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THE ENGLISH –*ING* FORM FROM A RECAPITULATIONIST HYPOTHESIS PERSPECTIVE

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Abstract. *Viewing language as an evolutionary process can offer a new insight into our understanding of historical changes. It also raises significant questions to the nature of language. In this paper, the English –ing form is examined from a recapitulationist hypothesis perspective, aiming to elucidate the complexity around the grammatical category membership of the different functions of this form. The study of the –ing form in child language acquisition as compared to its history will lead to the discussion of how the functions are connected, both structurally and cognitively. By searching outside the traditional grammatical approaches to grammatical categories, it is possible to make clear the identity of the – ing form.*

Key Words: *–ing form, gerund, verbal noun, recapitulationist hypothesis, grammatical category*

1. ACQUISITION AND EVOLUTION

Comparing the developmental process of language acquisition that children go through to the evolution of human language as such can naturally be found originally in biology, namely in the concept of recapitulationist hypothesis. This hypothesis, which was suggested in 1874 by Ernst Haeckel, states that ontogeny recapitulates phylogeny (Toyota 2007: 268), i.e., the development from the very coming into being of an organism into its most developed stage shows the evolutionary pattern, in large, of that same organism. This resemblance is actually mentioned already by Darwin in his *The Origin of the Species* from 1859. Although gaps can be found in ontogeny as compared to phylogeny, the general pattern is emphasized, and such gaps may even be argued natural since the life of one organism cannot be enough to capture its entire sequence of evolution. Eventually, this hypothesis was applied to linguistics, first by Lamendella in 1976.

Although it is rather speculative, it has been assumed that at the earliest stages of language, the category of noun dominated the grammar, perhaps along with a handful of

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verbs, such as motion verbs (Aitchison 1996: 110-111; Heine and Kuteva 2002: 390). Hurford (1990, 2003), however, claims that it was the category of pronoun, not nouns that existed first, which shows the ambiguity in this discussion. Reference to certain objects seems to be the most crucial base for linguistic communication, and could then be assumed as an early category of nouns. Even today, the significance of nouns is obvious in many languages with nouns in majority compared to other categories. Possibly, this is due to a human cognitive preference to expressions that are stable in time, or stative. Accordingly, when language became more complex, this was due to the emerging urge to refer to changes, which then could have triggered the development of more verbs. When turning to examine child language acquisition, general patterns are easily observed, though some stages are difficult to distinguish due to the of children typically rapid learning process. In this process, the same tendency as in language evolution can clearly be seen: starting out by referring to things and using expressions that are cognitively easier to handle (one-word utterances), and continuing to more complex constructions (two- or three-word utterances).

In this paper, the recapitulationist hypothesis will be applied to the *-ing* form in the different ambiguous shapes it takes in the English language. Consequently, after a closer description of the hypothesis, the *-ing* form will be examined in child language acquisition and the history of English. The results will be compared according to the hypothesis, which will lead to a discussion of grammatical categories, and the issue that the *-ing* form creates in linguistics.

2. THE –ING FORM

The *-ing* form is remarkable in many ways, due to its several grammatical functions, but also due to its history and occurence in child language acquisition, where it is often stated to be one of the first inflectional morphemes to appear. Its varying functions can be confusing and are complicated to distinguish, even for grammarians. Although categorical boundaries often seem shady, the different occurrences of the *-ing* today can probably be divided into something like the present participle (e.g. (1a)), the progressive aspect (e.g. (1b)), and verbal nouns or gerunds (e.g. (1c) – (1e)). The last two are sometimes argued to be the same thing, and sometimes seen as having different properties, which can be seen in (1c) – (1e).

(1) a. *Fishing* is fun.
    b. They *are fishing*.
    c. *Bill's fishing of trout* was pointless.
    d. *Bill's fishing trout* was pointless.
    e. *Bill fishing trout* was pointless.

2.1 The *-ing* form in child language

Although it is possible to get a fairly clear picture of the pattern that most normally developing children learning English follow, there are naturally points at which disagreement arises. During the first years of learning a first language, the development is usually described as starting with proto-words or holophrases, which develop into the

early vocabulary consisting of about 50 words (Peccei 2006) acquired at the age of about 18 to 20 months; after this the vocabulary increases much faster. This point also marks an emerging increase on many different levels simultaneously: inflections appear, and words are combined into sentences. These early, though advanced utterances are much discussed: according to Peccei (2006) first words virtually always appear uninflected, i.e. in their bare forms. Contrary to this, Tomasello (1992) observes that some verbs appear initially only inflected, interestingly often with the *-ing* ending. This naturally leads to the discussion of when children form grammatical categories, often emphasized as a crucial point of acquisition.

The *-ing* inflection is often stated to be one of the first, or even the very first inflection to appear in children's acquisition of English (Brown 1973; Radford 1990; Tomasello 1992). These early occurrences of the *-ing* inflection are often considered as examples of the progressive aspect, though this is not necessarily always the case: many instances show ambiguity. In Brown's famous study from 1973, following the acquisition of three children over a large time span, 14 initial morphemes are presented and analyzed. Among the three children in this study, the *-ing* inflection in the form of the present progressive appears as the first of the 14 chosen morphemes in two children's speech at the age of about two years and sixth months and one year and ten months. In the third child's speech, on the other hand, the progressive *-ing* does not appear until after the plural marker and the prepositions *in* and *on* (Brown 1973). It is further interesting to notice that the progressive, when first appearing in child language, lacks the auxiliary *be* for a long time, but is still used accurately. Brown's study also chose not to count gerund uses of the *-ing* form: only main verbs inflected with *-ing* have been counted (1973: 259). Naturally, a long time passes between the first appearances of the progressive and when it is used in every case where it is required.

Radford states that the first verbal clauses that children produce consist of main verbs, either without inflection, i.e. in their base forms, or what he calls "a gerund form in +*ing*, or a participial form in +*ing*" (1990: 148). Tomasello, in his study based on his daughter's acquisition of verbs, states that she produced progressive forms of many verbs at a young age, "[l]ike most other English-speaking children" (1992: 161), and that she often used verbs inflected in this fashion before she used the bare form. Here, Tomasello raises the significant question whether it is possible to still categorize these occurrences as being in a given aspect: "In what sense is *working* a present progressive if [she] never once used *work*?" (1992: 161). The aim here is to consider whether a child at this stage really has the concept of verb (or indeed the same concept of this as in mature language) and consequently its properties and uses, which will be discussed further later in section 3.1.

Another means of studying children's productivity with inflections and the concept of verb is acquired by the use of so-called novel verbs. A number of such studies have been carried out during the past couple of decades (Akhtar & Tomasello 1997; Hohenstein & Akhtar 2007; Olguin & Tomasello 1993). By teaching children designed nonsense verbs entirely new to them in a certain context of playing, inflections, among other things, can be studied in a very useful way. Akhtar & Tomasello (1997) show results such as children aged two years and one month being productive with *-ing* but hardly with *-ed*, though both inflections increased gradually with age, until at three years and eight months, when they were equally productive with both morphemes. According to Akhtar & Tomasello, there are three possible reasons for this result, some of which can be ruled

out: *-ing* has a phonological advantage over *-ed*, which can be realized differently depending on distribution. Nevertheless, the plural morpheme *-s* has different allomorphs as well, but is acquired as early as at 21 months. Secondly, aspect could be argued to be more relevant than tense, and hence acquired earlier, since it "more or less directly affects the meaning of a verb stem" (1997: 962). The third reason is connected to the frequency of verbs with certain inflections, and hence their availability to the child; *-ing* likely occurs more often than *-ed*. The Critical Mass Hypothesis suggested by Plunkett & Marchman (1993, cited in Akhtar & Tomasello 1997: 962) suggests that it is not until children have learned a certain number of verbs that can occur in for example the past tense that they start to inflect them productively in this manner. This is somewhat similar to the Verb Island Hypothesis by Tomasello (1992), which argues that properties of verbs, such as inflectional possibilities, are learned individually, i.e. verb-specifically. This implies that children tend to wait till they have learned a relatively large number of verbs before producing them, and consequently will not use verbs in other forms than they have heard. One of the final conclusions made by Akhtar & Tomasello in the study is extremely significant: "children learn some aspects of what can be done to verbs earlier than others" (1997: 963). Also, Akhtar & Tomasello notice something that many researchers have noticed: "children tend to use certain inflections with certain types of verbs more often than others" (1997: 962). In this context, it means that at first, the *-ing* inflection for progressive aspect is only used "with verbs naming durative events with no clear end state" (1997: 962). Hohenstein & Akhtar (2007) used both novel nouns and verbs modeled ending in *-ing* in their study, for the purpose of studying if dropping of the inflection occurred correctly among the children. The study shows that children at the age of two are productive in dropping the *-ing* inflection correctly, and that this must be independent of phonological aspects: the inflection was occasionally dropped from the verbs, but never from the nouns. The study also noticed that some of the children who did drop the *-ing* from verbs also added the plural *-s* to the nouns. This suggests that "they indicated an understanding that nouns and verbs could be treated differently" (2007: 872). Accordingly, the study concludes, it seems as though children at the age of two have some kind of concept of how verbs and their inflections are to be treated, at least when it comes to aspect.

A study by Olguin & Tomasello from 1993 notices something that the other two studies discussed lack: when children used the novel verbs, cases occurred where the meaning of the word and the child's treatment of it were difficult to distinguish. The most common of these was when the child used a form of the verb (often with *-ing*), as a noun, which all the eight participating children did at some point, e.g. *"I want dacking"* etc. (1993: 263). Although there is no comment on these findings other than that "[i]t is also interesting that…the majority of children incorporated the new verbs into sentence positions that would normally be reserved for nouns" (1993: 268), this is of high significance when considering grammatical categories as forming gradually in children's acquisition of language, but also when aiming to find out which grammatical categories different occurrences of the *-ing* form actually could belong to. The general pattern of acquisition can be seen in Figure 1, indicating age, certain stages in language acquisition, and certain significant appearances.

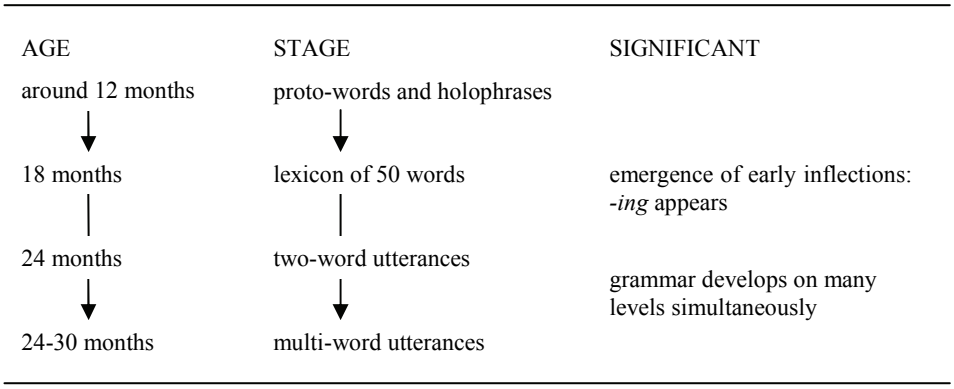

Fig. 1. General pattern of acquisition, based on Brown (1973) and (Peccei 2006)

2.2 The *-ing* form in history

In the early history of English, the precursors of the modern *-ing* show a pattern intertwining with other endings, which already seems to have decided the confusion that arises around the *-ing* form today. The origin of the modern *-ing* ending can be found in a variety of forms and functions. One of these is the early progressive, which can be traced back to OE. According to Traugott, who prefers to call this the "expanded form", one of a few verbs more or less equivalent to 'be' (e.g. *bēon* and *wesan*) was combined with a verb inflected with *-ende* (1992: 187). The expanded form was used with verbs denoting activitites, and referred to an ongoing action, or was used as a frame for referring to another action (Traugott 1992: 187). Although this seems similar to the PDE use of the progressive, Traugott argues that many OE occurrences could not be translated into '*be* + *-ing*', but would need another verb form, which clarifies that the progressive did not have the same function in OE as it has in PDE. This expanded form seems to have grown from a number of different constructions, and there are many suggestions as to which they are: *be* combined with a predicative adjective, appositive participles, and *be* combined with an agentive predicative nominal is what Nickel (1966, cited in Traugott 1992: 188) suggests. Also, Dal (1952:101-102) suggests four constructions where "the present participle appears to be equivalent to a preposition plus a nominal derived from a verb and ending in *-ung*/*-ing*" (1992: 189-190): the appositive, with a verb of rest or movement, with a verb of causation and perception, and with *beon* or *wesan* combined with a verb. When examining these occurrences, it becomes clear that some cases are verbal and some nominal, and that ambiguity between categorical boundaries occurred already at this stage.

In OE and eME, the confusion of different verb endings affected the development of the *-ing* and its precursors remarkably. Lass (1992) states that the development of the present participle and the verbal noun or gerund is very difficult to discern due to the many variants of endings, and the close development of the infinitive ending. The OE present participle was *-ende*, which during eME had variants like *-inde* and *-inge*, later becoming *-ing*. The verbal noun initially ended with *-ung*, which became *-ing* already in late OE. The infinitive also had many variants in OE; starting with *-en*, it became *-enne*

and *-anne*, and by the time of eME it had become *-ende*. The similarities between these different endings are naturally not coincidental; they rather developed affecting each other, appearing differently in different regions and dialects. During the ME period, the frequency of the progressive also increased vastly: before this, its frequency had been very low, even decreasing slightly. Explanations to the increase differ from foreign influence to the confusion of endings described above. Also, as Fischer (1992) states, the verbal noun at this time developed verbal properties, which perhaps also can be connected to the confusion of endings.

During the 17th century, the progressive was one among many constructions that developed rapidly through crucial stages (Rissanen 1999: 216). Starting around 1700, it developed from occurring almost only in the present and past tense to be used in every tense, and both in the active and passive voice, which was achieved at the end of the 18th century (Rissanen 1999: 216). Another construction also occurred at this time, which the progressive has been argued to stem from, though it probably was a coexisting construction which the progressive later replaced: *on* later becoming *a*, and a verbal noun, developing in the following manner: *I am on reading>I am a-reading>I am reading* (Rissanen 1999: 217). During this time, the progressive also had different functions, e.g. actively to express the passive voice etc, or combining *shall* or *will* with *be* + *-ing* to express future. Denison even states that "[t]he progressive construction…has undergone some of the most striking syntactic changes of the lModE [1700-present] period" (1998: 143). Around 1700, it became an established aspect, but nevertheless, the use of the progressive is often a matter of choice even today. Also, there are many different opinions on the nature of the construction, as multi-functional, used on terms of temporariness etc. Denison argues that meanings are often contextual, or depending on the lexical verb that is used or adverbials (1998: 145). Denison also discusses restrictions of the progressive, e.g. that it is not often used with stative verbs. Furthermore, he mentions that although the progressive is considered a verbal construction, it can show nominal features (1998: 158). In addition, starting in eMod, a double *-ing* occurred, of which rare instances can be found even today. As Denison states, this form does seem to fulfill a symmetrical pattern of the *-ing*, which makes it seem strange that this form is now considered ungrammatical. Nevertheless, the changing use of the progressive may have contributed to the loss of this double form.

Denison offers some well worth considering comments on gerunds or verbal nouns: he defines a "gerundial clause" as a "nonfinite" clause with "nominal function – subject, object, prepositional object, etc. –in some higher clause" (1999: 268), adding that they also can have verbal properties. Here, we arrive at the core of the problem of the gerund: when a certain gerund has both nominal and verbal properties, how are we supposed to make out categorical boundaries? Denison states that scholar's views on whether it is possible to draw these boundaries part consistently (1999: 271-272). This will receive further consideration in section 3.1. In Figure 2, the development of the *-ing* throughout history is schematically summarized.

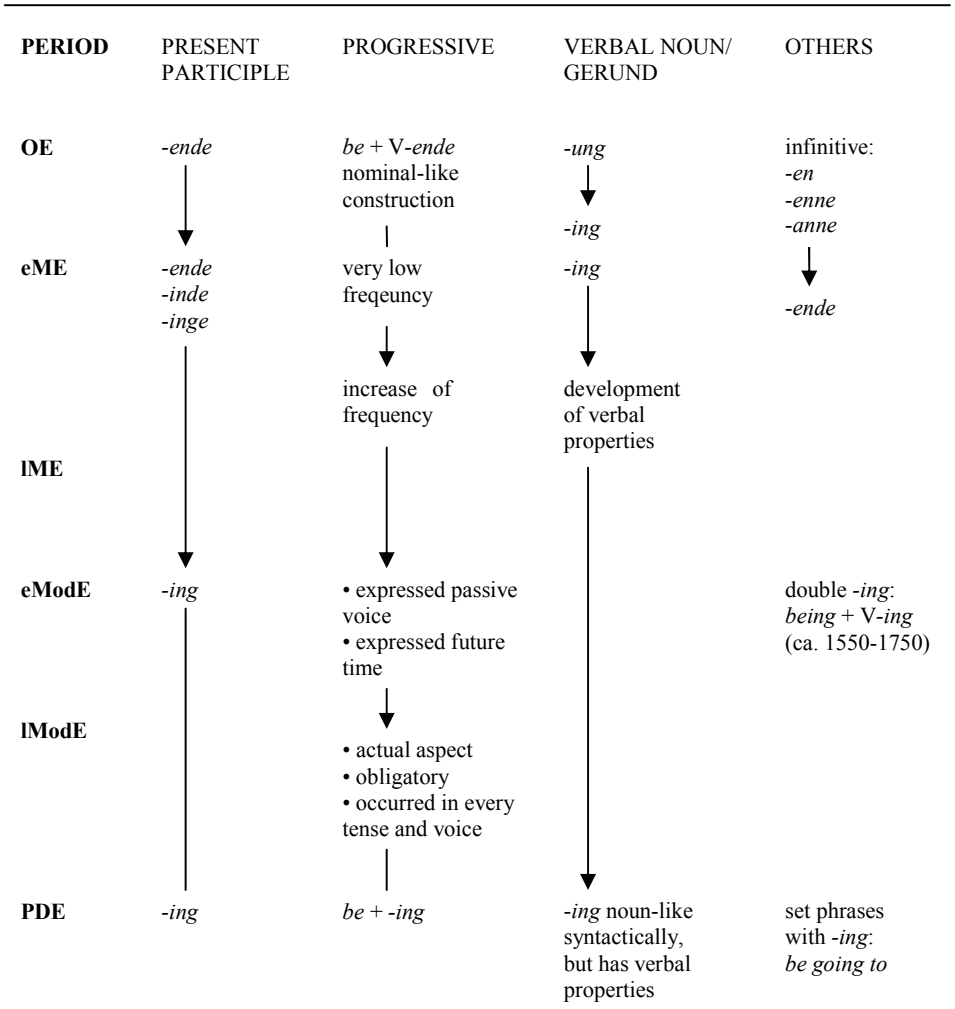

Fig. 2. Development of different *-ing* occurrences etc., from OE to PDE, based on Traugott (1992), Lass (1992), Fischer (1992), Rissanen (1999) and Denison (1998)

3. The Recapitulationist Hypothesis Applied

For a long time, the progressive aspect was assumed to have a main use of referring to ongoing actions or habits. Today, this is naturally not its only use, though in regular grammars it is often argued to be the main one: Svartvik & Sager state ongoing actions or habits to be the primary use of the progressive, although they also present a number of connotations (1996: 86). There are hence many very natural progressive uses that do not concern durability in that sense:

(2) a. She **was dying**.
b. He **is changing** the baby's diapers.
c. I **am** always **forgetting** things nowadays.
d. She **is being** silly.

Lee (2001) gives an excellent explanation to the use of the progressive in PDE, claiming that it "involves two distinct conceptual levels: the subpart of the event that is in focus at a particular reference point, and the event as a whole" (2001: 149). Today, the progressive can even be constructed with verbs that are inherently stative. It would then, according to Lee, be more accurate to describe the modern progressive in such cases as concerned with the temporal frame of the situation, or in some cases with the end of the action, e.g. (2d). This seems to be a very developed progressive, originally used for on-going actions and habits only, but due to changes throughout history obtaining an increasingly broader use. According to Akhtar & Tomasello, the occurrences of the *-ing* inflection in child language indicate that children initially add this morpheme to "verbs naming durative events with no clear end state" (1997: 962). The same can be found in the earliest uses of the progressive (or its predecessor) in OE: Traugott states that the progressive was mostly used with "verbs denoting activities without inherent beginning or ending" (1992: 187). Perhaps it is not so strange that this is seen as the most basic function of the progressive. Here, acquisition and evolution takes very similar paths when it comes to function: the child starts with the *-ing* inflection on verbs referring to durative events, which was also the preference in its initial uses in history, and is the more or less dominating current usage as well (though the latter is arguable). After this, complex uses and confusion appear in language acquisition and in history, and also in modern definitions of the uses of the *-ing* form.

In Figure 1, it was noted that as soon as inflections start to appear and two-word utterances can be produced, the child's grammar starts to develop on many levels simultaneously (at about 24 months age). Rissanen, as mentioned earlier, comments that the 17th century was "the crucial period in the development of the progressive", and that it was one among many grammatical constructions going through an important development at this time (1999: 216). Also, as shown in Figure 2, at this time the double *-ing* construction was used, and the gerund or verbal noun had developed verbal properties shortly before this. The parallel can be seen in the level and speed of development that accurate use of the progressive implies, in child language as well as history.

Another significant point can be found when comparing the development of the *-ing* form in terms of its establishment. This can be seen particularly well in the development of the progressive. In history, the progressive was not established as an aspect until around 1700. In child language, though children show some early productivity with *-ing*, it is not until after many months of using this inflection that it appears everywhere it is required, which is naturally the case with learning most constructions. The changing percentage of required use of the progressive is illustrated in Brown's account of one child Sarah's early inflectional morphemes (1973: 256-257). Although this presents the development of one specific child, it does also represent the general pattern of child language acquisition. Comparing this to history gives a picture of a strikingly similar sequence. The pattern of changes in frequency resembles that of the development of the progressive into an established aspect, and this similarity is summarized in 0. The first stage of Table 1 (2 years and 3 months versus OE) presents a low frequency of the progressive in child

language as well as in OE. In the latter, it is clear that what we now call the progressive was not an established aspect. Although it is arguable, it could be suggested that at this stage, it is also not an established aspect in child language: it is very hard to judge whether the early *-ing* appearances in a child's language can be considered as presenting a certain aspect. Sarah's full use of the progressive is not reached until the ages of 3 years and 7 months. This is fairly late, considering how far other parts of a child's acquisition have developed at this time. Nevertheless, the establishment of the progressive as an actual grammatical aspect occurs fairly late in history too, not until ModE. Interestingly, it is also of significance to consider that the progressive is a rather peculiar construction, not that common in other languages. A suggestion for the reason of this late development in acquisition as well as evolution could be the peculiarity of this construction.

Table 1. Development of the percentage of required use of the progressive in child language compared to its development in history, from Brown's study on Sarah (1973: 256-257), Fischer (1992) and Hogg & Denison (2006)

Age/Period	**Child Language**	**History**
2 years and 3 months OE	50%	low frequency (other function)
2 years and 5 months eME	20%	very low frequency
2 years and 8 months lME	80%	increase
3 years and 7 months ModE	100%	established as grammatical aspect

Another point, which certainly needs careful consideration, is the confusion itself between different *-ing* occurrences, i.e. the development of the present participle, the progressive, and the gerund or verbal noun intertwining, and also the affinity to the earlier infinitive inflection. We have seen how this has both contributed to its development in history and complicated the study of its history. In section 2.1, it was mentioned that Brown chose not to include gerunds in his study of children's early inflections (1973: 259). It has also been mentioned that Olguin & Tomasello, in their study where novel verbs were used, noticed that the majority of the children in the study used the novel verbs inflected with *-ing* "into sentence positions that would normally be reserved for nouns" (1993: 268), e.g. "*I want dacking*" (1993: 263). Not much research seems to have been done on this, possibly due to the general confusion about gerunds and grammatical categories, seen in examples (1c) – (1e) in section 2. Also, it must be taken into account that due to the early age of children starting to produce *-ing*, difficulty to analyze these utterances arises. Nevertheless, most likely, all these *-ing* occurrences are somehow connected: this can be seen in history, and perhaps also hazily sensed in child language acquisition. At this point, a need of further consideration of grammatical categorization arises, and to this we will soon turn. In Table 2, the main points of the recapitulationist hypothesis applied to the development of the *-ing* form are illustrated with the exception of the pattern of the frequency of the progressive, which is already shown in Table 1.

Table 2. Resembling points in evolution and acquisition, from Akhtar & Tomasello (1997), Olguin & Tomasello (1993), Peccei (2006), Rissanen (1999), Tomasello (1999) and Traugott (1992)

Age/Period	**Acquisition**	**Evolution**
18 months/OE	*-ing* appears, on durative	progressive *be* + *V-ende*, verbs first mostly used with durative verbs
22-25 months/OE	novel verbs used with *-ing* in noun positions	progressive as nominal verbal noun
24 months/ 17th century	grammar develops on many levels simultaneously	significant time for development of progressive and other constructions
24-36 months/ 17th century onwards	grammatical categories formed, i.e. the *-ing* as a noun or verb ending	definitions of gerunds and other ambiguous *-ing* cases

3.1 Grammatical categorization

So far, the problem of the different *-ing* forms and distributing them into the 'correct' grammatical category has mainly been hinted at in this paper. The many different opinions on how to categorize *-ing* instances, the ambiguous appearances of *-ing* inflections in child language, and the confusing path the *-ing* ending has taken throughout history are points that need careful consideration. This includes considering how the categories that we apply actually work. The concept of grammatical categories, such as nouns and verbs, has been used as long as the field of linguistics has existed. However, the universal perspective on this, i.e. the idea that certain grammatical categories can be found in every language, is somewhat younger. Yet more recent is the debate on whether the traditional categories really are sufficient for acknowledging all parts of speech. The gerund is a classical example of this, with its verbal and nominal features seemingly competing for its category membership. Nevertheless new perspectives on language appear, which hopefully offer possible solutions to these rather old problems. For the purpose of aiming to solve the gerund issue and the like, and to shed light on the *-ing* form in general, two newer views will now be contrasted, namely Aarts' Aristotelian form classes and intersective gradience, and Croft's Radical Construction Grammar.

In his book *Radical Construction Grammar*, Croft (2001) argues for an alternative view of grammatical categorization. This is initiated by presenting the 'generally' assumed view on parts of speech in a few assertions (Croft 2001: 63, numbering added):

(3) a. Noun, verb, and adjective are universal (cross-linguistic) categories found in particular languages
    b. But noun, verb, and adjective are not language universals – that is, not all languages possess the parts of speech noun, verb or adjective

Instead of this, Croft suggests the following to "be part of syntactic theory", instead of the above (Croft 2001:63, numbering added):

(4) a. Noun, verb, and adjective are not categories of particular languages
    b. But noun, verb, and adjective are language universals – that is, there are typological prototypes…which should be called noun, verb, and adjective

This argumentation may initially seem surprising, but eventually opens up for a whole new view on parts of speech. Croft goes on to describe how "the semantic class definition" has long been obsolete, due to its base of "lexical items rather than their morphosyntactic behavior" (2001: 63). This seems natural, but as Croft argues, there has not been any replacement of this insufficient or even incorrect way of analyzing parts of speech: "it is merely assumed that morphosyntactic behavior of some sort will establish parts of speech with the terms Noun, Verb, and Adjective in many if not all languages" (2001: 64). He goes on to describe how "binary features" are often used to determine parts of speech as "Noun, Verb, Adjective, and Preposition" (2001: 64). Nevertheless "[n]o guidelines are given as to how to DIFFERENTIATE parts of speech in a particular language" (2001: 64). The resulting issue seems to Croft to be the division of pursuing "lumping" (a few broad categories) versus "splitting" (many parts of speech) (2001: 65). After a careful description of both these approaches, Croft suggests another solution, according to his suggestions in (4a) and (4b), which is the Radical Construction Grammar. At the core of this, the so-called "conceptual space" and "semantic maps" can be found (Croft 2001: 92-93): "a speaker's knowledge of a language includes the many-to-many mapping between constructions and categories – the fillers of the relevant roles in the constructions". This can be found in the "conceptual space" (Croft 2001: 92), which also can be explained "as a mental map, cognitive map, semantic map, or semantic space" (Croft 2001: 92). In other words, what Croft seems to be getting at, is that parts of speech should be considered based on which construction they appear in, rather than where they can be derived from. In this, every part of speech in a certain language seems to fit in somehow, and there is no conflict in assignment of a certain category. When the English language is applied to the conceptual space, Croft argues that "the *-ing* form is used for action words as arguments (Gerund) and modifiers (Participle)" (2001: 98), which can be found in the marked area of the conceptual space in Figure 3.

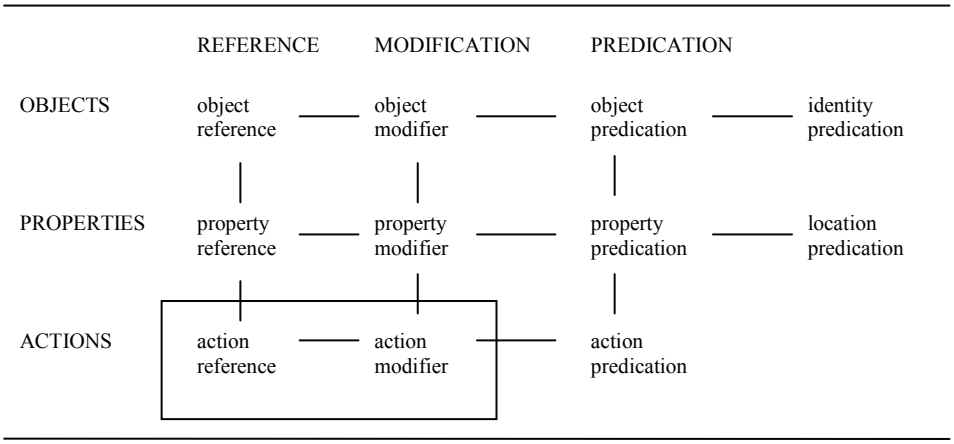

Fig. 3. Conceptual space for parts of speech
(from Croft 2001: 92, marking added for *-ing* form)

The debate about the Radical Construction Grammar as opposed to a more traditional view has in particular been pursued between Croft and Aarts. Aarts (2004, 2007) argues

that although Croft's perspective is interesting, there are still ways to pursue a more classical view of grammar, only partly adjusted (to solve issues such as the gerund) with the help of "intersective gradience" (2004: 1). In the example of the gerund, Aarts argues, with the help of distributional analysis in a given example, it is possible to determine if the example has a majority of verbal *or* nominal properties. This majority will then determine what category the part of speech belongs to, although the multiple properties of the gerund as such mean it is in intersective gradience (2004: 32-35). Aarts even takes the example of a gerund construction that is not used anymore: **The writing this book is a difficult job*, which would have an equal number of verbal and nominal properties, and argues that this is why the construction is no longer acceptable (2004: 35). Still, Croft is able to show the weaknesses of Aarts' view: "Aarts is obliged to decide for each type of gerund construction whether the gerund form is really a noun or really a verb, since he is committed to an Aristotelian grammatical category model" (2007: 426). This is clear from what Aarts argued in his work described above. Contrary to this, Croft (2007: 426) suggests the following:

> But if one discards the Aristotelian assumption, and recognizes that both constructions and formatives have functions, then the intermediate status of gerunds (and participles) is naturally explained: a gerund is a formative that is semantically closer to the 'verb' combination…but is used in a propositional act role that is characteristic of the 'noun' combination… Hence it is not surprising that gerunds display some properties of "nouns" and some of "verbs", and in fact in different mixtures.

Compared to the traditional view that can be traced as far back as Aristotle, and the usual "universal" categories learned at every institution of education, this might seem almost too revolutionary. Nonetheless, the insight this Radical Construction Grammar offers on language, as well as the mind, seems to go far beyond what a traditional view can do. This is clearly illustrated in the example of the gerund or verbal noun, for as Croft concludes: "if we draw a sharp line between "nominal" and "verbal" gerunds, then we miss the generalizations linking the different constructions used in referring to actions" (2007: 427).

Croft's conceptual space can interestingly enough be applied to the development of the progressive discussed in section 3, on the similar patterns of frequency and establishment in child language and history. The *-ing* form, naturally including the progressive, belongs to the left-bottom field in the conceptual space, called 'action reference'. The fully developed progressive is achieved rather late in child language as well as in evolution, as illustrated in Table 1. However, the progressive aspect is a peculiar construction, as mentioned earlier, and this peculiarity could then explain its late developmental completion. With this in mind, considering its placement in the conceptual space in Figure 3 may give a deeper understanding: 'action reference' is the left-bottom space, perhaps not as self-explanatory as e.g. 'object reference'. This field seems to develop later than others that are cognitively easier to handle, just like the peculiar progressive in child language and history. In fact, one seems to be an example of the other: the progressive, with its complex development, rightly belongs to 'action reference', which naturally seems as a late developing area in the conceptual space. Also, the area for 'action reference' as a possibly slower developing part of the conceptual space can be seen in the development of the progressive in acquisition and evolution.

Another interesting view on grammatical categories is presented by Barner & Bale (2002), who argue for discarding the view of words as being learned into (and hence belonging to) certain grammatical categories. This is for the purpose of seeing our lexicon as consisting of a number of lexical roots, without certain categories, which we use in different syntactic positions. A certain root could then be used in a certain position, e.g. where what we call nouns or verbs are expected, and it is not until we fit roots into certain positions that inflections etc, or even some sort of classification, appear. This would then be a syntactic process similar to that of combining words into sentences: "words are created in the syntax" instead of "in the lexicon" (2002: 773). The root *grow* is used to illustrate what can be done to this lexical item once it is incorporated into syntax: it can be inserted into either a transitive or intransitive construction, and in this way gaining or loosing transitivity; it can be inserted in several places where it will function as a noun phrase (*growth* or *growing*) etc. In child language, Barner & Bale argue, many examples of this can be found, which usually is considered incorrect due to grammatical conventions, though the intended meaning is easily understood: "Don't broom my mess", "I'm going to basket those apples", "You're gunning him" etc (2002: 776). These are all examples of children using nouns in slots where verbs are expected, and since this actually is a way of creating new verbs that are accepted too, it is not that surprising. It is also mentioned that Maratsos & Chalkley (1981, cited in Barner & Bale 2002: 777) state that one of the most common errors in child language is to use "verbs in noun contexts". This is similar to what was described above, about children using novel verbs inflected with *-ing* in slots where nouns are expected. It does indeed seem plausible to argue that roots in the lexicon differ categorically only when appearing in a specific syntactic context, and that hence, the rules of how this may be done are made by language conventions. This also simplifies the process of acquisition, for as Barner & Bale argue, the child does not have to learn what can be done to each word in the lexicon, but can instead learn how to administer the roots in syntax. This does not have to go against Tomasello's Verb Island Hypothesis, which states that properties are learned verb-specifically. Instead, it gives the idea that this happens on a different level in the child's grammar, i.e. not in the lexicon but in learning syntactic constructions, which simplifies the view of language acquisition remarkably. This is not that far from Croft's argumentation, and though perhaps not as structured as his, it does give a different, well worth considering and perhaps more just picture of language as a cognitive process.

3.3 Future of the *-ing* form

The confusion and mixing of different *-ing* forms in the history of English has been described above. It has also been stated that the *-ing* inflection is multi-functional to the extent of being hard to define, at least into a specific category, and it is one of those instances that causes debate about the traditional view of grammar. Perhaps the knowledge of the vast development that the *-ing* (and English as such) has gone through makes it even harder to say something about its future. Still, there are interesting points to consider.

The future of the progressive could be argued to show some signs of change. When considering the emerging set progressive phrases, like *be going*, which informally has already changed into *be gonna*, it is easy to wonder if the inflection will be altogether lost phonologically. However, the progressive is a rare aspect when compared to other languages, and it is in itself multi-functional, which can be seen in its varying uses (e.g. (2a)

– (2d)). The progressive seems to be one of many constructions in English that have developed very far, especially compared to other languages. It can hence be of interest to consider other languages with constructions similar to those in the English development of the progressive. For instance, such cases can be found in some German dialects, which use *sein* 'be' combined with a preposition and a gerund to construct a continuous meaning similar to the initial use of the English progressive. Example (5) illustrates this in colloquial German (Heine & Kuteva 2005: 65) and example (6) in Pennsylvania German (Burridge 1992: 213).

Colloquial German

(5) Er ist am Essen
he is at eating
'He is eating.'

Pennsylvania German

(6) Sie is am Aerbse blicke
she is at pea shell.INF
'She is shelling peas.'

These examples seem to show the same stage of development that the English progressive did before it was an established aspect, approximately at the time of OE-ME. When recalling the early nominal-like use of the progressive and phrases like *I am on reading* (Rissanen 1999: 217), these actually seem to indicate exactly the same phenomena that (5) and (6) show. Therefore, it is perhaps more plausible to predict the future of languages like German, that show progressive-like constructions, which may be about to be formalized. In examples (5) and (6), the connection to durability for a certain period of time is obvious, just as in the early English use of the progressive. It could then be natural to assume that the preposition (*am* 'at' in both (5) and (6)) may be lost in the future, and that this meaning will be expressed with inflection instead. Accordingly, the usage of the progressive may also develop to the broader sense it has obtained in English. To pursue this further, it could be useful to compare children's inflectional acquisition of English to that of German, which perhaps could give further indications for the future of the progressive in German.

Independent of the actual future development of the *-ing* form is the pressing need of defining it. In Croft's conceptual space, there is a way to see the functions of the *-ing* form clearly, without being forced to use exceptions etc. Here, it is also possible to see something of the future of the *-ing* form: it is, and will be necessary to consider it from a different perspective than the traditional, to really understand and appreciate the functionality that the form has today. This can give an insight into how language works cognitively and hence also how the grammar of the language we speak every day works.

5. Conclusion

The different functions of the English *-ing* form raise significant questions concerning grammatical categories, to which the recapitulationist hypothesis provides background as well as base for new views. The ambiguity of the *-ing* form can be seen in 'phylogeny' as well as 'ontogeny', and comparing them helps to explain the complexity of the *-ing* form. This also paves the way, or even shows the urge for explanations different from a more

conventional traditional grammar. Such a solution can be found in Croft's Radical Construction Grammar, which illustrates language and perhaps also human cognition in what he calls a conceptual space (e.g. Figure 3). Here, the *-ing* form in all its functions fits perfectly as being in the field of 'action reference' and 'action modifier'. This ambiguity in grammatical status could also illustrate the peculiarity of the progressive in English, developing late in acquisition, evolution, and the conceptual space alike.

The *-ing* form evidently raises problems when pursuing a traditional view of grammatical categories. The need for new solutions becomes increasingly pressing, and some new approaches indeed offer an answer to this need. Though literally radical, the Radical Construction Grammar is one such approach. The recapitulationist hypothesis should also deserve due attention, since it helps us to understand the *-ing* form better by offering insight to language change.

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ENGLESKI OBLIK -ING IZ REKAPITULACIONISTIČKE PERSPEKTIVE

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Ako gledamo na jezik kao na evolucioni proces, možemo steći novi uvid u način na koji shvatamo istorijske promene. Ovakav pristup takođe dovodi do značajnih pitanja u vezi sa prirodom jezika. U ovom radu ispituje se engleski oblik -ing iz perspektive rekapitulacionističke hipoteze sa ciljem da se osvetli kompleksni problem po kome različite funkcije ovoga oblika pripadaju različitim gramatičkim kategorijama. Izučavanje oblika -ing kod dečjeg usvajanja jezika u poređenju sa istorijskim pristupom dovešće do rasprave o tome na koji način su ove funkcije povezane, kako strukturalno tako i kognitivno. Identitet oblika -ing može postati sasvim jasan ukoliko se potraži van tradicionalnih gramatičkih pristupa gramatičkim kategorijama.

Ključne reči: *oblik -ing, gerund, glagolska imenica, rekapitulacionistička hipoteza, gramatička kategorija*