Perspective on Causal Clauses
Isabelle Charnavel (Harvard)

Background and goal – Although it has long been known that perspective sensitive elements such as logophoric pronouns or long distance (LD) reflexives can occur in adjunct clauses (Clements 1975, Thráinsson 1976, Culy 1994, a.o.), no account of this possibility has been provided so far. The goal of this paper is to propose one by arguing that such adjuncts are intrinsically perspectival: an adjunct conjunction (e.g. *because*) expresses a relation (e.g. cause) between an argument A (roughly, the main clause) and its complement B established by a judge. The identity of the judge depends on the nature of A (event/state, proposition, speech act): ultimately, the correlations shown in the table (details below) show that the perspective parameter (the judge) can be analyzed as a silent argument of the conjunction that must be bound within its clause. This will be demonstrated based on the case study of causal clauses (with *because/since*) in English.

A \ judge:	speaker	attitude holder	event participant
VP event	x	x	x
proposition	x	x	
speech act	x		

Causal clauses attached to main clauses (*A because B*): speaker vs. event participant as judge
Intuitively, the causal clauses in (1) express two different types of causes (note: the notion of cause/reason itself will not be discussed; but see e.g. Lewis 1973): the adjunct in (1a) provides the reason for the event of Liz leaving, and the adjunct in (1b) the reason for my saying that this happened. Furthermore, only the speaker can be judge of the reason in (1b), but Liz also can in (1a).

(1) a. Liz left [*because* she was tired].   (reason for event according to Liz/the speaker)
    b. Liz left, [*since/because* her coat is not here].   (reason for assertion according to the speaker)

The difference between the nature of A in (1a) and (1b) can be evidenced in several ways (cf. Rutherford 1970, Sæbø 1991, a.o.; cf. Haegeman 2003 for conditional clauses). First, only (1a) can answer the question *Why did Liz leave?*. Second, scopal properties illustrated in (2) reveal that the causal clause in (1b) scopes higher than in (1a).

(2) a. i. Liz left *because* she was tired, *since* her coat is not here.   *since* > *because*
       ii. *Liz left *since* her coat is not here, *because* she was tired.   **because* > *since*
    b. i. Liz did*n't* leave *because* she was tired (but because she was bored).   *not* > *because*
       ii. #Liz did*n't* leave *since* her coat is not here (*but since I can't find her).   **not* > *since*
    c. i. *Half* of the students chose the course *because* it takes place in the afternoon.   *half* > *because*
       ii. *Half* of the students chose the course, *since* I have 20 study cards.   **half* > *since*
    d. i. Liz *must*$_{epistemic}$ have left *because* she was tired.   *must* > *because*
       ii. Liz *must*$_{epistemic}$ have left, *since* her coat is not here.   *since* > *must*
    e. i. {Is it/it is} because she was tired that Liz left {?/.}   question/cleft > *because*
       ii. *{Is it/it is} since her coat is not here that Liz left {?/.}   *question/cleft > *since*

Specifically, A can be a VP event (why did this happen?), a proposition (why is this true?), call it EvidP (cf. Cinque 1999, Speas & Tenny 2003, Speas 2004), or a speech act (why am I saying this?), call it SAP (cf. *idem,* Haegeman & Hill 2013). The high position of EvidP and SAP as compared to VP explains why only a causal clause modifying the VP can scope lower than negation, quantifiers, epistemics modals or questions/clefts, among others (*SAP > EvidP > quantifier/epistemic/negation… > VP*). Also, while *because* is unspecified with respect to its A, *since* can only modify SAP or EvidP (further differences between *because* and *since*, such as the presupposition/assertion status of B, cannot be detailed here). Moreover, examples like (3) show that SAP must be distinguished from EvidP: while the causal clause in (1b) can modify either (giving a reason for both the assertion and the truth of the proposition), those in (3) have to modify the speech act.

(3) a. Since you insist, let's go for a drink.   (reason for exhortation according to the speaker)
    b. Did Liz leave, since you know everything?   (reason for information request according to the speaker)

The scopal difference between causal adjunct clauses correlates with the identity of the causal judge: while only the speaker can establish the cause for her speech act or the truth of a proposition it expresses, the cause of an event can also be determined by the event participant. In fact, this has to be the case when A involves an intentional agent such as Liz in (1a): the reason for an intentional action (e.g. leaving) can only be directly known by its agent; the speaker, who lacks access to Liz's internal state, can only be based on indirect evidence like inference or hearsay (cf. evidential *apparently* in 4).

(4) *Apparently,* Liz left because she was tired.   (speaker as *indirect* judge of reason for event)

Thus, the judge of an intentional cause can either be the intentional agent (direct judge) or the speaker (indirect judge). The former perspective is disambiguated by the use of subject-oriented elements as illustrated in (5), and the latter by the use of speaker-oriented elements as shown in (6).

(5) a. Liz left because her ex-lover was _coming_ to talk to her.   (Liz = deictic center of come)

   b. Liz_i left because an _embarrassing_ picture of _herself_i was posted on social media.   (LD reflexive)

(6) a. Liz_i left because [_the poor woman_]_i was exhausted. (antilogophoric epithet, cf. Dubinsky et al. 1998)

   b. Liz left because _strangely_, she was already tired.   (evaluative adverb anchored to the speaker)

Note that not just intentional subjects, but also experiencer objects can be direct judges of causes.

(7) Airplanes frighten _Sue_ because they _might_epistemic crash.   (given _Sue_'s knowledge, cf. Stephenson 2007)

Conversely, only the speaker can be judge when the caused event involves non-rational participants like inanimates (8a). This is so even if the causal clause is low, e.g. outscoped by the subject (8b).

(8) a. _The tree fell_ because it was struck by lightning.   (reason for event according to the speaker)

   b. _No tree_i fell because it_i was struck by lightning.   no tree > because (cf. pronominal binding)

Causal clauses in attitude contexts - The scope and judge possibilities of causal clauses increase in the presence of attitude clauses: the attitude holder (_Paul_) can be the causal judge for the embedded event (9a: why did Liz leave?), or the embedded proposition (9b: why is it true that Liz left?).

(9) a. _Paul thinks that Liz left because she was tired._   think > because

   b. _Paul thinks that Liz left since her coat is not here._   think > since

The latter case is only possible if the attitude clause involves doxastic alternatives (cf. embedded epistemics, Anand & Hacquart 2013), _contra_ (10a). Also, the attitude holder cannot judge the cause of a speech act (10b): only EvidP and VP seem embeddable (cf. Zu 2015), not SAP (_pace_ Krifka 2014).

(10) a. # Paul is asking that Mary help him since she is a nurse.   *ask > since

   b. # Paul is asking Bill_i if Liz left since he_i knows everything.   *ask > since

Moreover, unlike in (8b), the identity of the causal judge (speaker vs. attitude holder) depends on the scope of the causal clause, which can either modify the main VP/proposition/speech act or the embedded VP/proposition. In the former case, the speaker has to be judge, as can be diagnosed by the use of an epithet referring to the attitude holder in the causal clause (see 11a, where the causal clause expresses the cause of the main VP event, i.e. Paul's thinking, vs. 11b where it is intended to express the cause of the embedded VP event, i.e. Liz's leaving). In the latter case, the attitude holder has to be judge, as evidenced by the fact that expressions in the causal clause must be evaluated by the attitude holder (see 12, where the matrix negation enforces the interpretation under which the causal clause modifies the embedded proposition, which requires the expression _the idiot_ to be Paul's evaluation).

(11) a. Paul_i thinks that Liz left because [_the idiot_]_i can't see her.   *think > because; because > think

   b. #Paul_i thinks that Liz left because she missed [_the idiot_]_i.   *think > because; #because > think

(12) Paul (#who loves Liz_k) does not think that she_k left since [_the idiot_]_k's coat is not here.

Thus, the causal judge must be in the minimal clause containing the causal conjunction. For this reason, I represent the causal perspective holder as a silent anaphoric argument x of the causal conjunction, bound within its clause (but not necessarily by the closest binder as shown by 8b).

(13) [[because/since]]^w= $\lambda x.\lambda B.\lambda A.$ in all worlds w' compatible with x's
        beliefs in w , B is the reason/cause for A in w'.
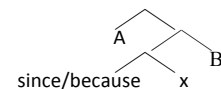
Thus, _A because/since B_ roughly means _A because/since B according to x_, and A can either be a speech act (SAP), a proposition (EvidP) or an event (VP); in the case of _since_, A must be a proposition or a speech act. Time permitting, the relation between the sizes of A and B will be discussed, based on the (non)licensing of main clause phenomena in B (Haegeman 2003, 2010, a.o).

In sum, the case study of English causal clauses reveals the reason why logophoric elements can appear in adjunct clauses: they include a parameter of perspective, which can license them.

References: **Anand & Hacquart 2013**: Epistemics and attitudes; **Cinque 1999**: Adverbs and functional heads: a cross-linguistic perspective; **Clements 1975**: the logophoric pronoun in Ewe; **Culy 1994**: Aspects of logophoric marking; **Dubinsky & Hamilton 1998**: Epithets as antilogophoric pronouns; **Haegeman 2003**: Conditional clauses: external and internal syntax; **Haegeman 2010**: The internal syntax of adverbial clauses; **Haegeman & Hill 2013**: The syntacticization of discourse; **Krifka 2014**: Embedding illocutionary acts; **Lewis 1973**: Causation; **Rutherford 1970**: Some observations concerning subordinate clauses in English; **Sæbø 1991**: Causal and purposive clauses; **Speas & Tenny 2003**: Configurational properties of point of view roles; **Speas 2004**: Evidentiality, logophoricity and the syntactic representation of pragmatic features; **Stephenson 2007**: Judge dependence, epistemic modals, and predicates of personal taste; **Thráinsson 1976**: Reflexives and subjunctives in Icelandic; **Zu 2015**: A two-tiered theory of the discourse.