indefinites have a type of meaning which is “compatible” with verb phrase meanings, all other types of noun phrases being uninterpretable within that domain.

Recall that in the discussion above,

of the literature where this phrasal intuition becomes apparent (though not in the phrasal vsal

an event-type which is more specific than another event type is related by $\leq$. Thus, for instance, ⟦run⟧ $\leq$ ⟦move⟧, ⟦shatter⟧ $\leq$ ⟦break⟧, and ⟦state⟧ $\leq$ ⟦communicate⟧, as the first are more specific instances of the latter. On the other hand, ⟦bake⟧ and ⟦nudge⟧ are not so related (even if, in a *specific* act of baking, one might nudge the pan into the oven). This $\leq$ relation is intended to mean that the first member is automatically redescribable as the second under all circumstances. So, while a part of an act of building, for instance, might be an act of sawing, one cannot automatically redescribe an instance of sawing as a building. This is so even if one, in a perceptual sense, identifies an act of building by noticing an act of sawing. The limit to this is when a specific event type appears necessarily a component of accomplishing another. For instance, suppose that playing chess always involves thinking; even so, it is not the case that ⟦think⟧ $\leq$ ⟦play-chess⟧, as any act of thinking is not redescribable as playing chess. Rather, this relation between thinking and chess-playing are going to appear in the propositional semantics.

One might note that 'play-chess' is not (formally speaking) a member of the category V in English. This is because, I assume, English does not have object incorporation. But many other languages do have incorporation, and things like 'play-chess' *can be* among the lexical items of the language. A verb like this is obviously some composition of the meaning of 'play' and the meaning of 'chess', and is not atomic. Thus it is necessary to say something about how the two are combined at this, the lexical level.

The meaning of a noun is what we might call informally a 'property', drawn from a set of properties Π, each member of which is P_1, P_2, ... ; there is no need to assume that Π and Σ are disjoint, but for the sake of simplicity I will assume it for the time being. Like the verb meanings, these also form a semilattice, so that ⟦cat⟧ $\leq$ ⟦mammal⟧ $\leq$ ⟦animal⟧, and so forth. And while ⟦cat⟧ does not stand in the '$\leq$' relation to ⟦dog⟧, both stand in the '$\leq$' relation to ⟦mammal⟧ and to ⟦animal⟧. At this, the lexical level, there are no expressions which denote individuals; only the universals are represented here. If one represents a proper name such as 'Bob', ⟦Bob⟧ at this level of interpretation is going to represent the common-noun usage of the name only (e.g., the property of being named Bob), and not the usage making reference to a particular individual bearing that name.

Now, suppose we have an incorporation construction, which I take to be a lexical meaning, of the form N

tion in the syntactic representation, the IP level. What can remain (it appears) as a constutuent among the types of noun phrases is the sole instance of weak, indefinite nonspecifics.

The mode of combination at the V′ level depends upon a verb associating with a series of thematic roles (Th_1, Th_2, ...), and these thematic roles in turn being "assigned" to the syntactic arguments. A part of what it is to be a "verb" in this view is that it is inserted under a V′ node that has an appropriate listing of thematic roles associated with it, which are listed in the lexicon with the verb. Most verbs have several alternative sets of roles,

The extension of a V meaning, ˇ⟦V⟧, is going to be some set of event-type instantiations; I'll call these "token events", though bearing in mind that these are not real events of the world, at this level. Let $\mathcal{E}$ designate a set of token events $\{e_1, e_2, \ldots\}$ such that for any V, ˇ⟦V⟧ is a subset of $\mathcal{E}$. These subsets preserve the lattice structure of the V meanings in the usual way (e.g., if one verb meaning is a part of another, then its extension will be a subset of the other's extension, etc.). Now, as I have said above, $\mathcal{E}$ does not consist of what we might think of as real events; it is rather more like the set of event-like things we can talk about. It does not matter that, for example, a mouse has never in fact devoured an elephant for that to have token event instances, since it is something we can talk about even if it never has happened, or ever will happen. ˇ⟦a mouse devour an elephant⟧ will be some subset of $\mathcal{E}$ just as surely as ˇ⟦a dog eat some food⟧. (In these examples, I intend the nonspecific readings of the indefinite noun phrases only.)

The extensions of N meanings are provided for at the NP (as opposed to DP) level, where ˇ⟦NP⟧ = ˇ⟦N⟧ in the instance where an NP consists only of an N (i.e., there are no modifiers or other elements combining with the N). It may seem that the natural thing to do would be to have these extensions be sets of individuals, but the problem with this is that whether a given individual falls under the extension of a noun is contingent. It depends on the particular time and place (and world) one is in. So, for instance, whether a particular person is a "student" or a "professor" obviously depends on the time of evaluation—the same person may be one at one time, the other, at another. So the best we could do in defining an extension for a given

going to be a subset of $\mathcal{N}$. $\mathrm{Th}_2([\![\text{plants}]\!])$ is going to designate the set of token events in $\mathcal{E}$ in which a plant (i.e., some member of $\check{}[\![\text{plant}]\!]$) functions as the Patient. This is going to include many non-freezing events (as when a plant blooms, is potted, etc.), some freezing events where it is a plant that freezes, but it will not include all freezing events (where some non-plant freezes). Intersecting this set with the set of freezing events is going to yield just that set of freezing events where some plant or other functions as the Patient.

Note that, at this level, the result is just a set of

anteed to denote a node in

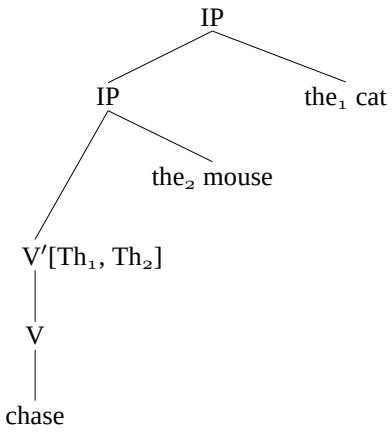
1.3.4 The S level

Interpretation at the V and V′ levels makes no reference to truth, context, times, worlds, or any of the familiar semantic notions aside from "denotation". However, at the S (or IP) level, all these elements come into play. Here, the representations are as commonly assumed. There is at least a set of individuals $\mathcal{A}$, a set of worlds $\mathcal{W}$, a set of events $\mathcal{E}$ (mnemonic for "actual events") with e_1, ... as members, and a set of ordered times $\mathcal{T}$. I am going to talk about worlds as containing events as parts, but this is a matter of convenience. Verb meanings are (or rather, correspond to) functions of the sort nearly universally assumed in formal semantics, with argument slots in them, expressing relations among the denotations of its arguments to yield truth-values and define propositions via these truth-values (e.g., a proposition being a set of possible worlds, that set of world at which the evaluation of the relation and its arguments yields True). So what we need then is some means of mapping from the structures present at the V′ level into structures at the propositional level.

We need to ensure that the meanings expressed at the V′ level have the intuitively correct denotations in the propositional model. We do not wish for "dog" to denote a type of fish, or "run" to denote events of eating, for example. We accomplish this by mapping into $\mathcal{A}$ and the elements of $\mathcal{E}$ from the members of $\mathcal{N}$ and $\mathcal{E}$ respectively

a corresponding property-instantiation in ˇ[[cat]] and ˇ[[mouse]] which "participates" in the chasing event. The same will hold for all extensional verbs. However, this is a different way of arriving at the same truth-conditionally defined proposition. I believe this (or its choice-function equivalent) is the structure of the specific reading of the indefinite. It involves assigning par-

(18)



Having made this syntactic association we are now able to calculate the exact relation that the cat and the mouse stand in. Recall that nouns stand for properties, which have as extensions under V′ property-instantiations. Individuals have property-instantiations by virtue of being of certain types. In this instance, the interpretation of the N′ determines that the cat is a cat, and the mouse is a mouse, from the contents of the nouns themselves. Some of the property-instantiations are going to be mapped onto the particular individual cat that is talked about here, and also onto the mouse that is being talked about here. That is, each will find some extension in $\mathcal{N}$. Suppose these just happen to be im S BT 9.9o

common noun meaning. One can deal with this by providing an interpretation3.98 m S BT 90.001 363 w F8o963 34

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