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On Three Interpretations of Past Determiners in Somali

1. Introduction: Past as 'displacement'.
2. Past in nominals : temporal, modal, evidential uses.
3. Approaches to (sentential) evidentiality.
4. Towards a unified analysis

1 Past as 'displacement'

One crucial property of human language is referential 'displacement' (Hockett 1960) - our ability to refer to objects, places, and events that are 'not here' or 'not now'.

Iatridou (2000) on counterfactuals

Past tense always has the same meaning, but the domain it operates on varies according to the environment:

- (1) T_x excludes C_x
The variable x ranges over times or worlds (Iatridou 2000:246).
 - When the variable ranges over times:
 - T_t excludes C_t
 - T_t = topic time (Klein 1994), the time interval (set of times) we are talking about.
 - C_t = the time interval for all we know is the time of the speaker = *utterance time* (UT).
 - Past tense expresses a relation of precedence between a topic time and the UT.

- When the variable ranges over worlds:
 T_w excludes C_w
 T_w = the worlds that we are talking about (topic worlds)
 C_w = the worlds that for all we know are the worlds of the speaker (= *actual world*).
 → The topic worlds exclude the actual world.

Izvorski (1997) on the Present Perfect-Evidential connection

- *Evidentiality*: the linguistic encoding of a speaker's source of information (perceptual, reportative, inferential).
- *Evidentials*: grammatical elements that encode an evidential value.
- *Evidential types*: the cognitive concepts underlying evidentials : Direct (visual, auditive, other sensorial), Indirect (inference, report) (Willett 1988, Faller 2002 a. o.)

In Bulgarian, a present perfect morphology is interpreted as a perfect of evidentiality (PE) (= indirect evidential) (2b). In non-finite environments, as well as in the formation of the past and future perfect, the interpretation of evidentiality does not arise (2a) :

- (2) a. Ivan trjabvada e **izpil** vsičkoto vino včera
 Ivan must is drunk all.the wine yesterday
 Ivan must have drunk all the wine yesterday (perfect reading)
- b. Ivan **izpil** vsičkoto vino včera
 Ivan drunk-PE all.the wine yesterday
 Ivan *apparently* drank all the wine yesterday (evidential reading)

Izvorski's proposal : PE or *apparently* are epistemic modals with a universal modal force and a more restricted domain of quantification than 'ordinary' epistemic operators:

- (3) a. *Assertion* : $\Box p$ in view of the speaker's knowledge state
 b. *Presupposition* : Speaker has indirect evidence for p

The meaning of the present perfect morphology is underspecified as to the type of arguments involved: time intervals or possible worlds (Iatridou 2000).

- **Present perfect**
 the core eventuality does not hold at TU
 the consequent state of the core eventuality holds at TU

- **Perfect of evidentiality**

the set of worlds in which p is known are epistemically inaccessible from $w_s \rightarrow$ the speaker has no direct evidence for p (= Ivan drank all the wine)

the speaker knows $p' = \textit{there are consequences/results of } p \rightarrow$ the speaker has indirect evidence for p .

Hypothesis: there is a non-trivial affinity between temporal operators and modal operators of the epistemic kind.

This presentation

There is an interesting correlation between the marking of **tense distinctions** on nouns or pronouns (demonstratives) and that of **visible / invisible distinction** (e.g., East Cushitic, Tibeto-Burman, Wakashan, Salishan ...)¹

- I will assume that (1) extends to the temporal and modal interpretation of noun phrases as well.
- Evidentiality detected in sentences is also present in the nominal. Such data provide a probe into the (sentence-centered) semantics and pragmatics of evidentiality.
- I explore the possibility that Kratzer's (1981, 1991) notion of 'doubly relative' modality might lead to a unified analysis of the tense/modality connection, including the one found in nominals.
- Many interesting issues open up regarding the exact nature of the tense/ (Direct) evidentiality connection—and its relation to the systems 'outside' the language faculty.²

2 Past in nominals

2.1 Somali determiners

(4) *Spatial demonstratives:*

-k/t-án 'this, these'

-k/t-áas 'that, those'

-k/t-éer 'that, those' (visible middle distance)

-k/t-óo 'that, those' (far away, still visible)

¹See Lecarme 2003 and references cited there.

²See Jackenoff (1983, 2002), Suddendorf and Corballis (1997).

- Tense is inflectional: some occurrences of [past] are interpretable([T]), others are uninterpretable ([uT])⁴. Agreement and deletion processes apply in a local relation to a ‘meaningful’ past tense.

Spatiotemporal modifiers must ‘agree’ in tense with a definite article (*horé* ‘before’, *dambé* ‘after’ have no inherent temporal value).

- (7) a. *sánnad-ka/*-íi* *dambe*
 year-detM[-past]/[+past] next
 next year
- b. *sánnad-kíi/*-a* **hore**
 year-detM[+past]/[-past] before
 last year

Somali adjectives must agree in gender and tense with a definite head noun :

- (8) a. *árday-ga* *wanaagsan*
 student-detM good
 The good student
- b. *árday-gíi* *wanaagsanaa*
 student-detM[+past] pl-good[+past]
 The good student (went)

Tense and definiteness agreement (predicative nouns used as modifiers):

- (9) a. *ardayád soomaalí ah*
 student.f Somali.f be
 A Somali student(f)
- b. *ardayád-da soomaalí-da ah*
 student.f-detF Somali-detF be
 The Somali student(f)
- c. *ardayád-díi soomaalí-da ahayd*
 student.f-detF[+past] Somali-detF be[+past].f
 The Somali student(f) (who phoned you)

Idioms used as modifiers:

- (10) a. *dád fará badan*
 people fingers many
 Many people

⁴See Chomsky’s (1995).

- b. **dád-ka** **fará-ha** **badan**
 people-detM fingers-detM many
 The numerous people
- c. **dád-kíi** **fará-ha** **badnaa**
 people-detM[+past] fingers-detM many[+past]
 The numerous people (# the people who had/were the numerous fingers)

→ These structures are licenced by the syntax of the language, where [definiteness] and [tense] can function as uninterpretable elements.

2.3 Modal uses

Outside the episodic (generic/habitual sentences, generalizing free relatives), the temporal *-ii* morphology does not provide any temporal information. It introduces a modal dimension into the interpretation, by allowing variability of reference of the DP.

Generic / habitual sentences

- (11) a. **Wíil-kíi** **wanaagsani** **waa ínuu** **wax**
 boy-detM.past good[+nom] F COMP.3MS thing
bartó
 learn.pres.dep
 A (lit. the) good boy must learn (generic statement)
 = *Every_{x,w} [x boy & x is good in w][x must learn in w]*
- b. **Wíil-ku** **waa ínuu** **wax** **bartó**
 boy-detM[+nom] F COMP.3MS thing learn.pres.dep
 The good boy must learn (now)
- c. **Jirriqáa-gu** **gaajó** **buu** **ú** **dhintaa**
 cricket-detM[+nom] starvation F.3MS from dies.pres.gen
Jiiláal-kii
 dry.season-detM.past
 The cricket dies of starvation in the Summer
 # *in a specific past or current dry season*

In habitual sentences (involving states or processes that are typically regularly repeated), an adverbial DP ('in the morning' 'once a year') obligatorily bear the *-ii* morphology:

- (12) a. Aróor-tíi wáxaan toosaa líx-da
 morning-detF.past F.1S wake-up.pres.gen six-detF
 In the morning I wake up at six
 # *this/that morning*
- b. Shír-kaas oo sánnad-kíi már la
 conference-detM.dem and year-detM.past time one
 qabto
 holds.dep.pres.gen
 That conference that is held once a year (= annual conference)
 # *this/that year*

Such readings combine a quantificational dimension, and a modal dimension.

- The quantificational dimension comes from a covert generic operator.⁵
- The modal dimension of the DP comes from the ‘exclusion’ morphology.

→ The *-ii* morphology is not a quantifier, but a modal determiner.

Free relatives

Definite vs. quantificational relatives : the quantificational force of a relative clause correlates with the presence of [past] on the head noun.

- (13) a. Nín-kíi wax wada qummán doonaa
 man-detM.past thing all perfect wants.pres.gen[+nom]
 wax la’áan búu dhaxlaa
 thing lack F.3MS inherits.pres.gen
The man who wants to do everything perfectly becomes a heir to nothing (Proverb)
 # *that man (nín-ka) who presently wants to do everything perfectly...*
- b. Wíx-íi aad rabtá-na lagugú síinayaa
 thing-detM.past 2S want.pres.gen-and one.2S.to give.pres.prog
 And we will give you what you want
 # *We’ll give you the thing (wáx-a) that you want now*

⁵See Lewis (1975), Heim (1982).

Adverbial and conditional clauses

There is no *wh*-like element in Somali.

Somali *when*-clauses take the form of a relative clause introduced by a definite head noun meaning ‘the moment’, ‘the time’, etc.

The presence of *-ii* correlates with the quantificational reading of the adverbial clause:

- (14) a. Már-ka la burburiyó Taleban,...
 time-detM one destroy.dep.pres Taleban
 When (lit. the time) the Taleban will collapse,...
- b. Már-kíi la gabowbó wax badán wáa la
 time-detM.past one becomes-old.dep.pres thing many F one
 illowbaa
 forgets.pres.gen
 When (lit. the time) one gets old one forgets many things

There is no *if*-like element in Somali.

Any conditional clause takes the form of a relative clause headed by *hád-díi* ‘the time’, where *-ii* functions as modal exclusion:⁶ [*hád-da* = ‘now, this moment’]

- (15) a. Nin hád-díi uu seexdó oo sóo
 man[+nom] time-detF.past 3MS sleeps.dep.pres. and dir.
 toosó, waa isá-gíi úun
 wakes-up.dep.pres. F him-detM.past only
 If (lit. the time) a man goes to sleep and then wakes up, he is only himself (i.e. the same as he was before) (Proverb)
- b. Hád-díi uu diidó ínuu inán-ta
 time-detF.past 3MS refuse.dep.pres. COMP.3MS girl-detF
 dawweeyó, kúr-ta ha lagá gooyó
 cure.dep.pres head-detF let one.from cut.dep.pres.
 If (lit. the time) he does not want to cure the girl, let us cut his head

ExclF takes scope inside the nominal, and not outside it.

Even if the conditional is based on the actual world, the time of the conditional realization (the lexical content of the DP) is not in the world according to the speaker.

⁶For the view that conditionals are definite descriptions of possible worlds, see Schlenker (to appear).

Summary : The temporal *-ii* morphology does not provide any temporal information. It is used as an exclusion morphology, which introduces a modal dimension into the interpretation (cf. *whoever, whatever, whenever*;⁷ cf. French *quiconque*.)

2.4 Evidential uses

Within the nominal, the *-ii* morphology does not play its usual temporal role, but is used instead as a perceptual evidential, conveying the sense of direct (visual) evidentiality:

(16) *Speaker-oriented visibility / invisibility*

- a. Qálinkáy-gii méeyey? (—Khaanád-da buu kú
pen-detM.past[+nom] Q.is.ms (—Drawer-detF F.3FS in
jiraa.)
stay.pres.gen)
Where is my pen? (—In the drawer.)
- b. Qálinkáy-gu wáa kee? (—Waa kán gudúudan.)
pen-detM.[+nom] F m.Q (—F m.dem red)
Which one is my pen? (—The red one.)
- c. Deerá-da miyáad árkeysaa?
gazelle-detF Q.2S see.prog.2s.pres
Do you see the gazelle? (visible to the speaker)

The fact that evidential past sometimes may be used to talk about the future suggests that we are dealing here with modal, not temporal, exclusion:

(17) *Talking about the near future*

- a. Maánta maalín-tíi kú toddóba ah baan su'aásháy-da
Today day-detF.past from seven be F.1S question.my-detF
jawaábtée-díi káa dónayaa
answer.your-detF.past you.from want.prog.pres.
On the seventh day from today, I want your answer to my question.
- b. Bal wíil-kíi baan gáarayaa, nabadgélyo!
Well boy-detM.past F.1S reach.prog.pres goodbye
Well, I am going to the boy, goodbye!

⁷See Dayal (1997), von Fintel (2000) for related discussion.

The fact that the invisible referent can be epistemically 'present' suggests that ExclF operates on a 'higher' layer of knowledge:

(18) *Talking about a hidden referent*

- a. Inán-tii hálkée bay joogtaa? –
 girl-detF.past[+nom] place-detM.Q F.3FS stay.f.pres.gen –
 Qól-káas bay kú jirtaa.
 room-detM.dem F.3FS in stay.f.pres.gen
 Where is the girl? - She is in that room.
- b. Malakulmówd-kii méel uu jiró la
 neg.with.meet-detM.past[+nom] place 3MS stay.dep.pres one
 má oga
 neg know.pres.gen
 One never knows where the Angel of Death is.

Somali has no grammatical evidentials at the sentence level. The difference between direct, inferred and reported evidence is obtained compositionally:

(19) *Evidential constructions*

- a. Baabúur-kii jíd-kíi buu ká tallaabey
 truck-detM.past[+nom] road-detM.past F.3MS by pass.past
The truck crossed the road
 → *Indirect evidence: report*
- b. Baabúur-ku jíd-ka buu ká tallaabay
 truck-detM[+nom] road-detM[-nom] F.3MS by pass.past
 The truck crossed the road
 → *Direct evidence*
- c. Wiyii-shii jíd-ka bay ká tallaabtay
 rhinoceros-detF.past[+nom] road-detM F.3FS by pass.f.past
The rhinoceros crossed the road
 → *Indirect evidence: inference*

3 Approaches to (sentential) evidentiality

Cinque (1999) on the functional hierarchy of Mood, Modality and Tense

- | | | | | | |
|------|------------------|------------------------|------------------|-------------------|-------------|
| | Speech Act > | Evaluative > | Evidential > | Epistemic > | Tense |
| (20) | <i>frankly</i> | <i>surprisingly</i> | <i>clearly</i> | <i>probably</i> | <i>now</i> |
| | <i>honestly</i> | <i>(un)fortunately</i> | <i>evidently</i> | <i>likely</i> | <i>once</i> |
| | <i>sincerely</i> | <i>luckily</i> | <i>allegedly</i> | <i>presumably</i> | <i>...</i> |

Faller (2002) on Quechua evidentials

Quechua evidential enclitics are illocutionary modifiers which apply to an illocutionary force (assertion) and add or modify its sincerity conditions (Faller 2002:207).

‘The framework of speech act theory might also prove to be the right one in analyzing evidentials in other languages, although not necessarily of evidentiality in general. It is a reasonable hypothesis that evidentiality that is encoded by markers of tense and modality can more fruitfully be analyzed within a framework as possible world semantics, which was developed for these categories’ (cf. Faller 2002:264).

Kratzer (1981, 1991) on epistemic modality

Evidential markers do not contribute to the informative proposition, but disclose the source of information :

‘the two dimensions... are logically independent. Yet, natural language typically treats propositions based on perceptual evidence as proposition asserted to be true’ (Izvorski 1997:3).

Standard contextual approaches: There is an abstract common logical structure unifying the epistemic and root uses of modals. The lexical semantics of the modal encodes a quantificational force: \square or \diamond . A free variable next to the modal picks up a contextually salient set of worlds as a restrictor (accessibility relations).

Epistemic accessibility is defined as compatibility relative to a knowledge state:

(21) (in view of the available evidence) John **must** be at home

Must p asserts that p is true in all worlds **compatible with the evidence**. Speakers do not claim that ‘John be at home’ is true, but that a certain logical relation holds between p and what they know.

Potential problem: free contextual variables provide no clues as to how the discrete evidential system is accessed.

Kratzer’s ‘doubly relative’ modality: The quantificational part of a modal (the modal relation) is defined along 2 parameters: the Modal Base and the Ordering Source.

1. *Modal relation* : distinguishes \square from \diamond
2. *Modal base*: $wR_f w'$, the set of possible worlds relevant for accessing the modal relation ('what we know', 'what the law provides',...)
3. *Ordering source*: $w \preceq_g w'$ imposes a particular ordering among the accessible worlds determined by the modal base. (w is at least as close to the ideal than w').

(22) John **must** be at home

Modal relation: \square

Modal base: epistemic

Ordering source: assigns to every world the set of propositions that constitute **what is normally the case** in that world, and imposes an ordering on the accessible worlds with respect to that set of propositions.

4 Towards a unified analysis

Izvorski's (1997) proposal

The evidential operator is an universal epistemic modal. The presupposition of available indirect evidence is derived compositionally:

(23) Perfect of evidentiality (PE) :

- a. *Assertion* : $\square p$ in view of the speaker's knowledge state
- b. *Presupposition* : Speaker has indirect evidence for p

1. *Modal base*: epistemic

– *Contribution of the perfect aspect morphology*:
the set of worlds in which p is known are epistemically inaccessible from $w_s \rightarrow$ the speaker has no direct evidence for p .

– *Contribution of the present tense morphology*:
the speaker knows $p' =$ *there are consequences/results of p* \rightarrow the speaker has indirect evidence for p .

2. *Ordering source*: stereotypical ('in view of the normal course of events') \rightarrow inference interpretation / epistemic (e.g., reliability of rumors) \rightarrow report interpretation.

'Direct / Indirect does not make a distinction based on whether or not the evidence is perceptual, but on whether or not the evidence justifies the speaker's belief in a proposition' (Izvorski 1997:3).

'To my knowledge, nobody has proposed a formal analysis of direct evidentials as epistemic modals in a framework such as possible worlds semantics along the lines proposed by Izvorski 1997' (Faller 2002:158).

We want to investigate evidentiality by including the one found in nominals: crosslinguistically, there appears to be a widespread connection between tense and Direct evidentiality (the visible / non-visible distinction).

Possible explanation: we can study Direct evidentiality in the sense of Kratzer's doubly relative modality by capturing a suitable ordering source : intuitively, it should single out the accessible worlds that come closest to an ideal in which the speaker has visual evidence.

A perceptual ordering source

Evidential interpretations arise when expressions are used with perceptual intension - when the speaker wants to talk about *something* he is or was perceiving.

Evidential expressions must be anchored at the UT. *At any time*, the evidence available to the speaker is compatible with a set of worlds which, for all he knows, is the actual world.

In both (24a) and (24b), the referent of the DP is epistemically 'present', although it is not visible to the speaker. Intuitively, [past] somehow excludes the referent of the DP from the speaker's actual world - in a still more restricted way.

- (24) a. Qálinkáy-gii méé?
 pen-detM.past[+nom] Q.is.ms
 Where is my pen?
- b. Inántáa-dii úur bay leedahay
 girl-f.Poss2S-detF.past.[+nom] pregnancy F.3FS has
 (Doctor to Mother) Your daughter is pregnant.

Evidential modality: the accessibility relation supplies a ‘totally realistic’ modal base. A perceptual ordering source reduces the set of evidential degrees to a single degree that is most (or least) close to the ideal world, basically, a world in which the speaker has Direct evidence:

- $w'Rw$ iff $w'=w$ limits epistemic accessibility to just those worlds in which all actual facts are true = the speaker’s actual world.
- $w \preceq w'$: in the most ideal or ‘normal’ of his worlds, the speaker has Direct evidence.

Anchoring to the UT

What is brought up by the context is not a proposition (because propositions cannot be perceived), but the complement of a perception verb : syntactically, a DP or a naked infinitive—expressions like ‘my pen’ ‘bottles in the office’, ‘John drinking the wine’ ‘John drink the wine’.

The meaning of Direct perception does not come from a perception verb (as in perceptual reports)—or from an abstract perceptual predicate or operator.⁸ The meaning of Direct perception comes from the present tense. Deictic present tense (non-past) indicates Directness - this is a feature of many languages.

We can think of the deictic present tense as some functional equivalent of demonstrative reference, an indexing mechanism that relates informational access to current knowledge. For demonstratives, the presence of the indexing mechanism restricts epistemic accessibility to only observable entities.

Deictic anchoring to the present tense is crucial for the evidential meaning to obtain:

- (25) a. Wíil-kíi wanaagsani waa ínuu wax
 boy-detM.past good[+nom] F COMP.3MS thing
 bartó
 learn.pres.dep
 A (lit. the) good boy must learn (deontic generalization)

⁸On perceptual reports, see Higginbotham (1983); on the relation between perceptual reports and evidentiality, see Van der Does and Van Lambalgen (2000).

- b. Wíil-kíi ú yeedh!
 boy-fetM.past at call
 Call the boy! (invisible)

Question : Why don't we get an evidential interpretation of the past DP in generic/habitual sentences (see section 2.3)?

Possible answer : In generic/habitual sentences, the present tense temporally locates the generic predicate, not the core eventuality. Anchoring the core eventuality in utterance time is crucial for nominal tense to receive an evidential interpretation.

- When the temporal coordinates of the core eventuality are set with respect to the utterance time, nominal past receives an evidential interpretation.
- When they are not set to the utterance time, the past DP receives a modal/quantificational reading.

Summary

Somali nominals have a full tense system: some occurrences of the past tense morpheme are semantically active, others are uninterpretable, i.e. mere agreement reflexes of other, meaningful elements.

[Past] is not a primitive : a speaker who uses a past morphology can choose any interpretation possible compatible with the [past] 'exclusion' feature, yielding a temporal, modal, or evidential interpretation.

(Direct) evidentiality is derived from the exclusion relation in combination with other interpretive elements:

- an epistemic modal base (including worlds that are consistent with what is known)
- a perceptual ordering source (the ideal world from which the worlds in the modal base are considered, basically, a world in which the speaker has Direct (visual) evidence)
- a deictic anchor (nonpast, or a deictic feature) to which the ordering source can be hooked.

Both features (past, nonpast) are accessed by the performance systems.

References

- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: a cross-linguistic perspective*. Oxford: Oxford University Press.
- Dayal, Veneeta. 1997. Free relatives and *ever*: Identity and Free Choice Readings. *Semantics and Linguistic Theory* 7.
- Faller, Martina. 2002. Semantics and Pragmatics of Evidentials in Cuzco Quechua. Ph.D. dissertation, Stanford University.
- von Fintel, Kay. 2000. Whatever. In Brenda Jackson and Tanya Matthews (eds), *Proceedings from the Conference on Semantics and Linguistics (SALT) 10*, CLC Publications.
- Heim, Irene. 1982. The semantics of definite and indefinite noun-phrases, Doctoral dissertation, University of Massachusetts, Amherst.
- Higginbotham, James. 1983. The logic of perceptual reports: An extensional alternative to Situation Semantics, *Journal of Philosophy* LXXX, 100-127.
- Hockett, Charles. 1960. The origin of speech. *Scientific American*, 203, 88-96.
- Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry* 31.2, 231-271.
- Izvorski, Roumyana. 1997. The present perfect as an epistemic modal. *Proceedings of Semantics and Linguistic Theory (SALT) 7*. Stanford: CSLI.
- Jackendoff, Ray. 1983. *Semantics and Cognition*. Cambridge: The MIT Press
- Jackendoff, Ray. 2002. *Foundation of Language*. New York: Oxford University.
- King, Jeffrey C. 1999. Are Complex 'That' Phrases Devices of Direct Reference?, *Nous* 33(2), 155-182
- Klein, Wolfgang. 1994. *Time and Language*. Routledge, London.
- Kratzer, Angelika. 1981. The notional category of modality. In J. Eikmayer and H. Rieser, eds., *Words, Worlds and Context: New Approaches in Word Semantics*, pages 38–74. Berlin: De Gruyter.
- Kratzer, Angelika. 1991. Modality. In A. von Stechow and D. Wunderlich (eds) *Semantics: an International Handbook of Contemporary Research*, 639-650.
- *Lecarme, Jacqueline. 1996. Tense in the nominal system: the Somali DP, in J. Lecarme, J. Lowenstamm & U. Shlonsky (eds), *Studies in Afroasiatic Grammar Papers from the 2nd Conference on Afroasiatic Languages*, Sophia Antipolis 1994, Holland Academic Graphics, The Hague.
- *Lecarme, Jacqueline. 1999b. Nominal Tense and Tense Theory. In F. Corblin, C. Dobrovie-Sorin & J.-M. Marandin (eds), *Empirical Issues in Formal Syntax and Semantics 2*, Selected Papers from the Colloque de Syntaxe et Sémantique à Paris (CSSP), The Hague: Holland Academic Graphics.
- *Lecarme, Jacqueline. 2003. Nominal Tense and Evidentiality. In J. Guéron and L. Tasmowski (eds), *Tense and Point of View*, Presses de l'Université Paris X-Nanterre.
- *Lecarme, Jacqueline. 2004. Tense in Nominals. In Jacqueline Guéron and Jacqueline Lecarme, eds., *The Syntax of Time*, MIT Press.
- Lewis, David. 1975. Adverbs of quantification. In Edward Keenan (ed), *Formal*

- Semantics of Natural Language*, Cambridge: Cambridge University Press, 3-15.
- Schlenker, Philippe. To appear. Conditionals as definite descriptions (A referential analysis). In Ruth Kempson & Klaus von Heusinger (eds), *Research on Language and Computation*, special issue on 'Choice Functions in Semantics'.
- Suddendorf, Thomas & Michel C. Corballis. 1997. Mental time travel and the evolution of the human mind. *Genetic, Social & General Psychology Monographs* Vol. 123 Issue 2, 133-167.
- Van der Does, Jaap and Michiel Van Lambalgen. 2000. A logic of vision. *Linguistics and Philosophy* 23: 1-92.
- Willett, Thomas. 1988. A cross-linguistic survey of the grammaticalization of evidentiality. *Studies in Language* 12, 51-97.
- *Available at <http://www.llf.cnrs.fr/fr/Lecarme/>