The syntax of concessive clauses: evidence from exempt anaphora
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Summary: Charnavel (2018) argues that the acceptability of long distance anaphors in adjunct clauses can be used to diagnose the height of adjunct clauses. The goal of this paper is first to provide experimental support for this diagnostic and then to use it to probe into two types of concessive clauses in English, namely even though- and although-clauses. Our findings are twofold. The anaphor-based diagnostic indicates that just like because- and since-clauses, even though- and although-clauses attach at different positions. But this result seems to contradict more standard scopal tests (such as pronominal binding) suggesting that even though-clauses scope as high as although-clauses. We argue that this apparent conflict reveals that more fine-grained scopal distinctions are needed both between different types of adjunct clauses and between different types of DPs.

Background: It has been established (by Sells 1987, Pollard & Sag 1992, Reinhart & Reuland 1993, i.a.) that at least for some English speakers, anaphors like herself may take a long distance antecedent in certain logophoric contexts (thus being apparently exempt from the locality conditions imposed by Condition A of the Binding Theory). Charnavel (2018) argues that the logophoric contexts licensing exempt anaphors include eventive because-clauses (see 1a), but not evidential since-clauses (see 1b).

(1) a. Liz left because there was an embarrassing picture of herself going around.
   b. ?? Liz must have left, since there is an embarrassing picture of herself going around.

According to her, this difference is reducible to a difference in the attachment sites of the two adjunct clauses due to the binding behaviors of a covert causal judge argument. Specifically, she argues that subordinating conjunctions like because and since carry a covert judge variable j, which syntactically represents the reasoning individual establishing the causal relation. J also controls a logophoric operator OP at the periphery of the adjunct clause, which binds logophoric elements like exempt anaphors in its scope. If j is in the appropriate syntactic and pragmatic conditions to be bound by a superordinate event participant EP as in (2a), anaphors apparently long distance anteceded by EP are thus licensed because they are in fact locally bound by OP (see Charnavel 2018). Crucially, this configuration requires the adjunct clause to be in the scope of EP. This is the case of eventive because-clauses, which can attach below the matrix subject at the VP level (2a(=1a)), but not of evidential since-clauses, which attach above the matrix subject at EvidP (2b(=1b)).

(2) a. \[ \text{TP} \text{EP}_i \text{VP} ... [j; \text{because} [\text{OP}_i ... \text{herself}_i]]] \]
   b. \* \[ \text{EvidP} \text{TP}_i \text{EP} ... [j; \text{since} [\text{OP}_i ... \text{herself}_i]]] \]

Experiment: We present new experimental evidence supporting the conclusions in Charnavel (2018), and extending that analysis to concessive clauses. We conducted an Mturk study, asking participants (n=30) to judge the grammaticality of sentences with exempt anaphors in adjunct clauses on a six-point Likert scale. Participants judged sentences with eventive because-clauses like (1a) to be significantly better than those with evidential since-clauses like (1b) \((p < 0.0005)\). Likewise, they judged sentences with even though-clauses like (3a) to be significantly better than those with although-clauses like (3b) \((p < 0.0005)\).

(3) a. The judge was allowed to stay on the case even though there was a recording of himself insulting the defendant.
   b. ?? The boss canceled the company dinner although it was planned that an ice sculpture of herself would be on display.

These results show that although-clauses scope higher than even though-clauses. There was no significant difference between even though- and because- clauses \((p > 0.6)\), nor between although- and since- clauses \((p > 0.2)\). This suggests that although-clauses attach at the level of since-clauses, and even though-clauses at the level of because-clauses.

Binding complications: The latter conclusion is however questioned by the fact that it’s possible for a matrix quantifier to bind pronouns in a because-clause but not an even though-clause. Compare the eventive because-clause in (4a) to the even though-clause in (4b). The provided contexts ensure that the pronoun must be interpreted as bound.
(4) a. [Context: There are ten guests at the party. Four left, and of them, three left due to exhaustion.]
   Most of the guests left the party because they were tired.

   (5) a. John didn’t go for a walk because it was a nice day. (He went for some other reason.)
   b. John didn’t go for a walk even though it was raining. (#He went despite some other fact.)

Analysis: We propose to solve the issue by refining scopal distinctions between different types of adjunct clauses on the one hand and different types of DPs on the other hand.

Even though at EpisP: The first ingredient of our analysis is to hypothesize that even though attaches at EpisP, following Cinque’s 1999 hierarchy in (6). This entails that even though-clauses scope between although/since-clauses (at EvidP) and because-clauses (at VP).

   (6) [ Mood\_speech \_act [ Mood\_evaluative [ Mood\_evidential [ Mod\_epistemic (EpisP) [ Mood\_irrealis ... ]] ] ] ]

This correctly predicts that even though-clauses scope above Mood\_irrealis modifiers like perhaps, but scope below Mood\_evidential modifiers like allegedly; because-clauses scope below both:

   (7) a. Perhaps John went for a walk even though it was raining. ⇒ It was raining.
   b. Allegedly, John went for a walk even though it was raining. $\not\Rightarrow$ It was raining.
   c. Perhaps/allegedly, John went for a walk because it was a nice day. $\not\Rightarrow$ It was a nice day.

This also correctly predicts that even though-clauses pattern like other epistemic elements. First, they may be embedded only under representational attitude verbs like think vs. wish (Anand & Hacquard 2013).

   (8) a. John thinks that Paul went for a walk even though it’s raining (but it’s not actually raining)
   b. John wishes that Paul would stay even though he’s tired (*but he’s not actually tired).

Second, they are subject to the Epistemic Containment Principle (ECP), which states that quantifiers may not take scope above epistemic modals as illustrated in (9) (von Fintel & Iatridou 2003). This is exactly the effect shown in (4b) above.

   (9) *Every student, must be awake if his light is on.

Perspectival Binding without Quantifier Binding: The second ingredient of our hypothesis consists in adopting Beghelli & Stowell’s 1997 proposal that not all DPs are syntactically equal. In particular, referential DPs like Liz in (1) may take scope high up in the clause (at RefP) such that they may c-command EpisP. Quantifier DPs like most in (4a), by contrast, may only take scope below EpisP.

   (10) [EvidP [RefP Liz [EpisP [Adv\_P even though] [ ... QP ... ]]]]

This explains why unlike because-, since- or although-clauses, even though-clauses do not exhibit a correlation between anaphora licensing and pronominal binding: while because-clauses scope below both Ref and QPs and since/although-clauses scope above both Ref and QPs, even though-clauses scope in between.

In sum, our experimental study supports Charnavel (2018)’s hypothesis that perspectival effects in adjunct clauses can shed new light on their structural properties. In particular, her long distance anaphor-based diagnostic coupled with more traditional scopal tests allowed us to attain a finer understanding of the syntactic position of concessive clauses like even though-clauses.

Wh-agreement across three domains in Indonesian

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BACKGROUND. Cross-linguistically, morphological wh-agreement has been observed either on C/T or on verbs (Zaenen 1983; Reintges et al. 2006), coinciding with classic domains for successive-cyclic A' movement. This suggests that other phasal XPs may be also marked with morphological wh-agreement.

PROPOSAL. This paper argues that in Indonesian, wh-agreement occurs in three domains: CP, VoiceP and DP. By examining cases in which possessors undergo A' movement out of DP, I show that obligatory changes in morphology are an instantiation of wh-agreement on DP.

PROPERTIES OF WH-AGREEMENT. Reintges et al. (2006) identify the following cross-linguistic profile of wh-agreement: (A) Wh-agreement is a reflex of A' movement, i.e. occurring in constituent questions, focus constructions and relatives. (B) Unlike other agreement phenomena, wh-agreement does not register DP-internal phi features. (C) Wh-agreement is sometimes realized as special morphology or lack of morphology; it can also surface as a morpheme that occurs elsewhere in the language but (in wh-agreement) does not have semantic content, except to mark A' movement.

WH-AGREEMENT ON C. Based on (A-C), I argue that the Indonesian complementizer system exhibits wh-agreement (morphological wh-agreement is bolded in examples.) The overt C bahwa introduces embedded declarative clauses (1). When A' movement crosses two Cs (2), neither C can occur as bahwa. Instead, the highest C occurs as yang, immediately following the surface position of the A'-moved DP, while any intermediate Cs crossed by movement must be null.

(1) Aku pikir bahwa Susan mem-beli se-buah tas kemarin.
1SG think COMP Susan ACTV-buy one-CLF bag yesterday
‘I think that Susan bought a bag yesterday.’

(2) Apa yang/*bahwa kamu pikir Ø/*bahwa Susan Ø-beli/*mem-beli __ kemarin?
what COMP 2SG think COMP Susan buy ACTV-buy yesterday
‘What do you think Susan bought yesterday?’

Yang is usually treated as a focus or relative marker (Saddy 1991), but I present evidence that yang belongs to category C: it does not form a constituent with the moved DP, and occurs higher than subjects. Further analysis of cleft structure also supports this view.

WH-AGREEMENT ON VOICE. Wh-agreement is also marked on verbs. Nominal movement across active verbs requires a null prefix (Saddy 1991; Cole et al. 2008); compare prefix mem- in (1) with the required null prefix in (2). In contrast, when the active prefix does not cross the verb (3), the active prefix is licit:

(3) Kamu pikir siapa yang __ mem-beli se-buah tas kemarin?
2SG think who COMP ACTV-buy one-CLF bag yesterday
‘Who do you think bought a bag yesterday?’

The overt/null alternation in the mem- prefix has been called “blocking”/“deletion” (Voskuil 2000), or voice “agreement” that registers the features of the moved argument (Cole et al. 2008). Since the null verbal prefix in (2) is a reflex of A' movement over the verb, the null morphology is straightforwardly captured under an analysis of wh-agreement, under properties (A) and (C).

WH-AGREEMENT ON D. I make the novel claim that Indonesian also has morphological wh-agreement within the nominal domain. When a possessor escapes its possessive DPs, the possessee that remains in situ must be suffixed with -nya (cf. Jeoung 2017). In (4) the null verbal morphology and the complementizer yang show that the wh-possessor siapa ‘who’ has undergone A' movement to SpecCP:

(4) Siapa yang adik Ø-baca buku-nya __?
who COMP sibling read book-DEF
‘Who is it that brother is reading (her) book?’

(5) buku-(nya) Siti/siapa
book-DEF Siti/ who
‘Siti’s book/whose book’
The possessum buku is obligatorily suffixed with –nya as a reflex of possessor extraction in (4). In contrast, -nya is optional in possessive DPs without extraction (5). Thus –nya is required just in case of A’ movement out of the DP, i.e. property (A) of morphological wh-agreement.

Specifically for cases of possessor extraction as in (4), I argue that –nya marks wh-agreement instead of a (resumptive) 3 possessive pronoun (pace Voskuil 2000; Musgrave 2001), based on the following evidence: (i) -nya cannot occur resumptively in general (non-possessive) argument extraction. (ii) -nya co-occurs with lexical (5) and pronominal possessors (6), which is unexplained if -nya is a 3 pronoun. (iii) -nya is not limited to 3 person, but occurs with extracted 1 and 2 person arguments (7).

6 rumah-(nya) aku/ kamu/ dia/ kita/ mereka/ orang
house-DEF 1SG/ 2SG/ 3SG/ 1PL/ 3PL/ person
‘my/your/his/our/their/someone’s house’

7 Aku/ kamu yang rumah-nya di-ratakan.
1SG/ 2SG COMP house-DEF PASS-destroy
‘It is I/you whose house was destroyed.’

SUCCESSIVE-CYCLIC A’ MOVEMENT THROUGH THE EDGE OF DP, VOICEP AND CP. To derive the possessor extraction in (4), the possessor undergoes movement through phase edges. The structure of the possessive DP ‘someone’s house’ (6) is given in (8): an edge feature [EPP-D] on D must be checked by raising the possessor to SpecDP. From this position on the edge of DP, the possessor is visible for further movement. [EPP-D] on Voice and C drive successive-cyclic movement of the possessor through the edge of VoiceP, then to its surface position in SpecCP, resulting in wh-agreement on each phase head (C, Voice, D).

IMPLICATIONS. Wh-agreement in the nominal domain supports the phasehood of DP in Indonesian. The data also expand the range of attested wh-agreement patterns in two ways: (a) to our knowledge, DP-internal wh-agreement has not previously been reported; and (b) wh-agreement is marked different on highest C and intermediate C, which departs from previously attested patterns (Reintges et al. 2006).

EXPANDING THE AGREEMENT DOMAIN IN GEORGIAN

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THESIS. Recent work has investigated whether Agree can neutralize phasal boundaries, thus widening the domain accessible for subsequent Agree operations (Rackowski & Richards 2005, Preminger 2011, Van Urk & Richards 2015, Halpert 2018, a.o.). This paper provides novel evidence for such a theory, based on inverse agreement in Georgian (Kartvelian). I propose that, for verbs in the inverse agreement paradigm, 1st/2nd person objects move to the edge of the vP phase in order to be licensed by a higher probe on \( \pi^0 \) (Rezac 2008). This movement bleeds any potential Agree relations with 3PL subjects, crucially with respect to the number probe. However, 3rd person objects remain low and so \( \pi^0 \) first encounters \( \nu \). The resulting Agree relation unlocks the phase, rendering 3PL subjects accessible to a subsequent search from the number probe.

BACKGROUND. Georgian inverse agreement is characterized as a ‘flip’ in agreement patterns compared to the ‘basic’ paradigm, i.e. the default agreement paradigm. A set of prefixes mark the object in the basic, but the subject in the inverse; a set of suffixes mark the subject in the basic, but the object in the inverse. Independent of these, there is a marker -t which generally marks plurality in Georgian. However, 1SG and 2SG inverse objects block 3PL agreement, as in (1-2).

3PL agreement is allowed just in case the object is also 3rd person, as in (3).

(1) mat me v-u-\( \chi \)var-var(*-t) (3) mat is u-\( \chi \)var-t
3PL.DAT 1SG.NOM 1-VER-love-1.PRES(-PL) 3PL.DAT 3SG.NOM VER-love-PL
‘They love me.’ ‘They love him/her.’
(okay as: ‘They love us.’)
(2) mat Jen 0-u-\( \chi \)var-xar(*-t)
3PL.DAT 2SG.NOM 2-VER-love-2.PRES(-PL)
‘They love you (sg).’
(okay as: ‘They love you (pl).’)

This paper focuses on the following question related to the inverse agreement paradigm: Why do 1SG/2SG objects block 3PL subject agreement?

STRUCTURE OF THE INVERSE. Subjects in the inverse agreement paradigm are in Spec,ApplP. Evidence from binding shows that inverse subjects are higher than objects: inverse (dative) subjects can bind anaphors, but the converse is not possible (see McGinnis 1995, i.a.). Here, I present three new arguments for this position. First, verbs in this paradigm obligatorily appear with ‘versionizer vowels’, a set of applicative prefixes that is largely productive in Georgian. Like applicative arguments, inverse subjects must bear dative case. But here, versionizers behave more like subject agreement: invariably, \( i \)- appears with 1st and 2nd persons, and \( u \)- appears with 3rd persons. Second, causatives are a flavour of applicative in Georgian. However, when an inverse subject appears as the causee, the causative versionizer \( a \)- overrides the inverse versionizer \( u \)-, which is suggestive of a single representation for both.

(4) me Nino-s je-y-a/*u-\( \chi \)var-e Dato
1SG.ERG Nino-DAT PRV-1>3-VER.CAUS/VER.INV-love-1/2.AOR Dato.NOM
‘I made Nino love Dato.’

Third, inverse subjects trigger object-related agreement morphology. As noted above, outside of the inverse, a set of prefixes is controlled by the internal argument. These prefixes are standardly placed on \( \nu^0 \), which straightforwardly targets the object for typical transitive verbs (Béjar 2003).
the inverse, however, the first argument targeted is the dative subject, suggesting a position lower than $v^0$. Notably, (4) features the $v$-prefix, which only appears in $1 \rightarrow 3$ contexts. This follows if the head that expones the prefixes is between the external and applicative arguments. The combination of these facts suggests that inverse subjects are introduced by Appl$^0$. Therefore, the structure is as follows with the $\phi$-probe on $v^0$, capturing its tendency to expones the object in the basic and the subject in the inverse.

\[
\text{(5) } [\#P^0 [\pi^0 [vP DP_{subj} v^0 [\sqrt{v^0 DP_{obj}}]]]]] \quad \text{BASIC}
\]

\[
\text{(6) } [\#P^0 [\pi^0 [vP v^0 [\text{ApplP } DP_{subj} \text{ Appl}^0 [\sqrt{v^0 DP_{obj}}]]]]] \quad \text{INVERSE}
\]

**1ST/2ND PERSON OBJECTS.** In the basic structure in (5), the object is licensed by $v^0$. As argued above, the inverse subject controls agreement from $v^0$. Therefore, to be licensed, 1st/2nd inverse objects must move out of the $vP$. Independent evidence for this licensing requirement comes from PCC effects in ditransitives, suggesting that 1st/2nd person arguments are subject to the PLC (Béjar & Rezac 2003). Once in Spec,$vP$, the 1st/2nd person objects are in a position accessible to a person probe on $\pi^0$. After the 1st/2nd person singular object is licensed by $\pi^0$, it moves to a position accessible to the number probe, which will spell-out as -t if it finds plural features on the moved object.

**3RD PERSON OBJECTS.** In this case, the object does not require person licensing and therefore remains low and inaccessible to $\pi^0$. Since there is no argument in Spec,$vP$, and $vP$ is a phase, $\pi^0$ first encounters $v$ in its entirety. The $vP$, however, does not carry the features $\pi^0$ is seeking, so this agreement relation has the effect of unlocking the interior of the phase for further searches (Van Urk & Richards 2015). With no phasal boundary, 3PL inverse subjects in Spec,ApplP are now accessible to the number probe, which will spell-out as -t if it finds a plural feature.

**CONCLUSION & IMPLICATIONS.** I have argued that licensing requirements on 1st/2nd person objects (which are independently seen in Georgian PCC effects) force these objects to move to a high position where they block number agreement. This addresses the long-standing puzzle concerning the distribution of the Georgian plural marker -t, and particularly its distribution in the oft-ignored inverse agreement paradigm. A crucial part of the analysis involved unlocking of the $vP$ phase when no $vP$-peripheral target was found; this proposal thus provides novel empirical support for this theory.

This presentation shows, extending the observation made in Oguro (2018), that Japanese, a WH-in-situ language, involves obligatory movement of a WH-phrase in a certain construction. Japanese has been analyzed as having null operator movement originating from inside a WH-phrase (Watanabe 1991) and as having overt movement of WH-phrases, which is actually a result of optional scrambling (Takahashi 1993), but this presentation deals with rare cases of movement of WH-phrases (not null operators) in overt syntax that is obligatory (not optional). Oguro (2018) observes that mono ka rhetorical questions (RQs), exemplified in (1).

(1) Dare-ga kur-u mono ka!
who-NOM come-PRES C Q
'No one will come!'  

Mono ka RQs have distinct properties which separate them from RQs ending with toiuno (Sprouse 2007), shown in (2), which expects a negative answer.

(2) Dare-ga kur-u to iu no?
who-NOM come-PRES C say C?
'Who will come? = No one will come.'

There are various differences between these RQs. One of them is that (1) does not expect any answer including "No, not anyone," which is a commonly expected answer in (2). Another is that (1) allows, but (2) does not allow, the presence of a strict negative polarity item such as daremo 'anyone', which is licensed only in negative contexts.

(3) Daremo kur-u mono ka!
anyone come-PRES C Q
'No one will come!'  

(4) * Daremo kur-u to iu no?
anyone come-PRES C say C?
'No one will come!'  

Another big difference is that in mono ka RQs the WH-phrase needs to be in sentence-initial position, while there is no such restriction on toiuno RQs.

(5) a. * Mary-ga nani-o ka-u mono ka!
Mary-NOM what-ACC buy-PRES C Q
'Mary will buy nothing!'  

b.(?) Nani-o Mary-ga ka-u mono ka!
what-ACC Mary-NOM buy-PRES C Q
'Mary will buy nothing!'  

There is reason to believe that the contrast in (5) is not just a matter of ordering of certain elements, but that the WH-element in mono ka RQs is raised outside of TP.

Kishimoto (2009) notes that subjects marked with kara 'from' stay inside vP, without being raised to the TP-domain. The WH-subject in mono ka RQs cannot be marked by kara, but this constraint does not apply to toiuno RQs.

(6) a. John-kara ayamar-u
John-from apologize-PRES.
'Don't apologize.'  

b. * Dare-kara ayama-ru mono ka!
who-from apologize-PRES C Q
'No one will apologize!'

c. Dare-kara ayama-ru to iu no?
   who-from apologize-PRES C say C
   'Who will apologize? = No one will apologize.'

This indicates that the WH-subject in *mono ka* RQs cannot remain in its base position. Kishimoto (2009) also notes that when the particle *dake* 'only' is attached to the tensed element in a sentence, it can take scope over the subject. This is not an option in *mono ka* RQs, but is possible in *toiuno* RQs.

(8) a. John-ga odor-u dake da
   John-NOM dance-PRES only COP
   'It is only the case that John will dance.'
   'It is John who will only dance.' (with a heavy stress on John)

b. Dare-ga odor-u dake na mono ka!
   who-NOM dance-PRES only COP C Q
   # 'It is only the case that no one will dance! (Everyone will!)
   'No one will only dance! (They will do other things as well.)'

c. Dare-ga odor-u dake da to iu no?
   who-NOM dance-PRES only COP C say C
   'Only who will dance, would you say? = Not just someone will. Everyone will.'
   'Who will only dance, would you say? = No one will only dance. They will do other things as well.'

(8a) has the interpretation in which the particle *dake* takes scope over the subject, which Kishimoto takes to indicate that it remains inside TP, that is to say, in [Spec, TP]. This interpretation is unavailable in (8b), which shows that the WH-subject in a *mono ka* RQ is necessarily raised out of TP, while it is allowed in (8c), which shows that the WH-subject in a *toiuno* RQ can remain in [Spec, TP]. Interestingly, the expected interpretation is allowed in *mono ka* RQs if the subject is not a WH-element.

(9) John-ga odor-u dake na mono ka!
   John-NOM dance-PRES only COP C Q
   'It is only the case that John one will dance.'
   'It is not the case that John will only dance!' (with a heavy stress on John)

I suggest that the WH-element in *mono ka* RQs does not function as an interrogative element but as a negative element with a focus feature, which forces it to undergo movement to [Spec, Foc] in the CP domain. Thus, *mono ka* WH-RQs should not be treated on a par with WH-questions, but as a case of negative inversion. This is why (1) does not expect an answer. Japanese has obligatory overt movement of WH-phrases, but it is not the kind of movement associated with WH-questions.

References


