Givenness and Maximize Presupposition

Some recent approaches to information structure (Sauerland 2005, Wagner To appear) suggested that there is a relation between marking given versus new and the Maximize Presupposition maxim of Heim 1991. This paper develops a more general account of givenness in terms of Maximize Presupposition which does not rely on a particular grammatical relation, such as the relation between prosody and the semantic interpretation (e.g., Selkirk 1995, Schwarzschild 1999, Wagner 2005, Krifka To appear). Instead I argue that the semantic component performs a global comparison over a reference set (Reinhart 1995, Fox 1995, Reinhart 2006) defined as a set of derivations based on the same numeration (Chomsky 1995) and the same assertion. The reference set is thus sensitive to whatever the grammatical tools for marking givenness in a particular language are. This allows us to cover a cross-linguistically more divergent set of data than the data previously considered.

**Empirical Motivation:** In Czech, there is a direct relation between the word order and the information structure. In general, given elements must linearly precede new elements. The precedence constraint usually operates on a syntactic domain corresponding to a proposition (type s,t). The required word order is achieved by movement. The interesting question is what happens in a domain where movement is blocked, such as a coordination. As seen in (2-a) and (2-b) (bf = given), even within a coordination a given DP must precede a new DP.

1. Na programu byla diskuse o nové učitelce. ←− context
   ‘The topic of the program was a discussion about a new teacher.’
2. a. Učitelku a žáky to překvapilo. ←− √DP & DP
   ‘The teacher and students were surprised by it.’
   b. #Žáky a učitelku a to překvapilo. ←− # DP & DP
   ‘Students and a teacher were surprised by it.’

Interestingly, an utterance with such a coordination is felicitous only if there is no new element preceding the given conjunct, (3). Otherwise, the given conjunct must realized as a pronoun, (4).

3. #To se nelíbilo ani učitelce ani žákům. ←− # new > DP & DP
   ‘Neither a teacher nor students were happy about it.’
4. To se nelíbilo ani jí ani žákům. ←− √new > pronoun & DP
   ‘Neither she nor students were happy about it.’

On the other hand, coordination verbs do not show any such restriction, (6). This is surprising because in other respects given VPs behave exactly like given DPs: a given VP must precede a new VP, (7), and a VP which is not trapped in a coordination must move, (8).
Many of my friends have recently decided to change their lifestyle...

a. Tak jedna moje kamarádka bude víc čist. — context
   so one my friend will more read
   ‘For example, a friend of mine will read more.’

(6) A její přítel bude [čist a překládat]. — new > VP & VP
   and her friend will read and translate
   ‘And her boyfriend will read and translate.’

(7) #A její přítel bude [překládat a čist]. — # VP & VP
   and her friend will translate and read
   ‘And her boyfriend will translate and read.’

(8) Čist bude (taky) její přítel __.
   read will also her friend
   ‘Her boyfriend will read as well.’

Proposal: I argue that the coordination (and other) facts can be accounted for in terms of global comparison performed over a reference set defined as the set of derivations that have the same numeration and the same assertion. I argue that elements can be marked as given either (i) by their lexical entries (pronouns), or (ii) they must be marked by a given operator introduced in the interpretive component. Since in Czech given elements are not usually marked as given in situ, I propose to define the given operator as a recursive binary operator which applies to a constituent B and marks B’s sister A as given. The operator terminates on a saturated semantic type, (9).

(9) \[ [G](B) = \begin{cases} 
\lambda A_\alpha : Given(A).[[G]][[B A]] & B \text{ is of type } < \alpha, \beta > \text{ for some } \alpha, \beta \\
B & \text{otherwise}
\end{cases} \]

The operator forces given elements to be structurally higher than any new element within a propositional domain. In a coordination, a given element must precede a new element (this order is more optimal with respect to Maximize Presupposition). If there is no new element preceding the coordination, the presupposition is maximized by inserting the operator below the given element. If there is, however, some new material structurally above the given material, the structure is suboptimal (the DP is either not marked by the operator, or a new element is marked as given).

In case of a nominal coordination, the non-pronominalized structure is not felicitous because there is a better structure available, namely, a structure in which the given DP is replaced by a pronoun (pronouns introduce a presupposition lexically, no operator is needed). In contrast, verbs do not have any anaphoric counterpart, thus there is no better structure to be considered and the suboptimal structure is the best structure the grammar can derive.

The question that arises is how pronouns and DPs can belong to the same reference set. I argue, following Elbourne 2005, that pronouns are elided DPs. [Alternatively, they are an overt realization of φ-features (cf. Heim To appear for a treatment of bound pronouns)]. We can thus see replacing a DP with a pronoun as a part of a more general strategy available for languages to avoid ungrammaticality, e.g., avoiding island violations or feature mismatches by VP-ellipsis or sluicing (e.g., Ross 1969, Merchant 2001, Fox & Lasnik 2003). If we adopt the system developed in this paper we can not only better explain empirical facts, but we also get a different perspective which can bring accounts of the information structure closer to other domains of linguistics studies.