Obligatory Presupposition

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Colóquio de Semântica Referential
October 20-22 2014, São Carlos

http://www.linguist.univ-paris-diderot.fr/~amsili/talks/slides_OblPsp_UFSCar14.pdf

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Joint work with Claire Beyssade (Paris 8)

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Introduction

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John made a big mistake. He won't do it again

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(2) a. Paul a fait souvent cette erreur. Jean ne la fera pas.
Paul has often made this mistake. Jean won't make it

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b. #Paul a fait souvent cette erreur. Il ne la fera pas.
Paul has often made this mistake. He won't make it

Introduction (2)

What is surprising in (3)?

(3) Jean a fait une grosse erreur. Il ne la fera plus.
John made a big mistake. He won't do it again

One piece of information is given twice:

- it is asserted once: John made a big mistake.
- and then it is presupposed: He won't do it again.

He won't do it again =

- He did it = *John made a big mistake* **(presupposition)**
- He won't do it **(assertion)**

Introduction (3) : redundancy

assertion – assertion : ✗

(4) #It's raining. It's raining

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(4) #It's raining. It's raining

presupposition – assertion : ✗

(5) #John knows that it's raining. It's raining. *(van der Sandt, 1988)*

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presupposition – assertion : ✗

(5) #John knows that it's raining. It's raining. *(van der Sandt, 1988)*

assertion – presupposition : ✓ / **obligatory**

(6) a. It's raining. John knows that it's raining.
b. John made a mistake. He won't do it again.

Introduction (4)

- The observation that *too* or *again* may, in some contexts, be compulsary is not new (a.o. Kaplan, Krifka, Zeevat, Sæbø).
- But the phenomenon is general: a subclass of presupposition triggers gives rise to such an obligatory redundancy
  (too, again, to know that, clefts, intonation. . .)
- We propose a pramatic explanation based on "anti-presupposition"
- But then other items seem to be also obligatory...

Outline

Roadmap

Kaplan: obligatoriness of *too*

(7) a. Jo had fish and Mo did too
b. $*$ Jo had fish and Mo did *(Kaplan, 1984, p. 510)*

(8) a. Barb is seventeen, and WENDY is old enough to have a driver's license, too
b. #Barb is seventeen, and WENDY is old enough to have a driver's license

(Green, 1968)

$\Rightarrow$ Obligatoriness *vs.* unwanted inferences

Kaplan: obligatoriness of *too*

- limited to 'bisentential' *too* (S_1 and/but S_2 too)

Discourse role

too "emphasize the similarity between members of a pair of contrasting items" (p. 516)

- unclear predictions
- variation of obligatoriness connected to variation of contrast

(9) a. Jo likes syntax and she likes phonetics (?∅ / too).
b. Jo likes syntax but she likes phonetics (*∅ / too).
c. Jo lived in NY and she lived in LA (∅ / too).

Krifka: distinctiveness constraint (1)

- Additive particles occurring after their focus
- Focus and topic accents

(10) a. A: What did Peter and Pia eat?

b. B: $*$ P/eter ate p\asta, and P/ia ate p\asta

c. B′: P/eter ate p\asta, and P/ia ate pasta, t\oo

Krifka: distinctiveness constraint (2)

- Congruent answer and focus accent

(11) a. A: What did Peter eat?
b. B: Peter ate pasta
c. B′: ∗ Peter ate pasta

- Partial answer and contrastive topic accent (Büring, 1998)

(12) a. A: What did Peter and Pia eat?
b. B: ∗ Peter ate pasta
c. B′: Peter ate pasta

Krifka: distinctiveness constraint (3)

Distinctiveness constraint

If $[\ldots T \ldots C \ldots]$ is a contrastive answer to a question, then there is no alternative T' of T such that the speaker is willing to assert $[\ldots T' \ldots C \ldots]$.

- *too* allows to violate this constraint

(13) a. A: What did Peter and Pia eat?

b. B: $*$ Péter ate pásta, and Pía ate pásta

c. B′: Péter ate pásta, and Pía ate pasta, tóo

Krifka: distinctiveness constraint (4)

- A contrastive topic accent in the first part of the answer triggers a distinctiveness implicature
- *too* cancels this implicature

- Sketch of the reasoning:

(14) John is sick, Mary is sick (too).

John is sick	$\emptyset$	$\rightarrow$ *no one else is* (distinctiveness constraint)

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, Mary is sick		→ CLASH

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John is sick	∅	→ *no one else is* (distinctiveness constraint)	
		, Mary is sick	→ CLASH
			too → *Reparation*

→ The obligatoriness of *too* is explained only when there is a contrastive accent

→ Only additive particles are concerned

Sæbø: back to presupposition

1. New examples from literary texts

Sæbø: back to presupposition

1. New examples from literary texts

(15) Swift Deer could see pine-clad mountains on the other side of the Rain Valley. Far away to the east and west the dry prairies stretched out as far as the eye could see. (i) To the north lay the yellow-brown desert, a low belt of green cactus-covered ridges and distant blue mountain ranges with sharp peaks. (ii) To the south (# ∅ / too) he could see mountains.

⇒ phenomenon not restricted to "additive particles under stress".

Sæbø: back to presupposition

1. New examples from literary texts

   $\Rightarrow$ phenomenon not restricted to "additive particles under stress".

2. The obligatoriness of *too* should be explained by the inferences triggered by the *second* sentence.

Sæbø: back to presupposition

1. New examples from literary texts

   $\Rightarrow$ phenomenon not restricted to "additive particles under stress".
2. The obligatoriness of *too* should be explained by the inferences triggered by the *second* sentence.
3. Presupposition is more important than contrast

(Sæbø, 2004)

Additives

Too and the other additives have been known to be "obligatory":

(15) Jo had fish and Mo did *(too). *(Green, 1968; Kaplan, 1984)*

(16) [*Context: John, a teacher with a very bad hand writing, has just written an exercise on the blackboard. When he is finished he reads it aloud to make sure everyone can copy it down properly. A student may not hear it all very well and ask:*]
Can you read that word #(again)? *(Chemla, 2008)*

(17) Léa a fait une bêtise qu'elle ne #(re-)fera pas.
Lea did a silly thing that she won't (re)do.

(18) Two days ago John was cooking. He is #(still) cooking.
(Ippolito, 2004)

Factive verbs I

(19) a. Paul knows that the earth is flat.
⇒ factive presupposition (*the earth is flat*)
b. Paul knows whether the earth is flat.
⇒ no presupposition

⇒ *know whether* = *know that* $\boxed{\textit{minus}}$ factive presupposition

know whether is not allowed when the factive psp is satisfied:

(20) Jill has gone to Africa, and Paul tells no one, even though he knows (that/# whether) she's gone there.

Factive verbs II

Similar situation with other verbs subcategorising both questions and propositions

- In French: *savoir* (*to know*) *ignorer* (*not to know/be unaware*), *vérifier* (*check*), *comprendre* (*understand*)

(21) Jean est revenu de vacances. Mais comme il n'a téléphoné à personne, au bureau, tout le monde ignore (? si / que) il est chez lui.
John has come back from vacation. But since he called no one, at his office everybody 'ignores' (whether / that) he is at home.

(22) Il y a eu une fuite d'eau, mais quelqu'un l'a réparée. Jean a appelé le plombier pour qu'il vérifie (? si / que) le problème est réglé.
There was a leakage, but somebody fixed it. Jean called the plumber so that he checks (whether / that) the problem is solved

Factive verbs III

Alternatives: ⟨*know (that)*, *believe (that)*⟩

(23) a. Paul knows that the earth is flat.
⇒ factive presupposition (*the earth is flat*)
b. Paul believes that the earth is flat.
⇒ no presupposition

⇒ *believe* = *know* *minus* factive presupposition

believe is not allowed when the factive psp is satisfied:

(24) a. [Mary has been cheating on John for years...]
b. *...and he believes it.
c. ... and he knows it. *(Chemla, 2008, ex(10))*

Cleft constructions

Jean est entré = *C'est Jean qui est entré* | *minus* | existential psp
Jean came in *it is John who came in*

The non presuppositional form is not allowed when the presupposition is satisfied:

(25) a. #Quelqu'un a préparé le dîner. Jean ne l'a pas fait.
b. Quelqu'un a préparé le dîner. Ce n'est pas Jean qui l'a fait.
Someone fixed the dinner. Jean did not do it / It is not Jean who did it

(26) Someone fixed the dinner.
(It is John who/JOHN/#John) did it.

Definite descriptions

a = the *minus* existence and uniqueness presupposition

(27)
a. #A wife of John's is intelligent
b. The wife of John's is intelligent
c. #A father of the victim arrived at the scene
d. The father of the victim arrived at the scene

(Heim, 1991; Sauerland, 2003)

Class of triggers

- What's obligatory
  - additive particles
    too, *again*, *still*, *anymore*, *re-*...
  - (some) factive verbs
  - cleft and focus constructions
  - definite descriptions

These presupposition triggers are **obligatory** when their conditions of use are met.

Class of triggers

- What do all these triggers have in common?

John came { Jean came (Assertion)
{ (Presupposition)

Class of triggers

- What do all these triggers have in common?

John came too $\left\{ \begin{array}{ll} \text{Jean came} & \text{(Assertion)} \\ \text{Someone came} & \text{(Presupposition)} \end{array} \right.$

Class of triggers

- What do all these triggers have in common?

John came too { Jean came (Assertion); Someone came (Presupposition) }

⇒ They don't contribute to the asserted content
(by contrast with presupposition triggers **with** asserted content, like *regret*, or *only*)

Roadmap

Analysis

Explanations on the market:

- Proposals based on the presence of a **contrast**

  (Kaplan, 1984; Krifka, 1999)

  $\Rightarrow$ account for a subset of the additive cases
- Proposals based on "Maximize Presupposition!"

  (Amsili & Beyssade, 2006)

  $\Rightarrow$ More on this later
- Proposal based on exhaustivity

  (Bade, 2013)

Our proposal

- Starting point : *maximize presupposition!*

(28) a. #A father of the victim arrived at the scene
b. The father of the victim arrived at the scene

$\langle$a, the$\rangle$ form an alternative pair

> Make your contribution presuppose as much as possible
>
> Heim (1991)

(28) is unfelicitous because the article '*a*' "triggers" an antipresupposition which turns out to be incompatible with (implicit) common knowledge (Percus, 2006; Chemla, 2008).
(See also "implicated presupposition" (Sauerland, 2003))

(29) John made a mistake. He won't do it (# $\emptyset$ / again).

Assertion: *John made a mistake*
Choice: S_1: He won't do it
S_2: He won't do it again

- S_2 is 'presuppositionaly stronger' than S_1

$S_2 \rightarrow S_1$ but not $S_1 \rightarrow S_2$
S_1 antipresupposes 'John made a mistake' *i.e.*
S_1 implicates 'John didn't make any mistake', which is incompatible with the assertion of the first sentence. Thus (A. S_1) is unfelicitous.

On the contrary, S_2 doesn't convey any antipresupposition.
Thus (A. S_2) is felicitous

- Extension of antipresupposition domain to new data:

(30) a. ⟨a, the⟩, ⟨each, the⟩, ⟨all, both⟩, ⟨believe, know⟩ *(Percus, 2006)*

b. ⟨too, ∅⟩, ⟨again, ∅⟩, ⟨that, whether⟩ . . . *(Amsili & Beyssade, 2010)*

- Sketch of the reasoning:

(31) John is sick, Mary is sick (too).

John is sick	∅	,	Mary is sick	∅	→ *antipresupposition* → *rejected*
not available	~~too~~		*available*	too	→ *expected form*
not available	~~again~~		*not available*	~~again~~	
	⋮			⋮	

Roadmap

Unresolved issues

1. What is the empirical definition of obligatoriness?
2. Some occurrences are more obligatory than others
3. Some occurrences don't seem to be obligatory at all
4. Some items that are not presupposition triggers seem to be obligatory

Empirical definition

1 What does it mean that, say, *too*, is obligatory ?

- Weak version: *too* cannot be removed from a discourse where it appears felicitously — too weak!
- Strong version: there are contexts where the speaker is obliged to use *too* — probably too strong

Gradability of obligatoriness

2 Obligatoriness is not a boolean property

(results about *too*/*aussi*)
There is a positive correlation between the degree of reduction of the additive host and the degree of obligatoriness:

(32) John showed a way out to Jane, and...

a. Max did ###(too)
b. Max showed her a way out ##(too)
c. Max showed a way out to Jane #(too)

(Amsili et al. *, 2012)*

⇒ Any explanation should account for this fact.

Exceptions I

3 In some cases, triggers do not seem to be obligatory at all

- Corpus study: we removed *too* in litterary samples, and asked subjects to decide whether it was obligatory (or not).
  $\Rightarrow$ very bad inter-annotator agreement ($\kappa \approx 0.22$)
  $\Rightarrow$ in more than half of the cases, *too* is optional

(Winterstein & Zeevat, 2012; Amsili et al. *, 2012)*

Exceptions II

- "Discourse exceptions"

(33) Jean est malade, Marie est malade, Paul est malade, tout le monde est malade alors !
Jean is sick, Marie is sick, Paul is sick, everybody is sick then!

(34) Il était là hier, il est là aujourd'hui.
He was there yesterday, he is there today

⇒ Role of discourse structure
Similar findings in (Eckard & Fränkel, 2012): when asked to produce a narrative, subjects tend to produce many additive markers, whereas they don't produce any when asked to produce a "spy report".

Roadmap

Tense and temporal adjuncts

(35) a. A: Where's John ?
b. B: He was at home an hour ago,
he's in his office #(now). *from Keshet (2008)*

(36) a. The fugitive is #(back) in jail.
b. That bachelor is #(now) married.
c. The employees are #(currently) unemployed.
(Keshet, 2008, ex(45))

(37) *Context: The 26th is the last Tuesday of the month. The utterance time is, say, the 27th:*
a. #Every Tuesday this month, I fast.
b. Every Tuesday this month, I fasted.
(Singh, 2011, ex(5))

Discourse particles I

Zeevat (2003) makes a list of what he calls "discourse particles":

> Again
> Indeed (≈ Dutch *immers*)
> Instead
> *Doch / Toch* (German/Dutch)
> Too

(38) A: Bill is ill.
B: He is *(indeed). *(Zeevat, 2003)*

- "Corpus studies by Tim Kliphuis and myself suggest that omitting [discourse particles] nearly always lead to awkwardness, or to difference in implicature."

  (Zeevat, 2003)

- Discourse/dialogue particles in French

Discourse particles II

(39) a. Jean est malade. Est-ce que Jill est malade aussi ?
b. Jean est malade. Est-ce que Jill est malade, elle ?
c. #Jean est malade. Est-ce que Jill est malade ?
John is sick. Is Jill sick (too/her/∅)?

(40) Jean est malade. #(Et toi,) Tu es malade?
Jean is sick. (And you), you are sick?

(41) J'ai mal dormi cette nuit. T'as bien dormi #(, toi) ?
I haven't slept well this night. Did you sleep well (, you)?

Pronouns (vs. Definite NPs/Proper names) I

- Once an entity has been introduced, it's compulsory to refer to it by cohesive devices:

(42) a. #Jean a fait une erreur que Jean n'avait jamais faite.
b. Jean$_i$ a fait une erreur qu'il$_i$ n'avait jamais faite.
Jean made a mistake that Jean/he never made.

- Except when this would lead to ambiguity:

(43) a. #Léa introduced a guest to John, and he didn't behave properly.
b. Léa introduced a guest to Marie, and he didn't behave properly.

Pronouns (vs. Definite NPs/Proper names) II

⇒ The pronoun is obligatory when its conditions of optimal resolution are met
[*to avoid an unwanted inferential effect (44)*],

⇒ a proper name (or a definite description) is required otherwise
[*to avoid an ambiguity (45)*]

(44) Sam came in and Sam went out.
∴ There are two Sams

(45) Jo_i introduced Mo_j to Max_k, and $\text{he}_{i/j/k}$ smiled.

Roadmap

Taking stock

- What's obligatory
  - (some) presupposition triggers
  - (some) discourse particles
  - (some) temporal adjuncts
  - pronouns (in some cases)
- What purpose do they serve?

  $\Rightarrow$ Discourse cohesion (in a wide sense)
- What do they have in common?

  $\Rightarrow$ That's the only thing they do.

Research Programme

Linguistic Generalization

Linguistic items that establish **discourse cohesion**
and serve **only** this purpose,
are **obligatory**
when their conditions of use are met.

Explanation

Old version ~~the speaker must **Maximize Presupposition** so as to avoid unwanted antipresuppositions~~

New version the speaker must **ensure cohesion** so as to
avoid unwanted inferences
based on a competion between expressions which differ
(only) on their cohesion effect

Back to unresolved issues : some answers

1. What is the empirical definition of obligatoriness?
   Still to be solved. But if we can make a list of cohesion devices available, we could end up with a predictive notion of obligation.
2. Some occurrences are more obligatory than others
   Not explained here. We claim that the degree of obligatoriness depends on the perceived similiarity of what's in the discourse.
3. Some occurrences don't seem to be obligatory at all
   When discourse cohesion is not a stake ; or when it is achieved by other means (intonation, for instance), cohesive devices are no longer obligatory.
4. Some items that are not presupposition triggers seem to be obligatory
   What's obligatory is to achieve discourse cohesion, not necessarily by means of presupposition.

Open issues

1. List of relevant cohesive devices (anaphora, presupposition, repetition, hypo/hyperonymy, syntactic parallelism...)
2. Should we generalize the notion of antipresupposition or are we in fact dealing with (varieties of) quantity implicatures?

Thank you!

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Amsili, Pascal, & Beyssade, Claire. 2006 (July). Compulsory Presupposition in Discourse. *In:* Sidner, Candy, Harpur, John, Benz, Anton, & Kühnlein, Peter (eds), *Proceedings of the Workshop on Constraints in Discourse 2006*.

Amsili, Pascal, & Beyssade, Claire. 2010. Obligatory Presuppositions in Discourse. *Pages 105–123 of:* Benz, Anton, Kuehnlein, Peter, & Sidner, Candace (eds), *Constraints in Discourse 2*. Pragmatics & Beyond. Amsterdam & Philadelphia: Benjamins Publishers.

Amsili, Pascal, Ellsiepen, Emilia, & Winterstein, Grégoire. 2012. Parameters on the obligatoriness of too. *In: Proceedings of "Logic and Engineering of Natural Language Semantics" (LENLS-9)*.

Bade, Nadine. 2013. Obligatory Presuppositions and Exhaustive Interpretation. *In: Book of abstracts, 19th International Congress of Linguists*. Session "Semantics-Pragmatics interface" (Kai von Fintel & David Beaver).

Büring, Daniel. 1998. *The 59th street bridge accent*. London: Routledge.

Chemla, Emmanuel. 2008. An Epistemic Step for Anti-Presupposition. *Journal of Semantics*, **25**(2), 141–173.

Eckard, Regine, & Fränkel, Manuela. 2012. Particle, *Maximize Presupposition* and Discourse Management. *Lingua*.

Green, Georgia M. 1968. On *too* and *either*, and not just *too* and *either*, either. *Pages 22–39 of: CLS (Chicago Linguistics Society)*, vol. 4.

Heim, Irene. 1991. Artikel und Definitheit. *Pages 487–535 of:* von Stechow, Arnim, & Wunderlich, Dieter (eds), *Semantik: Ein internationales Handbuch des zeitgenössischen Forschung*. Berlin: de Gruyter.

Ippolito, Michela. 2004. An analysis of *still*. *Pages 127–144 of:* Young, Robert B (ed), *Proceedings of Semantics and Linguistic Theory 14*. Cornell University, Ithaca, NY: CLC Publications.

Kaplan, Jeff. 1984. Obligatory *too* in English. *Language*, **60**(3), 510–518.

Keshet, Ezra. 2008. *Good Intensions: Paving Two Roads to a Theory of the De re/De dicto Distinction*. Ph.D. thesis, MIT.

Krifka, Manfred. 1999. Additive Particles under Stress. *Pages 111–128 of: Proceedings of SALT 8*. Cornell: CLC Publications.

Percus, Orin. 2006. Antipresuppositions. *Pages 52–73 of:* Ueyama, U. (ed), *Theoretical and Empirical Studies of Reference and Anaphora: Toward the establishment of generative grammar as empirical science*. Japan Society for the Promotion of Science. Report of the Grant-in-Aid for Scientific Research. Also available at Semantic Archive.

Sauerland, Uli. 2003 (jun). *Implicated presuppositions*. Hand-out for a talk given at the *Polarity, Scalar Phenomena, Implicatures* Workshop, University of Milan Bicocca, Milan, Italy.

Singh, Raj. 2011. Maximize Presupposition! and local contexts. *Natural Language Semantics*, **19**, 149–168.

Sæbø, Kjell Johan. 2004. Conversational Contrast and Conventional Parallel: Topic Implicatures and Additive Presuppositions. *Journal of Semantics*, **21**(2), 199–217.

van der Sandt, Rob A. 1988. *Context and Presupposition*. London: Croom Helm.

Winterstein, Grégoire, & Zeevat, Henk. 2012. Empirical Constraints on Accounts of *Too*. *Lingua*, **122**(15), 1787–1800.

Zeevat, Henk. 2003. Particles: Presupposition Triggers, Context Markers or Speech Act Markers. *Pages 91–111 of:* Blutner, Reinhard, & Zeevat, Henk (eds), *Optimality Theory and Pragmatics*. London: Palgrave-McMillan.

- too $[S(f)] = S(f) + \exists f'\ f' \neq f\ \&\ S(f')$
- cleft $[S(f)] = S(f) + \exists f\ S(f)$
- again $[\exists e\ S(e)] = \exists e\ S(e) + \exists e'\ e' < e\ \&\ S(e')$
- anymore $[\text{neg}\ S(e)] = \text{neg}\ S(e) + \exists e'\ e' < e\ \&\ S(e')$
- that [s knows whether P] = s knows whether P + P

$$\text{trigger}\ [\phi] = \begin{array}{ccc} \phi & + & \psi \\ \text{assertion} & + & \text{presupposition} \end{array}$$

Triggers with no asserted content

Antipresupposition I

(46) Mary knows that Jane is pregnant.
presupposes that Jane is pregnant

(47) Mary believes that Jane is pregnant.
$\rightsquigarrow$ Jane is not pregnant
antipresupposes that Jane is pregnant

(Percus, 2006)

Antipresupposition II

The trigger *know* carries the following "instruction":

- *know (that) p* (presupposition trigger) :
  is to be used by the speaker (S) if
  - S believes p, and
  - p is part of the common ground, or
  - S believes S has enough authority to make the addressee accommodate p.

- The choice of *believe*, in contrast, says that the previous conditions are not met, namely
  - the speaker (S) does not believe p, or
  - p is not part of the common ground, and
  - S doesn't have enough authority to make the addressee accommodate p

Antipresupposition III

- most of the time, when S has "competence" (knows whether p or $\neg p$) and has "authority", this leads to the conclusion that p does not hold

Prediction of the Maximize Presupposition principle:

Situation: a speaker s utters a sentence S_1. S_2 is an alternative sentence to S_1; S_2 asserts what S_1 asserts, but additionally presupposes p.

Predicted inference: $\neg B_S[p] \vee \neg B_s[\mathrm{Auth}_s[p]]$ *(Chemla, 2008, (24))*

Long literary examples I

from (Sæbø, 2004)

(48) When the gods arrive at Jotunheim, the giants prepare the wedding feast. But during the feast, the bride —Thor, that is— devours an entire ox and eight salmon. He also drinks three barrels of beer. This astonishes Thrym. But Loki averts the danger by explaining that Freyja has been looking forward to coming to Jotunheim so much that she has not eaten for a week. When Thrym lifts the bridal veil to kiss the bride, he is startled to find himself looking into Thor's burning eyes.
This time, (# ∅ / too), Loki saves the situation, explaining that the bride has not slept for a week for longing for Jotunheim.

Long literary examples II

(49) Swift Deer could see pine-clad mountains on the other side of the Rain Valley. Far away to the east and west the dry prairies stretched out as far as the eye could see. (i) To the north lay the yellow-brown desert, a low belt of green cactus-covered ridges and distant blue mountain ranges with sharp peaks. (ii) To the south (# ∅ / too) he could see mountains.

(50) — I want to see Son-of-Thunder. Fetch him.
So Good Care rose, fetched the newborn boy and held him out before his dying father. Swift Deer opened his eyes for the very last time, and Son-of-Thunder had his eyes open (# ∅ / too).

Long literary examples III

(51) So now you see what I meant about Leo blocks. They have more or less the same properties as those which Democritus ascribed to atoms. And that is what makes them so much fun to build with. They are first and foremost indivisible. Then they have different shapes and sizes. They are solid and impermeable. They also have 'hooks' and 'barbs' so that they can be connected to form every conceivable figure. These connections can later be broken so that new figures can be constructed from the same blocks. [. . .]
We can form things out of clay (# ∅ / too), but clay cannot be used over and over, because it can be broken up into smaller and smaller pieces.