

## Illocutive force is speaker concern about the source of information and information sharing. Anchoring multiple speaker-addressee deixis in syntax.

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### 1. Theory of mind ≠ Foreign Conscience Alignment=Speaker's assessing Addressee's mind (about Speaker's mind)

The fact that L has a cognitive function (e.g., in order to give expression (= print out?) thought(s) or create thought(s)) does not account for its form. Any other symbol-processing algorithm (such as predicate logic) would be just as good to do that. However, assume that we had different brains (with different processing architectures) yielding different Ls. Yet, their functions would be identical to those of our Ls.

**ToM in L1 acquisition:** Given lexical pairs different in epistemic complexity (such as modal verbs in Germanic, or sentence final particles in various Asian languages), what is the age differential with respect to the age of acquisition: When is the simpler and when is the more complex correspondent of the pair acquired? Choi 1995: 198.

(1) Acquisitional development of modal meaning differential:

Degree of assimilation of knowledge in the speaker's mind (old/assimilated k.) ... earlier		
Listener's status of knowledge about a proposition (shared k./certainty) ... intermediate		
Source of information (non-shared k./indirect evidence) ... later		

**Axiomatics:** Do we mature to cognize based on linguistic maturation or vice versa (Piaget vs. Chomsky)? (Which schools of linguistic thinking accept/reach out for such axiomatic bias: Constructionism?)

**Resolution?** – Papafragou et al. 2007: Kids that are maturer linguistically acquire complexities earlier! (Piaget contestant: The basis for kids to be maturer linguistically is their stronger cognitive maturity).

**ToM in non-acquisitional approaches:** Is there a maturity differential between languages (language typologies) in ToM terms? Is there a specific human ToM (specific lion-ToM?)

**ToM-reducibility:** Is non-acquisitional ToM reducible to issues of evidentiality (Palmer (1986: 91) on the distinction between discourse features and modality)?

**Evidentiality scaling:** Japanese (silent non-)assertiveness (Tanaka 2009); differentials based on physical senses as well as on reasoning and inference in Amerindian Ls.

**Jakobson's (1971) (origo) shifters and (multiple) (speaker) deixis (Diewald 1991):** *on Jan. 8, 1936 ≠ two years ago/yesterday* – λtrλts: tr=(ts-2years/ts-1day)

**Sperber & Wilson (1986: 4-5):** Thoughts do not simply travel from Speaker to Addressee (as in Shannon-Weaver's 1949 model). We don't just send out communications to addressees when we are engaged in linguistic intercourse. What we do, instead and much rather, is that we try to make sure what exists, on the part of the addressee, in terms of shared knowledge relevant to the present linguistic interaction and in terms of what is in need of correction on either part (achieve *common ground*=attempt at how much is truth value-worthy between Sp and Addr).

**Deixis differential:** different deixis bearers in different languages (why don't all Ls have the ToM-potent category of the German modal particles?)

**Illustration:** two German modal particles (≠ modal adverbs!) *ja* "yes-PARTICLE" vs. *eben* "flat-PARTICLE": While *ja* makes an appeal to the addressee's full consent on the basis of shared encyclopedic knowledge about p, the contribution *eben*, rather than appealing to a common knowledge horizon, derives such an appeal from what has been part of the previous discussion between Speaker and Addr.

(1)a λsλaλp(*ja*): Appeal[s(p)=a(p)] ∧ [ws⊃cw]

(2)b λsλaλp(*eben*): Appeal[s(p)=a(p)] ∧ [cons⊃ccona]

## 2. Clause structure – and the existence of a speaker-source deixis.

**2.1. Modal particles:** contingency upon specific illocutive types, accent, clause type, and position.

- (3) *przecież* (irritation, surprise)  
Przecież już idę!  
ja.MP schon.ADV gehe/komme.1.SG.PRES.IMPERF  
„I am coming alright!“
- (4) No chodź-żesz wkońcu!  
doch. MP komm.doch.2.SG.PRES.IMPERF-MP endlich.ADV  
„Do finally come!“
- (5) Wie siehst < denn> DU < denn> aus? ... *wh*-question  
how look PART<sub>?</sub> you PART out  
“What do you look like after all?”
- (6) \*Wie siehst < ja> DU < ja> aus?  
how look PART<sub>!</sub> you PART out
- (7) DU siehst ja aus! ... emphatic exclamation  
you look PART<sub>!</sub> out  
„Why, you are you looking like someone!“
- (8) \*DU siehst denn aus!  
you look PART<sub>?</sub> out
- (9)a Wie sieht er aus ?  
“What does he look like?” ... speaker’s question(p)  
b [SpecCP Wie <denn>] [Comp sieht<sub>i</sub>] er [VP <denn> [VP aus t<sub>i</sub>]] ?  
how PART<sub>?</sub> looks he PART<sub>?</sub> like  
“What does he look like after all ? ” ... speaker’s concern about p  
c Wie <DENN> sieht er <DENN> aus ?  
how PART<sub>?</sub> looks he PART<sub>?</sub> like  
“What else does he look like?” ... speaker’s concern about p(Addr)
- (10) **If** for (9a) FORCEP (or ILLOCUTIONP) operates on p by force of <interrogative(p)>, **then** (9b) does by force of <interrogative(p), Sp-concern about <?normal(p)>>, **and then** (9c) does so by force of <interrogative(p), Sp-concern about Addr-reaction <<-normal(p)>>where SP-CONCERN/DEIXIS is a subcategory, or a subfeature, of FORCEP (or ILLOCUTIONP).
- (11) Fine structure of the left sentence periphery (cf. (5) above):  
**FORCEP/ILLOCP/SPEAKERDEIXISP** > FOCp > TOPp > FINP/CP > TP > MP > VP > V

**2.2. Multiple shifting/deixis multiplication on German modal verbs** (Abraham 2008) fizzling out speaker concern (scoping over the whole proposition: modalities incompatible with certain person-speaker distributions.

- (12) a Er *soll* in Grönland gewesen sein  
he shall.MV in Greenland been be  
“He is supposed to have been in Greenland”  
b Ich *soll* in G. gewesen sein ... Person split  
I shall.MV in G. been be  
“I am supposed to have been in Greenland”
- (13) a Er *will* in Grönland gewesen sein  
he will.MV in Greenland been be  
“He pretends to have been in Greenland”

- b Ich *\*will/muss/mag* in G. gewesen sein ... *\*/Person split* (dream about oneself)  
I will.MV in G. been be

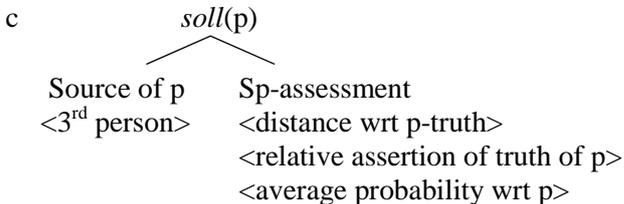
### 2.3. Speaker deixis/concern and Feature Distribution Differential/FDD

In Minimalist terms, any (covert) raising movement to FORCEP, the illocutive function, must be licensed by content features. We take as a point of departure Davidson's (2004) threefold distinction of mind awareness: Foreign/3<sup>rd</sup> person's ≠ Speaker's (=I's) ≠ Addressee's (=your). "Foreign/3<sup>rd</sup> persons' knowledge awareness" may also be understood as "social/objective/intersubjective knowledge".

- (14) a **epistemic modal verbs/EMV** denote a twofold deixis:  
according to the source of p, and another one according to the speaker's assessment of

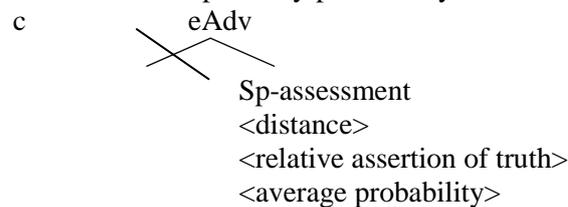
p.

- b Haider *soll* betrunken gewesen sein (with p=*Haider betrunken gewesen sein*)  
"Haider was supposed to have been drunk" "Haider having been drunk"



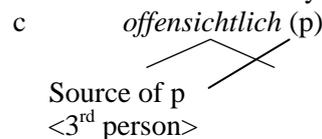
- (15) a **epistemic adverbials/epAdv** unfold but a simple deixis – Source branch of (11c) missing.

- b Haider ist *wahrscheinlich/vermutlich* betrunken gewesen  
"Haider was probably/presumably drunk"



- (16) a **evidential adverbials/evAdv** likewise unfold but a simple deixis – speaker deixis missing.

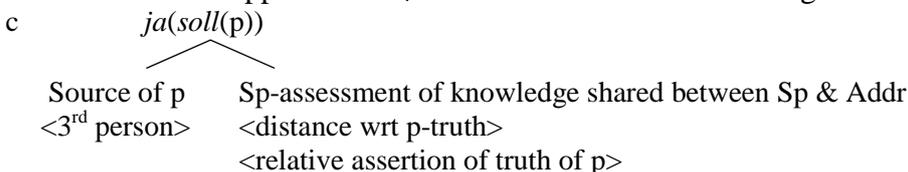
- b Haider ist *offensichtlich* betrunken gewesen. (with p=*Haider betrunken gewesen sein*)  
"Haider was obviously drunk" "Haider having been drunk"

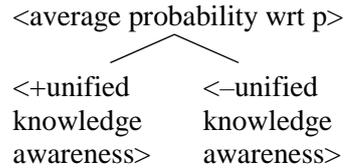


#### Yield for FDD: three-fold deixis

- (17) a **modal particles/MPs** denote a different deixis in the following sense: Speaker makes an estimate about the knowledge awareness of Addressee while letting the Addr know about this estimate and giving him a chance to relativize, or correct, this estimate about p. In this sense, the features under Sp-assessment are richer than those for EMV given according to the source of p, and another one according to the speaker's assessment of p.

- b Haider *soll ja* betrunken gewesen sein (with p=*Haider betrunken gewesen sein*)  
"Haider was supposed *PART<sub>i</sub>* to be drunk" "Haider having been drunk"





Thus, MPs unfold a threefold deixis in the sense of (17c). The general insight is that MP serve the highest theory of mind mark (speaker deixis/concern mark = speaker's assessment of Addressee's assessment), this to the extent that MPs – and only these as opposed to MVs and, even more so, E-adverbials – induce an oscillating intercommunication between Sp and Addr without giving full lexical expression to this exchange. No other grammatical category does this; and, what is interesting typologically, no language does this in the same direct-deictic, discourse prominent, way unless it possesses the MP-category (see Abraham 1991, 1995).

#### 4. MP-combinations and their deeper logic: Why are there no MPs in English (and other (Romance) Ls?)

4.1. **Combinability of MP:** under strong constraints: only in rising order of (20) (Abraham 1991, 1995). Notice the categorial status of each order class.

(18)	<b>C1-COORD</b>	>	<b>C2-ADV</b>	>	<b>C3-FP</b>
a	<i>denn</i>		<i>auch</i>		<i>bloß/nur</i>
b			<i>doch</i>		JA
c			<i>eigentlich</i>		<i>schon</i>
d			<i>etwa</i>		<i>wohl</i>
e	<i>aber</i>		<i>ja</i>		<i>auch</i>

Cf. category-contingent hierarchical order on **Double-Comp** (Bayer 2008):

(19) a	men shal wel knowe <b>who that</b> I am	Middle English
	'Man wird wohl wissen, <b>wer dass</b> ich bin'	
b	nu hoert ... <b>wa daz</b> er mir lougent niht aller mîner leide	Middle High German
	'Nun hört zu ... <b>wie viele</b> meiner Schmerzen <b>dass</b> er mir abstreitet'	
c	Je ne sais pas <b>quand que</b> Marie arrivera	Substandard French
	'Ich weiß nicht, <b>wann dass</b> Marie ankommt'	
d	Non so <b>quando che</b> Mario arriverà	Substandard Italian
e	Frag sie doch, [ <sub>SpezComp</sub> <b>wie lange</b> [ <sub>Comp</sub> <b>dass</b> sie [ <sub>VP</sub> noch [ <sub>VP</sub> da bleiben wollen]]]]!	

**Threefold C-occurrence** (Abraham 1995):

(20) a	das ist nicht so dumm, <b>als/wie-C1 ob/wenn-C2 daß-C3</b> er gedacht hat
b	das ist, <b>als ob dass</b> er gedacht hat <i>wie wenn daß...</i> (?)
c	Er schaut aus, <b>wie wann (dass)</b> er Masern hätte

(21) a	*Er weiß (nicht), <b>dass wen</b> er gesehen hat	*indirect <i>w</i> -question, *object clause
b	*Er schaut aus, <b>dass wie wann</b> er Masern hätte	sentence type?
c	*Er schaut aus, <b>wann daß wie</b> er Masern hätte	sentence type?

**Syntactic Null Hypothesis** (Abraham 1995)

(22) a MPs have 3 syntactic positional classes: **C1, C2, and C3**.

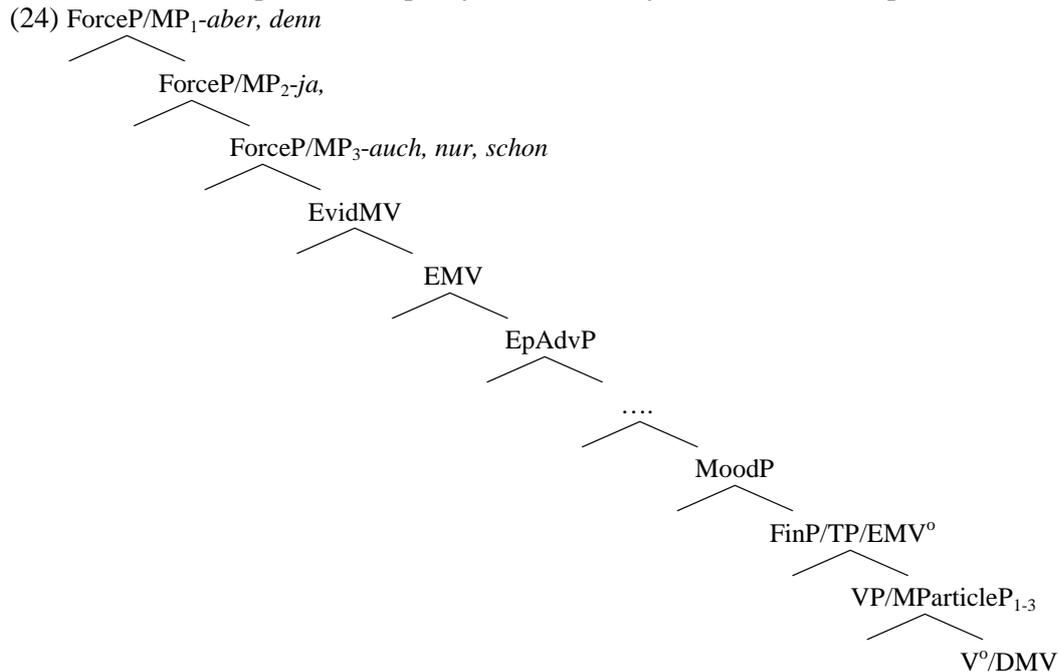
b Class belonging in **C1, C2, and C3** is contingent upon syntactic properties of the lexical MP-homonyms.

(23) a	Und/denn/aber <b>WIE</b> hat er das gesehen?	<i>w</i> -question context
b	Und/denn/aber <b>WIE dass</b> er sie gesehen hat!	<i>w</i> -exclamation context

#### 4.2. From surface to covert scope position: CP-hierarchy → ForceP-subcategorization

These are the empirical prerequisites for a formal derivation which yields the basis for semantic interpretability. This yields the following structure in (24).

- MPs occur only in the middle field or after a *wh*-word; they have to raise to the head of FORCEP to enforce their illocutive power.
- Since the invariable linear order of MPs in combination falls into three classes (Thur-mair 1989) motivated by their pre-particle categorial status (Abraham 1995), there must be three different landing sites in FORCEP, i.e. MP1<MP2<MP3.
- EMVs merge no lower than TP due to their finiteness-only; they have to raise to FORCEP to execute their illocutive power. DMV merge in VP and raise due to agreement.
- The hierarchical rise of speaker deixis features from E-adverbials to EMVs and further to MPs map onto an equally hierarchically structured CP-expansion.



#### 4.3. MP-in-situ in (East and West) Asian (not necessarily OV-) languages

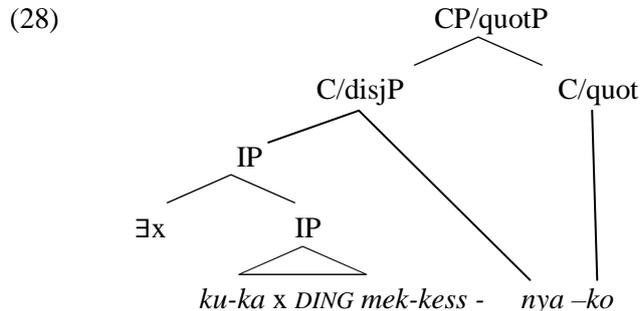
Mandarin Chinese as well as the majority of Asian OV-languages place discourse and sentence modalizing particles at the end of the clause. See Li (2006: 70).

- (25) (Kàn-qǐ-lái) Xiǎofú hùì zuó yú **ba**↓  
 look-up-come X. can cook fish PART  
 "It appears that X. can probably cook fish"

How does this clause-final position align with the clause and wide scope structure in (29)? Now see the *w*-constituents in the rightmost clausal periphery in Koran = stranded in clausal base position. Let us assume (with Bayer 2009) that clause-final discourse and modalizing particles in such languages are structured in line with (31) for questions featuring morphemes referring to <disj> and <C>.

- (26) akasi -nun [[[ ku-ka **mwues**-ul mek-kess] **-nya** ] **-ko**] mwulessta  
*bar keeper-TOP he-NOM what-ACC eat-wanted -Q -QUOT asked*  
 'The bar keeper asked what he wanted to eat'
- (27) Bill-um [[[John -i wa -ss] **-nya**] **-ko**] mwulessta  
*Bill-TOP John-NOM come-PAST -Q -QUOT asked*  
 'Bill asked if John had come'

Gloss Q refers to the feature <disj> extending scope over IP as in (31) below. QUOT refers to C. Apart from details this is in full correspondence with German except that Koran modalized clause structure is a mirror image of German clause and wide scope architecture.



→ multiple Comps are represented cross-linguistically irrespective of whether they are left-peripheral or in their base positions in the middle of the clause.

**4.4. Agreement checking for MPs for covert LF-movement should** proceed on the basis of the feature assignments in hierarchically rising order:

(29) for epistemic adverbials/**epAdv**: Sp-assessment <distance wrt p-truth>, <relative assertion of truth of p>, <average probability wrt p>

(30) for evidential adverbials/**evAdv**: Source of p <3<sup>rd</sup> person>

(31) for **EMV**, specifically epistemic *sollen* “be supposed to”: Source of p <3<sup>rd</sup> person> as well as Sp-assessment <distance wrt p-truth>, <relative assertion of truth of p>, <average probability wrt p>

(32) for **MPs**, specifically the MP2 *ja*: Sp-assessment <distance wrt p-truth>, <relative assertion of truth of p>, <average probability wrt p> as well as the split decision <±unified knowledge awareness>

See (11)-(14) above and (39)-(42) below. Recall that the feature bundle under “Sp-assessment” needs terminological collapse and tightening, let us say <**Sp(eaker)-concern**> (partly following Bayer 2008). Recall in particular that this collapses speaker identification with 1<sup>st</sup> and 2<sup>nd</sup> persons vs. neither (i.e., with 3<sup>rd</sup> person). In other words, ‘Sp-concern’ summarizes and generalizes for the specific feature bundles in (11c), (12c), (13c), and (14c).

If we take MP-representatives of the linearly first class, MP1 for the derivative pattern, this is the covert derivation of *denn* “then” and *aber* “but”:

(33) MP1 such as *denn*<sub>Interrog</sub> or *aber*<sub>Declar</sub>:  

$$[\text{FinP/ForceP1} \dots \text{Fin}^0/\text{Force}^0 \langle \text{Interrog/Declar} \rangle [ \dots [\text{ParticleP } \text{denn/aber} \langle \text{uInterrog/uDeclar, Sp-concern} \rangle [\text{VP} \dots ]]]]$$
 MOVE UNDER AGREE  $\Rightarrow$   

$$[\text{FinP/ForceP1} \dots \text{Fin}^0/\text{Force}^0 \langle \text{Interrog/Declar; Sp-concern} \rangle \text{denn/aber} [ \dots [\text{ParticleP } \text{denn/aber} \langle \text{uInterrog/uDeclar, Sp-concern} \rangle [\text{VP} \dots ]]]]$$

The landing sites for MP2 and MP3 are correspondingly lower in Force/MP2 and ForceP/MP3. EMVs land in the somewhat lower positions of EvidMV or EMV licensed by their corresponding speaker- deixis features (without <Sp-concern>, the latter being characteristic only of MPs). And, finally, epistemic adverbials, EpAdv, land even lower due to their weaker Sp-deictic predicaments.

### 5. MP-compatibility and ForceP across clause dependencies

In the light of the fact that MPs presuppose and modify the illocutionary force of MPs (and epistemic modal verbs, EMV), root clauses are taken to be the best candidates for the insertion of MPs. However, Haegeman 2006 shows that there are certain dependent clauses allowing for MP-insertions and, consequently, possessing illocutive force represented by FORCEP. Other dependent clauses, however, will not possess their own illocution and, consequently, project no FORCEP. See (36) (following Haegeman 2006; see also Coniglio 2008).

- (34) a dependent core clauses/DCC: Subj - - - TopP FinP .... \*MP  
 b dep. peripheral clauses/DPC: Subj **ForceP** TopP FocusP TopP FinP .... **MP**  
 c independent/matrix clauses: - **Force P** TopP FocusP TopP FinP .... **MP**

Notice the compatibility correlation between MP und FORCEP. What is at stake, for one, is to separate (34a) and (34b) distributionally. However, second, since adverbials do not carry the clausal illocutive operator power as MPs do, MP- vs. Adv-distribution in dependent clauses may also be employed for subdivision between (34a) vs. (34b).

### (35) Types of dependent clauses: Modal particles in German and truth value

[MP=modal particle, BG?backgrounding, FG=Foregrounding, DPC/DCC=dependent peripheral/core clause]

Semantic type of dependence	IllocP /MP	Presupposed (vs. asserted)	TH (vs. RH) status	Event (vs. discourse)	Truth value assessability	Core/DCC vs. Peripheral / DPC	Text BG (vs. FG)
<b>Complement clauses:</b>							
Verba dicendi-nonfact.	+	-	+	n.a.	+	DPC	n.a.
Verba dicendi-factive	-	+	-	n.a.	-	DCC	n.a.
<b>Adverbial dep. clauses:</b>							
Temporal	-	n.a.	-	+	-	DCC	n.a.
Locative	-	n.a.	-	+	-	DCC	n.a.
Modal-causal	+	n.a.	+	-	+	DPC	n.a.
Concessive	+	n.a.	+	-	+	DPC	n.a.
Adversative	+	n.a.	+	-	+	DPC	n.a.
Conditional	(+)	n.a.	+	-	+	DPC	n.a.
Consecutive	+	n.a.	+	-	+	DPC	n.a.
<b>Adnominal dep. clauses:</b>							
Relative restrictive	(-)	+	-	n.a.	-	DCC	-
Relative appositive	+	-	+	n.a.	+	DPC	+

What is the uniting property of the „modal-epistemic” dependent, yet root-like, clauses as between the shaded clause types? Notice the diversity of properties between columns 3, 5, and 8, which seems to preclude such a common unified property.

## 6. Discourse functions/IS, epistemicity, root phenomena in dependent clauses, and truth value assessability.

### 6.1. The focal function of VS in French and its distribution in DPC vs. DCC

In Lahousse 2010, it is argued that, contrary to what is often assumed, embedded adverbial clauses have an information structure articulation independent from that of the main clause. More particularly, it is shown that the specific way in which information structure is expressed in adverbial clauses depends on the possibility vs. impossibility of epistemic qualification in the adverbial clause. The claim is based on new empirical evidence concerning the distribution of a clearly information structure-driven syntactic configuration: verb-subject word order in French. The literature agrees more or less explicitly that the postverbal subject has to be interpreted as the new information focus (or part of the new information focus) of the clause. On the other hand, the distribution of main clause phenomena shows that the internal IS articulation of adverbial clauses is not exactly the same as that of main clauses, to the extent that they do not occur in all types of adverbial clauses. For instance, it is well known that topicalization can occur in an *although*-clause as (36), but not in a temporal *while*-clause as (37):

(36) The shape seemed to be looking through a book, **although** [what the book was] [Henry could not tell]. ... **DPC** (Komagata 2003: 302)

(37) \***While** [this book] [Mary was writing this time last year], her children were staying with her mother. ... **DCC** (Haegeman 2006: 33)

If IS plays exactly the same role in main and adverbial clauses, then it is hard to explain why certain clearly IS-driven phenomena do not occur in all of them alike.

The purpose of this paper is to examine the internal IS status of adverbial clauses on the basis of the distribution of a clearly IS-driven syntactic configuration: **verb-subject** word order (henceforth *VS*) with its focus reading in French. Although Modern French is often described as a language with a generalized subject-verb word order, modulo certain conditions, the subject can follow the verb, as in (38).

(38) Quand [<sub>verb</sub> arriva] [<sub>subject</sub> **la tante**], cela se fit tout naturellement. ... **DCC**  
 when arrived the aunt that Refl did very naturally  
 ‘When the aunt arrived, that happened very naturally.’ (Sabatier, Frantext)

In **causal and concessive clauses VS can only appear if it is licensed by an additional factor**. This is confirmed by (39), which do not contain a **spatio-temporal topic or an explicit indication of the focal interpretation of the subject**, and where **VS is not acceptable** or at least very marginal:

- (39) a Causal clause  
 ??? Je dois partir *puisque* **sont arrivés les enfants**. ... **DPC**  
 I have to-leave since have arrived the children  
 ‘I have to leave since the children arrived.’
- b Causal clause  
 ??? Je dois partir *parce que* **sont arrivés les enfants**. ... **DPC**  
 I have to-leave because have arrived the children  
 ‘I have to leave because the children arrived.’
- c Concessive clause

??? Je dois partir *bien que* soient arrivés les enfants. ... DPC  
 I have to-leave although have arrived the children  
 'I have to leave although the children arrived.'

The examples of VS in causal and concessive clauses in (39) sharply contrast with similar examples of **VS in temporal, comparative, purpose clauses and clauses beginning with *sans que* 'without ... -ing'**. The examples in (40) indeed show that, in the latter types of adverbial clauses, **VS is fully acceptable even in the absence of any additional factor**:

- (40) a Temporal clause  
 Je dois partir *quand* arrivent les enfants. ... DCC  
 I have to-leave when arrived the children  
 'I will leave when the children arrive.'
- b Comparative clause  
*Il pleurait comme le font les enfants.* ... DCC  
 he wept in-the-same-way-as it do the children  
 'He wept as children do.'

None of the adverbial clauses in these examples contain a **spatio-temporal topic**, and **there is no anaphoric element between the verb and the postverbal subject**. Moreover, the **postverbal subject is not indefinite**, does not contain a **restrictive modification** and is **not contrastively focused**. In other words, **VS is allowed in these adverbial clauses in the absence of a spatio-temporal topic or an indication of the focal interpretation of the subject**.

DPC	DCC
Causal clauses Concessive clauses	Temporal clauses (Comparative clauses Clauses with <i>sans que</i> 'without ... -ing' Purpose clauses)
VS necessarily co-occurs with spatio-temporal topic or indication of the focal interpretation of the subject	VS is acceptable without additional factor favoring its appearance

**Table 2: Descriptive generalization on IS-criteria**

## 6.2. Placement of epistemic adverbials in dependent clauses

The epistemic modal adverbs *peut-être* 'perhaps' and *probablement* 'probably' occur in the first, but not in the second group of adverbial clauses defined above.

### 6.2.1. Peripheral adverbial clauses/DPC: causal

**Causal** clauses introduced by *puisque* 'since', or by *parce que* 'because', the adverbs *peut-être* 'perhaps' and *probablement* 'probably' may appear:

- (41) a. *Puisque Jean est peut-être contaminé, on le transporte à l'hôpital.*  
 'Since John has perhaps been infected, he's being taken to hospital.'  
 b. *Puisque Jean est probablement contaminé, on le transporte à l'hôpital.*  
 'Since John has probably been infected, he's being taken to hospital.'
- (42) a. *On transporte Jean à l'hôpital parce qu'il est probablement contaminé.*  
 'John is being taken to hospital because he has probably been infected.'

- b. *On transporte Jean à l'hôpital parce qu'il est peut-être contaminé.*  
 'John is being taken to hospital because he has perhaps been infected.'

In **concessive** clauses too, both epistemic modal adverbs can occur:

- (43) a. *Bien que l'activité se soit probablement ralentie, la fermeté de la consommation permettra à l'économie de progresser.*  
 'Although activity has probably slowed down, stable consumer demand will enable the economy to make headway.'
- b. *Bien que l'activité se soit peut-être ralentie, la fermeté de la consommation permettra à l'économie de progresser.*  
 'Although activity has probably slowed down, stable consumer demand will enable the economy to make headway.'

### 6.2.2. Core adverbial clauses

Causal and concessive clauses clearly contrast with temporal clauses as (44): in the latter the appearance of epistemic modal adverbs is not acceptable, both in the French example and in the English translation:

- (44) a. \* *Pierre est parti quand Marie a probablement téléphoné.*  
 \* 'Peter left when Mary probably phoned.'
- b. \* *Pierre est parti quand Marie a peut-être téléphoné.*  
 \* 'Peter left when Mary perhaps phoned.'

Temporal clauses as (44) are indeed traditionally considered as being presupposed, rather than being asserted. In other words, the fact that epistemic modal markers cannot appear in temporal clauses shows that their propositional content is taken for granted by the speaker. Similarly, to the extent that causal clauses such as (41)-(43) "express an attitude by the subject of the sentence, explaining what intentions he has in carrying out the action indicated" (Palmer 1998: 174), they involve deontic commitment of the speaker, rather than epistemic commitment. Whereas in epistemic modality, the truth of the proposition is at stake, what is important in deontic modality is "action, by others and by the speaker himself" (Palmer 1998: 121); "deontic modality is concerned with the necessity or possibility of acts performed by morally responsible agents" (Lyons 1977: 823). In other words, in causal clauses, the knowledge and the belief of the speaker with respect to the truth of the proposition is not at stake; the speaker has no epistemic commitment to their propositional content, and the unacceptability of epistemic modal markers is not surprising.

### 7.3. Conclusion

The generalization in Table 2 leads to the generalization that VS in French, which is an IS-driven syntactic configuration, is allowed without an additional factor in adverbial clauses without epistemic qualification (group 2: DCC), contrary to what happens in adverbials with epistemic qualification (group 1: DPC). See Table 3.

DPC	DCC
Causal clauses Concessive clauses	Temporal clauses (Comparative clauses Clauses with <i>sans que</i> ‘without ... -ing’ Purpose clauses)
VS necessarily co-occurs with spatio-temporal topic or indication of the focal interpretation of the subject	VS is acceptable without additional factor favoring its appearance
Marker of EM <sup>OK</sup> <b>Epistemic qualification possible</b>	Marker of EM* <b>Epistemic qualification impossible</b>

**Table 3: Descriptive generalization on the basis of clausal epistemic modification**

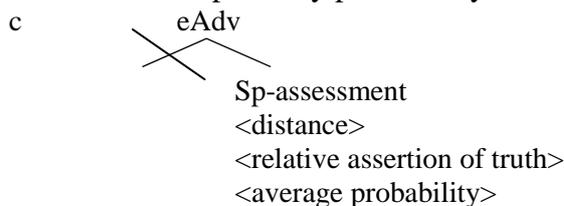
The present data thus reveal that two groups of embedded clauses must be distinguished, which exhibit different behavior with respect to the distribution of VS and epistemic modal markers. The distinction between these two groups of embedded clauses is of course not new: DPC and DCC of embedded clauses respectively correspond to the “peripheral” and “central” adverbial clauses defined for English by Haegeman (2002, 2003a, 2003b, 2006, 2007, to appear). Haegeman shows that peripheral adverbial clauses (such as causals and concessives), which structure the **discourse**, can contain epistemic modal markers, while central adverbial clauses (such as temporals and comparatives), whose function is to structure the **event** expressed in the associated clause, cannot.

### 8. Differential feature distribution between Adv and MP

(45) a **epistemic adverbials**/epAdv unfold but a simple deixis – Source branch missing.

b Haider ist *wahrscheinlich/vermutlich/vielleicht* betrunken gewesen

“Haider was probably/presumably drunk”

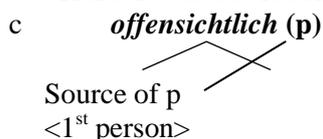


(46) a **evidential adverbials**/evAdv likewise unfold but a simple deixis – speaker deixis missing.

b Haider ist *offensichtlich* betrunken gewesen. (with p=*Haider betrunken gewesen sein*)

“Haider was obviously drunk”

“Haider having been drunk”



(47) a **modal particles**/MPs denote a different deixis in the following sense: Speaker makes an estimate about the knowledge awareness of Addressee while letting the Addr know about this estimate and giving him a chance to relativize, or correct, this estimate about p. In this sense, the features under Sp-assessment are richer than those for EMV given according to the source of p, and another one according to the speaker’s assessment of p.

b Haider *soll ja* betrunken gewesen sein (with p=*Haider betrunken gewesen sein*)



<b>dep. clauses:</b>								
Temporal	–	n.a.	–	–	–	DCC	n.a.	–
Locative	–	n.a.	–	–	–	DCC	n.a.	–
Causal	+	n.a.	+	+	+	DPC	n.a.	+
Concessive	+	n.a.	+	+	+	DPC	n.a.	+
Adversative	+	n.a.	+	+	+	DPC	n.a.	+
Conditional	(+)	n.a.	+	+	+	DPC	n.a.	+
Consecutive	+	n.a.	+	+	+	DPC	n.a.	+
<b>Adnominal dep. clauses:</b>								
Relative restrictive	(–)	–	–	n.a.	–	DCC	–	–
Relative appositive	+	+	+	n.a.	+	DPC	+	+

## 9. Conclusion: the modal *proto-soup* decomposed

### 9.1. Modals in speaker-deixis potent Ls

On first sight, modal particles have little in common except for part of their terminology: *modal* and *modality*, respectively. But this only raises another question: What is modality, in the first place, such that it may be common to MPs and MVs, two very different syntactic categories? And how do their (somewhat different) modalities relate to one another?

It was argued that what links the categories of MP and MV as well as epistemic (and evidential) adverbials is that they participate in specifying the illocutive power of the clause – be that root sentences or certain non-root, embedded clausal structures. Sentences with their own illocutive power have a particular, structurally longer domain such as in (20b) or in (39). This is what we can now say.

- (51) a Both MV and MP show polyfunctionality: the distinction between DMV and EMV, on the one hand, and MP vs. their (etymological) pre-particle homonyms with quite different categorial status assignments, on the other hand.
- b The polyfunctional status of MV as well as MP is due to grammaticalization: in the case of MV from root to epistemic modality, in the case of MP deriving from their respective status as coordinators, adverbs, interjections, and focus particles (Abraham 1991c).
- c EMV merge in TP due to their finiteness-only occurrence, from where it moves up to the categories with illocutive power. This is perhaps comparable to MPs having no status of clausal part of speech in their own right (not subject to movement elsewhere, specifically not topicalizable as opposed to all other clausal parts). MPs merge just above VP, in  $v\bar{P}$   $vP$ , from where they reach Force<sup>o</sup> through head movement. Both EMV and MP are zero projections within constituents with empty specifiers.
- d In both categories, MV as well as MP, speaker deixis plays a crucial role, although with MPs even stronger to the extent that they add the moment of concern about the addressee's state of knowledge.
- e Both EMV and MP range higher in speaker/addressee deixis than adverbials of equally epistemic and evidential power. It is due to this difference that translational opacity as well as translatory artefacts arise between different languages – i.e., those with and without EMVs and MPs.

- f The fact why only the Germanic languages possess either category, MV (with poly-functional status!) and MP, is unclear. The modality of DMVs may be triggered, in some constrained way, by aspect in languages that have no MVs (see Abraham & Leiss (eds.) 2008). And the existence of MPs converges with the existence of a wide middle field (between Comp/V2 and Vlast in VP) that, to all insights, is unique to the continental and North Germanic languages (Abraham 1991a).

### **9.2. What's wrong with speaker-deixis less potent, or overt, Ls? What is ToM in such Ls limited to?**

For any German reading English is a treat in coming to terms with lacking presuppositions. German textual coherence and cohesion relies heavily on MPs (and other means such as the mood differentials (present subjunctive for speaker-unwarranted reportives), logical coordinators, and the sequence of tenses). Yet, classification of Ls as *maturer*, vs. *immaturer*, ones is reminiscent of the socio-Darwinist, racist position defended by Schleicher (1863, 1865) and, more recently, Dahl 2004, Everett 2005, Gil 2008, McWhorter 2001a,b, 2007.

### **9.3. Illocutive power = ToM or FBA? In which way are ToM and FBA different?**

There is agreement in the literature that part of what illocutive power means belongs to aspects of a theory of mind. By contrast to root modality, epistemics and, in particular, epistemic modality as given linguistic shape by the (Germanic) modal verbs and (equally Germanic) modal particles are main, though special, carriers in the inventory of metalinguistic and inter-communicative messages. Their core characteristic is that they induce beliefs about the state of knowledge on the addressee and, perhaps more important, that they make an appeal to the addressee to cooperatively confirm or correct the belief assumptions signaled by the speaker. It was specifically the latter that we analyzed as core properties of modal particles. There is important literature on the fact that EMV, verbs of belief and claiming as well as epistemic adverbials have a rich semantic-pragmatic structure such that young children can learn these elements only at later stages in their linguistic development (see Papafragou 2002, where other pertinent literature is listed). Furthermore, the literature shows that, in all likelihood, modality is a particular component in cognitive-linguistic impairments such as autism and the Down syndrome (Papafragou 2002).

The present article extended earlier insights by fathoming out more profoundly the speaker- and addressee-deictic features mapped out by the respective categories. We have seen that MPs possess the richest speaker/addressee-deictic triggers. And we have devised means to let syntax encompass such linguistic characteristics in a completely structural and derivative mechanism. It has been indicated what this means for a justification among today's schools of linguistic thinking. Without such an inventory of rich syntactic and semantic distinctions, neither promising neuro-therapeutical projects (see, e.g., Friedmann & Grodzinsky 1997, Grodzinsky 2000, as opposed to De Roeck & Nuyts 1997) nor empirically rich enough analyses could be provided – as, in fact, they can.

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