

Lauter Überlegungen

Funny Indefinites Workshop :: ZAS Berlin
Jan Anderssen

07/07/07

Road map

- ★ Show that *lauter* syntactically behaves like a determiner (Yet, as argued in Eckardt (2006, ch. 6), adopting generalized quantifier denotations familiar from determiners with similar meanings doesn't seem to lead to a satisfactory account.)
- ★ Demonstrate that DPs headed by *lauter* show a distribution restricted in interesting ways.
- ★ Speculate about accounts that could combine the insights from Eckardt's work and the generalizations about the data discussed here.

Initial acquaintance

- (i) Bei uns können Sie *lauter* lautere Weine aus der Umgebung probieren.
at us can you *lauter* pure wines from the surrounding try
'You can try a variety of pure wines from the area at our place.'
- ★ Translations into English vary between for instance *a bunch of*, *numerous*, *a number of*, existential *there* constructions, to in some cases *all*, or *only*.

lauter is syntactically a determiner ...

- ★ Adjective *lauter* shows obligatory adjectival agreement, while determiner *lauter* does not inflect, as illustrated in (i).
- ★ Determiner *lauter* precedes all adjectives, and combines with (mass and plural count) NPs of any complexity, yielding a DP.

- (2) a. Er heuerte *lauter* IMs an.
he hired *lauter* secret informants V-PART.
'He hired a bunch of secret informants.'
- b. Er hatte *lauter* Marmelade im Gesicht.
he had *lauter* marmelade in the face.
'There was jam in his face.'

- ★ Determiner *lauter* does not allow any other determiners to its left or right.

- (3) a. *die *lauter* Pfifferlinge, **lauter* zwei Morcheln
*the *lauter* chanterelles, **lauter* two morels
- b. die vielen Pfifferlinge, alle zwei Morcheln
the many chanterelles, all two morels

(Eckardt, 2006, p. 204)

- ★ Further observations 1: *lauter* DPs do not allow split NP constructions.

- (4) a. *Steinpilze haben wir *lauter* gefunden.
penny-bun-bolets have we *lauter* found

- b. Steinpilze haben wir viele gefunden.
 penny-bun-bolets have we many found
 ‘As for penny-bun-bolets, we found a lot of those.’ (Eckardt, 2006, p. 230)

★ Further observations 2: Determiner *lauter* cannot be used in partitive constructions.

- (5) a. *lauter der Kinder, *lauter der Spatzen auf dem Dach
 *lauter of the children, *lauter of the sparrows on the roof
 b. viele der Kinder, zwei von den Spatzen auf dem Dach
 many the.GEN children, two of the sparrows on the roof

...but maybe not semantically

★ Eckardt (2006) argues that rather than the synchronic syntactic behavior of *lauter*, its adjectival origin is a better guide to its current meaning. Eckardt takes the adjectival *lauter*, with a relatively transparent meaning ‘pure’, as a starting point to develop a denotation for determiner *lauter*. She models purity by requiring that the property in question holds of all parts of an object. Similarly, she proposes that determiner *lauter* takes a property and returns a set of plural individuals, each ‘pure’ with respect to the property in question.¹

- (6) $[[\textit{lauter}]] = \lambda P.\lambda x.\forall y(y \leq x \rightarrow P(y))$

★ “According to the current proposal, the phrase *lauter N* has much in common with bare indefinites [...] and we would expect it to show a similar range of uses.” (Eckardt, 2006, p. 225)

Distribution of *lauter* subjects

Lauter and non-existential subject positions

- ★ The distribution of DPs headed by determiner *lauter* is more restricted than the distribution of bare plurals.
 ★ Bare plurals as subjects of so-called i-level verbs receive a generic interpretation.² *lauter* DPs cannot occur in those environments.

- (7) a. Professoren sind intelligent.
 professors are intelligent
 ‘Professors are intelligent.’

¹This core semantics is augmented through a process of pragmatic strengthening (triggered by competition with the bare plural meaning), which adds one of the contextual restrictions (reflecting an ‘only’ and a ‘many’ reading of *lauter*).

- (i) a. $(\text{RELEVANT}(y) \rightarrow y \leq x) \wedge \text{BIG}(x)$ ‘only’-reading
 b. $\text{STRIKING}(x) \wedge \text{BIG}(x)$ ‘many’-reading

In the main part of this presentation, I will not discuss this part of Eckardt’s account, but I don’t want to preclude that some of what I will say about the differences in distribution between bare plurals and *lauter* DPs might be explainable through these added predicates.

²Jäger (2001) shows that different classes of verbs are picked out under the term i-level verb depending on which particular characteristic of i-level verbs is under consideration. He proposes that the phenomenon is better thought of in terms of topic/comment structure. His observations are highly relevant for the data to be presented. The characteristic of interest for now is whether or not a verb can receive an existential interpretation of its subject argument.

- b. *Lauter Professoren sind intelligent.
lauter professors are intelligent

★ Eckardt argues that in some cases *lauter* DPs can receive generic interpretations.

- (8) LAUTER Professoren kriegen IMMER Streit.
lauter professors get always argument
 ‘Large groups that consist purely of professors will always quarrel.’

However, her cases seem to require special intonation or overt generic quantification. The speakers I have asked differ in their judgments on the acceptability and interpretation of (8).

★ The following example in (9) shows that in circumstance where a bare plural is ambiguous between a generic and an existential interpretation (as in (9a)), only the existential interpretation is available for a *lauter* DP (compare (9b)).

- (9) a. Üblicherweise sind Studenten in der Kneipe.
 usually are students in the pub
 ‘Usually, students are in pubs.’
 ‘Usually, there are students in this pub.’
 b. Üblicherweise sind *lauter* Studenten in der Kneipe.
 usually are *lauter* students in the pub
 ‘Usually, there are loads of students in this bar.’

Low subjects

- ★ A study of about 100 naturally occurring examples of *lauter* DPs contained 10 cases of *lauter* subjects in matrix clauses.³ These showed an interesting positional difference compared to regular subjects.
- ★ Hoberg (1981) discusses the word-order in written German, stating that in her investigation the *Vorfeld* (Spec CP in standard accounts to V2) tends to host the subject of a clause (about 65% of the time), and conversely subject show some preference to occupy this position as well (about 56% of all matrix subjects were found to occur in the *Vorfeld*).
- ★ The corpus examples of matrix *lauter* subjects show a very different picture. Of the ten cases found, only one has the subject DP in Spec CP.
- ★ The same can be seen in the following intuitive contrast in (10).

- (10) a. Am Straßenrand stehen *lauter* leere Kisten.
 At the curb stand *lauter* empty boxes
 ‘There are many empty boxes standing at the curb.’
 b. ??Lauter leere Kisten stehen am Straßenrand.
lauter empty boxes stood at the curb

³These originate from a search on various newspaper corpora (searching for the lemma *lauter*). Searching through corpora of a total size of about 200 million tokens (estimated 12 - 12.5 million sentences), there were roughly 1200 matches. I looked at the first 300 of those (removing duplicate sentences), of which about a third was relevant for the purposes at hand (as shown below).

misabeled adjectives (lemma: <i>laut</i>)	58	19.3%
“pure” adjective	2	0.6%
unclear	2	0.6%
“rational adverbials” (<i>aus/vor laut</i> + ‘emotive’ N)	37 (aus) + 107 (vor) = 144	48%
determiner <i>lauter</i>	94	31.3%

- (11) a. Alle leeren Kisten stehen am Straßenrand.
 all empty boxes stand at the curb
 ‘All empty boxes are standing at the curb.’
 b. ??Am Straßenrand stehen alle leeren Kisten.
 At the curb stand all empty boxes

* A similar observation can be made when looking at cases of embedded clauses with *lauter* subjects.

- (12) a. Als wir heute zurückkamen, saßen wieder *lauter* Spatzen auf dem Dach.
 As we today returned, sat again *lauter* sparrows on the roof
 ‘When we returned today, there was a bunch of sparrows sitting on the roof again.’
 b. *Als wir heute zurückkamen, saßen *lauter* Spatzen wieder auf dem Dach.
 As we today returned, sat *lauter* sparrows again on the roof

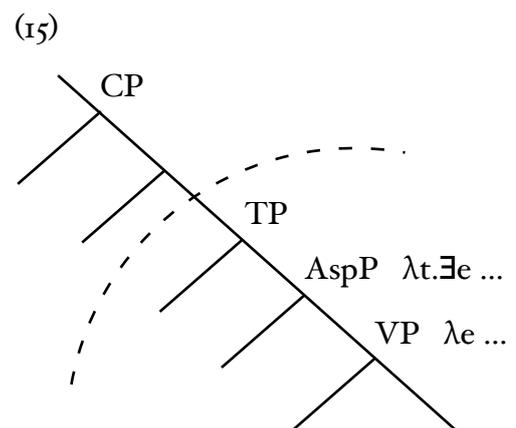
* In the corpus data, locative adverbials always precede *lauter* subjects, as in (13), and so do sentential adverbials, as in (14).⁴

- (13) Ich stand vor einem bescheidenen Lädchen, in dessen Schaufenstern *lauter*
 I stood in front of a modest little store, in that.GEN window *lauter*
 Puppen lagen.
 dolls laid.
 ‘I stood in front of a modest little store with lots of dolls lying in the window.’

- (14) Vom Bauherrn erst gefragt, wie wohl *lauter* Rechtecke auf sein Dreieck passen, ...
 by the builder first asked, how ADV *lauter* rectangles on his triangle fit
 ‘Asked by the builder, how a bunch of rectangles might fit onto his triangle, ...’

Lauter as interacting with event structure

- * *Lauter* subjects seem to occur ‘low’ in the tree.
- * Possibly this could be derived by assuming that *lauter* needs to have access to a Davidsonian event argument, and by further assuming that those arguments are only available at lower stages in the tree, in particular below tense/aspect (see for instance [Kratzer, 2007](#), sec. 9 and references therein).
- * Eckardt’s insight that determiner *lauter*’s meaning should take serious its *pure* adjectival heritage could be imported by making use of a notion of covers (as used in the domain of individuals in for instance [Schwarzschild 1996](#) and [Morzycki 2002](#)), for instance requiring events to cover topic situation.



Possible appeal

- * Could capture the intuition that the events are vaguely distributed over the topic location of time (via a topic situation, or some way of anchoring the event).

⁴For a difference in (subject) positions in embedded clauses see [Frey \(2004\)](#).

- (16) a. Auf dem Dach saßen lauter Spatzen.
 on the roof sat *lauter* sparrows
 ‘Lauter sparrows were sitting on the roof.’
 b. Auf dem Weg zum Flughafen haben wir lauter Unfälle gesehen. ‘We saw lots
 on the way to the airport have we *lauter* accidents witnessed
 of accidents on the way to the airport.’

* Temporal modifiers can change the acceptability of *lauter* sentences.

- (17) a. Er hat im Laufe seiner Karriere lauter berühmte Politiker getroffen.
 he has in the run of his career *lauter* famous politicians met
 ‘During the course of his career, he met lots of famous politicians.’
 b. *Er hat den ganzen Nachmittag lang lauter berühmte Politiker getroffen.
 he has the whole afternoon long *lauter* famous politicians met

* The context dependent notion of cover might give us the vagueness that is perceived in the meaning of any (from *many* to *all/only*).

Experimental data

- * Based on the hypothesis that *lauter* DPs seem to be restricted to occur at syntactic positions low in the tree, an acceptable sentence with a low *lauter* DP should become unacceptable if the DP is moved to a higher position.
- * The experiment tests the effects of scrambling on *lauter* objects.
- * *Lauter* objects in their base position should be low in the tree, therefore not be affected by the restriction on higher positions. Scrambling of the object over the subject moves the DP into a restricted position, which is predicted to be unacceptable.
- * *Einige* objects as a control for which no such prediction exists.
- * *Prediction*: There should be an interaction between quantifier type and position.
- * *Materials*:

- (18) a. Er hat sich sehr über die Pressekonferenz gefreut, weil der holländische
 he has SELF very about the press conference be glad, because the Dutch
 Journalist einige/manche/lauter Fragen gestellt hat.
 journalist *einige/manche/lauter* questions posed has.
 ‘He was very happy about the press conference, because the Dutch journalist asked
 several/various/*lauter* questions.’
 b. ..., weil einige/manche/lauter Fragen der holländische Journalist gestellt
 because *einige/manche/lauter* questions the Dutch journalist posed
 hat.
 had

★ *Method:* Acceptability rating questionnaire, 34 subjects, 70 sentences, among which were 24 items of interest in a 3×2 design, contrasting the quantifiers *einige*, *manche*, and *lauter* in scrambled and unscrambled position. (I will ignore the *manche*-data for the present purposes.) Ratings were given from 1 (best) to 5 (worst).

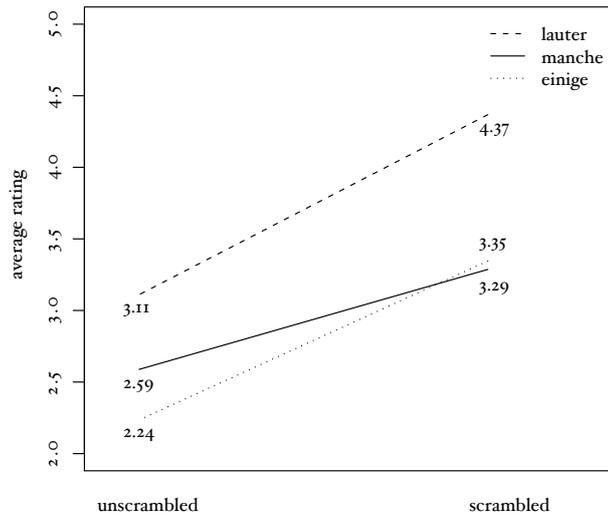
★ *Results:* Focussing on *einige* and *lauter*, there is evidence for main effects of both quantifier type and position, but no evidence for an interaction of both, as illustrated in the graph on the left, i.e. while the scrambled *lauter* cases are bad, as expected (mean 4.37), the ‘cost’ of scrambling was as high for the *einige* cases, even though they were overall rated better.

★ *Discussion:*

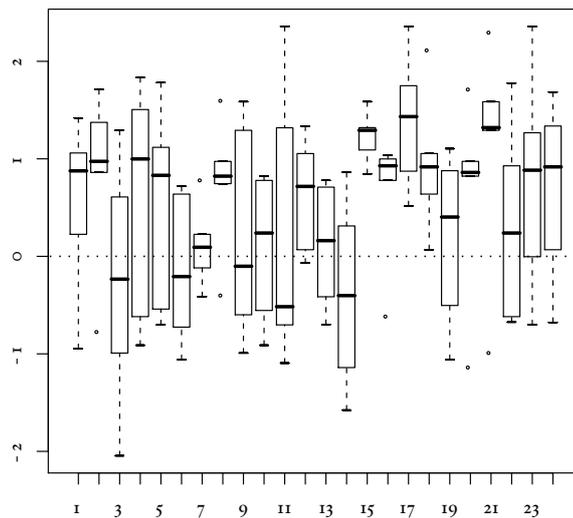
- With a context biased more towards scrambling, scrambled *einige* might have improved.
- More interestingly, unscrambled *lauter* showed a wide variety of ratings, mostly well below average.

★ The experimental design might have overlooked restrictions on *lauter* in object position, leading to a relatively poor average rating of unscrambled *lauter*.

interaction of quantifier type with position



z scores for unscrambled lauter items
(difference from average rating / sd)



Potential restrictions on *lauter* objects

- ★ (19) a. Der Dekan war beeindruckt, weil die Studenten *lauter* Speisen zubereitet hatten.
the dean was impressed, b/c the students *lauter* dishes prepared had
'The Dean was impressed, because the students had prepared many dishes.'
- b. Wir mussten den Preis etwas senken, weil eine Aushilfskraft *lauter* Fenster gestrichen hat.
we had to the price somewhat lower, because a substitute worker *lauter* windows painted had.
'We had to lower the price a bit, because a substitute worker painted many of the windows.'

★ *Intuition:* Information structure of the two items is different. Most natural translation for the last one would have been a passive ('many windows were painted by a substitute worker').

In order for it to contribute a relevant explanation for a lower price, it is not enough that a substitute worker spent a whole day window-painting. Presumably some of a relevant set of windows were painted in a sub-par quality.

- ★ *lauter* DPs cannot be interpreted partitively, or, cast for instance in an approach to specificity as proposed in Enç (1991), the DP cannot be definite on its second index, i.e. (19b) would be talking about a completely unspecific, novel set of windows.
- ★ Accounts of topicality in German (for instance Frey, 2004; Jäger, 2001) have connected ‘reaching’ higher region of the tree to topicality, which in turn might be connected to specificity.
- ★ *Lauter* then would be banned from specificity, making it a funny indefinite which resists becoming specific.

Two more data points

- The distributional restrictions disappear when a *lauter* DP modifies a noun as in (20).

(20) Ihre Reisegruppe aus *lauter* Amerikanern hat sie dort schon erwartet.
 Her travel group from *lauter* Americans has her there already awaited.
 ‘Her all American travel group was already waiting for her there.’

Possibly, proposals that push for the similarity of DPs and CPs could be exploited here (such as Szabolsci, 1994).

- I found several cases of *lauter* DPs that could be described as ‘summarizing’, for instance (21).

(21) goldene Kugeln, goldene Wagen, goldene Himmel, *lauter* Hoffnungszeichen
 golden balls, golden carriages, golden skies, *lauter* signs of hope

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