

## Fragments of Child Grammar

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In the 1990s, the theoretical distinction between lexical and functional categories led to a new interpretation of the telegraphic nature of children's early speech. Recent theoretical research on fragments (Merchant 2003, Barton and Progovac 2005, Fortin 2007) offers another perspective on children's early syntactic competence. The present paper charts this new territory, focusing on answers to *wh*-questions.

Most generative linguists assume that, in discourse, answers to questions are related by computation in the 'narrow syntax'. Updating insights by Morgan (1973, 1989), Merchant (2003) proposes that fragment answers to *wh*-questions are formed by deletion of material from an underlying sentence. This allows an appropriate syntactic category to be sent to the semantics for interpretation as a proposition, thereby preserving standard assumptions regarding the syntax/semantics mapping. The hearer of the question in (1) obligatorily reconstructs the syntactic structure of the speaker's IP. The fragment NP moves to FP (focus), the IP constituent is deleted/elided, and "Eggs" is pronounced.

		<i>Derivation</i>
(1)	<i>Speaker:</i> What can Daddy cook?	a. [IP Daddy can cook eggs]
	<i>Hearer:</i> Eggs	b. [FP Eggs <sub>i</sub> [IP Daddy can cook t <sub>i</sub> ]]
		c. [FP Eggs <sub>i</sub> [IP <del>Daddy can cook</del> t <sub>i</sub> ]]

Other researchers claim that fragment answers are generated as stand-alone categories, with the appropriate syntactic category filled in by pragmatic information (e.g. Barton 1990, Stainton 1995;1997, Jackendoff 2002). The 1:1 mapping between syntax and semantics cannot be preserved on this approach.

Merchant's proposal predicts that children (like adults) compute full sentence derivations in their answers. Assuming that computation of narrow syntax is part and parcel of being equipped with UG, in order to produce the answer "Eggs" in response to the question in (1), reconstruction of the speaker's question comes for free, but a child must figure out that English permits IP deletion. Should this be delayed, children might initially prefer the full sentence answer in (a) to the fragment answer. In fact, just such a delay in acquiring deletion has been observed in a related study on children's acquisition of VP ellipsis in answers to Yes/No questions. Our own data document a child who answered "Daddy cooks eggs" to the question "Does Daddy cook eggs?" well before "(Yes) Daddy does" was acquired as a possible answer. Data from a pilot study of one child's answers to *wh*-questions reveal a similar pattern. In searching transcripts from the CHILDES database (MacWhinney 2000), we found that in Nina's earliest responses to *who* questions, more full-sentence answers were produced than answers of any other type. Two examples below are representative.

- |  |  |
|--|--|
| (2) Mother: Who else is swimming in the water? | (3) Mother: Who gave you this balloon? |
| Nina: Ducks swimming the water.                | Nina: Ellie gave my balloon.           |

We are underway with an elicited production study of four English-speaking 2-year-old children to investigate our predictions. The empirical findings are still preliminary. We are also searching transcripts in the CHILDES database to test the theoretical predictions.

## Reference resolution in a second language: evidence from an eye-tracking study

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It is well known that second language learners (L2ers) from articleless L1 backgrounds show persistent variability in L2 article production. But do these L2ers process information signalled by English articles during real-time language comprehension? The experiment reported here addresses this question by employing visual world eye-tracking paradigm to investigate how L2ers and native speakers combine various information sources to constrain reference resolution.

In this paradigm, a subject is presented with a picture while hearing a sentence related to the objects presented in the picture. The critical trials involve pictures containing an actor and 6 objects. One of these is the theme object, and two are potential goal referents in the sentences of the type: “The ACTOR will put the THEME inside the/a GOAL” (e.g. *The pirate will put the cube inside the/a can*). There are two versions of each sentence, varying the definiteness status of the goal referent, and two versions of the visual scene: in one, the two goal objects (identical containers) are both open and/or empty; in the other, one is open, and the other closed/full. Pragmatic information (the number of open/empty goal referents) and the linguistic context (indefinite vs. definite article) are crossed, yielding four conditions:



The pirate will put the cube inside the can.  
The pirate will put the cube inside a can.



The pirate will put the cube inside the can.  
The pirate will put the cube inside a can.

If L2ers are sensitive to the uniqueness information signalled by articles (*the* signals the uniqueness of a referent; *a* implicates non-uniqueness, cf. Hawkins 1991), we expect them to behave like native speakers, i.e. reference resolution should be slowed down in mismatched contexts (Chambers *et al.* 2002). For example, when there is only one pragmatically compatible goal in the visual scene (e.g. only one of the two cans is open/empty) and the sentence contains “**the** can”, participants are expected to fixate the appropriate goal sooner relative to the condition with “**a** can”, which implies non-uniqueness (i.e. it implies that there may be other cans in which the cube could fit). But if L2ers rely exclusively on the pragmatics of the context to determine the goal, they should always be faster in contexts where there is only one goal pragmatically compatible with the theme object (i.e. the single open/empty can contexts), irrespective of the definiteness value of the noun phrase.

The study also considers the roles of the L1 and developmental stages, and so involves five groups: two groups of L1 Mandarin (-articles) and two groups of L1 French (+articles) learners of English (intermediate and advanced in each), and a native-control group.

Assuming that forms from the input automatically activate associated knowledge representations, the results should also indirectly inform us as to whether learners’ problems in production merely reflect difficulties in accessing overt forms, or whether they may stem from the absence of appropriate representations.

# *Kinghood, kingdom, kingship: a new account of the rivalry of suffixes*

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This paper surveys the rivalry of derivations with the Modern English (ModE) suffixes *-hood*, *-dom* and *-ship* occurring with the same base (e.g. *kinghood*, *kingdom*, *kingship*). In the literature (see Aronoff 1976, Plag 2003) it has been observed that word-formations with the same base and different suffixes occur and seem to denote the same type category, e.g., abstract nouns. Therefore, it has been claimed that they act as rivals, where often one wins out over the other. This similarity, or better the semantic relatedness between formations with *-hood*, *-dom* and *-ship*, has been described the following:

The native suffix *-dom* is semantically closely related to *-hood* and *-ship*, which express similar concepts. *-dom* attaches to nouns to form nominals which can be paraphrased as 'state of being X', as in *apedom* ..., or which refer to collective entities, such as *professordom* ..., or denote domains, realms or territories as in *kingdom* ...  
(Plag 2003, 88)

However, it is never exactly stated what "similar concepts" really means and which differences the term "similar" implies.

In their paper, Aronoff & Cho (2001) try to explain part of these observations by exploring the semantic conditions of *-ship*-suffixation in ModE. They propose that the type of predicate a base belongs to explains the occurrence or non-occurrence of such a derivation drawing on the distinction between stage-level and individual-level predicates (Carlson 1977). They show that *-ship* can only occur with stage-level predicates, and thus they can explain why a derivation like *childship* does not exist (as opposed to *childhood*). They also account for exceptions like *fathership* denoting 'the condition or state of being the oldest member of a community' by assuming that these derivations can never denote enduring properties as opposed to *fatherhood* 'the state or condition of being a father'. In my talk, I will present new insights into the semantic conditions of these derivations by taking the diachrony into account. I will show that by tracing the development of these suffixes the synchrony of derivations with these suffixes can be explained, and more precisely it can be explained 1) what is meant by the specific meaning of a suffix; 2) why we find pairs of words with the same base but different suffixes (*kinghood*, *kingdom*); 3) why we find gaps in lists comparing formations with the same base (existence of *childhood*, non-existence of *childship*). I will present diachronic data from the Old English, Middle English and Early Modern English period exhibiting that the three suffixes were once free morphemes with a number of different salient meanings that in the course of time developed further meanings due to metonymic shifts. I will assume that all these meanings are still inherent in the ModE suffixes today explaining their property of being underspecified. Moreover, I will show that due to this property derivations like *kinghood*, *kingdom* and *kingship* bear different meanings and thus they do not really act as rivals. The diachronic data presented will be analysed in a revised version of Lieber (2004) taking the diachrony into account.

## Logic in pragmatics

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In Relevance Theory (RT), pragmatic processing may enrich truth-conditions of utterances beyond reference assignment and disambiguation. Stanley (2002) claims that this free-enrichment overgenerates. Suppose the speaker utters (1) where (2a) and (2b) are contextual assumptions. Enriching (1) by adding (2a) via &introduction (&I) to derive (3), followed by Modus Ponens with (2b), the hearer may draw a relevant conclusion *John stinks*. Thus, according to Stanley's claim, RT wrongly predicts that (1) can be enriched to (3).

Addressing this criticism, Hall (2006) uses Conjunctive Modus Ponens in (4). CMPP allows us to satisfy each of the two conditions P and Q in  $(P \& Q) \rightarrow R$  separately, rather than as  $(P \& Q)$  at once. Thus, we can draw the relevant conclusion R without using &I. Hall still has to explain why humans take the steps in (4), rather than enriching (1) to (3), followed by MPP. Thus, she refers to Sperber & Wilson's postulate (1986/95) that introduction rules are not used in spontaneous inferences. However, I suggest that a total elimination of &I from the inferential system makes it hard to neatly explain human judgments about the equivalence relations between propositions in terms of their truth values. Though mental logic used in pragmatic inferences is different from logic as in proof theory, if truth based inference plays at least some role in such a deductive system, elimination of &I from a system which retains &Elimination may lead to inconsistency. Also, the reason why CMPP in (4) does not cause inconsistency in the total inference system is that the two formulas in (5) are logically equivalent, whereas we cannot prove this logical equivalence without &I.

RT does not have to eliminate &Introduction from pragmatic inferences. Instead, the impossibility of enrichment via &I follows from Hall's (2006) distinction between local inference that is used in enrichment and global inference as in (1)~(3). As an inference rule applicable only with independently truth-evaluable premises, &I may apply only after (1) itself develops to an independent premise/proposition.

After showing that we do not need to eliminate &I to prevent the alleged overgeneration via enrichment, I argue against the claim that use of &I in spontaneous inferences leads to non-terminating inferences (cf. Johnson-Laird 1997). First, the recursive use of &I followed by &E does not lead to infinite inference steps if we use a proof presentation that eliminates "redundancy" (i.e. a system that eliminates Cut, cf. Girard 1987). Next, the alleged infinite inference in (6) is caused by "expansion" of P, not by &I per se, and should be solved separately. Also, the infinity as in (6) can be prevented in a proof presentation in which, informally, P is multiplied only if it is required in a proof step. Lastly, the more elaborate infinity problem in (7), in which we may take propositions such as Q, R, S, from the (nearly) infinite data base of "potentially usable propositions" and conjoin them with propositions in the "active data base," arises independently of the use of &I. The introduction of Q, R, S,... into the active data base causes infinity without &I and should be restricted independently.

(1) John smokes. (=P)

(2) a. John drinks. (=Q)    b. If John smokes and drinks, he stinks. ( $=(P \& Q) \rightarrow R$ )

(3) John smokes [*and drinks*]. ( $=(P \& Q)$ )

(4) Conjunctive modus ponens (CMPP)

1.  $(P \& Q) \rightarrow R$     Premise 1

2. P    Premise 2

3.  $Q \rightarrow R$     1, 2, CMPP

4. Q    Premise 3

5. R    3 (or 1, 2), 4, MPP    (cf. Hall, 2006: 96-97)

(5)  $(P \& Q) \rightarrow R \Leftrightarrow P \rightarrow (Q \rightarrow R)$

(6)  $P \Rightarrow P \& P \Rightarrow P \& P \& P \Rightarrow \dots$

(7) a.  $P \Rightarrow_{\{Q,R,S,\dots\}} P \& Q \Rightarrow_{\{R,S,\dots\}} P \& Q \& R \Rightarrow_{\{S,\dots\}} \dots$ , where the set  $\{Q,R,S,\dots\}$  is infinite.

## The Role of Contrast in Two Types of Spreading

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This talk will discuss a case from Northern Norwegian which motivates a distinction between underlyingly present (contrastive) and derived (surface) features, which cause two different types of spreading of the same feature in this dialect.

Common to many Norwegian dialects is a process of retroflexion; the coronals /t, d, n, s, l/ become retroflex [ʈ, ɖ, ɳ, ʃ, ʎ] after coda /r/, which deletes. In addition, retroflexion (optionally) spreads to all adjacent coronals in a cluster (1a). Most retroflexes are allophonic variants only, but /ʃ/ also exists as an independent phoneme and is a trigger for retroflex spreading (1b). In some Northern Norwegian dialects (we will discuss the Narvik variety here), there is a second source of surface retroflexes: /d, n/ become retroflex after a tautomorphemic short low or back vowel (2a). These retroflexes also spread, but not to /s/ (2b). The same restriction holds for /l/ which is always a retroflex in the Narvik dialect: it spreads retroflexion to all segments save /s/. The generalization is that derived retroflexes (derived in the sense that the triggering feature is not in the UR) respect contrast in spreading.

We will provide an analysis which makes crucial use of the distinction between underlying (minimal) specifications and surface (full) specifications. The spreading feature is [+posterior]. Underlying [+posterior] actively spreads to all adjacent potential feature bearers (coronals). Save /r, s, ʃ/, most coronals are not underlyingly specified as [±posterior]. They must receive some specification on the surface, however. While [−posterior] is the default, some contexts trigger insertion of [+posterior] in Narvik Norwegian. This inserted feature can spread to provide other coronals with the necessary specification but does not spread to segments which are already specified for [±posterior].

The analysis will be couched in the framework of Turbidity Theory (Goldrick 2000, Revithiadou 2005, van Oostendorp 2006) which enables us to combine Optimality Theory with feature underspecification. In Turbidity, phonological elements stand in two kinds of relationship, projection and pronunciation. Constraints on projection determine which input features appear in a phonological representation, thus being able to generate underspecified representations. Actual outputs must be fully specified, however. How this will be done is determined by constraints on pronunciation. In Norwegian, a [+posterior] feature which has been projected is subject to a spreading constraint. This constraint does not apply to inserted features, which by definition have not been projected. The inserted feature still spreads but only to minimally violate faithfulness (inserting as few features as necessary).

We will conclude this talk by discussing some of the implications of distinguishing between two types of spreading, the active propagation of a feature vs. spreading as surface feature filling, and by comparing Turbidity against other models of Optimality Theory, which cannot capture the Northern Norwegian data discussed here.

### Examples:

(1)	(a)	/barn+s/ /et barn som/	[ba:ɳʃ] [ɛt ba:ɳ ʃɔm]	‘child (gen.)’ ‘a child which’
	(b)	/lønʃ som/	[lœɳʃ ʃɔm]	‘lunch which’
(2)	(a)	/man/ /klad/	[maɳɔ] [k[ɑɖɔ]	‘man’ ‘draft’
	(b)	/hanta:k/ /en klad som/ /et murd som/	[haɳɔ:tɑ:k] [e:n k[ɑɖɔ sɔm] [ɛt muɖɔ ʃɔm]	‘handle’ ‘a draft which’ – <i>compare</i> ‘a murder which’

## Non-sentential Questions and the Theory of Grammar

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In all natural languages, phrases of different types are often uttered which are (superficially) not contained in full sentences. These appear both as short answers to questions (1B) and in discourse initial position (2). In the generative tradition, two hypotheses have been put forward to deal with these constructions. Some scholars (Morgan (1973) and Merchant (2004), among others) argue that they are the result of applying deletion/ellipsis to parts of full sentences and thus tend to call them *fragments*. For others (Yanofsky (1978), Barton (1990) and Valmala (1999), among others), they are non-sentential maximal projections at all levels of syntactic representation and thus tend to call them *non-sentential constituents*.

To my knowledge, all previous analyses of non-sententials have concentrated exclusively on declarative utterances. In this talk I will argue in favour of a non-sentential approach on the basis, among other things, of non-sentential questions and imperatives which have gone unnoticed so far in the literature. This talk is structured as follows.

In sections 1 and 2 I introduce the phenomenon and discuss the basic properties of Hankamer (1971,1979) and Morgan's (1973) "traditional" deletion analysis and the main features of the non-sentential approach.

In section 3 I review Merchant's (2004) theory of non-sententials, probably the best articulated and most elegant ellipsis approach to the phenomenon, which solves the non-constituent-deletion problem of "traditional" ellipsis analyses on the basis of the idea that non-sententials are the result of two operations: a movement operation by which the non-sentential moves to the specifier of a left-peripheral head F plus ellipsis of the complement of the head F.

In section 4 I provide arguments against Merchant's proposal on the basis of different anti-connectivity effects of a) sequences which are not possible as non-sententials but can undergo left-peripheral movement in full sentences, and b) sequences which cannot be moved in full sentences but can unexpectedly appear as non-sententials and in declarative, interrogative and imperative contexts. I will also take the existence of island-insensitive non-sententials and the impossibility of VP-ellipsis fed by non-sententials as evidence against a movement plus ellipsis analysis.

In section 5, I provide additional evidence supporting my claim that even non-sentential answers to questions cannot be the result of a movement plus deletion strategy on the basis of the existence of individuals who, as a result of an impaired theory of language or mind, do not have movement to the left periphery and ellipsis as part of their linguistic competence but can nevertheless produce and understand non-sentential constituents.

Section 6 discusses the consequences of assuming a non-ellipsis approach to non-sententials for our conception of different aspects of the grammar of natural languages.

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## On the topic of *wa*-phrases in Japanese

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This talk presents evidence that the Japanese particle *wa*, which has been argued at least since Kuroda (1965) to be a marker for topic, does not only mark topic. It also marks old information. I argue furthermore that the pragmatic consideration of whether a particular *wa*-phrase is interpreted as topic or old information dictates its syntactic distribution.

It is well-known that a focus-background structure can be part of a comment, but a topic-comment structure cannot be contained inside a background (e.g., Lambrecht 1994, Hajicova, et al 1998). It has also been argued by Rizzi (1997), and more recently by Neeleman & van de Koot (2006), that the sister constituent of a fronted topic is interpreted as the comment, while that of a fronted focus is interpreted as the background. These two considerations together make the predictions in (1): a focus can follow a fronted topic, but a topic cannot follow a fronted focus (Neeleman & van de Koot 2006). Data such as (2), however, which shows that a fronted focus can precede a *wa*-phrase, suggests that the prediction in (1b) may be incorrect for Japanese, seemingly also supporting an approach which projects multiple Topic-Phrases in pre- and post-focal positions (e.g., Rizzi 1997, 2004). Despite the initial appearance, I argue that (1b) is correct for Japanese and that the post-focal *wa*-phrase in (2b) is simply old information, in the sense that it has been previously mentioned, rather than a topic, in the sense that it is what the rest of the sentence is about (Reinhart 1981). Focusing on subject *wa*-phrases, I provide three arguments for this position.

Firstly, the considerations in (1) are in fact observed in general in Japanese. Thus, in responding to a request such as *kono inu-nituite osiete* ‘tell me about this dog’, which forces *kono inu*, ‘this dog’, to be a topic in the following utterance (Reinhart 1982), only the order in (2a) is permitted. From a theoretical point of view, then, it seems desirable to seek an alternative account for the data in (2b). Secondly, topics in Japanese are usually analysed as base-generated in a left-peripheral position, binding a *pro* internally to the clause, as opposed to being derived by movement (cf. Saito 1985, Hoji 1985). Consequently, they can be associated with a position inside an island, such as a relative clause, (3). However, it turns out that such a *wa*-phrase can only be a topic and not old information in the senses noted above: (3) can follow the Japanese counterpart of the request in (4a), but not the one in (4b), which merely mentions *the child*. Finally, this syntactic difference between old information and topic *wa*-phrases predicts that if the post-focal *wa*-phrase in (2b) is indeed simply old information, then it should be impossible for such a *wa*-phrase to be associated with a position inside a relative clause. The prediction is correct, (5).

In sum, the particle *wa* does not exclusively mark topic. The information structural status of a *wa*-phrase as either a topic or old information dictates the syntactic distribution of the phrase. The distribution bears out the prediction that a topic cannot follow a fronted focus.

(SMALL CAPS = focus)

- (1) a.  $\text{topic}_i$  [<sub>comment</sub> FOCUS [<sub>background</sub>  $t_i$  ]]      b. \*FOCUS<sub>i</sub> [<sub>background</sub> topic [<sub>comment</sub>  $t_i$  ]]
- (2) a. sono inu-wa JOHN-O kande-simatta  
*that dog-wa John-acc bite-closed*      ‘The dog bit John.’  
b. JOHN<sub>i</sub>-O sono inu-wa  $t_i$  kande-simatta  
*John-acc that dog-wa bite-closed*      ‘It’s John that the dog bit.’
- (3) sono kodomo<sub>i</sub>-wa kyoo [<sub>NP</sub> [<sub>TP</sub> pro<sub>i</sub> e<sub>j</sub> kinoo katta] inu<sub>j</sub>]-ga John-o kande-simatta.  
*that child-wa today yesterday bought dog-nom John-acc bit-closed*  
‘The dog that the child bought yesterday bit John today.’
- (4) a. Tell me about the child.  
b. Who did the dog that the child bought yesterday bite?
- (5) #JOHN<sub>i</sub>-O sono kodomo<sub>i</sub>-wa kyoo [<sub>NP</sub> [<sub>TP</sub> pro<sub>i</sub> e<sub>j</sub> kinoo katta] inu<sub>j</sub>]-ga  $t_i$  kande-simatta  
*John-acc that child-wa today yesterday bought dog-nom bite-closed*  
‘It’s John who the dog that that boy bought yesterday bit today.’

## Perception of the /r-w/ contrast by British and American English-speaking adults

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Alveolar approximant /r/ in British and American English is characterised acoustically by a lowered third formant (F3) (Delattre and Freeman 1968, Nolan 1983, Alwan et al. 1997, Stevens 1998, Espy-Wilson et al. 2000). Low F3 /r/ is acquired relatively late by children in British and American English-speaking environments, and before its adult-like acquisition, children are often said to substitute /w/ for /r/ (Grunwell 1987, Hoffman et al. 1985, Studdert-Kennedy and Goldstein 2003, McGowan et al. 2004). However, instrumental studies suggest that children may in fact make a (covert) contrast by producing /r/ with a non-/r/-like high F3 but with F2 higher than it is for /w/, and more /r/-like in frequency (Klein 1971, Dalston 1972, Hoffman et al. 1983). Claims for developmental /w-r/-substitution in normal speech appear to be based, therefore, on adult misperceptions, as in other cases of supposed substitutions (Daniloff et al. 1980, Maxwell 1983, Baum and McNutt 1990). The developmental forms of /r/ are retained by some adults in British English speech as so-called ‘labiodental’ /r/ (Nolan and Oh 1996, Foulkes and Docherty 2001, Jones 2005). Assuming a link between production and perception, the use of a mid-frequency F2 in ‘labiodental’ /r/ suggests that F3 may be less highly weighted perceptually for children at some stage in their development, and by adults who retain it (Jones 2005), although currently experimental evidence is lacking.

The research presented here aims to address this issue by investigating the perceptual identification and discrimination of synthetic stimuli in which formant frequencies reflect various /w/-like and /r/-like values. The subjects are British and American English-speaking adults, a subset of the former exhibiting ‘labiodental’ /r/. The experiments reported here, therefore, examine the dialect- and production-related differences in the relative importance of F3 and F2 with respect to /r/ and /w/ perception. Results indicate that F2 is more important to the /w-r/ contrast for all subjects than has previously been assumed, but that there is some inter-subject variation: subjects with ‘labiodental’ /r/ seem less affected by F3 height than other subjects, as hypothesised above. These findings suggest that the influence of the production-perception link is reflected in the use of non-standard realisations of /r/, and that F3 is not the only determinant of /r/-ness for a wide range of subjects.

**A Linguistic Solution to the *Good Samaritan Paradox***  
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We discuss the so-called *Good Samaritan Paradox*, which is a problem in Deontic Logic. Our central claim is that the paradox is straightforwardly accounted for with a well-motivated linguistic analysis of the relationship between sentential operators and non-restrictive relative clauses. The argument is an example of how linguistic analysis can resolve issues in Deontic Logic.

We focus on the semantics of *obligation*, as expressed in:

(1) Bill is obligated to help Phil.

There are a several morphologically related forms which are synonymous for our purposes among them *obligation* and *obligatory*. We refer to *obligation* as a *sentential operator* as it has semantic scope over the sentence it applies to (Stalnaker and Thomason (1973)). Out of the range of issues, we examine the semantic relationship between *obligation* and subordinate clauses.

The semantics of *obligation* have been discussed in depth in the literature on *Deontic Logic* (McNamara (2006)). There are several substantive problems for the formal semantic analysis, among them the *Good Samaritan Paradox*, which appears as follows:

(2) Bill is obligated to help Phil, who has had an accident. Therefore, it is obligatory that Phil has had an accident.

Intuitively, while it may be the case that Bill is obligated to help Phil (who has had an accident), it need not be obligatory that Phil has had an accident. However, given assumptions widely followed in Deontic Logic, it does follow. Thus the paradox. We symbolize the logical form of the argument as in (3).

(3) Assuming  $O(P \wedge Q)$  and  $[[P \wedge Q] \rightarrow Q]$ , then  $O(Q)$

$O$  is the sentential operator which represents *obligation*,  $P$  is the main clause, and  $Q$  is the non-restrictive relative clause. As common in discussions of Deontic Logic, we assume the modal logic axiom labelled **RM**, where if  $[M(P) \wedge [P \rightarrow Q]]$ , then  $M(Q)$ , for a modal operator  $M$ . A key assumption in (3) is that the non-restrictive relative clause is *conjoined to the main clause and is under the scope of the sentential operator*.

While several proposals have been made to account for the paradox of (2) (McNamara (2006)), there is little consensus in the field of Deontic Logic about a solution. Notably, these proposals make no reference to current linguistic analyses of similar constructions.

Linguistic evidence from a range of constructions shows that the key assumption is false -- *non-restrictive relative clauses are presupposed and are outside the semantic scope of sentential operators* (Arnold (2004)). For example, we see that the non-restrictive relative clause is outside the scope of main clause future tense:

(4) Bill will help Phil, who has had an accident.

The linguistic literature has not substantively addressed the problems of Deontic Logic. Applying the linguistic analysis, (5) is the logical form for (2) rather than (3). In (5),  $O(Q)$  does not follow.

(5)  $O(P) \wedge Q$ , where  $Q$  is the non-restrictive relative clause.

We have shown that a well-motivated linguistic analysis eliminates the Good Samaritan Paradox. In the paper, we provide supporting arguments and evidence for these claims as well as relate it to some other paradoxes of Deontic Logic which can be addressed with linguistic analyses.