The German Incredulity Response Construction and the Hierarchical Organization of Constructions

The Incredulity Response Construction (IRC) in (1) has been studied for English in Akmajian (1984) and for English and German (G-IRC) in Lambrecht (1990) (L90). Akmajian (1984) tries to reduce the properties of the English IRC to a widely used phrase structure rule and general principles of the grammar. L90 argues against this approach pointing out irreducible construction-specific properties. L90 analyzes the IRC as a *formal idiom* (Fillmore et al. (1988)). In recent CG work, which had a tremendous impact on Head-Driven Phrase Structure Grammar (HPSG, Pollard and Sag (1994)), much attention has been directed to the hierarchical organization of constructions and the inheritance of properties from more general to more specific constructions (Sag, 1997; Kay, 1998). Though Michaelis and Lambrecht (1996) give an hierarchy-based characterization of English exclamatives, they do not discuss the IRC.

We will refine L90's empirical observations about the G-IRC and show that it resists hierarchis of constructions, rather, it is easily captured by a simple construction schema.

L90 summarizes his analysis of the G-ICR in the schema in (2). TOP indicates that the entire construction is a topic, where NP and PREDP have to be topic constituents. The categorial differences between the two parts of the G-IRC and the predicative interpretation show that the G-IRC is not a coordination construction. We might alternatively assume that it is an instance of a subject-predicate construction (SPC, Michaelis and Lambrecht (1996)). This is problematic: First, infinitives in German do not accomodate overt nominative subjects.

Second, for non-verbal PREDPs, German requires an overt copula in SPCs, i.e., a copula construction (CopC). Empirical reasons against a CopC analysis include: The adjective *stutzig* (*suspicious*) occurs predicatively with the verbs *werden* (*get*) and *machen* (*make*), but not with *sein* (*be*) (Fleischer, 1989). Nonetheless, *stutzig* may appear in the G-IRC (4). Analogously, (5) has a process passive interpretation which is normally expressed with the copula *werden*, not *sein*. Thus, the non-infinitival instances of the G-IRC cannot be subsumed under a CopC.

Third, the NP in the G-IRC is more restricted than we would expect for an SPC subject: Expletives and quantified NPs are excluded (3). This exclusion follows from the requirement that the NP be a topic constituent. While this can be stated in a G-IRC schema, it is not part of the SPC and would not follow from classifying the G-IRC as a topic construction, because topics need not be nominative NPs nor construction-initial. We conclude that nothing is gained from ordering the G-ICR hierarchically below SPC.

Additionally, some negative polarity items (NPI) can occur in the PREDP, (6), namely those that can be licensed by simple downward-entailing elements such as *höchstens* (*at most*) (Zwarts (1997), (7)). This property is neither a consequence of the exclamative status of the G-IRC (8a) nor of its yes/no-question character (8b). Instead, NPI licensing has been assumed to follow from the logical form of a sentence (Linebarger, 1987), its entailment properties (Ladusaw, 1980), or its pragmatic characteristics (Israel, 1996). Independent of the approach, the formal diversity of NPI-licensing structures casts doubts upon an abstract NPI-licensing construction that subsumes all the different licensing contexts.

We conclude that the properties of the G-IRC can be expressed in a straightforward way in the form of a schema as (2), whereas it is impossible to derive them by inheritance from more general constructions. In an HPSG encoding, we therefore will not introduce a special subtype of *phrase* but rather add a *phrasal lexical entry* that expresses a refinement of (2).

(1) a. Ich und mir Sorgen machen?! b. Larry und Arzt?!
I and worry "Me worry?!" Larry and doctor "Larry a doctor?!"

(2) IRC: $_{\mathrm{TOP}}[\ _{\mathrm{NP[+nom]}}[\ldots]\ \textit{und}\ _{\textsc{Pred}\mathrm{P[+inf]}}[\ldots]\ ](_{S}[\ldots])$

(3) a. * Es und regnen?!
it and rain

b. * Niemand und diesen tollen Kuchen essen?!
No one and this wonderful cake eat "No one eat this wonderful cake?!"

(4) A: Als Maria auf einmal so spät nach Hause kam, habe ich mich schon gewundert.
"I wonderd when all of a sudden Maria came back home so late"

B: Was? Du und stutzig?!
What? you and suspicious

(5) Peter und von seinen Eltern geschlagen?!
Peter and by his parents beaten "What? Peter being beaten by his parents?!"

(6) a. * Peter und *sonderlich* freundlich zu ihr?!
Peter and especially friendly to her "Peter be friendly to her?!"

b. Peter und ein *Hehl* aus seiner Meinung machen?!
Peter and a secret of his opinion make "Peter make a secret of his op.?!"

(7) a. * Höchstens zwei Kollegen sind sonderlich freundlich zu ihr gewesen.
at most two collegues have especially friendly to her been

b. Höchstens zwei Kollegen machen ein Hehl aus ihrer Meinung.
at most two collegues make a secret of their opinion

(8) a. * Peter hat doch tatsächlich ein Hehl aus seiner Meinung gemacht!
Peter has as a matter of fact a secret of his opinion made

b. * Hat Peter ein Hehl aus seiner Meinung gemacht?
Has Peter a secret of his opinion made

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