

The interaction of clausal syntax, discourse roles, and information structure in questions

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Linguistic markers of speech acts or illocutionary force, such as the morphosyntactic reflexes of questions, have traditionally been treated as indicators of pragmatically-salient information, with little relevance to clausal syntax. However, research on the syntax of the left (or right) periphery of the clause has resulted in proposals for a number of syntactic projections for clausal elements. Of these, two play a fundamental role in the contrast between a declarative and an interrogative sentence: the Speech Act Phrase (SAP) (Rizzi 1997, Rivero 1994, Cinque 1999), and an Evidentiality Phrase (EvidP) (Cinque 1999, Speas and Tenny 2003). Speas and Tenny 2003 have argued that: (i) there is a small and highly constrained set of *grammaticalized* (and *grammaticalizeable*) speech acts; (ii) this is true because they are constrained by principles of grammar; and (iii) there is a speech act argument (speaker /hearer) associated with the SAP, and an evidential argument associated with the EvidP. The *discourse roles* of speaker and hearer have been recognized as salient in grammar (Sells 1987, Kamp 1984, Ross 1970). We argue in this vein that the essential *grammatical characterization* of the declarative/interrogative contrast lies in how they mediate the relation between the speech act argument and the evidentiality argument, and that this makes predictions for some interesting facts in the domain of information structure.

Speas and Tenny have argued that basic syntactic principles constrain projections of pragmatic force as well as the inventory of grammatically relevant pragmatic roles. It appears that languages never

grammaticize more than four different illocutionary forces (which is quite surprising given the potentially infinite numbers of speech act types). They argue that familiar syntactic and lexical principles operate on primitives of a *Sentience Domain*, which includes the Speech Act Phrase and the Evidentiality Phrase, and restricts the pragmatics-syntax interface. Speas (forthcoming) has argued that evidentiality is also grammaticized, permitting only four general classes of evidentiality. This grammaticized *discourse role* of the evidential argument will be shown to be fundamental to question formation.

Sentences of natural language invoke an evaluator of propositional truth, or the sentient individual who is responsible for the truth of a proposition. This is the evidential argument, representing a *seat of knowledge*. Evidential verbs (*appears*, *seems*) and adverbs (*evidently*, *apparently*), refer to it:

- (1) The bicyclist has **evidently_s/apparently_s** escaped injury in the crash.
- (2) The bicyclist **appears_s/seems_s** to have escaped injury in the crash.

When the sentence is switched from declarative to interrogative, evidentials, *in a reading where they maintain their strictly evidential sense*, shift from being speaker-oriented to being hearer-oriented (indicated by the subscript *h*). In the interrogatives the hearer is the one who is able to tell what appears to have happened to the bicyclist; and it is the hearer who is granted that responsibility:

- (3) Has the bicyclist **evidently_h/apparently_h** escaped injury in the crash?
- (4) Does the bicyclist **appear_h/seem_h** to have escaped injury in the crash?

In a declarative sentence it is the speaker who knows the truth of the proposition; in an interrogative sentence it is the addressee who can evaluate the truth of the proposition. The speech act relation simply mediates between the discourse participants of speaker and hearer, and the *seat of knowledge* or evidential argument invoked in the sentence. We can represent these two speech acts as differing in their assignment of the *seat of knowledge* to the participants in the discourse (represented by underlining the appropriate person):

- (5) declarative: [Speaker, Hearer]
- interrogative: [Speaker, Hearer]

Under the view taken here, the grammatical switch of a declarative sentence to an interrogative sentence is a simple flip of the evidential argument with respect to speaker and hearer.

Taking as a jumping-off point this view of question formation as a negotiation between the discourse roles of speaker, hearer, and the evidential role, the goal of this paper is to extend this work into the area of information structure. In information structure such things as shared versus speaker

knowledge, and given versus new knowledge, come into play. These kinds of distinctions seem to be related to the speaker and hearer trading the evidential role back and forth, and therefore (under this approach) must be an integral part of question formation.

Consider what happens in the following sentences. In the declarative sentences in (8), the indefinite NP is ambiguous between: (a) a reading where there is one particular individual referred to (doctor or artist) and (b) a reading in which the NP is not referential:

- (6) Dudley wants to marry a Swedish doctor.
Marisa wants to study an 18th century artist.

In the (a) readings, the identity of the doctor or artist is known to the speaker but not disclosed to the hearer. In the (b) readings, neither the speaker nor the hearer knows the identity -- because it has not been identified. In (8) the indefinite NPs reflect speaker knowledge. When the sentences in (8) are changed to questions, and the seat of knowledge is passed to the hearer, the reading referring to a particular individual is no longer available:

- (7) Does Dudley want to marry a Swedish doctor?
Does Marisa want to study an 18th century artist?

Here the speaker has encoded the *doctor* and the *artist* as indefinite NPs, but does not have a particular individual in mind. If she did, she would be more likely to say:

- (8) Is the woman Dudley wants to marry a Swedish doctor?

These facts illustrate the tripartite interaction of the evidential discourse role, the syntax and semantics of question formation, and information structure. We argue that they hinge on this link between the evidential argument and the speaker or hearer, and furthermore that that link is essential to an understanding of the nature of questions.

References

- Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A cross-linguistic perspective*. Oxford University Press. 275 pp.
- Kamp, J.A.W. 1984. A Theory of Truth and Semantic Representation. In *Truth, Interpretation and Information*, ed. J. Groenendijk, T. Janssen, and M. Stockhof, 1-41. Foris. Dordrecht.
- Rivero, Maria-Luisa. 1994. Clause Structure and V-movement in the Languages of the Balkans. *Natural Language and Linguistic Theory* 12(1):63-120.

- Rizzi, Luigi. 1997. The Fine Structure of the Left-Periphery. In *Elements of Grammar: A Handbook of Generative Syntax*, ed. L. Haegeman, 281-337. Dordrecht: Kluwer.
- Ross, John R. 1970. On Declarative Sentences. In *Readings in English Transformational Grammar*, ed. R. A. Jacobs and Peter S. Rosenbaum. Waltham, Mass.: Ginn.
- Sells, Peter. 1987. Aspects of Logophoricity. *Linguistic Inquiry* 18(3):445-479.
- Speas, Peggy. (2000, forthcoming). *Evidentiality, Logophoricity and the Syntactic Representation of Pragmatic Features*. Presented at University College Workshop on the Syntax-Pragmatics Interface. Forthcoming in *Lingua*.
- Speas, Peggy, and Tenny, Carol. 2003. Configurational Properties of Point of View Roles. In DiSciullo, A. (ed.), *Asymmetry in Grammar*. Amsterdam: John Benjamins. 315-344.