

# Person and the left periphery

Valentina Bianchi (University of Siena)

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## Abstract

**Introduction.** One basic assumption of the “cartographic project” takes the left periphery of the clause to be the interface site between grammar and the context. Given that the person feature is intrinsically deictic, this assumption leads to the hypothesis that [person] should establish a link with the left periphery. This idea has been independently developed by a number of people (Bianchi 2003, 2006; Sigurðsson 2004; Speas & Tenny 2003, 2004; Ritter & Rosen 2007). However, the comparison and integration of different proposals is hampered by the coexistence of different conceptions of [person]: firstly, with respect to its interface import (participant in the speech event, à la Benveniste, vs. ‘sentience’ vs. ‘individual reference’); secondly, with respect to the morphosyntactic definition of the feature itself (privative vs. binary vs. multivalent vs. decomposition into more primitive features). In this seminar I try to clarify these issues, with the aim of integrating various threads of research. The main focus is on personal pronouns, in their syntactically free uses.

**Third person pronouns.** I argue that third person pronouns do have one feature in common with first and second person ones, which is distinct from sentience/animacy and is instead related to their context-dependence. If we conceive of free third person pronouns as free variables, they depend on an assignment function to get a value; according to Kaplan (1989), the assignment of values can be seen as one more aspect of the context, in addition to the standard deictic parameters (speaker, hearer, utterance time...). In cartographic terms, this view is consistent with the hypothesis that third person pronouns are always syntactically connected to possibly silent Topics in the left periphery of the clause – an idea that has been recently explored by Belletti, Frascarelli, Holmberg et al., a.o. The recursive Topic projections in the left periphery provide a semantic value for the pronouns that are syntactically linked to them (cf. Holmberg et al’s 2008 D(efiniteness) feature): they thus constitute a ‘syntacticization’ of the assignment function. From this perspective, there would be no real free variable pronouns in natural language syntax.

**First and second person pronouns.** A by now common hypothesis is that one or more dedicated projections in the left periphery encode the Speaker and the Hearer(s). However, various approaches differ w.r.t. the conception of these entities: under one view, they are purely kaplanian parameters, i.e. participants in the speech event (Bianchi, Sigurðsson); under another view, they are arguments of a speech act denoting head (recalling the implicit performative hypothesis; Speas & Tenny 2003, 2004, Puglielli & Frascarelli 2008). This difference is relevant in cartographic terms: under the second view, the Speaker and Hearer are directly connected to a head encoding illocutive Force, whereas under the first view, they are not. I here argue in favour of the kaplanian view.

Speas & Tenny’s (2003, 2004) analysis of the “interrogative flip” posits a Sentience projection immediately below their Speech Act projection. Independent evidence concerning long distance anaphors (Jayaseelan 1998, Huang & Liu 2001 a.o.) justifies a Perspective projection. I suggest that these two notions may be unified: one projection in the left periphery encodes the perspectival centering of the proposition, i.e. its relativization to an individual perspective. Even under the kaplanian conception, the Speaker and Hearer can control this perspectival parameter, accounting for the “interrogative flip”. Elaborating on

Huang & Liu (2001), I suggest that the coexistence of the Speaker/Hearer and Perspective projections in the left periphery allows for an approach to the well-known blocking effects on the Chinese long distance anaphor in terms of syntactic intervention effects.

**The cartographic mapping of the context.** A broader theme underlying my discussion is the necessity to distinguish two different notions of context: the kaplanian one, and the stalnakerian one. A kaplanian context is a package of coordinates that provide values for the determination of the propositional content of the sentence. A stalnakerian context is a set of propositions uniquely identifying a set of possible worlds, and represents a state of information which gets updated by the propositional content of an asserted sentence.

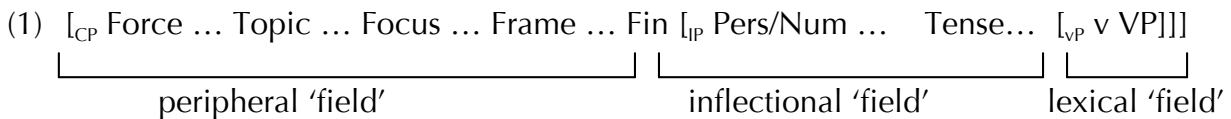
It turns out that among the many projections that have been hypothesized in the left periphery of the clause, some have a stalnakerian nature, others are kaplanian. For instance, in Frascarelli & Hinterhölzl's (2007) topic hierarchy, the Aboutness-Shift topic (probably also the Contrastive Topic) is clearly stalnakerian, encoding an instruction on how to update the common ground (cf. Reinhart 1981), whereas the so called 'Familiarity' topics seem to be merely kaplanian, in the sense discussed above. Distributional evidence shows that the former is hierarchically higher than the latter. Evidence concerning prenegative subject positions in Hebrew (Shlonsky 2000) and prenegative clitics in Northern Italian dialects (Poletto 2000) suggests that the Aboutness-Topic projection may be higher than the projection(s) encoding Speaker and Hearer. These distributional data lead to the tentative hypothesis that the stalnakerian projections in general may be structurally higher than the kaplanian ones.

A related issue is the structure of the left periphery for phases other than CP. If there is cyclic access to the interfaces at each phase edge, it is natural to assume that even a non-clausal phase, e.g. vP, may have an articulated left periphery (Belletti 2001, 2005; Grewendorf 2005). However, this periphery seems to be 'less powerful' than the CP periphery. For Belletti, it includes a Focus projection, which however cannot express contrastive focus (a stalnakerian function, typically implying the partial rejection of a previous assertion); it also contains Topic projections implementing right dislocation (cf. Cecchetto 2000), which, however, cannot encode Aboutness or Contrastive topics, but only 'Familiarity' topics (Frascarelli & Hinterhölzl 2007, de Cat 2007 a.o.). Most importantly, the vP periphery seems to lack a Force projection. The distinction proposed above leads me to speculate that the vP periphery may have kaplanian projections, but not stalnakerian ones: the intuitive reason would be that a vP phase cannot constitute (the propositional content for) an independent speech act.

## Handout

### 1. Introduction

CARTOGRAPHIC ASSUMPTION: the clausal (or phasal) left periphery is the interface site between grammar and the context (Enç 1987... Rizzi 1997)



→ Person, being deictic (Jakobson 1971), must be anchored to the left periphery: Bianchi (2003, 2006), Sigurðsson (2004), Speas & Tenny (2003), Tenny (2006) a.o.

Problems:

(ia) Different conceptions of [person]:

- a) Participant in the speech situation (à la Benveniste: Harley & Ritter 2002)
- b) Individual endowed with sentience/perspective (including, e.g., impersonals: Kayne 2000, or indirect object third person: Adger & Harbour 2007, Anagnostopoulou 2003)
- c) Capability of reference to individuals (Longobardi 2006, Rizzi 1986)

(ib) Alternative definitions of [person] (multivalent: Kayne 2000; binary: Anagnostopoulou 2003; decomposition into primitive (privative/binary) features: Darlympe&Kaplan 2000, Poletto 2000, Harley&Ritter 2002, Schlenker 2003, Nevins 2007, Béjar&Rezac forth.)

(ii) No clear definition of context → unclear cartographic mapping:

- a) problem of the relative order of projections
- b) do all phases have exactly the same left periphery?

My aim today: to bring some order, if possible

Nota bene: I will be discussing syntactically free uses of personal pronouns. I will leave aside bound pronouns, with the optimistic assumption that they will be accounted for by some version of Kratzer's (forthcoming) Minimal Pronoun hypothesis.

### 2. Two views of the context

#### 2.1. Kaplanian context (see also Appendix, 1A)

(2) I am here now (Kaplan 1977/89, 508-9)

Character (context) ⇒ propositional content

A kaplanian context is an INDEX with several coordinates, e.g.  $i = \langle w, t, p, a \dots \rangle$  where  $w$  is a possible world/circumstance (the actual world of the utterance),  $t$  is a time,  $p$  is a position in 3D space,  $a$  is an agent(speaker) etc.

A context  $\langle w, t, p, x \rangle$  must be PROPER, i.e.  $x$  must be located at  $p$  in  $w$  at time  $t$ . This is what guarantees that (2) is a priori true, though not necessary (for not all possible circumstances of evaluation are proper contexts).

“The problem is that on my analysis, the mechanism of direct reference operates *before* the familiar semantical notions of truth and denotation come into play. If I continue to think, as Carnap taught me, that the overall theory of language should be constructed with syntax at the base, semantics built upon that, and pragmatics built upon semantics, I am faced with a dilemma. The mechanisms of direct reference certainly are not *postsemantical*. But equally surely they are not syntactical. Thus I put them in the bottom layer of semantics.” (Kaplan 1989, *Afterthoughts*, 575-76)

## 2.2. Stalnakerian context (see also Appendix, 2A)

COMMON GROUND: a set of propositions representing the information that is mutually presupposed by participants in a conversation

This set of propositions uniquely determines (by intersection) a CONTEXT SET of possible worlds that are compatible with all the information contained in the common ground.

One basic goal of ordinary conversation is to DISTINGUISH AMONG THE ALTERNATIVES in the context set, which are candidates for the actual world (for the purposes of that conversation)

The ESSENTIAL EFFECT of the assertion of a declarative clause  $S$  is that the propositional content of  $S$  updates the common ground (by intersection), discarding all the worlds in which  $S$  is not true. If an assertion is not rejected, from that point on the propositional content of  $S$  is added to the common ground.

Heim (1983): meaning can then be conceived of dynamically, as a function from contexts (Stalnaker’s context sets) to contexts, by recursively defining the Context Change Potential of any sentence  $S$ . E.g., for an atomic sentence like *it is raining*:

For any context  $c$ ,  $c + \textit{it is raining} = \{w \in c : \textit{it is raining in } w\} (= c')$

## 2.3. In sum

A KAPLANIAN CONTEXT is a package of parameters (coordinates, anchoring points) which determine (at least) the content of indexical expressions.

A STALNAKERIAN CONTEXT is a set of propositions uniquely identifying a set of possible worlds, and represents a state of information. This gets updated by the propositional content of an assertion (Stalnaker 1978, Heim 1983).

→ From a unifying perspective, we may say that the input context for the interpretation of a sentence plays A DOUBLE ROLE (cf. Roberts 2004): it helps determine the propositional content, and it gets updated by that propositional content.

→ Yet, the kaplanian vs. stalnakerian conceptions are very different: cf. Krifka’s (2006) distinction between COMMON GROUND CONTENT and COMMON GROUND MANAGEMENT. It turns out that various layers of the left periphery are related to one or the other conception.

### 3. Pronominal third person

On Benveniste's view, third person=lack of person (Kayne 2000, Wechsler 2002 a.o.). But:

a) In Algonquian, third person is divided in subcategories (proximate/obviative) which are visible to the direct/inverse system just like first-second person. The third person subcategories encode degrees of topical salience (cf. e.g. LeSourd 1976, 448)

- (3) a. ne-wa:pam-**a**-wa (Fox; leSourd 1976, 459)  
 'I see.DIR him'  
 b. wa:pam-**e**-wa (NB: vowel change by regular phonological process)  
 'He.PROX sees.DIR him.OBV'  
 c. ne-wa:pam-**ekw**-a (Fox; leSourd 1976, 460)  
 'He sees.INV me'  
 d. wa:pam-**ekw**-a  
 'He.OBV sees.INV him.PROX'

b) Some morphosyntactic phenomena group together first, second and third person pronouns, as opposed to lexical DPs, e.g. Kayne (2000) on clitic doubling in French and:

- (4) a. Chi di noi/ voi/loro/?costoro dovrà farlo? (Bianchi 2006b)  
 who of us /you/ them/those-people will-have-to do-it  
 b. \* Quale di noi/voi/loro/costoro dovrà farlo?  
 which of us /you/ them/those-people will-have-to do-it
- (5) a. \* Chi dei tuoi studenti dovrà farlo?  
 who of your students will-have-to do-it  
 b. Quale dei tuoi studenti dovrà farlo?  
 which of your students will-have-to do-it

(See also Nevins 2007.)

Bianchi (2006a): unbound third person pronouns are essentially interpreted as free variables which receive a value from an assignment function; following Kaplan (1989, 591-92), we may conceive of the assignment of values as ANOTHER ASPECT OF THE CONTEXT (see Appendix, 4A, and cf. Heim & Kratzer 1998, ch. 9)

→ The common feature of first, second and third person pronouns is their dependence on the context (direct reference). Following Kaplan (1989,593), we may call this feature [parametric] (Bianchi 2006a: [context-determined]).

→ By the cartographic assumption, third person pronouns must be linked to the left periphery (cf. Sigurdhsson & Maling's (2006) Context Linking Generalization for referential pronouns).

### 3.1. Linking to Topic

A number of recent proposals links “free” third person pronouns to silent Topic positions (Frascarelli 2007; Belletti 2008; Holmberg et al. 2008)

Frascarelli (2007): Italian third person null subjects are always linked to an Aboutness-Shift Topic, which may be silent. The Agree relation with the Aboutness-Shift Topic head identifies *pro*'s phi features:

$$(6) \left[ \text{ShiftP}_{\text{DP}_{[\alpha\text{Pn}]}} \left[ \text{Shift}^{\circ} \left[ \dots \left[ \text{AgrSP} \left[ \text{Agr}^{\circ} \left[ \text{VP} \left[ \text{pro}_{[\alpha\text{Pn}]} \right] \right] \right] \right] \dots \right] \right] \right] \left[ +\text{ABOUTNESS} \right] \left[ \text{PHI-features} \right]$$

AGREE

Holmberg et al. (2008, 13-19): an alternative Agree-based derivation:

- in consistent null subject languages, T has an unvalued D(efiniteness) feature, whose value is a referential index;
- The Aboutness topic values the uD feature of T, transmitting a referential feature to it;
- a defective third person pronoun, with valued phi-features but no D feature, is probed by the T head which has unvalued phi-features;
- T and the defective pronoun create a chain, whereby only T is spelled out; T also has a valued D- feature, whence a definite interpretation.

$$(7) \left[ \text{ShiftP}_{\text{DP}_{[\text{D}]}} \left[ \text{Shift}^{\circ} \left[ \dots \left[ \text{TP} \left[ \text{T}_{[\text{uD}]} \left[ \text{VP} \left[ \text{pro}_{[\phi]} \right] \right] \right] \right] \right] \right] \right]$$

AGREE

Belletti (2008, § 5): “free” pronouns double a silent pronominal topic raised to the edge of the clause, which looks for an antecedent from that position:

$$(8) \left[ \text{CP} \left[ \text{DP}_2 \dots \left[ \text{TP} \dots \text{Cl} \left[ \text{VP} \left[ \text{V} \left[ \text{DP}_1 \left[ \text{D} \right] \text{cl} \right] \right] \right] \left[ \text{DP}_2 \right] \right] \right] \right]$$

AGREE

→ If linking to silent Topics is generalized to all referential third person pronouns, there must be multiple silent Topic projections. What is the nature of these positions? Different languages exhibit at least two different types of topic structures (cf. Haegeman 2007):

- English-type topicalization:
  - non-recursive
  - not generally available in subordinate clauses
  - island effect
- Romance-type topicalization:
  - recursive
  - generally available in subordinate clauses
  - no island effect

### 3.3. Frascarelli & Hinterhölzl's (2007) Topic Hierarchy

Frascarelli & Hinterhölzl (2007) argue against the free recursion of the Topic Phrase (Rizzi 1997) and identify three distinct types of topic associated with different tonal events

- the Aboutness-Shift topic, corresponding to Reinhart's (1981) Sentence Topic
- the Contrastive topic

(c) Familiarity topics (which may also be an Aboutness topic, in which case it constitutes a continuing topic. Caveat: ‘familiarity’ NOT in the Heimian sense; givenness).

- (9) Topic Hierarchy (Frascarelli & Hinterhölzl 2007, (37))  
 [ShiftP [+aboutness] [ContrP [FocP [FamP\*{continuing; familiar} [IP...]]]]
- 

An overt Aboutness-Shifting Topic is marked by “a rise in the F0 contour that is aligned with the tonic vowel in its full extension (L\*+H)”

- (10) Il materiale era tantissimo quindi all'inizio l'ho fatto tutto di corsa cercando di impiegarci il tempo che dicevate voi magari facendolo un po' superficialmente pur di prendere tutto- **l'ultima unit** la sto facendo l'avevo lasciata un po' da parte...  
 ‘The material was quite a lot, so at the beginning I did it all in a rush, trying to do it in the time that you had fixed, perhaps a little superficially, so as to do everything- I’m doing the last unit now, I had put it aside before [...]’ (Frascarelli 2007, (8))

Familiarity Topics are lower in the structure (below Contrastive Focus) and bear a L\* tone; they may be left-or right dislocated:

- (11) il problema secondo me di questo **autoapprendimento** è stato affrontare la grammatica proprio no quindi lì ti trovi davanti ad argomenti nuovi nei quali avresti bisogno appunto di qualcuno [...] invece **l'autoapprendimento questo** non- non me l'ha dato ecco.  
 ‘In my opinion the problem of this self-learning course was the grammar part – you deal with new topics for which you would exactly need someone [...] on the contrary, self-learning could not give it to me, that’s it. (Frascarelli 2007, (10))

[<sub>SP</sub> (~~l'autoappr.~~) Shift° [<sub>FamP1</sub> l'autoapprendimento Fam° [<sub>FamP2</sub> questo [<sub>IP</sub> pro non me lo ha dato]]]]

### 3.2. Speculations on the Topic Hierarchy

If we really adopt Reinhart’s (1981) proposal, the Aboutness/Shift Topic turns out to be a stalnakerian projection (Krifka 2006: “common ground management”): Reinhart’s Sentence Topic is an instruction on HOW TO UPDATE the common ground (cf. Appendix 3A).

“The propositions admitted into the context set [sic] are classified into subsets of propositions, which are stored under defining entries. At least some such entries are determined by NP interpretations” (Reinhart 1981, 26)

“To say that a sentence S uttered in a context C is about  $\alpha_i$ , i.e. that the pair  $\langle \alpha_i, \phi \rangle$  of  $PPA_{(S)}$  is selected in C, is to say,

- (i) first, that if possible, the proposition  $\phi$  expressed in S [sic] will be assessed by the hearer in C with respect to the subset of propositions already listed in the context set [sic] under  $\alpha_i$ ,  
 (ii) second, that if  $\phi$  is not rejected it will be added in the context set under the entry  $\alpha_i$ . “

(Reinhart 1981, 25)

- Each possible pragmatic assertion is about a UNIQUE Sentence Topic. This is consistent with Frascarelli & Hinterhölzl's observation that the AboutnessShift-topic is not recursive.
- The Aboutness-Shift Topic should be limited to clauses with "illocutive force" (assertive or other – see Roberts 1996,2004, Portner 2006 for extensions of Stalnaker's approach): roughly, main clauses and complements of bridge verbs, cf. Maki et al. (1999)
- Extraction out of a clause endowed with its own illocutive force is problematic, because the propositional content of the clause will contain an unbound variable

Familiarity Topics do not seem to play any role in common ground management , hence

- no uniqueness requirement: they are recursive
- they are not limited to clauses with illocutive force
- the lack of illocutive force implies absence of "islandhood"

These properties follow if the Familiarity Topics are a syntactic implementation of the kaplanian assignment of values: namely, they provide a value for the third person pronouns that are syntactically linked to them. As for apparently free pronouns, two alternatives:

- a) they are linked to silent Topics (Frascarelli, Holberg et al.) → no 'free variable' pronouns!
- b) the silent pronominal doublee, by moving to a Topic projection, becomes visible at the interface (Belletti), so that it can be assigned a value.

(12)  $[_{ASP} \text{ Shift}^\circ [_{FamP1} (XP) \text{ Fam}^\circ [_{FamP2} (YP) \text{ Fam}^\circ [_{FamP3} (WP) \text{ Fam}^\circ \dots [_{IP} \text{ pro glie } ]_o \text{ dirà}]]]]]$

An open problem: crosslinguistic variation, especially in the expression of Familiarity Topics. E.g., English seems to mark givenness by destressing in situ (Schwarzschild 1999).

#### 4. First and second person

Alternative conceptions of speaker and hearer:

- a) kaplanian (Bianchi 2003, 2006; Sigurðsson 2004; Schlenker 2003, 2004, 2005): they are the participants in the speech EVENT
- b) 'almost stalnakerian' (Speas & Tenny 2003, Tenny 2006, Puglielli & Frascarelli 2008): they are the arguments of a head expressing a speech ACT
- the second view, but not the first one, entails a direct relationship with the projection(s) encoding the illocutive force.

##### 4.1. The kaplanian view

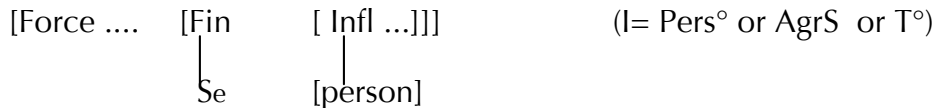
(13) Nominative is licensed by [+finite] Tense (Chomsky 1998,39;1981,50: Tensed INFL)

- (14) a. Henni leiddust þeir. (Taraldsen 1995, (1))  
       she-DAT was-bored-by-3PL-ST they-NOM
- b. \* Henni leiðumst við. (Taraldsen 1995, (4))  
       she-DAT was-bored-by-1PL-ST us-NOM
- c. Hún taldi okkur leiðast hún. (Taraldsen 1995, (43))  
       she-NOM believed we-DAT be-bored-INF she-NOM

- (15) a. A Gianni piacevo io.  
 to Gianni pleased-1SG I-NOM  
 b. \* Maria crede di a Gianni piacere io.  
 Maria believes PRT to Gianni please-INF I-NOM

(16) Person agreement is sensitive to finiteness.

The [+Fin] head syntactically encodes the Speech Event, to which the deictic features are anchored. Therefore, only a [+Fin] clausal structure can license person agreement:



Sigurðsson (2004):

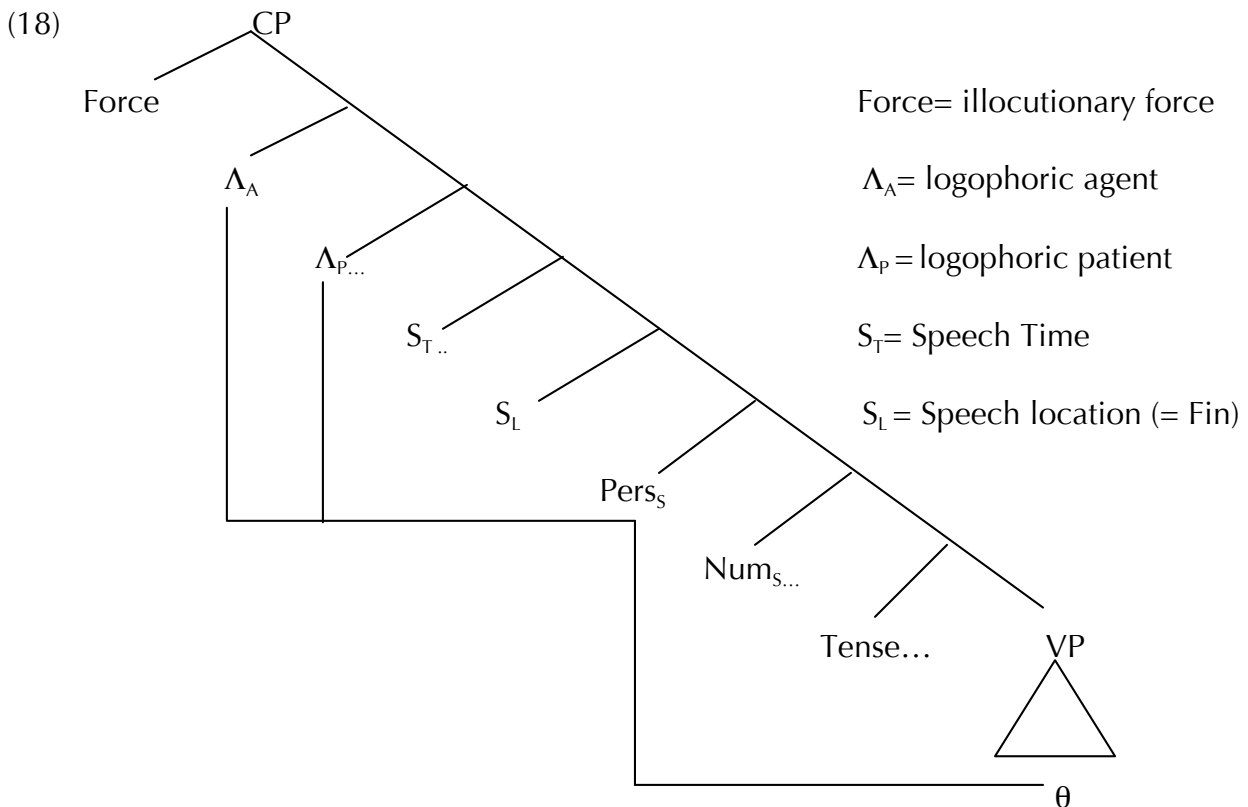
(i) the peripheral field encodes features of the speech event: Speech event  $\supset \{S_T, S_L, \{\Lambda_A, \Lambda_P\}\}$

(ii) the inflectional layer encodes grammatical features (e.g. Person)

(iii) the lexical layer encodes event features (theta-features)

There is a MATCHING relation between (iii) and (ii), and between (ii) and (i), such that:

- (17) a.  $\theta = +\text{Person} = +\Lambda_A, -\Lambda_P$ : 1P by computation  
 b.  $\theta = +\text{Person} = -\Lambda_A, +\Lambda_P$ : 2P by computation  
 c.  $\theta = +\text{Person} = -\Lambda_A, -\Lambda_P$ : 3P by computation  
 d.  $\theta = -\text{Person} (= 0\Lambda_A, 0\Lambda_P)$ : 3P by default (Sigurðsson 2004, (27))



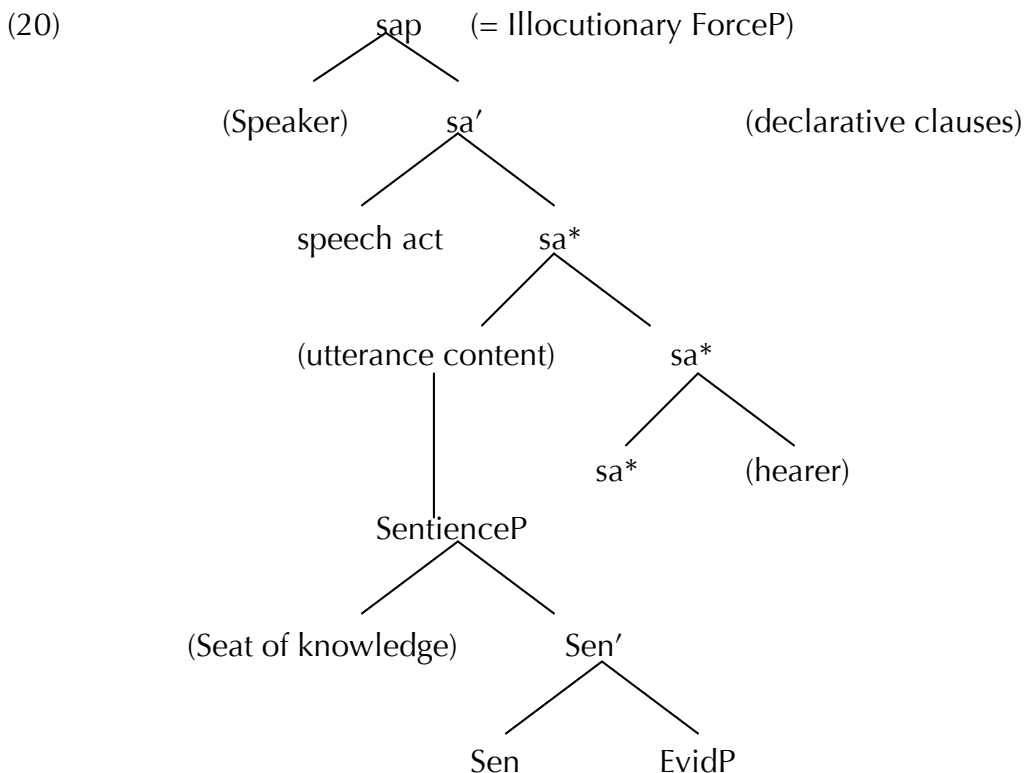
The constant referential meaning of 1<sup>st</sup> and 2<sup>nd</sup> person is coreference with their local logophoric features (Sigurðsson & Maling 2006, 10)

- (19) a. He said to me that he loved me (Sigurðsson 2004, 236, (32))  
 $[_{CP} \dots \{\Lambda_A\}_i \dots \{\Lambda_P\}_k \dots [_{IP} \dots he_j \dots me_l \dots [_{CP} \dots \{\Lambda_A\}_i \dots \{\Lambda_P\}_k \dots [_{IP} \dots he_j \dots me_l \dots$
- b. He said to me: I love you (Sigurðsson 2004, 237, (33))  
 $[_{CP} \dots \{\Lambda_A\}_i \dots \{\Lambda_P\}_k \dots [_{IP} \dots he_j \dots me_l \dots [_{CP} \dots \{\Lambda_A\}_j \dots \{\Lambda_P\}_l \dots [_{IP} \dots I_j \dots you_l \dots$
- c. Punjabi ((Sigurðsson 2004, 236, (30a))  
 Gurnekne aakhiaa ki **māi** jāāvaagaa.  
 Gurnek:ERG said that I go:FUT:1M.SG  
 ‘Gurneki said that he would go.’ (also: ‘... I would go.’)

Cf. Bianchi (2001), Schlenker (1999,2003), Speas (2000), Speas & Tenny (2003), Safir (2004).

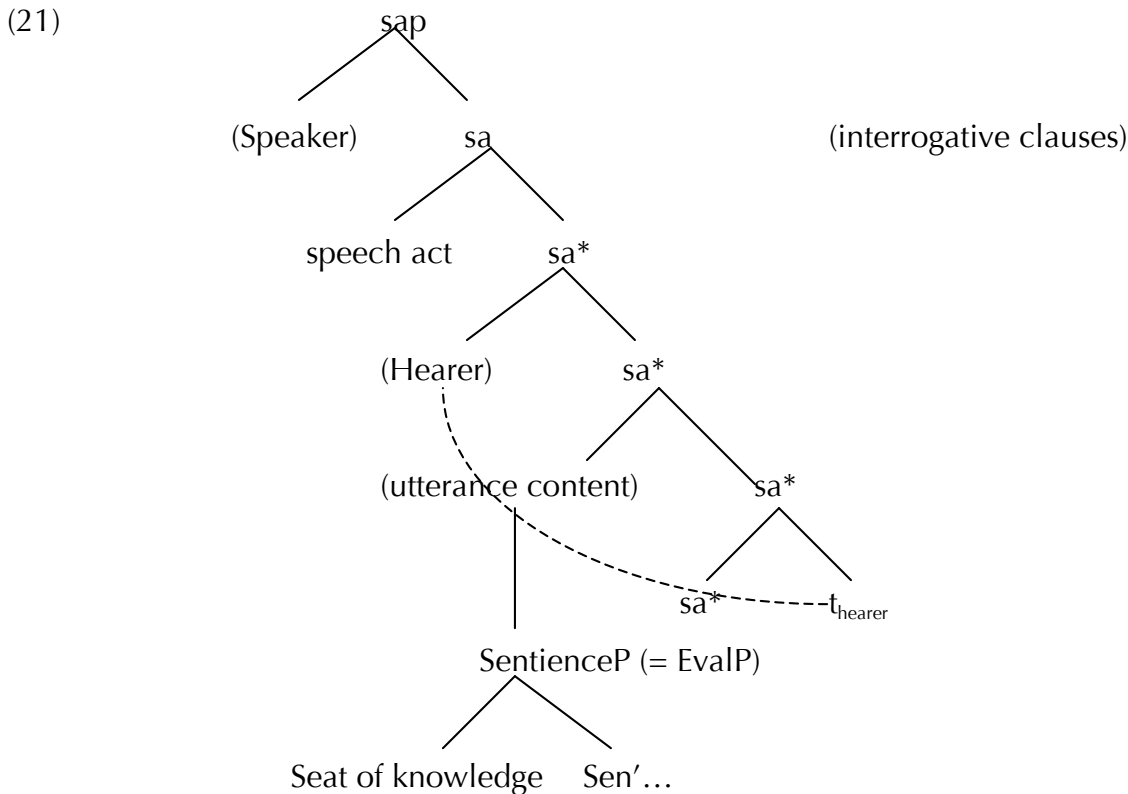
#### 4.2. First/second person and sentience

Speas & Tenny (2003), (2004), Tenny (2006): “Thus, we may think of the **SPEAKER** as the agent of the speech act, the **UTTERANCE CONTENT** as its theme and the **HEARER** as its goal.” These roles are projected in a Larsonian structure (Nota bene: they claim that this is not a version of the implicit performative hypothesis, Ross 1970)



In declarative clauses, Speaker is the closest c-commander of Seat of knowledge.

In interrogatives, Hearer in promoted inside SaP and becomes the closest c-commander:



Phenomena illustrating this “interrogative flip”:

- a) Japanese predicates of direct experience in the reportive style (Tenny 2006)
- b) “identifiability” of the referent of specific indefinites (Speas & Tenny 2004)
- c) anchor for evidential adverbs and ‘utterance modifiers’ like *honestly* (ibid.)  
... to which we may add:
- c) colloquial English subject drop (Servidio 2008, 41 ff. based on Thrasher 1977):

- (22) a. \_ Really appreciate the help. (Servidio 2008, 42, (39))  
b. \_ Need any help with that? (Servidio 2008, 42, (41))

d) conjunct/disjunct marking (e.g. Curnow 2002):

- (23) a. (na=na) pala ku-mtu-s (Awa Pit)  
(1SG.(NOM)=TOP) plaintain eat-IMPF-CONJ (Curnow 2002, 613, (1))  
‘I am eating plaintains.’

- b. (nu=na) pala ku-mtu-y  
(2SG.(NOM)=TOP) plaintain eat-IMPF-DISJ (Curnow 2002, 613, (2))  
‘You are eating plaintains’

- (24) a. min=ta=ma ashap-tu-y?  
who-ACC-INTER annoy-IMPF-DISJ (Curnow 2002, 613, (4))  
‘Whom am I annoying?’

- b. shi=ma ki-mtu-s?  
what-INTER do-IMPF.CONJ (Curnow 2002, 613, (5))  
‘What are you doing?’

### 4.3. Speculations on Speas & Tenny's field

i) A locality problem: if SaP = ForceP and SenP= Cinque's (1999) EvalP, the Topic, Focus and Interrogative projections would occur in between, disrupting the locality relation between the Speech Act arguments and the Seat of Knowledge

ii) The speaker/hearer alternation is not completely determined by GRAMMATICAL force:

a) Curnow (2002, 614-615): in rhetorical questions, a first person subject may co-occur with conjunct marking (quoting Hale 1980).

b) in "rejoinder declaratives", adverbs like *honestly* are infelicitous:

(25) A. ...So he offered me a job.

B. ...and (# honestly/#apparently) you accepted (of course – didn't you?)

Alternative: a purely kaplanian view of speaker and hearer, not related to illocutionary force. The relevant projections may be located around Rizzi's FinP (Bianchi2003, Sigurðsson 2004)

We may rethink the Sentience Phrase as a Perspective Phrase (cf. Jayaseelan 1998, Sigurðsson 2004, Huang & Liu 2001, Anand & Hsieh 2005, a.o.). The interface import of this projection is somewhat elusive: what does 'perspective' mean?

a) it encodes one of Sells's (1987) logophoric roles (Source/Self/Pivot)

b) it encodes *de se* self-ascription à la Chierchia (1989)

c) it encodes the author of a Context of Thought, ≠ Context of Utterance (Schlenker 2004)

c) it may encode the first parameter of centered worlds (e.g. Egan 2007)?

### 4.4. Long Distance anaphors and blocking effects

A Perspective/Point of View projection has been independently proposed by various authors to account for logophoric Long Distance anaphors: Huang & Liu (2001), Jayaseelan (1998), Sigurðsson (2004), among others (see Cole et al. 2004 and Reuland 2004 for overviews):

(26) Zhangsan<sub>z</sub> renwei [Lisi<sub>i</sub> zhidao[Wangwu<sub>w</sub> xihuan ziji<sub>(z/l/w)</sub>]]  
 Zhangsan think Lisi know Wangwu like self  
 (Chinese; Cole et al 2001, 12, (22))

(i) An intervening first person subject blocks long distance binding

(27) Zhangsan<sub>z</sub> renwei[Wangwu<sub>w</sub> zhidao [wo<sub>k</sub> xihuan ziji<sub>(\*z/\*w/k)</sub>]]  
 Zhangsan think Wangwu know I like self  
 ((Cole et al 2001, 12, (23))

(ii) An intervening third person does ((28a), Cole et al 2004, 23) or does not ((28b), Huang & Liu 2001, note 2) block long distance binding if there is feature disagreement between the potential antecedents (subjects)

(28)a. Zhangsan<sub>z</sub> renwei[wo<sub>k</sub> zhidao [Wangwu<sub>w</sub> xihuan ziji<sub>(\*z/\*k/w)</sub>]]  
 Zhangsan think I know W. like self  
 ((Cole et al 2004, 23, (3))

b. wo<sub>k</sub> danxin Zhangsan<sub>z</sub> hui piping ziji<sub>k/z</sub>  
 I worry Z. will criticize self

(iii) An intervening nonsubject can induce a blocking effect:

(29)a. Zhangsan<sub>z</sub> gaosu wo Lisi<sub>l</sub> hen ziji<sub>(\*/z/l)</sub> (Huang & Liu 2001, 162, (8a))  
 Zhangsan tell me Lisi hate self  
 b. \* Zhangsan<sub>z</sub> shuo ta qipian-le ziji<sub>z</sub> (Huang & Liu 2001, (12))  
 Zhangsan say DEICTIC.3P.SG. cheat.PERF SELF  
 Zhangsang said that he/she cheated himself/herself

(iv) When the blocker is in subject position, as in (a), the blocking effect is stronger; blocking by non-subjects can be alleviated by real world knowledge:

(30)a. ? Zongton<sub>i</sub> qing wo<sub>k</sub> zuo zai ziji<sub>(i/\*k)</sub> de shenbian  
 president ask me sit at self 's side (Cole et al. 2001, 35, (74))  
 b. Zhangsan<sub>i</sub> de biaoqing gaosu wo<sub>j</sub> ziji<sub>i/\*j</sub> shi wugude  
 Z. DE expression tell me self is innocent  
 Z's expression tells me that he is innocent (Cole et al. 2004, 37, (36))

Cole et al. (2001), (2004, 43-48; 59-65) suggest a mixed approach:

a) blocking effects induced by subjects are grammatical (agreement based analysis),  
 b) blocking effects induced by non-subject are discourse-based.

ai) *ziji* undergoes head movement and adjoins to the various Infl nodes intervening between it and the (LD) antecedent.

a2) *Ziji* can be freely generated with any person feature.

a3) In Chinese, Infl has no intrinsic [person]: [person] percolates from adjoined *ziji* to Infl.

→ Blocking arise because of a feature mismatch between [person] percolating from *ziji* and [person] of the local subject:

(28a)' \* [<sub>IP1</sub> Zhangsan<sub>[+3]</sub> ... [<sub>IP2</sub> wo<sub>[+1]</sub> [<sub>I2</sub> ziji<sub>[+3]</sub> I<sub>2</sub> ] ... [<sub>IP3</sub> .... t<sub>ziji</sub> ...]]]

→ No blocking expected in languages where Infl has intrinsic [person], like Italian [and presumably Icelandic]: the feature of the adjoined LD anaphor does not percolate.

(31)a. Jón<sub>i</sub> sagði Maríu að þú elskaðir sig<sub>i</sub> (Sigurðsson 1990, 311, (8))  
 Jon told Mary that you loved.SUBJ self  
 b. Jón<sub>i</sub> sannfærði Maríu um að ég hefði glemyt sér<sub>i</sub>  
 Jon convinced Mary about that I had.SUBJ forgotten SELF  
 (Sigurðsson 1990, 334, (71))

bi) Sells's (1987) Pivot: the person whose (physical) perspective is adopted in the clause.

bii) The antecedent for an LD reflexive must be a Pivot.

biii) The presence of a Pivot (external or internal) in a sentence prevents a reflexive from taking any other distinct DP as a long-distance antecedent. (Cole et al 2004, 61, (72); Cole et al. (2001, 35)

→ The functional/discourse account should not display significant cross-linguistic variation (Cole et al. 2004, 44). On the other hand, as we have seen, strong blocking effects are subject to crosslinguistic variation.

#### 4.5. An intervention effect?

Assume, following Huang & Liu (2001, (95)), that *ziji* must move covertly to Spec,PerspP (successive-cyclically):

(32)  $[_{IP}$  Zhangsan I  $[_{VP}$  shuo  $[_{PerspP}$  *ziji*<sub>i</sub>  $[_{IP}$  Lisi you *zai* piping *t*<sub>i</sub> le]]]]  
 Zhangsan say self Lisi again at criticize PERF

Assume now that first and second person pronouns must match Sigurðsson's  $\Lambda$ -projections:

(27)' Zhangsan<sub>z</sub> renwei[Wangwu<sub>w</sub> zhidao [wo<sub>k</sub> xihuan *ziji* (\*z/\*w/k) ]]  
 Zhangsan think Wangwu know I like self

a.  $[_{CP1}$  Zhangsan<sub>z</sub> ...  $[_{CP2}$  Wangwu<sub>w</sub> ...  $[_{CP3}$   $[_{AAP}$  wo<sub>k</sub>  $[_{IP}$  t<sub>k</sub> xihuan *ziji*<sub>k</sub> ] (local binding)

b. \*  $[_{CP1}$  Zhangsan<sub>z</sub> ...  $[_{CP2}$  Wangwu<sub>w</sub> ...  $[_{CP3}$   $[_{AAP}$   $\Lambda_A$   $[_{PP}$  *ziji*<sub>w</sub>  $[_{IP}$  wo<sub>k</sub> xihuan t<sub>ziji</sub> ]]

c. \*  $[_{CP1}$  Zhangsan<sub>z</sub> ...  $[_{CP2}$   $[_{SP}$  *ziji*<sub>z</sub> Wangwu<sub>w</sub> ..  $[_{CP3}$   $[_{AAP}$   $\Lambda_A$   $[_{IP}$  wo<sub>k</sub> xihuan t<sub>ziji</sub> ]]

(28a)'' Zhangsan<sub>z</sub> renwei[wo<sub>k</sub> zhidao [Wangwu<sub>w</sub> xihuan *ziji* (\*z/\*k/w) ]]  
 Zhangsan think I know W. like self

a.  $[_{CP1}$  Zhangsan<sub>z</sub> ...  $[_{CP2}$   $[_{AAP}$   $\Lambda_A$   $[_{IP}$  wo<sub>k</sub> ...  $[_{CP3}$  Wangwu<sub>w</sub> xihuan *ziji*<sub>w</sub> ] (local binding)

b.  $[_{CP1}$  Zhangsan<sub>z</sub> ...  $[_{CP2}$   $[_{AAP}$   $\Lambda_A$   $[_{IP}$  wo<sub>k</sub> ...  $[_{CP3}$   $[_{PP}$  *ziji*<sub>k</sub> [ Wangwu<sub>w</sub> xihuan t<sub>ziji</sub> ]]

c. \*  $[_{CP1}$  Zhangsan<sub>z</sub> ...  $[_{CP2}$   $[_{AAP}$   $\Lambda_A$   $[_{PP}$  *ziji*<sub>z</sub>  $[_{IP}$  wo<sub>k</sub> ..  $[_{CP3}$  Wangwu<sub>w</sub> xihuan t<sub>ziji</sub> ]]

The long distance anaphor in Spec,PerspP creates an intervention effect for the matching relation between first/second person pronouns and the  $\Lambda$ -projections.

Problems (mostly inherited from Huang & Liu's approach):

- (i) blocking by an intermediate third person antecedent in (28a)-b'' does not follow (cf. Huang & Liu 2001, who claim that there is no real blocking in this case: cp. (28b))
- (ii) stronger blocking by a subject intervener does not follow; it looks like an "ECP effect"
- (iii) one problem for the covert movement of the LD anaphor (but also for the head movement approach!) is the immunity of LD binding to islands (Cole et al 2004, 65-75)
- (iv) Alleviation of blocking effects in (30): this is actually expected if *ziji* moves to SelfP of the subordinate clause, and *wo* connects to  $\Lambda$ AP of the matrix clause, cf. (28a)''
- (v) problem of crosslinguistic variation: why no blocking in Icelandic, Italian?



Poletto (2000): pre-negative clitics in Northern Italian dialects:

- (35) a. **I** mangi (Friulan; Poletto 2000, 13, (4))  
 CL eat.1SG  
 b. **I** ti mangis  
 CL CL.2SG eat.2SG  
 c. **I** mangin  
 CL eat.1PL  
 d. **I** mangè  
 CL eat.2(PL?)
- (36) a. **A** l mangia  
 CL SCL eat.3SG  
 b. **A** mangin  
 CL eat.(3)pl?

The clitic *i* occurs with both first and second person subjects, irrespective of number. The clitic *a* cannot co-occur with *i*; it is limited to wholly rhematic clauses, it is incompatible with wh-phrases or left-dislocated elements.

- (37) [<sub>LDP</sub> inv SCL<sub>i</sub> [<sub>CP</sub> deic SCL [<sub>FocP</sub> t<sub>i</sub> [<sub>IP</sub>[NegP [<sub>NumP</sub> SCL [<sub>HearerP</sub> SCL [<sub>SpeakerP</sub> InflV [<sub>TP</sub>...
- (Poletto 2000, 36, (63))

Partial unification of (34) and (37) (cf. Di Domenico 2004 for a different one):

- A Speech Event Participant projection (which subject pronouns overtly move to in Hebrew)
- The highest nonpronominal subject position may be the Aboutness-Shift Topic position (cf. also Cardinaletti's (2004, 148-149) discussion of her Subject-of-Predication)

The data in (i)-(ii) suggest a potential generalization:

- (38) The stalnakerian projections are higher than the kaplanian ones

Familiarity topics can be right-dislocated, contrary to contrastive and aboutness shift topics:

- (39) a. Je ne vois presque jamais Alice. Mais sa soeur, je la vois souvent.  
 b. Je ne vois presque jamais Alice. # Mais je la vois souvent, sa soeur.  
 (De Cat 2007, 515, (74))

It has been argued that right-dislocated elements belong in the lower periphery of the vP phase (Belletti 2005, Cecchetto 2000 - see De Cat 2007 for a criticism; Grewendorf 2005). The vP periphery also lacks contrastive focus (Belletti 2004, 37) and presumably Force. If we assume the lower vP periphery, we may envisage the following conjecture:

- (40) The vP phase has kaplanian projections, but not stalnakerian projections.

The rationale would be that a vP phase cannot constitute an independent illocutive act. Given generalization (38), (40) would be consistent with a truncation view of the vP periphery.

## 6. Summary

General types of cartographic arguments:

- (i) positional/distributional (e.g., Rizzi 1997, Cinque 1999)
- (ii) intervention/locality (e.g, Enç 1987)
- (iii) compositional (e.g. Kratzer 1996, Zamparelli 1999)

Conclusions concerning the person feature:

- i) All (unbound) personal pronouns are linked to the left periphery. In a feature geometry approach, we may hypothesize a superordinate feature [parametric] common to all personal pronouns.
- ii) The purely indexical component (roles in the speech event) of first and second person can be cartographically distinguished from the perspectival component, à la Speas & Tenny (cf. also Schlenker 2004 on free indirect discourse). Intrinsic animacy/sentience of a personal pronoun is a necessary, but not a sufficient condition for establishing a connection with the Perspective Phrase.

Concerning the left periphery:

- iii) It is better to distinguish two notions of context: the parametric, kaplanian notion and the dynamic, stalnakerian notion. The left periphery may be organized in subfields corresponding to these different notions.
- iv) What is the relative ordering of the kaplanian and the stalnakerian projections? Some positional evidence suggests that the former is lower than the latter.
- v) The distinction may also be relevant to the issue of clarifying the difference between the CP periphery and the vP periphery
- vi) The double role of the context remains an open problem, as well as the question of how much of the context can be captured by functional projections.

Valentina Bianchi  
 Università degli Studi di Siena – Italy  
 bianchi10@unisi.it

## Appendix

### 1A. Kaplan (1977/89)

Assume an infinite set  $W$  of possible worlds/circumstances  $w$ :

- The extension of a sentence  $S$  at a single  $w$  is a truth value (1 or 0)
- The intension of a sentence  $S$  is a proposition, the set of possible worlds/circumstances in which  $S$  is true (a function from worlds/circumstances to truth values)
- $S$  is necessary iff  $S$  is true in every possible world/circumstance.

(1) I am here now

(3) is true in every possible context of utterance, yet (1) is contingent, not necessary.

→ It is necessary to distinguish the context of use from the circumstances of evaluation.

→ Namely, it is necessary to distinguish two levels of meaning:

Character: contexts  $\Rightarrow$  contents

Content: circumstances  $\Rightarrow$  extensions, or:

Meaning + context  $\Rightarrow$  intension

Intension + possible world  $\Rightarrow$  extension (Kaplan 1977/89, 505-506)

Indexical terms have a character which, when applied to a context, yields an appropriate 'content' (e.g., an individual, in the case of first and second person pronouns)

Indexical terms are thus DIRECTLY REFERENTIAL: "the designatum (referent) determines the propositional component rather than the propositional component, along with a circumstance, determining the designatum" (Kaplan 1977/89, 497). In this, they differ from definite descriptions (e.g. *the President of the USA*), whose extension varies with the circumstance of evaluation.

A Kaplanian context is an INDEX with several coordinates, e.g.  $i = \langle w, t, p, a \dots \rangle$  where  $w$  is a possible world/circumstance (the actual world of the utterance),  $t$  is a time,  $p$  is a position in 3D space,  $a$  is an agent (speaker) etc.

A context  $\langle w, t, p, x \rangle$  must be proper, i.e.  $x$  must be located at  $p$  in  $w$  at time  $t$ . This is what guarantees that (13) is a priori true, though not necessary. (Not all possible circumstances of evaluation are proper contexts!)

"The problem is that on my analysis, the mechanism of direct reference operates *before* the familiar semantical notions of truth and denotation come into play... the mechanisms of direct reference certainly are not *post*semantical. But equally surely they are not syntactical. Thus I put them in the bottom layer of semantics." (Kaplan 1989, *Afterthoughts*, 575-76)

### 2A. Stalnaker/Heim: updating the common ground

As above, assume an infinite set  $W$  of possible worlds/circumstances  $w$ :

- The extension of a sentence  $S$  at a single  $w$  is a truth value (1 or 0)
- The intension of a sentence  $S$  is a proposition, the set of possible worlds/circumstances in which  $S$  is true (a function from worlds/circumstances to truth values)

Instead of evaluating a proposition w.r.t. one circumstance of evaluation (yielding a truth value), we take a dynamic perspective.

Conversation as a cooperative and rational activity (Grice) is based on a common ground of mutually recognized shared presuppositions, i.e. a set of propositions that each participant takes to be believed (or accepted) by everyone (Stalnaker 1979, 2002; Bonomi 2007).

This set of propositions uniquely determines (by intersection) a context set of possible worlds (a subset of  $W$ ): the set of worlds that are compatible with all the information contained in the common ground. (The larger the common ground, the smaller the context set that it characterizes.)

One basic goal of ordinary conversation is to distinguish among the alternatives in the common ground.

The pragmatic presuppositions of a sentence  $S$  are ‘admittance conditions’: they must be true in all of the worlds in the context set in order for updating to be possible.

The essential effect of the assertion of an utterance  $S$  is that the propositional content of  $S$  updates the common ground (by intersection), discarding all the worlds in which  $S$  is not true. If an assertion is not rejected, from that point on the propositional content of  $S$  is incorporated in the common ground.

Heim (1983): meaning can then be conceived of, dynamically, as a function from contexts (context sets) to contexts, by recursively defining the Context Change Potential of any sentence  $S$ . For an atomic sentence like *it is raining*:

(2) For any context  $c$ ,  $c + \textit{it is raining} = \{w \in c : \textit{it is raining in } w\} (= c')$

Nota bene: this is actually a model of BELIEF TRANSFER, cf. Stalnaker (2002)

Interrogative and imperative clauses may be thought of as adding elements to different components of the context: the QUESTION UNDER DISCUSSION STACK (Roberts 1996, 2004) and the addressee’s TO-DO-LIST (Portner 2007), respectively.

### 3A. Reinhart’s (1981) Sentence Topic

“The failure to define topics as old information suggests that rather than defining them in terms of the effect of previous discourse on the given sentence we should attempt to define them in terms of their effect on the ongoing discourse.” (Reinhart 1981, 23)

Assuming Stalnaker’s (1978) notion of common ground as a set of propositions (NB: here dubbed context set):

“The propositions admitted into the context set [sic] are classified into subsets of propositions, which are stored under defining entries. At least some such entries are determined by NP interpretations. NP-sentence topics, then, will be the referential entries under which we classify propositions in the context set and the propositions under such entries in the context set represent what we know about them in this set. [...] Sentence topics... are signals for how to construct the context set, or under which entries [sic] to classify the new proposition.” (Reinhart 1981, 24)

For any sentence  $S$ , let  $\phi$  be the proposition expressed by  $S$ . The set of possible pragmatic assertions of  $S$  ( $PPA_{(S)}$ ) =  $\phi$  together with  $\{ \langle \alpha, \phi \rangle : \alpha \text{ is the interpretation of an NP expression in } S \}$

Caveats:

- (i) the sentence topic need not be an NP (other possibilities not discussed);
- (ii) certain marked structures (e.g. left dislocation or passivization) restrict the  $PPA_{(S)}$  set to only  $\langle \alpha_i, \phi \rangle$ , where  $\alpha_i$  is the interpretation of the left-dislocated NP (or passive subject).

A selection function maps each pair  $\langle C, S \rangle$ , where  $S$  is a sentence and  $C$  is its context of utterance, into a member of  $PPA_{(S)}$ , i.e. it selects one of the members of the PPA set of  $S$  in context  $C$ . (Some conditions on the selection function determine that we select  $\langle \alpha_i, \phi \rangle$  such that  $\alpha_i$  is  
 (i) already included in the context set (=already familiar topic), unless a new discourse segment is starting (or  $\phi$  is lined to the previous proposition in  $C$  by a semantic connector), and  
 (ii) consistent with (i), the interpretation of the subject (or of the highest element on the NP accessibility hierarchy). (Reinhart 1981, 29)

To say that a sentence  $S$  uttered in a context  $C$  is about  $\alpha_i$ , i.e. that the pair  $\langle \alpha_i, \phi \rangle$  of  $PPA_{(S)}$  is selected in  $C$ , is to say,  
 First, that if possible, the proposition  $\phi$  expressed in  $S$  [sic] will be assessed by the hearer in  $C$  with respect to the subset of propositions already listed in the context set under  $\alpha_i$ , and  
 Second, that if  $\phi$  is not rejected it will be added in the context set under the entry  $\alpha_i$ . (Reinhart 1981, 25)

→ The first clause implies the existence presupposition of topics (à la Strawson 1964). “Only individuals (or sets of individuals) whose existence has been established may serve as entries in the context set.” (Reinhart 1981, 26)

→ In the case of indefinite-specific topics, where the referent is explicitly assumed to be unknown to the hearer, there will be no already existing entry in the context set, so the proposition cannot be assessed w.r.t. an already existing entry; nevertheless, the pragmatic assertion is still about the topic’s referent in the second sense of being listed in the context set (if the assertion is not rejected) under this [newly created] entry. (Cf. Reinhart 1981, 26)

“The intuitive picture underlying the condition [i] is that within each segment of a given (happy) discourse the speaker attempts to relate the proposition of each new assertion [sic] to the immediate information in the context set, either by expansion and further classification of existing entries (subsets of propositions) or by establishing semantic relations between existing entries and new entries opened with the inclusion of the proposition. [...]

The second condition [ii]... is of different nature than the first. Rather than reflecting discourse strategies, it reflects properties of the syntactic and semantic processing of sentences. Subjects are known to have ‘prominence’...” (Reinhart 1981, 30)

Reinhart (1981, 3) assumes that there is at most one sentence topic for any sentence uttered in a given context.

NB: I have limited myself to the most basic possible understanding of sentence topic, For a more refined view, see work by Portner & Yabushita (1998, L&P;2001, Journal of Semantics)

#### 4A. Kaplan (1989) on the assignment function

Kaplan (1989, *Afterthoughts*, 591-592): “Context is a package of whatever parameters are needed to determine the referent, and thus the content, of the directly referential expressions of the language... *it is natural to treat the assignment of values to free occurrences of variables as simply one more aspect of context* [emphasis mine, VB].... each context is associated with a particular possible world. The agent, time, and place are all drawn from that world. Similarly, an assignment associated with a particular context may be taken to assign only values that exist in the world of the context .”