We are primarily interested in the following questions:
• How can we and should frame semantics be integrated into a Sign-based Construction Grammar?
• Specifically, which notions developed at FrameNet are useful or necessary in SBCG accounts of constructions? And how should these notions be represented?

These questions were explored by a detailed case study of a specific English construction: in that X. We found that there are two-related in that X constructions, one which specifies a core argument of predicates of similarity, typicality, and uniqueness, and one which introduces its own predication (evokes its own frame) of ELABORATION.

2 In that X

In that is a clause-adjunct preposition phrase.

(a) His case is unique in that it involves much more money than other cases.

(b) The new proposal differs from the original one in that environmental effects are not taken into consideration.

(c) This report is important in that the authors give us the full picture of events.

(d) Internally, it is a PP, in selects a that-marked clause. It is idiosyncratic in that: (i) no other P selects a that-marked clause, (ii) it does not allow extraction of the that-clause in clitic or similar constructions.

The meaning is also idiosyncratic. We can get a starting idea from the Oxford English Dictionary definition:

in the fact that: in its being the case that, in presence, view, or consequence of the fact that, seeing that, as, because

These meanings (to be refined below) are not predictable based on any otherwise-recognized sense of in, nor its combination with a that-clause.

These syntactic and semantic facts must be specified constructually.

3 FrameNet and Frame Elements

The meaning of words and constructions according to FrameNet (FN):[1]

• Linguistic expressions evoke frames, like Giving, Filling, Abundance, or Similarity.

• Frames are descriptions of scenario, events, or situations and their constituent parts: the frame elements (FEs).

• Simple example: The Giving frame has DONOR, THEME, and RECIPIENT among its FEs.

[The chef handed [the bowl of stew] to the waiter]

FN recognizes three classes of FEs:

• Core: conceptually-central and/or salient participants or aspects of a frame. Frame-specific: DONOR, RECIPIENT, THEME, KILLER, FLOOR, etc.

• Peripheral: conceptually-necessary but non-salient aspects of a frame, such as TIME, PLACE, MANNER.

• Extrathematic: expressions which are syntactically dependent on a main-frame-evoking clause, but are semantically independent, often taking the main clause as a semantic argument. E.g., ITERATION, EXPLANATION, DEFINITE

[The chef handed dishes to the waiter] (several times)

One version of in that realizes a core FE in a limited number of frames; the other version realizes an extrathematic FE, i.e., evokes its own frame and modifies a clause.

4 Corpus study

Which sorts of frames does in that co-occur with? We looked at the most common collocates in the BNC.

different

similar

unusual

fortunate

other

important

unique

good

(2) a. Coordination by hierarchy is different in that the actions of similar elements (individuals, firms) is to some extent constrained.

b. Oral language differs significantly from written language in that it has a complex interactive nature.

c. Because it was constructed for a specific purpose, this text is fairly unusual in that there are few lexical clues to what the text might be about.

FN Similarity:

Two or more distinct entities are characterized as being similar to each other. The similarity may be based on appearances, physical properties, or other characteristics of the two entities. However, no such dimension has to be specified explicitly. Rather than specifying the dimension of difference, a DifferentiatingFACT may be mentioned.

FN Uniqueness:

An entity is judged unique, either in totality or with respect to having a particular Property or a DistinctifyingFACT.

• The specific FEs which in that realizes are DifferentiatingFACT in Similarity and DistinctifyingFACT in Uniqueness. These are types of a more general ParameterFACT FE. We call this ParameterFACT-expressing function specification.

• In these frames, there is what FN calls a core set: Either DifferentiatingFACT or Dimension may be mentioned. It is an alternative expression of the same semantic notion.

In nearly all other cases, in that did not realize a conceptually-necessary aspect of the frame it modifies. Instead, it provided specifications for why the predication it modified was appropriate by giving more details about the situation:

(a) An intelligence test may be too difficult for students in all test exams have very low scores.

(b) The mat is lucky in that he is more likely to leave the clinic with a diagnosis at the end of his first visit.

(c) The result was seen as crucial in that it provided Sandiford with a personal mandate to govern.

We posit a new extrathematic FE, ELABORATION, which evokes a frame of ELABORATION and takes as its argument the clause it modifies. We can locate the various FEs present from two perspectives: from the predicate modified (4a), and from in that (4b).

(a) [The result] was seen as crucial in that it provided Sandiford with a personal mandate to govern.

(b) [The result was seen as crucial] in that it provided Sandiford with a personal mandate to govern.

5 In that in SBCG

We present here one way to represent the FN categories of core vs extrathematic FEs in Sign-based Construction Grammar (2). First is the elaboration (extrathematic) version of in that. It evokes its own frame (elaboration-fr) and takes a clause as its semantic argument. It "selects" the main clause as the item it modifies. (see [2] on the select feature, and for full featural specification of clauses and that-clauses).

6 Topics for further research

• What sorts of frames can felicitously be elaborated upon?

• What other lexical items or constructions evoke the Linguistic,laboration frame?

• And in general: what other constructions would benefit from a similar application of Frame-semantic and FN methodologies?

References