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Protosyntax: A thetic (unaccusative) stage?

1. Introduction

Jackendoff (1999) has suggested that modern languages might have preserved traces of previous evolutionary stages. In Jackendoff (2002) he considered evidence from child language, second language acquisition, aphasia, pidgin languages and ape research and proposed that the formation of compound nouns such as *snowman* and rules found in Klein & Purdue's (1997) *Basic Variety* such as 'Agent First' and 'Focus Last' could be considered protolinguistic 'fossils.' Progovac (2008a, 2009a) has recently extended the fossil analysis to what she calls Root Small Clauses of modern languages (e.g. *Problem solved. Me first!*), arguing that these are "half clauses," that is, clauses that lack at least one functional layer, that of Tense Phrase (TP), and show no evidence of tense, agreement, or structural case on the subject. Uriagereka (2008) has also argued that (embedded) small clauses may involve finite-state syntax, the simplest syntax in Chomsky's hierarchy.¹

In this paper we introduce an additional consideration relevant to understanding the initial stages of early syntax. We show that so-called thetic statements (Kuroda 1972, Sasse 1987), which could be subsumed under the 'Focus Last' principle, even though they are more accurately described as 'Focus-only' (Lambrecht's 1994 Sentence-Focus), are more primary than 'Agent First' constructions, which involve more complex structures,

For some additional recent works on the evolution of language see Bickerton (1998; 2007), Botha & Knight (2009a; 2009b), Burling (2005), Cangelosi *et al.* (2006), Christiansen & Kirby (2003), Deacon (1997), Fitch, Hauser & Chomsky (2005), Heine & Kuteva (2007), Hurford (2007), Locke (2009), Oller & Griebel (2004), Tallerman (2005), among many others.

both syntactically and informationally. This paper is organized as follows. In section 2 we introduce the distinction between thetic and categorical statements. In Section 3 we consider the syntactic, prosodic, semantic and pragmatic features of thetic statements and we argue that they are simpler than their categorical counterparts. In section 4 we show some corroborating data from child language and in section 5 we offer some conclusions.

2. Thetic vs. Categorical Statements

The distinction between thetic and categorical statements was first proposed by 19th century philosopher Franz Brentano, elaborated by his student Anton Marty, and later revived by Kuroda (1972) and Sasse (1987). According to Marty (1918), categorical judgments (also referred to as *double judgments*) involve two successive acts (choosing an entity and making a statement about it) and are expressed by the traditional subject-predicate sentence, as in (1) below:

(1) Diese Blume ist blau "This flower is blue"

In contrast, thetic statements or *simple judgments* merely assert a state of affairs where a new situation is presented as a whole. In these statements the entity involved in the event forms a unit with it. Thetic statements include impersonal and existential sentences of the type in (2) and (3)–(4) below.

- (2) Es regnet "It rains"
- (3) Gott is "God exists"
- (4) Es gibt gelbe Blumen "There are yellow flowers"

Although existential, impersonal, and also presentational sentences (see below) are predominant among thetic statements, the thetic/categorical distinction reflects two different points of view from which a state of affairs can be regarded with any type of verb. As Kuroda (1972) shows, in Japanese an event involving the running of a dog can be expressed by the particle ga, as in (5), or by the particle wa, as in (6):

- (5) Inu ga hasitte iru
 dog running is
 "There is a dog running"
- (6) Inu wa hasitte iru "The/a dog is running"

The use of the particle ga in (5) indicates that an event of running is taking place in which some entity (in this case 'a dog') is involved (thetic statement), while (6) is used to say of an entity that it is performing the action of running (categorical statement).

As Sasse (1987) points out, in other languages the distinction is marked by word order, intonation, and/or incorporation. Word order is used in a great variety of languages all over the world, where thetic statements are expressed by the order Verb-Subject (VS) in otherwise Subject-Verb (SV) languages.² Among these, Sasse (1987) mentions Italian, Spanish, Russian, Serbo-Croatian, Bulgarian, Hungarian, Modern Greek, Albanian, Swahili, Tolai, Wikchamni, Modern Arabic dialects, and Chinese. In (7)–(10) we illustrate with examples form Serbian and Spanish.

- (7) Zvoni telefon rings telephone "A phone is ringing"
- (8) Naš telefon zvoni/radi our telephone rings/works "Our phone rings/works"
- (9) Suena el teléfono sounds the phone "The phone is ringing"
- (10) Nuestro teléfono suena/funciona "Our phone rings/works"

In languages like English, Polish, and German, thetic sentences are often distinguished through intonation (Sasse 1987, 2006, Lambrecht 1994), more specifically, by single accentuation on the subject, as in (11)–(13).³

(11)	The BUTter melted		(English)
(12)	TeLEfon	dzwoni	(Polish)
	telephone	rings	

² Sasse (1987) refers to this order as *subject inversion*. As we suggest in Section 3, however, these structures do not involve inversion, but are base-generated with this order.

³ According to Sasse (1987) some languages like Boni (an Eastern Cushitic language) can mark thetic sentences by incorporation. We do not consider those cases here.

(13) Die SONne scheint (German) "The sun shines"

These contrast with categorical statements, in which both the subject and the verb would be accented, as in (14)–(16).

(14)	MAry is SINGing	(English)
(15)	TeLEfon DZWOni	(Polish)
(16)	HARry SINGT	(German)

Although, as mentioned above, any type of verb can be viewed as part of a compact event (as opposed to part of a dual structure involving a subject and a predicate), certain types of verbs predominate in thetic expressions. In addition to impersonal and existential sentences of the type in (17)–(18), thetic statements often involve presentation verbs expressing appearance/ disappearance and other physical changes, as in (19)–(20).

- (17) It is raining
- (18) There are many flowers
- (19) Here comes the mailman
- (20) JOHN has disappeared

These verbs are known in the generative literature as unaccusatives and we concentrate on their features in the next section.

3. A Thetic (Unaccusative) Stage in the Evolution of Syntax?

As is well-known in the linguistics literature, unaccusative verbs are a special type of intransitive verbs whose subjects have the semantic role of theme (instead of agent).⁴ Depending on the language, unaccusative subjects can be marked by a different position in the sentence (usually postverbal, but not always), by different intonation, or by their participation in incorporation, as we also saw in the previous section with regard to thetic statements in general. In (21) we have some examples of a prototypical unaccusative verb (*arrive*) in different languages.⁵

⁴ Unaccusative verbs contrast with unergative verbs in this respect. For details, see Perlmutter (1978), Burzio (1981), (1986), Levin & Rappaport Hovav (L&RH) (1995) and Harves (2002), among others.

⁵ For unaccusative diagnostics in Italian, such as choice of auxiliary verbs and *ne*-cliticization, see e.g. Burzio (1981), (1986) and Belletti & Rizzi (1981). According to L&RH (1995),

(21)	JOHN has arrived	(English)
	E arrivato Giovanni	(Italian)
	Stigao (je) Jovan	(Serbian)
	Ha llegado Juan	(Spanish)

As the Italian, Serbian and Spanish examples show, the unmarked order for unaccusative verbs in the languages that allow for word order variation tends to be VS, as is also the case with thetic statements in general. This tendency can be observed even in languages which do not allow for postverbal subjects, such as Modern French. Thus in (22) below, the theme appears postverbally, although with a different case and preceded by a dummy pronoun (Sasse 1987: 534):

(22)	Il est	arrive des	bonnes	nouvelles
	it has	arrived PARTITIVE	good	news
	"Good	news have arrived"		

In English, according to L&RH (1995: 19), VS order is manifested only in the *there*-insertion construction, which is restricted to verbs of existence (e.g. *exist, remain, thrive*) and/or appearance (*appear, arise, emerge*):

- (23) There remained three documents on the desk
- (24) There appeared a ship on the horizon

Unaccusative thetic structures have very interesting syntactic, prosodic, semantic, and pragmatic features, which we consider in the next subsections.

3.1. Syntactic Features

Although structures involving this VS order in unaccusatives used to be referred to as inversion structures, as if they were a product of moving a preverbal subject to a postverbal position, in the framework of generative grammar, these subjects are analyzed as base-generated inside the Verb Phrase (VP) and do not involve Move.⁶ According to Baker's (1988) influential

one of the tests for English unaccusatives is their appearance in *there*-insertion constructions. They also cite additional tests, such as *-er* nominalizations, which can be formed of unergative verbs (*beeper*, *buzzer*), but not of unaccusative verbs (**arriver*, **appearer*, **faller*).

⁶ That is, unaccusative verbs would involve external Merge (with no Move), while categorical statements involve internal Merge (Move) as well. In the context of Subjacency, Progovac (2009b) has argued that structures with no Move are evolutionarily primary, and that Move can be considered an evolutionary innovation.

UTAH (Uniformity of Theta Assignment Hypothesis), theme arguments, whether subjects or objects in surface syntax, are uniformly generated inside the VP position, as complements of the verb, following the verb. Given these considerations, the unaccusative VS structure is derived as follows. First, the verb merges with its complement to create a VP, as in (22):

(22) [VP arrivato Giovanni] / [VP Stigao Jovan] / [VP Llegado Juan]

Abstracting away from possible additional functional projections, in Italian, Serbian and Spanish, an auxiliary is merged in a higher functional projection, TP, but the subject stays *in situ*, in the position where it was generated. In this sense VS unaccusative thetic structures are derivationally simpler, more basic, than their SV counterparts, which involve Move and are typically categorical.

The syntactic complexity of thetic statements seems to be on a continuum, however. The Spanish and Italian examples introduced above, while showing the base-generated postverbal subject, seem to have a TP projection, judging by the obligatory use of the finite auxiliary verb. On the other hand, Serbian seems to have two options in this respect, one with TP, including the finite auxiliary je (e.g. 21) and one without the auxiliary, which can be analyzed as not involving a TP at all, as in (23-25) below⁷.

- (23) Pala vlada fallen.P(AST)P(ARTICIPLE) government "The government has collapsed"
- (24) Proš'o voz gone.PP train "The opportunity has passed"
- (25) Pala karta fallen.PP card "Card laid, card played"

Some participles even occur in a non-agreeing form altogether, as in (26) below, where the participle is in the neuter (N) (default) form, while the noun is feminine (F) and appears in a non-canonical Genitive (GEN) case:

⁷ We adopt an analysis of these clauses which does not involve any deletion or ellipsis. For reasons and details, see Progovac (2008a,b).

(26) Nestalo struje

disappeared-PP-N electricity.F.GEN

Interestingly, the examples in (24) and (25) above are formulaic and cannot be expanded into full categorical statements with auxiliaries without losing their formulaic/idiomatic meaning.⁸ Thus, the examples in (27), while grammatical, can only have a literal meaning, as indicated by the gloss.⁹

(27) Karta je pala card AUX fallen "The card fell down"

It is worth pointing out that the short unaccusative structure has relevance to the present moment and does not accept reference to the (distant) past, such as "pre tri godine" (three years ago), as shown by the ungrammaticality of (28)–(29).

- (28) ?*Nestalo struje pre tri dana
- (29) ?* Pala vlada pre tri godine

Thus, the continuum of thetic statements ranges over SV structures, as in English, VS structures with auxiliaries as in Spanish and Italian, VS structures without an auxiliary as in some Serbian unaccusative constructions (e.g. 23), and VS structures, without an auxiliary or agreement, as in the short unaccusative structure in (26). This gradation of complexity in clause structure is to be expected under a gradualist evolutionary approach to syntax.

Finally, Spanish and other Romance languages like Italian provide some further evidence of the simplicity of VS thetic structures. In these languages

(i) Nestalo struje disappeared-PP-N electricity.F.GEN
 (ii) Struja je nestala electricity.F.NOM is disappeared.F

(iii) Nestalo je struje

disappeared-PP-N is electricity.F.GEN

For more details on these and similar structures in Serbian, see Progovac (2008a,b).

⁸ Just like the syntactic complexity, the property of formulaicity/lexicalization also seems to be a matter of degree. As noted in Sasse (2006), many thetic expressions are (semi-) lexicalized/formulaic, often involving predictable predicates and arguments, such as *The phone is ringing; The sun is shining; The wind is blowing*.

⁹ Interestingly, in addition to (i), the short unaccusative structure, and (ii), the fully tensed categorical one, Serbian also has an intermediate form, which exhibits an auxiliary verb with a non-agreeing participle and a subject in the genitive case, as in (iii):

the difference between the postverbal and the preverbal subject positions is clearly distinguished by the kind of NPs that can occupy each position. Thus, Bare Nouns (BNs) can occupy the postverbal position but cannot appear in the preverbal position (only full DPs can). This is shown in (30)–(31):

- (30) Llegaron estudiantes de todas partes del mundo arrived-3pl students from all parts of-the world "Students arrived from all over the world"
- (31) *Estudiantes llegaron de todas partes del mundo

As Torrego (1989) has pointed out, although unergative verbs can have postverbal BN subjects, particularly if a prepositional phrase precedes the verb, as in (32), only unaccusative verbs admit BN subjects freely.¹¹

(32) En la calle jugaban niños in the street played-3pl children "Children were playing in the street"

This difference between the types of NPs that can occur preverbally or postverbally in these languages can be interpreted as a difference between structural case checking in the preverbal position (which would require a full DP) vs. default case in the postverbal position, which does not. This would be a difference between an Unaccusative+Theme unit, which does not need a determiner nor structural nominative case, and an Agent+Action binary structure, which does.

In sum, we have argued that the thematic subject that occurs postverbally in thetic statements in many languages is syntactically simple and does not involve the type of movement and case-assignment assumed for preverbal subjects in subject-predicate (agent-verb) categorical statements. Interestingly, current analyses of categorical statements (e.g. Stowell 1981,

For the behavior of BNs in these languages see the collection of articles in Bosque (1996), Casielles (1996) and (2004), Contreras (1986) and Longobardi (1994), among many others

As Casielles (1996) and (2004) points out, the preposing of the topical phrase is not necessary. Thus, (i) is grammatical in Spanish while (ii) with the preverbal BN subject is not.

Jugaban niños en la calle played-3pl children in the street "Children were playing in the street"

⁽ii) *Niños jugaban en la calle children played-3pl in the street "Children were playing in the street"

1983, Burzio 1981, Kitagawa 1985, 1986, Koopman & Sportiche 1991, Chomsky 1995, Hale & Keyser 2002) build these structures out of the VP structure we are assuming for thetic unaccusative constructions. From this perspective, if the (prototypical) thetic statements preceded (prototypical) categorical statements in the evolution of language, then the marked behavior of thetic statements across languages can be attributed to them being linguistic "fossils," preserved to a higher or lesser degree in various present-day language constructions. What is significant about this analysis is that it can shed light on the very nature of syntactic derivations. Postulating an (unaccusative) thetic stage in the evolution of syntax sheds light on why unaccusativity exists at all, as well as on why even modern categorical clauses unfold from these VS simple structures – it is as if the derivation of the categorical TP sentence retraces the evolutionary steps (see Progovac 2008a, 2009a).

3.2. Prosodic Features

It is important to note that the VS order of thetic structures involves a single intonation unit. This is not only true of unaccusative structures but also of thetic structures with other verbs. Thus, Navarro Tomás (1974) points out that intonationally the Spanish sentences in (33)–(34) are composed of one intonational unit

(33)	Se	ha	cerrado	la	puerta
	SE	has	closed	the	door
(34)	На	transc	urrido	el	tiempo
	has	passec	i	the	time

This, he says, changes if we prepose the subject. Then we tend to separate this element from the rest of the sentence resulting in two intonational units (a categorical statement):

- (35) La puerta | se ha cerrado
- (36) El tiempo | ha transcurrido

This is also true of the Serbian data we considered above repeated here as (37) and (38).

- (37) Pala vlada
- (38) Vlada je | pala

Thus, the simpler syntactic structure seems to correlate with simpler prosody – more tightly-knit VS syntactic/semantic units correspond to a single intonation unit, while more complex SV syntactic structures fragment into multiple intonation units.

3.3. Semantic and Pragmatic Features

In addition to the formal morphosyntactic properties of thetic statements, one is also struck by their unusual semantic and pragmatic properties. As pointed out by Allerton & Cruttenden (1979), common in thetic statements are verbs denoting a change of state, which can refer to unpleasant or adverse events, such as those in (39) and also predictable verbs expressing an inherent quality of the entity involved, such as those in (40).¹²

- (39) My FAther died
 The BOY has disappeared
 A STORM is approaching
- (40) The SUN is shining
 The KETtle's boiling
 The TELephone is ringing
 The WIND is blowing
 SNOW is falling

Also common are deictic particles such as *here* and *there* and statements in the here-and-now, which would make sense if this type of statements are primary from an evolutionary perspective, since even primate calls have these features and are typically deictic, and uttered when there is an element of adversity or danger in the here-and-now.

As we mentioned above, the subject in thetic statements does not have an agent role but is considered to be a theme, an internal argument. With specific reference to thetic *there*-insertion structures in English, L&RH (1995: 152) point out that while these can never receive agentive interpretation, as shown in (41), agentive interpretation is optionally available in sentences with the moved subject, as in (42):

Since we are using English examples to show these semantic features, the subjects in (39)-(40) are preverbal and hard to distinguish from non-thetic statements. However, the sentences in (39)-(40) would be rendered with postverbal subjects in the languages which allow for them

- (41) There remained three men in the room (???on purpose)
- (42) Three men remained in the room (on purpose)

That is, while it is possible to interpret that the three men are agents in their decision to remain in the room in (42), this is not possible for (41).

Thus, semantically, the subject in these unaccusative thetic statements is an entity with no agency, which is involved in events expressing appearance/disappearance and other physical changes in the here-and-now.

From the point of view of information structure, thetic statements are also simpler than categorical statements and contain only new information.¹³ While categorical statements are interpreted as involving an informational dichotomy, a division between a *topic*—what the sentence is about—and a *comment* or *focus*—what is predicated of that topic, as in (43), thetic statements do not form an informational dichotomy, but are simple all-focus utterances with no topic or background, as in (44).¹⁴

- (43) What's up with Peter?
 PEter is on vaCAtion
 [Topic-Comment]
- (44) What happened?

 JOHN has arrived

 [Sentence-Focus]

Thus, thetic statements are as simple informationally as they are intonationally, syntactically and semantically.

The study of the information structure of utterances often referred to as the Topic-Focus articulation (TFA) has a very old tradition going back to Weil (1844) and Prague School scholars and has been studied from different perspectives and theoretical frameworks. Recently it has been placed at the core of syntactic analyses in generative frameworks such as the Principles and Parameters approach and subsequent developments. See Erteschik-Shir (2007), López (2009), Reinhart (2006) and Rizzi (1997), among others.

In addition to the Topic-Comment articulation, which separates the topic from the rest of the sentence, there is another type of informational dichotomy, usually referred to as Focus-Background (FB), which separates the focus, the most informative element in the sentence, from the rest of the sentence, as in (i). For an overview of the terms 'topic' and 'focus' and the different TFA articulations, see Casielles (2004) and Vallduví (1990).

⁽i) Who burnt the lasagna?JOHN burnt the lasagnaFocus Background

3.4. Summary

We have shown that thetic unaccusative structures are syntactically, semantically, prosodically, and pragmatically simpler than categorical, Agent-Action structures. Based on this and on the fact that the latter are built out of the former in current syntactic analyses of SV structures, we have suggested that the first combinations of verbs and nouns were probably thetic in nature, rather than categorical, that is, composed of a Verb+Theme unit, rather than an Agent+Action bipartite structure. In the next section we offer some data from child language which supports this idea.

4. Corroborating Evidence from Language Acquisition

Although the ontogeny recapitulates phylogeny perspective has been challenged in its strong form, in some cases present views of ontogeny/phylogeny warrant the use of development in children to corroborate hypotheses about development in the species (Studdert-Kennedy 1991, Rolfe 1996 and Locke 2009). ¹⁵ From this perspective, we offer the following facts from language acquisition research, which seem to corroborate our hypothesis about the primary nature of thetic statements, statements which lack a topic and just introduce new information into the discourse.

As Baker & Greenfield (1988) have noticed, children are aware of new vs. old information from early on and they choose the most informative element when producing one-word utterances (Bates 1976, Greenfield & Smith 1976, Greenfield *et al.* 1985). In addition, a preference for VS structures over SV structures has been observed for early child Italian (Bates 1976). This VS order has even been observed in the acquisition of languages which do not allow for postverbal subjects, such as French (Lightbown 1977, Clark 1985, Peirce 1992, Friedmann 2000), as shown in the following examples.¹⁶

Studdert-Kennedy (1991: 9-10) observes that even though we cannot be sure that the order of development we now observe was the actual order of evolution, ontogeny does, in some cases, parallel phylogeny. He concludes that language is a good candidate for study in this framework because its development is rich in sequential dependencies: syllables and formulaic phrases emerge before phonemes and features, holophrases before words, words before simple sentences. Burling (2005: 174) also makes use of the phylogeny/ontogeny connection, and so does Lieberman (e.g. 2000) in his discussion of the descent of larynx (see also Strickberger 2000: 493–4). Ridley (1993: 551) considers the relationship between ontogeny and phylogeny to be a classic topic in evolutionary biology, which is again active today.

¹⁶ These data come from the following sources: Nathalie and Daniel (Lightbown 1977) and Philippe (Suppes *et al.* 1973).

(45)	Tomber papa	Nathalie	
	fall papa		
(46)	Dormir là	Michel	Philippe
	sleep there	Michel	
(47)	Pleure clown		Daniel
	cries clown		

Although claimed to be rare (Brown 1973, Pinker 1984), VS utterances have also been noticed in child English (O'Shea 1907, Gruber 1967, Peirce 1992), as shown by the following examples from Gruber (1967):

(48) go truck all broken wheel break pumpkin

Interestingly, as Peirce (1992) notes, most of the postverbal subjects in child English occur with unaccusative verbs, the typical verbs of thetic utterances. Peirce (1992: 22–25) offers the following examples:¹⁷

(49)	there go horsie	(Naomi)
(50)	come car	(Eve)
	drop spoon	
(51)	fall pants	(Nina)
(52)	broken the light	(Peter)

Thus there is some evidence of early production of thetic statements with VS order, even in languages like English, which does not allow for that order any more.

In fact there might be cognitive reasons why thetic statements appear first. Baker & Greenfield (1988: 4) point out that: "The very first acts of perceptual activity in the neonatal period grow out of a pattern of fixation to a novel stimulus (or as one might call it new information)..." They also point out that when Greenfield was trying to teach her daughter, age 11 months, the word 'dada,' pointing to her father and saying 'dada' in his static presence didn't work. However, they point out that "Lauren learned to attach meaning to the double syllable when her father appeared in the room. Lauren noticed his appearance and the appearance was labeled 'dada.' In other words Lauren

The data from these children can be accessed through the Child Language Data Exchange System (CHILDES) and come from the following sources: Eve (Brown 1973); Naomi (Sachs 1983); Peter (Bloom 1970) and Nina (Suppes *et al.* 1973).

learned the meaning of her first word, 'dad', when the father was a novel or changing stimulus, eliciting perceptual orientation." (1988: 4). 18 It is worth pointing out that they do not say 'Lauren noticed her daddy,' but "noticed his appearance," which points to an assertion where there is no separate entity, but an event encompassing an entity.

In addition to the appearance of early unaccusative structures in child language, there is also evidence of difficulties producing SV categorical statements. As is well-known (Rizzi 1994, Roeper & Rohrbacher 2000, Valian 1991, etc.), children often produce subjectless structures even in languages like English where these are not allowed in adult language. In (53) we have some examples from Hyams & Wexler (1993):

(53) Want go get it Show Mommy that Not making muffins

Thus, even children acquiring non-null-subject languages like English do not always produce full SV structures. Further, a delay in the production of appropriate preverbal subjects in other languages has also been recently noted (Casielles *et al.* 2006, Grinstead 2004, Westergaard 2008, etc.). If supported by further research these studies would confirm the intrinsic complexity of these apparently simple SV structures.

Thus, we have seen that while children seem to have difficulties with SV categorical statements, they produce VS thetic unaccusative structures relatively early and effortlessly, even when acquiring languages where these VS structures are not part of their linguistic input. These thetic statements can be viewed as a transition between a one-word holistic statement, and full categorical predication. As pointed out by Givón (2009), children's one-word utterances do not just serve to name an object or action, but rather stand for a whole proposition (are holistic). Thus, when a child (or an adult, for that

Givón (2009) points out that this cognitive property is also shared by other primates. He says: "the primate ventral and dorsal trends of visual information processing – objects recognition (lexicon) and event/state recognition (propositions and multi-propositions), respectively – came to us already coupled. Objects were recognized as *participants* in some event/state. And events were recognized as having particular *types* of participants. The rich cross-connectivity between the two neural trends ... suggests that one is never activated without the other. Events/states (dorsal trend) provided the context within which objects are perceived or construed as *adaptively meaningful*. The pre-human perception of objects – fauna, flora, inanimates – as adaptively relevant has always been couched in the context of some event or state. ... In the same vein, states and events are perceived or construed in *their* adaptively-relevant context, that of coherent scenarios relevant to *us*." (Givón 2009: 337)

matter) says "Mailman!", he/she is not interested in just providing a label for the person involved, but rather in expressing the whole event/state, that of the mailman appearing and delivering mail. The unaccusative statement *Ha llegado el cartero/* "The MAILman has arrived" adds only very little in terms of meaning. However, this thetic "proto-predication" serves to pave the way to true predication, where nouns and predicates combine in SV categorical statements¹⁹.

5. Some Conclusions

We have questioned the assumption that SV (agent-action) structures are basic and primary and have shown that thetic VS unaccusative structures, involving an event+theme unit, are better candidates for simple, primary proto-syntactic "fossils." We have shown that thetic unaccusative structures are simpler syntactically, prosodically, semantically and informationally, and have suggested that this is due to the fact that syntactic evolution progressed from a stage with thetic statements (with no arguments, such as It is cold, or with only one argument, typically unaccusative, such as Spanish Ha llegado Juan (has arrived Juan) or Serbian Pao sneg (fallen.PP snow)), to more complex categorical assertions, involving agents and a syntactic and intonational separation between the subject and the predicate. Obviously, this raises many questions. How did thetic statements intergrade into categorical statements, and what were the evolutionary factors that facilitated this transition? Did both of the informational dichotomies (Topic-Comment and Focus-Background) develop from thetic statements or are F-B structures simpler than T-C? We leave these questions for future research.

References

Allerton, D. J. & Cruttenden, A. (1979). Three reasons for accenting a definite subject. *Journal of Linguistics*, 15, 49–53.

Baker, M. C. (1988). *Incorporation*. Chicago: University of Chicago Press.

According to Givón (2009: 337), "the first step in the genesis of syntactic complexity ... was not just taking words with lexical meanings and combining them into clauses with event/state meaning. Rather, it was taking single words that already coded event/state meanings and – relying on immediate context – coding the other word(s) to yield a multi-word verbal clause."

- Baker, N. & Greenfield, P. (1988). The development of new and old information in young children's early language. *Language Sciences*, 10(1), 3–34.
- Bates, E. (1976). *Language and Context: The Acquisition of Pragmatics*. New York: Academic Press.
- Belletti, A. & Rizzi, L. (1981). The syntax of *ne*: Some theoretical implications. *The Linguistic Review*, 1, 117–54.
- Bickerton, D. (1998). Catastrophic evolution: The case for a single step from protolanguage to full human language. In J. R. Hurford, M. Studdert-Kennedy & C. Knight (Eds.), *Approaches to the Evolution of Language: Social and Cognitive Bases* (pp. 341–358). Cambridge: Cambridge University Press.
- Bickerton, D. (2007). Language evolution: A brief guide for linguists. *Lingua*, 117(3), 510–526.
- Bloom, L. (1970). Language Development: Form and Function in Emerging Grammars. Cambridge, MA: MIT Press.
- Bosque, I. (Ed.). (1996). El Sustantivo sin Determinación. La ausencia de determinante en la lengua española. Madrid: Visor.
- Botha, R. & Knight, C. (Eds.). (2009)a. *The Prehistory of Language*. Oxford: Oxford University Press.
- Botha, R. & Knight, C. (Eds.). (2009)b. *The Cradle of Language*. Oxford: Oxford University Press.
- Brown, R. (1973). *A First Language: The Early Stages*. Cambridge, MA: Harvard University Press.
- Burling, R. (2005). *The Talking Ape: How Language Evolved*. Oxford: Oxford University Press.
- Burzio, L. (1981). *Intransitive Verbs and Italian Auxiliaries*. Doctoral Dissertation, MIT.
- Burzio, L. (1986). *Italian Syntax: A Government-Binding Approach*. Dordrecht: Kluwer.
- Cangelosi, A., Smith A. D. M. & Smith, K. (Eds.). (2006). *The Evolution of Language*. New Jersey: World Scientific.
- Casielles, E. (1996). On the misbehavior of bare nouns in Spanish. In C. Parodi et al. (Eds.), Aspects of Romance Linguistics: Selected Papers from the XXIV Linguistic Symposium on Romance Languages (pp. 135–148). Washington D.C.: Georgetown University Press.
- Casielles, E. (2004). *The Syntax-Information Structure Interface: Evidence from Spanish and English.* New York: Routledge.
- Casielles, E., Andruski, J., Kim, S., Nathan, G., & Work, R. (2006). Syntactic and discourse features of subjects in child Spanish: Evidence from Spanish/English bilingual acquisition. In D. Bamman, T. Magnitskaia & C. Zaller (Eds), *Proceedings of the 30th Annual Boston University Conference on Language Development* (pp. 72–83). Somerville, MA: Cascadilla Press.
- Chomsky, N. (1995). The Minimalist Program. Cambridge, MA: MIT Press.
- Christiansen, M. H. & Kirby, S. (Eds.). (2003). *Language Evolution*. Oxford: Oxford University Press.

- Clark, E. (1985). The acquisition of Romance with special reference to French. In D. Slobin (Ed.), *The Crosslinguistic Study of Language Acquisition* (pp. 687–782). Volume 1. Hillsdale: Erlbaum.
- Contreras, H. (1986). Spanish bare NPs and the ECP. In I. Bordelois, H. Contreras & K. Zagona (Eds.), *Generative Studies in Spanish Syntax* (pp. 25–49). Dordrecht: Foris.
- Deacon, T. W. (1997). *The Symbolic Species: The Co-evolution of Language and the Brain*. New York & London: W.W. Norton & Company.
- Erteschik-Shir, N. (2007). *Information Structure. The Syntax-Discourse Interface*. Oxford: Oxford University Press.
- Friedmann, M.-A. (2000). Early French postrerbal subjects. In M.-A. Friedmann &L. Rizzi (Eds.), *The acquisition of syntax* (pp. 63–83). London: Longman.
- Fitch, W. T., Hauser, M. D. & Chomsky, N. (2005). The Evolution of the language faculty: Clarifications and implications. *Cognition*, 97, 179–210.
- Givón, T. (2009). *The Genesis of Syntactic Complexity: Diachrony, Ontogeny, Neuro-cognition, Evolution.* Amsterdam/Philadelphia: John Benjamins.
- Greenfield, P.M., Reilly, J., Leaper, C., & Baker, N. (1985). The structural and functional status of single-word utterances and their relationship to early multiword speech. In M. Barrett (Ed.), *Children's Single-Word Speech* (pp. 233–267). London: Wiley.
- Greenfield, P. M. & Smith, J. H. (1976). *The Structure of Communication in Early Language Development*. New York: Academic Press.
- Grinstead, J. (2004). Subjects and interface delay in child Spanish and Catalan. *Language*, 80(1), 40–72.
- Gruber, J. (1967). Topicalization in child language. *Foundations of Language*, 3, 37–65.
- Hale, K., & Keyser, S. J. (2002). *Prolegomena to a Theory of Argument Structure*. Linguistic Inquiry Monograph 39. Cambridge, MA: MIT Press.
- Harves, S. (2002). Unaccusative Syntax in Russian. Doctoral Dissertation, Princeton University.
- Heine, B. & Kuteva, T. (2007). *The Genesis of Grammar. A Reconstruction*. Oxford: Oxford University Press.
- Hurford, J. R. (2007). *The Origins of Meaning: Language in the Light of Evolution*. Oxford: Oxford University Press.
- Hyams, N. & Wexler, K. (1993). On the grammatical basis of null subjects in child language. *Linguistic Inquiry*, 24, 421–459.
- Jackendoff, R. (1999). Possible stages in the evolution of the language capacity. *Trends in Cognitive Sciences*, 3(7), 272–279.
- Jackendoff, R. (2002). Foundations of Language. Oxford: Oxford University Press.
- Kitagawa, Y. (1985). Small but clausal. Chicago Linguistic Society, 21, 210–220.
- Kitagawa, Y. (1986). *Subjects in English and Japanese*. Doctoral Dissertation, University of Massachusetts, Amherst.
- Klein, W. & Purdue, C. (1997). The Basic Variety or couldn't language be much simpler? *Second Language Research*, 13, 301–347.

- Koopman, H. & Sportiche, D. (1991). The position of subjects. *Lingua*, 85, 211–258.Kuroda, S.-Y. (1972). The categorical and the thetic judgment. Evidence from Japanese syntax. *Foundations of Language*, 9, 153–185.
- Lambrecht, K. (1994). *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.
- Levin, B. & Rappaport Hovav, M. (1995). *Unaccusativity at the Syntax-Lexical Semantics Interface*. Linguistic Inquiry Monographs 26. Cambridge, MA: MIT Press.
- Lieberman, P. (2000). *Human Language and Our Reptilian Brain: The Subcortical Bases of Speech, Syntax, and Thought*. Cambridge, MA and London, England: Harvard University Press.
- Lightbown, P. (1977). *Consistency and Variation in the Acquisition of French*. Doctoral Dissertation, Columbia University.
- Locke, J. L. (2009). Evolutionary developmental linguistics: Naturalization of the faculty of language. *Language Sciences*, 31, 33–59.
- Longobardi, G. (1994). Reference and proper names: A theory of N-movement in syntax and Logical Form. *Linguistic Inquiry*, 25(4), 609–665.
- López, L. (2009). *A Derivational Syntax for Information Structure*. Oxford: Oxford University Press.
- Marty, A. (1918). *Gesammelte Schriften*. vol. II, part 1. Abteilung. Halle: Max Niemeyer Verlag.
- Navarro Tomás, T. (1974). *Manual de Entonación Española*. 3rd edition. Madrid: Guadarrama.
- Oller, D. K. & Griebel, U. (Eds.). (2004). *Evolution of Communication Systems: A Comparative Approach*. Cambridge, MA: MIT Press.
- O'Shea, M. V. (1907). Linguistic Development and Education. New York: Macmillan.
- Peirce, A. (1992). Language Acquisition and Linguistic Theory. A Comparative Analysis of French and English Child Grammars. Dordrecht: Kluwer.
- Perlmutter, D. (1978). Impersonal passive and the Unaccusative Hypothesis. *Berkeley Linguistics Society*, 4, 159–189. University of California, Berkeley.
- Pinker, S. (1984). *Language Learnability and Language Development*. Cambridge, MA: Harvard University Press.
- Progovac, L. (2008)a. What use is half a clause? In A. D. M. Smith, K. Smith & R. Ferrer i Cancho (Eds.), *Evolution of Language: Proceedings of the 7th International EVOLANG Conference, Barcelona, Spain, 12–15 March 2008* (pp. 259–266). New Jersey: World Scientific.
- Progovac, L. (2008)b. Root Small Clauses with unaccusative verbs. In A. Antonenko, J. F. Bailyn & C. Y. Bethin (Eds.), *Proceedings of FASL (Formal Approaches to Slavic Linguistics)*, 16 (pp. 359–373). Ann Arbor: Michigan Slavic Publications.
- Progovac, L. (2009a). Layering of grammar: Vestiges of evolutionary development of syntax in present-day languages. In G. Sampson, D. Gil & P. Trudgill, (Eds.), *Language Complexity as an Evolving Variable* (pp. 203–212). Oxford: Oxford University Press.

- Progovac, L. (2009b). Sex and syntax: Subjacency revisited. Special issue of *Biolinguistics*, 3(2–3), 273–305.
- Reinhart, T. (2006). *Interface Strategies. Optimal and Costly Computations*. Cambridge, MA: MIT Press.
- Ridley, M. (1993). Evolution. Oxford: Blackwell Scientific Publications.
- Rizzi, L. (1994). Early null subjects and root null subjects. In T. Hoekstra & B.D. Schwartz (Eds.), *Language Acquisition Studies in Generative Grammar*. Amsterdam: John Benjamins.
- Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of Grammar* (pp. 281–337). Dordrecht: Kluwer.
- Roeper, T. & Rohrbacher, B. (2000). Null subjects in early Child English and the theory of economy of projection. In S.M. Powers & C. Hamann (Eds.), *The Acquisition of Scrambling and Cliticization* (pp. 345–396). Dordrecht: Kluwer.
- Rolfe, L. (1996). Theoretical stages in the prehistory of grammar. In A. Lock & C. R. Peters (Eds.), *Handbook of Human Symbolic Evolution* (pp. 776–792). Oxford: Clarendon Press.
- Sachs, J. (1983). Talking about the, there and then: The emergence of displaced reference parent child discourse. In K. E. Nelson (Ed.), Childern's Language vol. 4 (pp. 1–28). Hillsdale: Erlbaum.
- Sasse, H.-J. (1987). The thetic/categorical distinction revisited. *Linguistics*, 25, 511–580.
- Sasse, H.-J. (2006). Theticity. In G. Bernini & M. L. Schwartz (Eds.), *Pragmatic Organization of Discourse in the Languages of Europe* (pp. 255–308). Berlin & New York: Mouton de Gruyter.
- Stowell, T. (1981). Origins of Phrase Structure. Doctoral Dissertation, MIT.
- Stowell, T. (1983). Subjects across categories. *The Linguistic Review*, 2/3, 285–312.
- Strickberger, M. W. (2000). Evolution. Third Edition. Boston: Jones & Bartlett.
- Studdert-Kennedy, M. (1991). Language development from an evolutionary perspective. In N. A. Krasnegor, D. M. Rumbaugh, R. L. Scheiefelbusch & M. Studdert-Kennedy (Eds.), *Biological and Behavioral Determinants of Language Development* (pp. 5–28). Hillsdale, NJ: Erlbaum.
- Suppes, P., Smith, R. & Leveille, M. (1973). The French syntax of a child's noun phrases. *Archives de Psychologie*, 42, 207–269.
- Tallerman, M. (Ed.). (2005). *Language Origins: Perspectives on Evolution*. Studies in the Evolution of Language. Oxford: Oxford University Press.
- Torrego, E. (1989). Unergative-unaccusative alternations in Spanish. *MIT Working Papers in Linguistics*, 10, 253–272.
- Uriagereka, J. (2008). *Syntactic Anchors: On Semantic Structuring*. Cambridge: Cambridge University Press.
- Valian, V. (1991). Syntactic subjects in the early speech of American and Italian children. *Cognition*, 40, 21–81.
- Vallduví, E. (1990). *The Informational Component*. Doctoral Dissertation, University of Pennsylvania, Philadelphia.

- Weil, H. (1844). De l'ordre des mots dans les langues anciennes comparéees aux langues modernes. Paris: Joubert. Translated as The Order of Words in the Ancient Languages compared with that of the Modern Languages. Boston: Ginn & Co. 1887, by Charles W. Super. Reedited: Amsterdam/Philadelphia: John Benjamins 1978.
- Westergaard, M.R. (2008). Verb movement and subject placement in the acquisition of word order. In P. Guijarro-Fuentes, M. P. Larrañaga & J. Clibbens (Eds.), *First Language Acquisition of Morphology and Syntax* (pp. 61–85). Amsterdam: John Benjamins.