The Interaction of Syntax and Pragmatics:

by
Christopher Tancredi
Yokohama National University

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1. The Problem:

One of the defining characteristics of generative linguistics in the Chomskyan tradition is the separation of linguistic knowledge from processes of general reasoning. (Cf. Chomsky 1957, 1965, 1980, 1986, 1992.) Language is said to constitute a faculty of mind, with its own independent representational and computational mechanisms subject to faculty specific constraints. In the terms of Fodor (1983), linguistic knowledge is encapsulated. It is a central property of this view of language as autonomous that no processes of reasoning can play a direct role in determining properties of or representations within the linguistic faculty itself. Kempson (1992a, 1992b, 1991/1992) and Gabbay and Kempson (1991/1992a, 1991/1992b) take issue with this view. Kempson (1992a,1992b) in particular argues that much if not all of what has traditionally been included under the heading of syntactic phenomena is best explained directly in terms of constraints on general processes of reasoning, without making any reference to an independent body of syntactic constraints.

Kempson gives three empirical arguments to substantiate her claim that interpretation of language does not require syntax. The first is based upon the behavior of pronouns whose interpretation is dependent upon preceding quantified expressions. With respect to these, Kempson claims that in a restricted class of cases the interpretation of a pronoun can only be determined through applying a process of reasoning to some preceding expression. In such cases, the pronoun is interpreted as denoting a particular (group of) individual(s) in the world, and the identity of that group/individual is dependent upon a preceding expression, but there is no linguistic expression within that preceding expression which denotes that group/individual. Furthermore, the dependence of such pronouns on the preceding expression appears to give rise to bound variable type effects -- the interpretation of the pronoun can co-vary with the interpretation of the preceding expression when the latter is quantified. Since in these cases there is no antecedent expression which denotes the group of individuals referred to by the pronoun, in order to determine the relevant group of individuals, Kempson argues that it is necessary to appeal to a general process of reasoning to construct an antecedent for the pronoun. Since this reasoning process must logically precede interpretation of the pronoun as a sort of bound variable, and since such interpretation is widely presumed to require a syntactic connection between the pronoun and its antecedent, Kempson
concludes that reasoning must play a direct role in constructing syntactic representations, and hence that syntax is not part of an encapsulated language faculty.

The second argument Kempson gives toward this same conclusion is based upon the interaction between bound variable interpretation and real world knowledge. Kempson claims that in certain instances an expression such as the door can be interpreted as dependent upon a quantified antecedent such as every fridge in a sentence like Every fridge needs the door repaired, and that such an interpretation is only made possibly by our real world knowledge that fridges have doors. If real world knowledge is required to make the connection between the two expressions in question, then here again it would appear that processes of reasoning will have to logically precede traditional syntactic processes such as variable binding, and again the conclusion that syntax does not constitute part of an encapsulated language faculty would be warranted.

The third argument Kempson gives for abolishing a formal distinction between syntax and reasoning is that what have traditionally been held to be syntactic constraints show up in processes which appear to be pragmatic. In particular, island constraints show up in ellipsis environments, but ellipsis resolution itself is an inherently pragmatic process involving processes of general reasoning. In order to capture the island phenomena, she argues, it is necessary to analyze island constraints as constraints on the reasoning process involved in ellipsis resolution, calling into question the need for or usefulness of an independent syntax couched within an encapsulated language faculty.

Each of Kempson’s arguments outlined above is intended to show that syntax cannot be conceived of as a body of constraints contained entirely within an encapsulated language faculty which excludes general processes of reasoning. The form of argument in each case is identical -- a certain range of phenomena appear to involve both what have traditionally been held to be syntactic constraints and elements of reasoning which are strictly non-syntactic, and in each case the non-syntactic elements are argued to play an essential role in generating the syntactically-determined interpretation of a sentence. In this paper, I will argue that none of the phenomena Kempson examines force us to this conclusion. The argument will come in two forms. First, I will argue on general grounds that it is possible to allow reasoning to play a role in assigning an interpretation to an utterance without thereby being forced to the conclusion that syntax is not encapsulated. I will then go on to argue that in each of the specific cases in which Kempson argues it to be necessary to allow reasoning to play an essential role in syntax, the reason based analysis offered is both empirically inadequate and unnecessary. In each case an alternative explanation is possible which is based upon the assumption that syntax is contained within an encapsulated
2. Preliminaries:

Before looking at Kempson's arguments, it is worthwhile to consider what means to claim that syntax is independent of reasoning, i.e. what is at issue. The first thing to note is a fairly obvious point, namely that even on theories such as those of Chomsky or of Fodor which maintain a principled distinction between syntax and general reasoning processes, there must be some interaction between the two or there would be no way to connect linguistic utterances with non-linguistic knowledge. To take a simple example, consider the name "John". Syntactically (assuming for the moment that this notion is meaningful), "John" is a noun phrase, perhaps one associated with a discourse marker in a (broadly) syntactic theory of discourse representation. If there were no connection between such a syntactic representation and reasoning, there would be no way to associate this noun phrase with a real world individual, and consequently no accounting for the intuition that a sentence containing the name "John" is under normal circumstances understood to be about some person in the real world. At the very least, then, there must be a way of mapping between linguistic (syntactic) representations and other forms of world knowledge. This much is true of any theory which separates some portion of linguistic knowledge off from processes of reasoning (including Kempson's theory, in which the lexicon is taken to be purely syntactic), and so is not at issue.

The second point worth noting is that under nobody's theory is it the case that every aspect of interpretation assigned to an utterance of a sentence is part of its linguistic meaning. Again a simple example can be used to illustrate the point. Consider the sentence "John is here". If I utter this sentence to another person at 9:00 pm on January 8th 1993 while sitting in my kitchen, my audience will likely interpret my utterance as meaning (or at least as entailing) that John is sufficiently close to Christopher Tancredi's kitchen at 9:00 pm on January 8th 1993, and yet the specific time and location assigned as part of this interpretation clearly are not part of the meaning of the sentence "John is here" (though on standard theories of indexicality these aspects of the interpretation are at least partially determined by the meaning of the sentence -- cf. Kaplan (1977)). Context here plays an ineliminable role in assigning at least certain aspects of interpretation to an utterance, though this would likely be conceded by even the most radical syntactic separatist, and particularly by Chomsky and Fodor. Again, this type of interaction between syntax and reasoning is not at issue. Under standard explanations of indexicality, syntax determines certain aspects of the meaning to a sentence, though the full interpretation of a sentence as uttered on a given occasion is dependent on information which can only be supplied by a process of reasoning used to identify relevant contextual information from the context of
utterance. In short, there can be no doubt that reasoning plays some role in interpreting utterances.

In view of the above considerations, it is clear that we must keep the question of how syntax and reasoning interact separate from the question of whether each plays a role in interpreting utterances. The answer to the latter question is clear -- if there are separate processes involved in syntax and in reasoning, both must contribute to interpretation. The answer to the former question, on the other hand, is far from obvious, and it is precisely here where disagreement arises. According to Chomsky (1992), the interaction between syntax and reasoning occurs entirely at the interface level(s) between the two. Syntactic processes are thus independent of reasoning processes, each only potentially having access to the output of the other. For Fodor, the interaction between syntax and reasoning is rather constrained to being a one way interaction -- syntactic information can be utilized as the input to processes of reasoning, but reasoning cannot be used as an input to syntax. That is, syntactic processes operate independent of and logically prior to processes of reasoning, with the result that processes of reasoning cannot in any way affect the internal workings of the syntactic component, and hence cannot alter the syntactic representation assigned to an utterance.

The view of linguistic interpretation espoused by Kempson differs radically from each of the two views outlined above. While Kempson maintains a distinction between aspects of language interpretation which are linguistically encapsulated and aspects which are not, for her the only aspect of language which is linguistically encapsulated is the lexicon. Constructing a “syntactic” representation and corresponding interpretation for a sentence is all part of a general process of reasoning applying to the output of the lexicon. Such a revised view of language interpretation could take either of two forms. In its weakest form it would amount roughly to a re-labeling of constraints argued by Chomsky, e.g., to be syntactic as constraints on reasoning. In such a weak form it would still be possible in principle to distinguish between two sub-types of constraints on reasoning, and so a distinction between reasoning and syntax could be maintained though it would no longer be one of principle. Certain processes of reasoning could be included in a list labeled syntactic reasoning, while others could be included in a list labeled non-syntactic reasoning. The main substantive difference between the weak position and the positions argued for by Chomsky and by Fodor would be that the weak position allows “syntactic” and “non-syntactic” reasoning processes to apply in any order and interact freely. As will become clear below, the arguments that Kempson gives can at most be seen as arguing for this weak form. A stronger form of the revised view of language interpretation would be that there is no distinction between processes involved in “syntactic” reasoning and those involved in general reasoning, i.e. that any process that can be involved in the one can also be
involved in the other. Judging from the form of explanation Kempson gives for certain types of island constraints and for traditional "syntactic" violations in general, it would appear to be this stronger position that she wishes ultimately to establish. The goal of this paper is to show that the phenomena considered by Kempson do not force us to adopt the revisions to a Chomskyan or Fodorian view of language she argues for in either its strong form or its weak form. With this as background, I turn now to consideration of the specific arguments which Kempson gives for holding that syntax and reasoning are inseparable.

3. The arguments:

3.1. Pronominal Interpretation

The first argument that Kempson gives against a Chomskyan/Fodorian view of language is based upon the interpretation of pronominal elements. As is widely acknowledged, there are various ways in which the interpretation of a pronoun can be connected to some antecedent expression. Kempson gives the following list of uses of pronouns which have been argued in the literature to involve distinct syntactic relations -- bound variable pronouns, discourse coreferent pronouns (Reinhart 1983, 1986), E-type pronouns (Evans 1980, Heim 1982), donkey-type pronouns (Kamp 1981, Heim 1982), and pronouns of laziness (Karttunen 1968, Cooper 1979). In the analyses cited, the connection between the pronoun and its antecedent is presumed to be linguistic, in that it is directly represented at some level which is independent of processes of reasoning. Against this presumption, however, Kempson notes that certain uses of pronouns appear to be licensed by the existence of referents which can only be established as existing through a process of reasoning. As illustration, she gives the following example:

(1) Joan isn't so anti-private practice as not to have any private patients, but she's always complaining that they treat her as a servant.

The problem posed by such an example is that of determining the interpretation of the italicized pronoun they. Intuitively, the interpretation assigned to this pronoun is Joan's private patients. However, there is no expression which can serve as antecedent for the pronoun that has this as its interpretation.

The example given in (1) does not by itself establish the need to posit any radical interaction between syntax and processes of reasoning, as Kempson herself is quite aware. In particular, there is no reason to assume that the pronoun needs to have a linguistic antecedent. Under anybody's analysis of pronominal interpretation, it is possible for the "referent" of a pronoun to be given non-linguistically, a relation which can be made consistent with the modularity view of language by allowing a mapping between abstract markers which are contained entirely within the linguistic module
and representations of individuals given at a higher level of abstraction, say that associated with our general reasoning processes. For the example at hand, allowing the "antecedent" to be given by a process of reasoning would be conceptually no different from allowing the antecedent to be identified visually, or by pointing. Since it is within our powers to associate linguistic expressions with other cognitive representations (e.g. with visual images of objects), it makes no theoretical difference how that other cognitive representation comes about. In particular, it makes no difference whether such a representation comes about as the result of some process of reasoning, such as double negation elimination, fueled by the interpretation of some linguistic expression as in (1).

While the sentence in (1) is relatively unproblematic on anyone's analysis, Kempson gives a further refinement of the example which does indeed appear to be problematic for a wide range of analyses. She argues that on standard assumptions the relation between the pronoun and its presumed antecedent in (1) must be represented within the linguistic module since such the pronoun can co-vary with a quantificational antecedent in examples such as (2) below.

(2) Every one of my friends who isn't so anti-private practice as not to have any private patients is complaining that they treat her as a servant.

By assumption, the interpretation associated with they is (roughly) her private patients. This example is similar to (1) in this respect. It differs from (1) crucially, however, in that the set of patients which is relevant co-varies with the friend chosen. Consequently, the pronoun cannot simply be associated with some set of individuals identified once by some reasoning process and left at that, or there would be no way of explaining the co-variance. If we assume (as is standard) that the interpretation of a pronoun as co-variant is sufficient to establish a purely linguistic relation between the pronoun and some antecedent, and if we furthermore accept Kempson's contention that the relevant antecedent in (2) can only be supplied via a process of reasoning (here, double negation elimination), then we would appear to have no choice but to accept Kempson's conclusion that general cognitive reasoning processes and linguistic processes are essentially interdependent, i.e. we have sufficient reason to adopt the weak view of Kempson's position outlined in section 2.

To avoid this conclusion, there are two tacks one could take. The first would be to argue, contra Kempson's assumption, that the interpretation assumed for the sentence in (2) is incorrect and that there is in fact no co-variation of the sort necessary in order for Kempson to make her argument. That such an approach might be made plausible can be seen by comparing the sentence in (2) with that in (3) below which differs only in that the pronoun they has been replaced with the expression private patients.
(3) Every one of my friends who isn’t so anti-private practice as not to have any private patients is complaining that private patients treat her as a servant.

Under such an analysis, whatever co-variation exists between the friends in question and certain subsets of private patients would not fall under the purview of variable binding, but could instead perhaps be related to a general process of plural interpretation. While such an analysis might be made to work, however, I will not choose to pursue this line of attack for the simple reason that the sentence in (2) would appear on an intuitive level to allow for an interpretation in which the co-variation which exists is more tightly constrained than it is in the case of quantifier/plural interaction (as in (3)).

The second tack one can take to avoid the conclusions Kempson reaches is to accept Kempson’s assumption that the interpretation of the pronoun they co-variates with choice of friends, but to argue that this co-variation is independent of the process of reasoning to which Kempson makes essential appeal. It is this approach that I will pursue. Kempson’s analysis is predicated on the assumption that the pronoun they in (2) is constrained to referring to existing individuals, with the identity of those individuals determined through a process of reasoning, in the cases under consideration the process of double negative elimination. As support for this claim, she offers the example in (4) below in which this reasoning process is unavailable, and “… no suitable interpretation for the pronoun they as (indirectly) dependent on every friend of mine … can be constructed.”

(4) #Everyone of my friends who doesn’t have any private patients is complaining that they misuse her time.

Since it is not generally possible to reason from the fact that someone does not have any private patients to the conclusion that there are specific private patients that she doesn’t have, the relative clause of the subject does not license one to conclude that there are any private patients, and hence, the argument goes, there is no way of establishing an antecedent for the pronoun they to refer to.

Since availability of an antecedent for the pronoun they is by hypothesis dependent solely on the availability of a process of inference from which one can conclude that some referent exists for they to refer to, it follows that no change in the sentence in (4) which does not affect such inferences should be able to alter the interpretability of the pronoun they. When we look at the example in (5), however, we see that interpretability of this pronoun appears to be independent of whether such a reasoning process is available.
(5) Everyone of my friends who doesn’t have any private patients (boasts that she) is not complaining that they misuse her time.

The only difference between (4) and (5) is that the latter contains an added negation with scope over the pronoun they which is lacking in the former. This difference suffices to license a coherent interpretation of the sentence despite the fact that it does not make available any antecedent “referent” for the pronoun to pick up as its interpretation, neither via a process of reasoning nor in any other way. The pronoun in (5) appears to be independently interpretable as dependent (in some fashion) on the phrase any private patients, a dependence which has nothing to do with a process of reasoning of the sort Kempson argues is necessary in (2). Since reasoning plays no role in interpreting the pronoun in (5) however, the basis for claiming that it does play such a role in (2) is severely undermined; establishing a “referent” for the pronoun is not a prerequisite for assigning it an interpretation, and so there is no reason to assume that the reasoning procedure Kempson appeals to for establishing a referent for the pronoun in (2) is involved in the process of linguistically interpreting the pronoun.

Note that from the perspective just sketched on pronominal interpretation in the examples above, a perfectly coherent explanation of the contrasts between (1), (2) and (5) on the one hand and (4) on the other can be given without incorporating processes of reasoning into the syntax (or vice versa). In all of the examples, it is linguistically perfectly acceptable for the pronoun they to be interpreted (roughly) as her private patients. However, interpreting the pronoun in this fashion in (4) will imply that each relevant friend has private patients, while the relative clause of the quantified expression every friend in that example explicitly prohibits such a possibility. The oddness of (4) can then be seen as identical in kind to the oddness of a sentence such as Every unmarried man loves his wife, in which a presupposition of the sentence as a whole (that the men have wives) is contradicted within one of its subconstituents. The oddness is explained not be blocking any interpretation of the sentence, but rather by assigning the sentence a perfectly acceptable linguistic (i.e. partial) interpretation, but one which cannot be further given a coherent full interpretation by processes of reasoning.

The picture suggested by the above discussion is that co-vari ance between the pronoun and the relevant friend in (2), (4) and (5) derives from the linguistic representation of the sentences in question, and that the interpretation of pronouns at this level is independent of any associations made between the pronoun and individuals in the world, or of any representations of such individuals in the mind of a given speaker that are external to the language faculty. What remains to be done is to give a plausible analysis of pronominal interpretation which will account for the availability of a co-variant interpretation for the examples in (2)
and (5) as well as for the unavailability of any such interpretation for (4). The examples strongly suggest an analysis of the pronouns in question as E-type pronouns, though it would take me too far afield to do justice to such an approach here. What is significant for our purposes is not the actual analysis itself but rather the independent need for such an analysis to account for the sentence in (5). For this example, no non-linguistic process of determining a particular group of real-world individuals referred to by the pronoun can play any role since there are no such individuals. The co-variation of the pronoun with a preceding quantified expression will thus have to be explained by purely syntax-internal connections between the pronoun and (some phrase contained within) the preceding quantified expression. If such an explanation is necessary for (5), though, there would appear to be little if any reason why such an explanation couldn't also be given for (2) as well. But if that is so, then Kempson's first argument for an obligatory interweaving of reasoning and syntax is defused.

3.2. Linkage through World Knowledge

The second argument Kempson offers to establish the need to incorporate reasoning processes into the traditional realm of syntax comes from consideration of sentences like the following.

(6) The fridge is broken. The door needs mending.

The connection felt to hold between the definite NPs the door and the fridge is clear -- the door in question is most naturally taken to be the door to the fridge under discussion. According to Kempson, this connection itself is only possible "in virtue of the knowledge that fridges have doors." (1992a,p.3) As Kempson notes, including such knowledge in the lexical (i.e. purely linguistic) representation of the words in question would be akin to putting all knowledge of the world into the lexicon, a move which would make the question of whether there is a linguistic faculty independent of processes of reasoning completely moot. Supposing that such knowledge is not represented in the lexical entries for these words, however, leaves us with the problem of accounting for the connection between the two definite NPs in (6). The problem is once again compounded, according to Kempson, by the fact that such a connection persists in sentences which require a bound variable like reading as in (7).

(7) Every fridge needs the door mend[ed].

While it is undeniable that a connection of the type Kempson identifies is felt to exist, it does not follow from the existence of such a connection that real world knowledge plays any role in establishing the connection. If the connection can be established independently of world knowledge of the type in question, then the example simply fails to be problematic. That examples such as (7) are indeed unproblematic for a Chomskyan or Fodorian approach to language can be seen by considering a parallel example in which
real world knowledge could not possibly be utilized to establish the connection in question, as in (8).

(8) Every sky hook needs the main jat replaced.

As with (7), there is a clear relation felt to hold between two of the expressions in the sentence, in the present case the relation being that sky hooks have main jats. This connection could not possibly derive from real world knowledge, however, since there is no such thing (as far as I am aware at least) as either a sky hook or a jat. The connection is no less strong in the case of (8) than it was in the cases of (6) and (7), however. This would appear to be an example in which Kempson has reversed the cart and the horse. Rather than real world knowledge being used in (7) to fix an otherwise syntactic relation of variable binding, it would appear that an independently available syntactic relation of variable binding is being exploited by reasoning processes to infer a connection between the real world objects.

3.3. Ellipsis resolution

The final one of Kempson’s arguments that general processes of reasoning play an ineliminable role in what has traditionally been held to be the realm of syntax pertains to ellipsis, about which Kempson says the following:

"We appear to need to define concepts of locality, c-command, etc. over configurations licensed both by grammar-internal processes and by general cognitive processes. There is evidence that this is the right direction in which to look for a solution. Elliptical processes display the underdeterminacy of natural-language expressions vis a vis the interpretation assigned to them even more dramatically than anaphora, but are yet subject to the so-called "island" constraints familiar as grammar-internal constraints (cf. Morgan 1973).

Kempson’s comments presumably are meant to hold for ellipsis processes in general, though since she focuses her main attention on Bare Argument Ellipsis (BAE) I will restrict my consideration to this construction. The sensitivity of BAE constructions to traditional syntactic island effects mentioned above is illustrated in (9).

(9) A: Joan visited the woman who likes Bill.

B: Mary too.

a. Mary visited the woman who likes Bill too.

b. Joan visited Mary too.

c. #Joan visited the woman who likes Mary too.

Here, the BAE sentence in B’s response can be interpreted either as in (9a) or as in (9b), but not as in (9c). The reason for the distinction in (9) would appear to be related to the fact that in
(9c) Mary is embedded in a syntactic island (here, a relative clause), while in (9a) and (9b) it is not, and indeed further examples can be readily created to show that this correlation is quite strong. However, as Kempson notes, assigning an interpretation to a BAE sentence such as (9a) involves some degree of reasoning, as one would expect of a typical pragmatic process but not of a purely syntactic process. The general problem, as she states it, is that “from a single ... constituent, with no structure projected by the singleton ... itself, an interpretation or set of interpretations is nonetheless projected which has all the structural properties one would associate with a structural configuration associated with a lexical string.” She furthermore observes that BAE “appears to straddle the syntax-discourse boundary in having many of the properties of discourse phenomena. It has all the properties criterially fitting a pragmatic account -- the input information presented by the string very considerably under-determines the interpretation assigned to it; it does not ... occur sentence internally at all, conjunction apart; and it occurs across speakers.”

As before, the data presented (here showing sensitivity of BAE to island effects) are uncontroversial. Furthermore, there can be no question that the process of determining the interpretation intended for an utterance such as B’s response in (9) involves a pragmatic process. However, it does not follow from these facts that the pragmatic process itself is responsible for the island effects, an assumption which would appear to be implicit in Kempson’s reasoning. Furthermore, even if an analysis can be given of (9) which explains the island violations in terms of pragmatic processes, the examples do not pose a problem to a Chomskyan or Fodorian view of language unless such an analysis is the only kind possible. To defuse this final argument, then, it will suffice to demonstrate that the island effects in (9) can be accounted for without abandoning the distinction between syntax and reasoning.

To give an account of island effects in ellipsis, I will employ the analysis of ellipsis developed in Tancredi (1992). There, I argued that ellipsis is best handled as optional phonological deletion of deaccented material. While deaccenting is not constrained by sentence level syntax, I argued that in order for a sentence containing deaccented material to be felicitous it has to meet an identity condition which can be summarized roughly as follows: an expression $x$ can be deaccented (and hence deleted) in an active context $c$ only if $c$ contains an expression $y$ which is syntactically identical to $x$. I assume that the active context of a given discourse will minimally include the Logical Forms of recent utterances in that discourse. Given these assumptions, the role that pragmatics plays in restricting the interpretation of ellipsis sentences can be seen to be indirect. While an ellipsis sentence such as Mary too in (9) can have any of an infinite number of syntactic representations, the only such representations which will be felicitous in a given active context are those in which the phonologically deleted material is identical to something else
contained in that context. Thus the felicity condition on deaccenting can effectively serve to disambiguate ellipsis sentences.

This way of viewing deletion processes does not directly answer the question of why there are island effects in BAE sentences such as that in (9). However, in order to explain these, we need only add one assumption -- that in BAE sentences, what gets deleted must form a single constituent. To see how this will give us an account of island effects, consider once again the example given in (9) taken from Kempson. If deletion can only apply to a single constituent in BAE sentences, then in order to generate the interpretations given in (9a-c) we must assume that the input representations are equivalent to those given in (10a-c) respectively, where in the latter two representations Mary is assumed to have raised from its underlying position and adjoined to the matrix sentence.

(10) a. Mary [visited the woman who likes Bill] too.
    b. Mary, [Joan visited e] too.
    c. #Mary, [Joan visited the woman who likes e] too.

In (10), each of the bracket phrases forms a constituent, a VP in (10a) and an S in (10b,c). All of the bracketed expressions in (10) further satisfy the felicity condition on deletion: in each case, the bracketed phrase which is to be deleted is already instantiated in the context. (For an explicit formal definition of instantiation, see Tancredi (1992), (1993).) Since the representations in (10) are the only ones which satisfy the hypothesized constraints on deletion, the question of what interpretations are available for B's utterance of Mary too in (9) reduces to the question of which of the representations in (10) are well-formed. But here there is a clear distinction between (10a,b) on the one hand and (10c) on the other: only the former are syntactically well-formed, (10c) violating one of the syntactic island constraints. Since (10c) is syntactically ill-formed, and since this is the only representation of Mary too which could satisfy the constraints on deletion and also be semantically interpreted as in (9c), it follows that attempting to interpret Mary too as in (9c) should give rise to syntactic island effects because they involve actual syntactic island violations. There is thus no need to try to build syntactic islands into the pragmatic analysis of disambiguation. The effects follow directly from independent constraints on deaccenting and deletion.

The viability of the analysis just sketched for interpreting ellipsis sentences makes interpretation of sentences like Mary too in (9) unproblematic within an approach to linguistics which encapsulates linguistic knowledge and reasoning as a faculty separate from faculties invoked in general processes of reasoning. Constraints on deaccenting (and hence on deletion) play the role of bridging the gap between syntax and reasoning by placing a constraint of formal syntactic identity between an expression which
is deaccented (or deleted) and some previously occurring expression in the active context. This bridge, however, respects the directionality inherent in an approach to language such as Fodor's— it is a case of a linguistic representation being utilized by a process of reasoning to determine discourse felicity, not of processes of reasoning being employed to construct linguistic representations. It also respects the constraint inherent in Chomsky's approach to language, in which reasoning processes and linguistic processes interact only at the interface level(s) between the two. The analysis thus makes it possible to capture both syntactic constraints and pragmatic effects involved in ellipsis sentences without having to abandon the distinction between syntax and reasoning. The third and final of Kempson's arguments thus fails to establish the need to abandon a broadly Chomskyan or Fodorian view of language.

4. Conclusion:

The main question I have addressed in this paper is the question of whether or not it is possible to maintain a strict separation between syntactic processes and processes of general reasoning, a distinction argued for most forcefully by Chomsky and Fodor. I have examined three specific objections to such a view of language given by Kempson, and shown that none of these objections forces one to abandon the distinction in question. In doing so, I have also pointed out problems for the specific analyses offered by Kempson for some of the cases she considers problematic for a Chomskyan/Fodorian view of language, while offering (sometimes sketchy) alternative analyses within a framework which assumes that syntax is embedded in a linguistic faculty which is distinct from processes of general reasoning. In doing so, I have not refuted Kempson's claim that syntax and reasoning are non-distinct, nor do I see a straightforward way of doing so. By refuting the arguments Kempson gives for abandoning a division between syntactic processes and processes of reasoning, however, I have removed the primary motivation for her claim. If there is a good reason to abandon a Chomskyan or Fodorian view of language, that reason has not yet been given. The ball is back in Kempson's court.

Bibliography


Karttunen, L. (1968) "What do Referential Indices Refer to?", Santa Monica publication no. P-3554.


Kempson, R. (1992b) "Bare Argument Fragments and Gapping: Natural Language Interpretation as Labeled Natural Deduction" (second draft of Kempson (1992a)).


