

Judgement structure, Focus, and the Interpretation of Indefinites

Regine Eckardt
Düsseldorf

0. Abstract

In this article I show that judgement structure is a crucial factor in the interpretation of German utterances. The judgement structure of an utterance drives the *interpretation of indefinites* (generic vs. weak existential reading) on one hand, and is made visible by the *focus structure of the sentence*, on the other hand. Whereas we have few distinctive criteria in order to test the judgement structure of a sentence abstractly, intonation patterns and the interpretation of indefinites are explicit phonological and semantic features of the utterance. The first part of the paper will be devoted to show the correlation between these two features. In the second part, I will argue that judgement structure is the driving factor behind both, focus structure and interpretation of indefinites, and will then relate the emerging picture to the syntax based theory of Diesing and Kratzer. It will be essential for the overall picture to distinguish judgement focus (F1) from semantic focus (F2) in the sense of Rooth[85]. I will finally show that the accents of judgement focus are the "sentence accents" of previous accounts of the intonation patterns for (German) sentences.

1. Intonation and Indefinites

1.1. Two kinds of focus

It is wellknown that indefinite NPs can be understood in two ways: either as asserting the existence of a certain object (weak existential reading) or as making a statement about the typical individual of a certain kind. Thus, sentence (1) can be understood either as (1a) or (1b):

- (1) Ein Eisbär lebt am Nordpol.
- (1a) There is a polar bear living at the north pole.
- (1b) Polar bears typically live at the north pole¹.

It has also been observed that the intonation pattern in which sentence (1) is actually uttered can be used to decide whether the speaker had reading (1a) or (1b) in mind. The intonation patterns corresponding to reading (1a) and (1b) are given under (2a) and (2b) respectively, where accents are indicated by capital letters:

- (2a) Ein EISBÄR lebt am Nordpol.
- (2b) Ein Eisbär lebt am NORDPOL.

This correspondence has often been noted (see for instance Krifka[91], Diesing[92], Chierchia[92]) and seems to indicate that the interpretation of indefinite NPs is driven by

the focus structure of a sentence, which in turn is expressed by certain (wellstudied) accent patterns. To be precise, we might formulate the following general rule:

- (A) The interpretation of indefinites is driven by focus structure.
An indefinite NP is interpreted existentially iff it is in focus.

This generalization is in line with examples (2a) and (2b). However, it turns out to be wrong.

It is easily possible to construct counterexamples on the basis that other factors force certain parts of the sentence to be in focus. In each of the following examples, we either find an indefinite NP which is existential outside focus, or which is generic inside focus. The foci in (3) are evoked by the focus sensitive element "sogar" (even). Those in (4) are motivated by the preceding questions, and those in (5) mark a contrast with a preceding utterance.

- (3a) Sogar [ARNIM]F hat einen Mercedes.
Even Arnim owns a Mercedes
- (3b) Sogar [EISBÄREN]F leben am Nordpol.
Even (the species of) polar bears live at the north pole.
- (4a) Wer hat eine Zwiebel mitgebracht? - [OTTO]F hat eine Zwiebel mitgebracht.
Who brought an onion? - Otto brought an onion.
- (4b) Wer frißt Eukalyptusblätter? - [EIN KOALABÄR]F frißt Eukalyptusblätter.
Who (=which kind of animal) eats eucalyptus? - A koala bear eats eucalyptus.
- (5a) Jon hat eine Zwiebel gebracht. - Nein, falsch: [OTTO]F hat eine Zwiebel gebracht.
Jon brought an onion. - No, wrong: Otto brought an onion.
- (5b) Ein Braubär frißt Eukalyptus. - Nein, falsch: [Ein KOALABÄR]F frißt Eukalyptus.
A brown bear eats eucalyptus. - No, wrong: A koala bear eats eucalyptus.

(3a), for instance, does not make a claim about the typical Mercedes, stating that it is owned by Arnim, but asserts that Arnim owns one single Mercedes. Therefore generalization (A) can't be maintained as it stands.

However, the foci in examples (3) - (5) are of a different kind than those in (2). While examples like (3) and (4) have fruitfully been treated within recent theories of semantic focus in interaction with focus sensitive elements (see Rooth[85], [92], Krifka[92]) and foci like in (5) are usually labelled as "contrastive foci", the phenomenon in (2) is not simply captured by alluding to the traditional semantic notion of focus.

First note that we observe no effect of narrow foci with respect to the availability of existential or generic readings. This is shown in example (6):

- (6) Ein [ERWACHSENES]F Schwein wird geschlachtet
An [adult]F pig gets/is getting slaughtered.

¹There is a third reading, namely the partitive one: "One of the polar bears is living at the north pole", where a certain set of polar bears has to be prementioned in the discourse. This reading is evoked by a stress on the determiner "ein". I count "ein" under this reading as a "strong quantifier" which patterns with "jeder" (each), "die meisten" (most) etc. I will not consider these quantifiers in the following; but see section 2.

The narrow focus on the adjective can only be understood as contrastive, or question-answer focus and allows either reading: "There is an accidental slaughtering of an adult pig going on". Or: "What happens to typical adult pigs is, that they get slaughtered". Thus, narrow foci do not determine the interpretation of indefinites. If we assume that ordinary semantic focus drives the interpretation of indefinites in the way indicated in (A) we can not account for this observation.

Second, we could claim that the effects under (2) arise because the focus associates with a tacit adverbial GEN quantifier, as suggested by Krifka[91]. However, the following example shows that an explicit focus can associate with an adverbial quantifier in addition to the determination of the reading of an indefinite NP. Imagine the following situation: You have moved next to a kindergarden and there are always children making a noise. They are arguing, they are laughing, they are screaming - but on the phone you tell your friend:

- (7) Meistens HEULT ein Kind.
= "Most of the time there is a child CRYING."
(7a) MOST t (a child makes some kind of noise at t ; a child cries at t)

An analysis of quantification associating with focus will predict that the unfocussed part of the sentence is interpreted as the domain of quantification the focussed part as the scope indefinites are unselectively bound by the adverbial quantifier

This will lead to a representation which says that most children cry most of the time, or possibly that all children cry most of the time. However, (7) can be true where only one or two of a large group of children cry all the time. This shows that the indefinite NP "ein Kind" is interpreted existentially although it is not in focus. The explicit (semantic) focus only associates with "most", yielding the correct domain of quantification. This proves that the interpretation of indefinite NPs is not a simple matter of focus associating with adverbial quantifiers.

Thirdly, the intonation patterns in (2) match with accents which do not involve any quantification:

- (8a) Stefan war in HEIDELBERG.
= Stefan was in Heidelberg
(8b) STEFAN war in Heidelberg.
= Stefan was in Heidelberg

The different intonation patterns in (8a) and (8b) involve meaning differences beyond the level of fine grainedness defined by truth value semantics. In special, they have nothing to do with the presence of any genericity operator. No quantification is involved in (8). One aim of the paper is, to demonstrate that viewing example (2) as similar to (8) instead of claiming it to be a simple case of "focus in association with adverbial quantification" leads to a coherent and fruitful picture.

Looking at (8), one might suggest that the respective foci have to do with "discourse topic". Discourse topic is loosely considered to be that parameter which determines what is under debate at the moment. It is assumed that discourse topic can be spelled out by a

question (see von Stechow[94], Büring[94]). Thus, the accents in (2) would be ordinary semantic focus accents which are licensed by the question explicating the topic. Let me exemplify this assumption for sentences (2a) and (2b).

- (9a) [Ein EISBÄR lebt am Nordpol]F
= wide focus; answering to the topic question: "what is the matter?", "what's happening?"
(9b) Ein Eisbär [lebt am NORDPOL]F
= narrow focus; answering to the topic question: "which ones of a variety of properties does a typical polar bear have?".

However, we have seen above that questions can licence any focus, independent of the interpretation of indefinites in the sentence. For instance, the focus in (9b) could all the same be licensed by the question: "At what place does a/some polar bear live?". In that case, the topic question would lead to an existential interpretation of "ein Eisbaer". However, our observation was that the intonation patterns in (2) *determine* the interpretation of the subject.

If we claim that the foci in (2) simply answer the discourse topic, we will have to explain why the "contextually least marked questions" that come to mind, or the "most normal discourse topics" for (2a) and (2b) are those given in (9a) and (9b), and not the topic questions which allow the opposite interpretations of the indefinite subjects.

The four observations above show that the intonation patterns in (2) and (8) can't straightforwardly be analyzed as some kind of association with focus. I suggest to draw a principal distinction between two kinds of foci: F1 focus on one hand, driving the interpretation of indefinite NPs, and F2 focus on the other hand, which I take to cover both semantic and contrastive foci. The following four assumptions characterize the interaction between F1 and F2:

- (H1) There are two different abstract focus features, F1 and F2. Both can be realized by an accent; but they need not always be.
(H2) Where both F1 and F2 are present in a sentence, the accent of F2 "wins over" the accent of F1: The audible accent is an F2 accent. F1 is not realized by accent. (**Hierarchy hypothesis**)
(H3) Both F1 and F2 follow the same "focus projection rules". (This means that the relation between accents and F1 domains can be tested empirically by looking at F2 domains) (**Uniformity Hypothesis**)
(H4) An indefinite NP is interpreted existentially if and only if it is in F1 focus. (**Existential focus hypothesis**)

(H4) is the most crucial assumption in view of example (1). Hypotheses (H1) to (H3) set the overall perspective. The next sections will be devoted to exemplify, refine and test (H1) to (H4) by looking at simpler and more complex examples - examples in German, where word order and accent pattern conspire in order to establish certain readings of indefinite NPs.

1.2. Examples

Before looking at the examples, let me repeat some facts about focus projection in German. German is an SOV language where this word order shows up in subordinate clauses. The SVO order of the main sentence is assumed to be derived by fronting verb and subject. This movement of the subject is neutral with respect to focus projection².

Generally, however, movement does have influence on focus projection, as has been demonstrated by Höhle[82]. German has free word order. Not all word orders are equal with respect to focus projection, though. Höhle shows that there is a "normal word order" for each sentence, which is characterized by the fact that this order allows accents in the proper positions to signal sentence wide foci. Höhle's test for focus consists in using question-answer pairs, such that in fact, he tests F2 foci in the terminology of section 1.1. Due to the Uniformity Hypothesis we can transfer his results to our examples. All non-normal word orders have the effect that single accents will reflect narrower focus domains.

It will turn out that F1 always has to dominate the verb. This empirical finding will get a conceptual interpretation in section 2. Apart from that, we can live on the rough rule that, as long as no scrambled NPs intervene the accent lands on the rightmost NP in focus next to the verbal complex; if no nominal argument is in focus, focus gets realized on the verbal complex. The verbal complex comprises finite and infinite verbs and possibly modifiers. I will say nothing about accent realization in the verbal complex.

This is more or less a variant of the nuclear stress rule (Chomsky&Halle[68]). It will turn out, though, that broad foci are also possible in scrambled sentences, an observation which is rarely discussed or explained in the literature. In section 1.3. we will discuss examples where scrambling interferes with focus projection, however on a purely empirical basis.

In Eckardt[96] I attempt to give a more explicit set of focus projection rules which confirm with the data under discussion, both in the scrambled and nonscrambled case. These rules are mainly inspired by the literature, for example Gussenhoven [83], Cinque[93], Uhmann[91] or Rosengren[93].

We will proceed as follows in the discussion of examples: First, we will give the sentence without any accents. Next, we will list those intonation patterns which can be understood non-contrastively and not having to be licensed by an explicit question. These are the F1 patterns, while contrastive and question-answer foci are F2 patterns which reveal the original F1 structure.

We will give intonation patterns with the respective focus structures that are predicted for these accents by the literature. (In cases of doubt, we will do a short cross check with F2 focus, tested by questions.) Thirdly, we will check whether the sentences, in the focus structures indicated, have the readings predicted by (H4). Finally, we check whether the sentences have any unpredicted additional readings (not involving contrastive focus).

The simplest kind of example are sentences with intransitive verbs. Sentence (10) can be uttered as in (11) and (12).

- (10) (weil) eine Katze miaut. (= (because) a cat meow/is meowing)
- (11) (weil) [eine KATZE miaut]F1
- (12) (weil) eine Katze [MIAUT]F1.

An accent pattern like in (12) is known to correspond to a narrow focus on the verb alone. The subject is outside F1. Therefore, it should be interpreted generically, according to (H4). And indeed, (12) has the meaning "the typical cat meows", and this is the only noncontrastive meaning.

The accent in (11) corresponds to sentencewide F1 focus. Therefore, (11) should have the reading "there is some cat meowing" - which it has indeed. If we force ourselves to understand the subject NP "eine Katze" generically in (11), then we will automatically understand the accent as contrastive accent.

According to the literature on focus projection, the accent in (11) could of course also reflect narrow focus on the subject NP alone. However, we will see later that F1 focus always has to cover the verb - which a very narrow focus in (11) would not do. Therefore the F1 structure of (11) is unambiguous.

Sentences with transitive verbs are not as unambiguous as sentence (10). Look at example (13), which allows the noncontrastive intonation patterns in (14) and (15):

- (13) (weil) eine Katze Mäuse frißt. (= a cat eats/is eating mice)
- (14a) (weil) [eine Katze MÄUSE frißt]F1
- (14b) (weil) eine Katze [MÄUSE frißt]F1
- (15) (weil) eine Katze Mäuse [FRISST]F1.

The intonation pattern in (14) is known to reflect either one of two focus structures in (14a) and (14b). Thus, we expect two readings. This is the case: (14) can mean "there is a cat eating mice", corresponding to (14a). (14) moreover has a reading with generic subject NP: "A typical cat eats mice". This corresponds to (14b).

The pattern in (15) is unambiguously due to narrow focus on the verb. This means that both, subject and object NP are outside F1. The data match this prediction: (15) has a (somewhat odd) double generic reading: "What typical cats do about typical mice is: eat them".

Any other reading of (14) and (15) will automatically force us to understand the accents as contrastive accents, which proves that we have exhausted the range of readings that are possible with these F1 accents.

We can discuss what happens if the word order in (13) is disturbed, as in (16):

- (16) (weil) eine Maus(acc) eine Katze(nom) frißt.
(= "(because) a mouse(obj) a cat(subj) eats/ is eating")
- (17) (weil) eine Maus [eine KATZE frißt]F1.
- (18) (weil) eine Maus eine Katze [FRISST]F1

²To be precise, I will use a top-down picture of focus projection (Rosengren[xx]??): Focus is seen as an abstract feature in the syntactic structure which gets realized by "sending down" one or several accents, down to the lexical level to the appropriate positions. For the sake of brevity, I will use the term "focus projection" to refer to the rules that guide the relation between focus feature and accent(s), although this term is normally part of a "bottom up" theory. Both perspectives should be intertranslatable in the end.

The word order in (16) is non-normal. Therefore the accent pattern in (17) can only reflect narrow F1 focus on "eine Katze frißt". This corresponds to the observation that (17) means that the typical mouse dies by getting eaten by a cat.

Sentence (18) is a somewhat odd variant of sentence (15): It exhibits narrow F1 focus, and means that the typical action for a cat to take about a mouse is: to eat it. The reasons why (18) is odd might be of the following kind: German uses scrambling mainly in order to get the proper elements outside a focus (like in example (17)), or to make sure that an accent is unambiguously understood as narrow focus (which is often the reason to front something different from the subject NP in main clauses). However, no such effects arise in (18): If we want to get narrow focus on the verb alone, the more normal sentence (15) will be perfect. Only if we get full understanding of the factors that drive scrambling in German, we might be able to construct situations where (18) is the best way to say things.

Sentences with ditransitive verbs confirm the picture drawn so far. They give rise to accent patterns which are even more ambiguous than (14), and the corresponding readings where not only one, but even two or three arguments of the verb must be understood generic. They also allow for more scrambling, which will be discussed below.

Let us finally look at examples which involve manner adverbs. An overview over the data involved suggests that the normal word order for transitive sentences which contain an adverb of manner is this:

Subject Adverb of Manner (Object 1) (Object 2) Verbal complex

Only in this order we find that one accent (on the rightmost object) can reflect sentencewide focus. If we look at other positions of the adverb of manner, we find that the sentence either gets ungrammatical (Adv S_j Obj Verb), or that single accents can only reflect narrow foci (S_j Obj Adv Verb). An example is given in (19).

- (19) (weil) ein Hund aufgeregt einen KNOCHEN vergräbt.
 (because) a dog excitedly a bone buries
- (19a) (weil) [ein Hund aufgeregt einen KNOCHEN vergräbt]F1.
 A dog is excitedly burying a bone.
- (19b) (weil) ein Hund [aufgeregt einen KNOCHEN vergräbt]F1.
 A dog (generic) excitedly buries a bone.

(19a) and (19b) give the two possible readings of (19).

Already example (6) in the introduction has shown that F1 has to dominate the verb. Let me demonstrate the same point with a further example: Sentence (20) can only be understood to involve a narrow *contrastive* focus on the object NP. If this narrow focus was a possible *F1* focus, we would expect to get a non-contrastive reading which is equivalent to (19b). However, (20) needs a contrast and then allows *any* reading - depending on the sentence it contrasts with.

- (20) (weil) ein Hund [einen KNOCHEN]F? aufgeregt vergäbt.
 (bec.) a dog a bone excitedly buries

The examples we have seen so far all confirmed the central hypothesis (H4). The most distinguished sentences were those with intransitive verbs. Transitive verbs give rise to more ambiguous accent patterns, apart from accents on the verb alone, where the corresponding readings were somewhat odd, maybe.

In order to conform the observation that intonation and the interpretation of indefinites are closely connected I want to discuss a further type of example in the next section, namely sentences with scrambled word order but wide F1 focus.

1.3. More examples

Theories of "sentence accent" or "focus projection" usually look only at sentences in normal word order (if there is anything to choose). The underlying assumption seems to be that sentences in derived word order simply are never used in contexts where they should have broader foci than what can be done with a single accent. This, however, is not true. (A more innocent view on the data can be found in Gussenhoven[83]).

Sentences in non-normal word order can carry broad foci. These foci simply need more than one accent to get expressed. Look at the examples in (21) and (22):

- (21) (weil) [ein Hund einen KNOCHEN AUFGEREGT VERBUDEL]F1
 (bec.) a dog a bone excitedly buries
- (22) (weil) [ein Politiker eine ROSE(acc) einer MARKTFRAU(dat) geschenkt hat]F1
 (bec.) a politician a rose to-a market woman given has
 = A politician gave a rose to a market woman

Each of the examples is in non-normal word order. In (21), the adverb is too far right, and in (22) the order of objects is "the wrong way round". Nevertheless both sentences can be understood with broad F1 focus as indicated: Both sentences have a reading where all indefinites are understood existentially, *but they only* have this reading *in the intonation pattern indicated*. The first thing to be said about these examples is, that they show that intonation helps to determine the readings of indefinite NPs. However, are these accent patterns still focus accents?

This question can be answered positively if we find cases of "real" semantic focus which exhibit the same patterns - that is, constellations where broad semantic foci should arise in the above sentences. I will test this with question-answer pairs: Can the above examples be successfully used in answer to the question "what happened?" or "what is the matter?". It seems that they can. The following two mini-discourses are coherent:

- (23) What is the matter? Why do you look out of the window?
 - Weil [ein Hund einen KNOCHEN AUFMERKSAM VERBUDEL].]F2
- (24) Why is everybody so excited?
 - Weil [ein Politiker einer MARKTFRAU eine ROSE geschenkt hat.]F2

This shows that the indicated accent patterns reflect sentencewide focus. While the F2 focus domains in (23) and (24) are tested with the preceding questions, the broad F1 focus domains in (21) and (22) are diagnosed by looking at the interpretation of the indefinites.

Note that the same accent patterns can indicate a narrower focus, covering everything except the subject NP. The corresponding F1 focus licences a generic reading of the

subject, the corresponding F2 focus for instance the question "what did a politician do?". I will not discuss the exact rules of focus projection in scrambled cases which predict the above patterns. A more thorough investigation of examples can be found in Eckardt [96], [t.a.].

2. Indefinites and judgement structure

The preceding section has shown that there is a fruitful correlation between the domain where indefinites are interpreted existentially, and a certain focus structure which I called F1 focus. It would be odd, though, to have a notion of focus which only operates in sentences which contain indefinite NPs. The question arises whether there is some broader cognitive content underlying F1. I suggest that the picture is complete only if supplemented by two insights drawn from the literature.

On one hand, Ladusaw[94] claims that the interpretation of indefinites has to be captured in terms of judgement structure of sentences. He suggests that the domain of the sentence where indefinite NPs are interpreted existentially corresponds to the predication part of the sentence. Subject-indefinites, in contrast, have to be understood generically. (For the definition of the term Subject, see below).

On the other hand, Sasse[87] shows that German uses the intonation pattern of an utterance in order to express the underlying judgement structure. He discusses mainly sentences with intransitive verbs, though, and it will soon become clear why.

These two assumptions can fruitfully be merged into the following overall picture: German³ uses F1 structure in order to express the judgement structure of an utterance. Judgement structure is decisive for the interpretation of indefinite NPs. Thus, indefinites, intonation and judgement structure are one coherent phenomenon.

Let me explicate in more detail the terms and theories I want to refer to.

The theory of judgement structure goes back to Marty (Marty[40]) and Brentano (Brentano[1874]). Brentano assumes that if a speaker utters a sentence, s/he thereby expresses a judgement which s/he arrives at in a preceding underlying mental process. Brentano distinguishes two kinds of judgements:thetic judgements and categoric judgements. In a categoric judgement, the speaker has a certain person or object already in mind, the Subject⁴ of the judgement, and moreover a certain property. The judgement consists in ascribing or denying the Subject the property. The following sentences (normally) express categoric judgements:

(25) Sue has blond hair.

³I will restrict my claims to German where I have a good understanding of the intonation patterns involved. Although the situation in English looks similar in many cases, I got the impression that certain crucial differences exist. For instance, as German has free word order, it allows to rearrange the word order of the sentence such that almost any division of material into F1/non-F1 can be expressed. English, having fixed word order, might use other grammatical devices in order to express the relevant structures.

⁴I will use Subject with capital "S" for the logical subject, in contrast to grammatical subject NPs.

(26) Sue doesn't have blond hair.

thetic judgements, on the other hand, are not structured into a Subject and a predication. They assert the existence of an object or describe an overall scene without any prominent part. The following sentences (normally) expressthetic judgements:

(27) It's raining.

(28) It doesn't snow.

(29) There is beer in the fridge.

(30) There is no beer in Hawaii.

Let me comment somewhat more on this terminology.

The term "Subject" seems to overlap in part with what has been called "Topic" elsewhere, especially in Reinhart[81]. Both her article and Kuroda[72] point out that the "Subject" (i.e. Reinhart's "topic") is only in part determined by the previous discourse - certain items can *not* be the Subject, but in the end it is the speaker's decision which item s/he wants to be the Subject. These observations are not compatible with other uses of the term "Topic" in the literature, like in von Stechow[94] or Büring[94]. Thus, the reader is warned to equal Subjects with any kind of "topics" discussed elsewhere. I especially will *not* assume that any question which would coherently precede an utterance automatically brings out the Subject-predicate structure of that utterance. This assumption translates the observations in examples (4a) and (4b).

As forthetic judgements, it seems that many of these can best be understood as being in fact about a Subject, too, namely the location which is described, or where the existence of a certain kind of objects is asserted. These ideas are discussed in more detail by Jäger[96]. Thus, sentence (30) will be about the Subject "Hawaii", and sentence (27) about the Subject "the place for which I now tell you the weather". These Subjects are not always explicated in the sentence (which might be why the inventors of the theory did not come to this generalization). It is an open question whether there are completely Subjectless sentences - candidates are sentences at the beginning of a story, and the like.

The consequences of viewing an utterance as having a certain judgement structure have largely been assumed to be purely pragmatic in nature in languages like English or German. However, Ladusaw[94] proposes that we find effects of the judgement structure of an utterance which are diagnosable in terms of truth value semantics, even in languages like English. Ladusaw's main interest lies in developing a certain perspective on negation; yet, in order to support his view, he integrates the interpretation of indefinites into a theory of the modes of judgement. He argues that indefinites - in their existential reading - are characterized by their function in discourse, namely, to introduce novel, previously unmentioned individuals and objects into the domain of discourse. This function *agrees* with thethetic mode of judgement and generally with predication. It is *incompatible* with the function "to denote a Subject of a judgement". Subjects are what the speaker was already thinking about. It would be misleading, so to speak, to introduce something as new into the discourse and at the same time ask the reader to understand that the speaker had been thinking about this item before. (This constellation is expressed differently. The speaker uses a definite NP where the hearer would have expected an indefinite, like in the following first sentence of a discourse: "This student of mine is really cute.") Therefore, Ladusaw claims, the only way to interpret an indefinite as something acquainted is to

interpret it generically. "A polar bear" only counts as known if it refers to the typical "polar bear-an-sich"⁵.

Ladusaw thus provides an account of the interpretation of indefinite NPs which is based on conceptual notions, while the most prominent alternative theory, the theory of Diesing and Kratzer (Diesing[92], Kratzer[89]) is based on syntactic grounds. The latter will be discussed in more detail in section 4.

We have seen two possibly distinct factors - focus structure and judgement structure - which both have been claimed to drive the interpretation of indefinite NPs. Can we merge them into a uniform picture? Sasse, in the paper Sasse[87], investigates the notion of "judgement structure" under a typological perspective, demonstrating a variety of means to express Subjecthood and predication in a number of different languages. He draws attention to the fact that one has an odd alternation between two intonation patterns in German sentences with intransitive verbs: Certain sentences seem only possible with an accent on the predicate, others almost only with an accent on the (grammatical) subject, and some sentences allow both patterns:

- (31) Die SONNE scheint
The sun is shining
(32) Joe ist INTELLIGENT
Joe is intelligent
(33a) Das BABY weint.
(33b) Das Baby WEINT.
The baby is crying

Sasse argues that the subject-accented sentences expressthetic judgements while an accent on the verbal predicate expresses a categoric judgement. A comparison of examples (27) to (30) with (31) and (32) may illustrate his claim.

If we analyze examples like (31) to (33b) in terms of the regularities of focus projection, like the ones alluded to in section 1, we note that (31) and (33a) would have broad F1 focus, while (32) and (33b) show narrow F1 focus. Thus, it makes sense to see Sasse's intonation patterns not just in terms of "accent to the left" and "accent to the right", but to assume that the more theory-bound notion of "focus" is in play. I take the above examples as the starting point for the following claim:

F1 focus is used to express the judgement structure of German utterances.
The part of the sentence inside F1 expresses the predication.
The part outside F1 denotes the Subject.

This assumption allows to generalize Sasse's observations to the transitive and ditransitive case, both in basic word order and scrambled word order. It also becomes apparent, though, why the most illustrative examples arise in the intransitive case: As there is only one nominal argument present in the sentence, intonational effects arise as soon as this

⁵The partitive existential reading of the German "ein Eisbär", namely "one of an already known crowd of polar bears, counts as a quantified NP. It makes sense to assume that quantified NPs *can* refer to Subjects and express multiple predications. I will not be concerned with quantificational cases here.

only argument is meant to denote the Subject of the judgement. Sentences with transitive verbs are more robust with respect to intonation. Our knowledge of the focus projection regularities will tell us that the same accent patterns arise for all-F1 focussed sentences and sentences with the grammatical subject being the Subject. Only the rarer judgement structures where both subject and object NP are what the speaker makes a claim about will show a different accent pattern (compare example (15)). Another case are utterances which are "less normal" with respect to word order: The object NP can be fronted in order to express that it denotes the Subject, as in (17) or (34).

- (34) (weil) das Geißlein(i,akk) [der WOLF(nom) t_i gefressen hat.]F1
(because) the little-goat the wolfe eaten has
"The little goat, it was eaten by the wolfe"

More examples will be discussed in the next section.

Let me finally repeat the overall picture.

- (A) Utterances express certain underlying judgements. These judgements are structured in (possibly) a Subject and a predication.
(B) Judgement structure is expressed by F1 focus in German. F1 contains the predication, the Subject corresponds to what is outside F1
(C) Judgement structure drives the interpretation of indefinites. An indefinite NP inside the predication part is interpreted existentially, a Subject indefinite must be interpreted generically.

The integrated theory of judgement structure, focus, and the interpretation of indefinites provides a richer picture than both, Ladusaw's and Sasse's theory in isolation. Different from Ladusaw, we have means to identify judgement structures in more than just those sentences which happen to contain an indefinite NP. In contrast to Sasse, we have a more theory-bound concept of "accent pattern" and its correlation to judgement structure. Moreover, we have an independent criterion to test the judgement structure which seems to be indicated by a certain intonation pattern, namely the interpretation of indefinite NPs (if there happen to be some). The diagnosis of judgement structures has always been, apart from the core cases, a task relying mainly on the linguist's inner voice, and the results were not always easily communicable to others.

3. Lexical conditions on judgement structure

We have correlated focus structures, judgement structures, and the interpretation of indefinite NPs. It is well known, however, that certain predicates restrict the possibility to interpret their subject (or other) arguments existentially: So-called *individual level predicates* (in short ILPs) with indefinite subjects only allow generic readings for these subjects, while *stage level predicates* (in short SLPs) do not restrict the interpretation of subject or object NPs. This distinction has first been closely investigated by Carlson (Carlson[77]) and more recently by Kratzer and Diesing (Kratzer[89], Diesing [90], [92]).

For the moment, I want to adopt Ladusaw's view on the SLP/ILP distinction. I take it to be part of the speaker's knowledge about the meaning and possible uses of a

predicate, whether it can be used inthetic judgements or not. ILPs verbalize properties which can only "be ascribed to someone" but where it does not make sense to describe an overall scene with them. I take it to be too early to derive this distinction from any absolute semantic factor like "the presence or absence of an event parameter" or the like (see next section). It has also been noted that even ILPs may give up their ILP properties in certain contexts, like comparative constructions with "so" ("be so intelligent", "be so blue eyed", ...) or certain focus constructions. It would be surprising if comparatives or semantic foci could change the semantic characteristics of predicates.

What we can do, however, is to test whether ILPs and other examples of predicates which restrict the judgement structures where they can appear confirm the claim that a certain focus domain indicates the part of a sentence where existential readings for indefinite NPs arise. This will indeed be the case, and moreover we will face an interesting little zoo of predicates which show preferences for one or the other type of judgement structure.

3.1. Predicates with a normal use

There is a wide variety of predicates which, although allowing for all kinds of judgement structures, express something which is preferably uttered in a context where the speaker makes a certain type of judgement. These most normal uses have led to the claim that such sentences have a most normal accent pattern, which is especially interesting for intransitive verbs where accents are floating between subject and verb. This type of normality, however, has nothing to do with grammar, but with world knowledge. Let me discuss an example.

- (35) KARL kommt. ("Karl is coming")
- (36) Eine FRAU kommt. ("A woman is coming")
- (37) Karl GEHT. ("Karl is leaving")
- (38) eine frau geht (≈ "a, some, one of the women is leaving"; intonation pattern unclear)

The verb "kommen" (= to come) unproblematically allows forthetic judgements. This is proved both by the - even preferred - intonation patterns in (35) and (36), and the unproblematic use of indefinite subject NP in (36). And indeed, "to come" or "to arrive" is one of the first things someone can do in order to introduce herself into some real world scene. Thus, the linguistic observation that (35) and (36) are goodthetic judgements corresponds to the world knowledge that the contexts in question are such that the speaker easily might not have had Karl in mind before, and thus does not talk about the Subject Karl.

The verb "gehen" (= to leave) behaves differently. If "gehen" is combined with a definite NP or proper name, the respective sentences expresses a judgement about the person in question (f.e. Karl in (37)) in the most normal case. Accordingly, it is difficult to express a straightforwardthetic judgement with (38). The use of "to leave" implies that the speaker's location is the same as the location of the person denoted by the subject, before s/he leaves. Moreover, it seems implausible that - given this situation - the speaker's attention should focus on the "leaving" scene without having been aware of the subject for some time before; or at least perceiving the subject as one of a known group of people. This can

be concluded from what we find to be possible uses of (38): Sentence (38) is preferably uttered as

(38a.) Eine FRAU GEHT.

(We are not interested in the partitive pattern "EINE Frau GEHT.") The accent on "Frau" (=woman) contrasts this woman with other persons. Sentence (38a.) can't be uttered in a situation where this woman is the only woman in the room, say. It implies⁶ that more people than just this one woman must be present. Thus, we know that (38a.) is not simply a non-normal case of wide F1 focus in an exotic intonation pattern.

If we specify the scenario, however, we can support athetic use of sentences (37) and (38). Imagine that you are a janitor watching the entrance of your house. You have only recently arrived at your office and do not know how many people are in the house, if any. At 12.15 you see Karl/ a woman pass your office and leave the house. In such a context you can use "leave" without having been in the same room with that person before. Now you can use (37) or (38):

- (37') KARL geht. / Um 12.15 ging KARL.
Karl is leaving/ At 12.15, Karl left.
- (38') Eine FRAU geht. / Um 12.15 ging eine FRAU.
A woman is leaving / At 12.15, a woman left.

These examples show that more factors are in play in thethetic/categoric distinction than simple "presence or absence of an event" or "situation" (see section 4.). The contrast between (35) and (37) is all the more telling, as the verbs "kommen" and "gehen" almost have the same content and only differ in perspective.

Another class of verbs with a most normal use are discussed by Allerton/Cruttdenden (Allerton/Cruttdenden[79]). They list "sentences that report a mishap" among those where intransitive verbs can be used in sentences with an accent on the subject NP - that isthetic judgements, in our terms. Although their examples are given in English, they carry over to German. (39) to (41) are of the relevant kind:

- (39) Deine HOSE brennt. ("Your TROUSERS are on fire")
- (40) Das BOOT ist undicht. ("The BOAT leaks")
- (41) Der FÜLLER kleckst. ("The PEN blots")

It should be puzzling to find that a syntactic notion like "sentence accent" was sensitive to content. Thinking in terms of judgement structure, however, the accents in (39) to (41) make much sense. They reflectthetic judgements. Thetic judgements are characterized as "describing some overall scene without any special attention to a certain object". It is typical for mishaps that the objects in question have not been in the speaker's attention before - this is why mishaps are so surprising. Of course, nothing in the above sentences themselves disallows them to express categoric judgements. If you bargain the prize of a boat you want to buy, you can say:

⁶ in whatever pragmatic sense of "implication"

(40') Das Boot ist UNDICHT.

thus pointing out a certain undesirable property of the boat. Note that, looking at (40') alone, one would expect that German treats "undicht sein" as an adjectival, permanent property, in the same way as it does with "nervös sein" (be nervous). No event in the Davidsonian sense seems to be involved. Nevertheless, not onlythetic sentences like (40) are good, but also existentialthetic sentences like (42).

(42) Eine LUKE ist undicht. ("A hatch leaks, is leaking")

These examples show that the close connection between "ILP-hood" and the presence of an event parameter which has been postulated by certain theories is not tenable. We will come back to these issues in section 4.

3.2. The ILP property - classical cases

I will use the term "ILP property" to characterize those predicates which have at least one argument which, if instantiated with an indefinite NP, can't give rise to existential readings. Thus classical ILPs certainly have the ILP property, and moreover the relevant argument of the predicate is the grammatical subject. As I have said before, I take it to be part of the speaker's knowledge about the meaning of predicates like "be intelligent" or "be blond" that they express properties of individuals. We *have* to check, however, if the intonational facts match the predication that narrow F1 foci are in play. It turns out that intonational structure and judgement structure do match. The following intonation patterns are the only possible F1 patterns for the respective sentences.

(43) Ein Dobermann ist INTELLIGENT.
A doberman is intelligent.

(44) Ein Schwede ist BLOND.
Swedes are blond.

(45) Ein Ritter im Mittelalter war REICH.
A knight in the middle ages was rich.

(46) Ein Eichhörnchen ernährt sich von HASELNÜSSEN.
A squirrel lives on hazelnuts.

In contrast, even SLPs which are adjectival constructions with "sein" (= to be) can carry an accent on the subject NP, proving their ability to be used with wide F1, that is, inthetic judgements.

(47) Ein FEUERLÖSCHER ist verfügbar.
A fire extinguisher is available.

Note that "undicht sein" of the preceding section patterns with example (47) and thus does not have the ILP property, in spite of its temporal constitution.

3.3. The ILP property - nonclassical cases

Apart from the standard examples of ILPs, there are predicates which have the ILP property for the object argument, or even for both arguments, subject *and* object. These examples are a challenge for a syntax based theory for the ILP/SLP distinction, as the one to be discussed in section 4, as well as further test material for the judgement+focus hypothesis. Let me give some examples.

(48) (daß) einem Professor ein COMPUTER zur Verfügung steht.
(that) a professor (dat) a computer (nom) available stands

(49) (daß) Lärm eine Oma ÄRGERT. / Lärm ARGERT eine Oma.
(that) noise a Grandma annoys / Noise annoys a Grandma

(50) (daß) Folkloretänze einem Touristen GEFALLEN.
(that) folklore dances please a tourist

Example (48) is unusual in various respects. On one hand, the dative object NP "ein Professor" can only be understood generically. On the other hand, the most unmarked word order seems to be this:

(51) indirect object subject verb

The intonation pattern, then, is the one given in (52).

(52) indirect object SUBJECT verb

These observations can be fitted into the overall picture in at least two ways. We can either claim that the word order in (51) is base generated, and that narrow F1 focus, indicated by the accent in (52), is part of the lexical description of the verb. We can alternatively assume that the indirect object undergoes obligatory scrambling, leaving the F1 domain [subject - verb]. F1 focus is indicated by an accent on the rightmost nominal argument of the verb in focus - the grammatical subject. I will not argue in favour of either of these explanations. Both come along with the assumption that the verb has to know about the Subject status of its future indirect object argument. The main result thus is that the F1 structure of (48) must be like this:

(53) (daß) einem Professor [ein COMPUTER zur Verfügung steht]F1

Thus, "be available" expresses a categorical judgement about the beneficiary, if this participant is expressed.

The examples given in (49) and (50) show that there is such a thing as "doubly categorical judgements", that is, judgements where a property is ascribed to two participants. Both subject and object NP can *only* be interpreted generically. Both subject and object NP are outside F1 focus, which makes itself audible by the accent on the verb. It turns out that we even face a homogeneous semantic class of predicates which have this property: most verbs of emotional affection in their non-agentive variant pattern with (49) and (50). Interestingly, if we use the agentive variant of these the ILP property will vanish. Thus,

(54) can express a good thetic judgement with sentencewide F1 focus, existential subject and object:

- (54) Ein kleines Mädchen ärgert eine KATZE.
A little girl is annoying a cat.

(54) means that the little girl does something on purpose in order to annoy the cat. This is crucial in order for the thetic judgement to be possible. The noise in example (49), on the other hand, can only annoy Grandma by its mere existence or occurrence, and thus this reading is blocked.

These non-classical versions of ILPs have often been attacked in discussions. The respective counterexamples, however, were always of a kind which turned even classical ILPs into predicates without the ILP property. I want to go through one example in order to demonstrate how these mechanisms work. One might, with respect to the predicate "gefallen" in example (50), point out that the following sentence is thetic:

- (55) Ein Mantel hat einer Frau so gefallen, daß sie ihn sofort kaufte.
A coat (ex.) pleased a woman (ex.) so much that she bought it immediately.

Does this mean that "gefallen" doesn't have the ILP property? No, it doesn't mean that. This type of construction even allows an existential subject with the classical ILP "be intelligent":

- (56) Ein Bäcker in Bamberg war so intelligent, daß nur Professoren bei ihm einkauften.
A baker in Bamberg was so intelligent that only professors would buy from him.

Therefore it is not surprising that (55) also has the existential readings it has.

The nonclassical ILP examples confirm the hypothesis that focus structure, judgement structure and indefinites are one coherent phenomenon. This means that intonational data can be taken more serious in future research. Moreover the division of theories into the hard ones which talk about focus structure, quantification and genericity on one hand, and the weak ones which talk about predication, topics and Subjects on the other hand has to be given up if we want to understand the nature of judgement structure to its full extend.

The next section will be devoted to contrast the present picture to a syntax driven theory of interpretation of indefinites.

4. The theory of Kratzer and Diesing.

I made various side remarks, in the preceding sections, to the end that certain data constituted counterexamples to a syntax driven theory of interpretation of indefinites. Here, I want to repeat shortly this kind of theory and sum up the arguments that stand against such an approach.

Kratzer argues in Kratzer[89] that the crucial difference between ILPs and SLPs consists in the latter, but not the former, have a Davidsonian event argument. The following contrast is taken to be prototypical:

- (57) A man ate an apple
= reporting an event; temporally restricted; no ILP property
(58) Men are hypochondric
= not reporting an event; no own temporal constitution; ILP property for subject.

She discusses various tests which confirm this distinction.

Diesing[90], [92] turns this observation into a theory of NP interpretation. It is assumed that each sentence has one VP external ("subject") position which obligatorily has to be occupied by the highest argument. In the case of SLPs, the event parameter can occupy this position. If, however, no event parameter is present, then another argument of the verb, normally the nominative case argument, will occupy this position.

Next, these structures are interpreted semantically. Diesing assumes a DRT type framework. Indefinite NPs do not introduce a quantifier on their own account, but get bound by unselective existential binding. Existential binding applies at the VP boundary, or in the nuclear scope of further quantifiers. This means that an indefinite NP outside VP is not captured by existential closure. Diesing assumes that these indefinites get bound by an adverbial quantifier GEN which turns (58) into a semantic representation like (59):

- (xx) GEN x (MAN(x) ; HYPOCH(x)) = "typical men are hypochondric"

This theory accounts for the prototypical ILP/SLP distinction as exemplified in (57)/(58).

4.1. Taking care of the event argument

Kratzer's observation concerning the rough correlation between absence/presence of an event and ILP properties is certainly true. How, then, does this event parameter of SLPs get bound? Semanticists agree that verbs introduce the event indefinitely. Thus, sentence (60) has the meaning (60a.), and not (60b.) or (60c.). The F2 focus construction in example (61) shows that events can be bound unselectively, another test for indefiniteness.

- (60) A man ate an apple.
(60a.) There was an event e, a man x, and an apple y, and x ate y in e.
(60b.) The salient/unique event e consists in there being a man x and an apple y, and x eats y in e.
(60c.) All typical events e are such that a man eats an apple in e
(61) Most women solved the problem [ELEGANTLY]F2

Diesing, however, assumes that the event parameter occupies the VP external position, that is, one which is not covered by existential closure. Assuming that the same rescue

mechanisms apply for unbound event parameters as for unbound indefinites, she will predict that sentence (60) has either meaning (60b.) or (60c.) - which is wrong.

In order to save the overall picture, one might claim that the ILP/SLP distinction is not due to the presence or absence of Davidson's events, but due to some more abstract "situation" parameter. In fact, both Kratzer and Diesing tend to use the more vague term "eventuality", loosening the narrow Davidsonian concept. Nevertheless they will have to conclude that ILPs like "eat" have *both* an event and an "eventuality" parameter, while ILPs like "be hypochondric" have neither. It is much more difficult, though, to argue that ILPs do not even refer to a situation in the loose sense than to show that they do not refer to events. All the tests in Kratzer[89], for instance, might in fact test the presence or absence of events, and say nothing about the situation parameter, at all. Therefore the conceptual motivation of the Kratzer/ Diesing theory turns out to be purely stipulative.

4.2. Nonclassical ILPs

In section 3.3 we saw predicates which had the ILP property either for the object NP, or for both subject and object NP. Diesing can account for the former examples by assuming that - for some reason or other - it was the object NP and not the subject which was the highest argument in these cases. The doubly-generic examples are harder to capture, however. One would have to provide two VP external positions in that case in order to predict that both arguments are obligatorily interpreted outside VP. While one VP external position can be motivated on independent syntactic grounds, it will be difficult (at best!) to argue that there are isolated verbs which can only live in syntactic structures with two "subject" positions.

4.3. Prototypical uses.

We discussed the verb pair "kommen"/"gehen" (come/leave) in section 3. These verbs are very similar with respect to event structure - in fact it makes little sense to claim that one of them refers to an event or situation while the other doesn't. However, their preferences for certain types of judgement structures differ. This can be derived from the observation that "gehen" can rarely be used with plain and simple existential indefinite subject NPs, while "kommen" is unproblematic in that respect.

Diesing can "explain" the generic or contrastive readings of "gehen" subjects by observing that speakers just happen to prefer uttering "gehen" sentences with a VP external subject NP. (This is technically possible in her framework.) However, she can't do more than that. A theory of judgement driven interpretation of indefinites can do more: It can at least use these examples as a starting point to investigate the factors which licence or motivate the mode of judgement. While "ascribing someone an atemporal, a-situated property" seems to be *one* reason for making a categorical judgement, it might not be the only one. "using a verb which carries the perspective: be near an object while describing its actions" seems to be another reason to prefer categorical judgements.

The dual case arose in the following type of sentence, where a catastrophe was reported using athetic judgement, yet referring to an uneventive property of an object:

(40) Eine LUKE ist undicht. ("A hatch leaks/is leaking")

The predicate "undicht sein" certainly does not have an event parameter in Davidson's sense. It is unclear whether the property "undicht sein" is situated, or temporally bound, seen from the perspective of the hatch. (Many things in our life are leaking in a more inherent way than we would like them to.)

What certainly is the case is that "A hatch is leaking" describes some larger situation, namely the "ship situation" in which the hatch is built in. This "ship situation" is licenced by the noun "hatch", maybe, but not by its further property of leaking. (The ship would be around the hatch whether it leaks or not.) Thus the overall sentence is about a situation, in spite of the atemporality of the "leaking" with respect to the hatch. This may look like a point in favour of Diesing's theory. However, these observations make it clear that testing the eventiveness of a predicate doesn't tell anything about the situatedness of the overall sentence. The question to be answered is this: Why can a property like "be leak" be situated for a hatch, while a property like "be hypochondric" can not be situated for a man?

4.4. "Being available"

The predicate "verfügbar sein" (= be available) is often used as the prototypical stage level predicate. The predicate "jemandem zur Verfügung stehen" (= "stand at someone's disposal" = be available for someone) was discussed in section 3. as one case where obligatorily predication about the dative object takes place. Diesing would explain this by claiming that "zur Verfügung stehen" does not have a situation/event parameter, that the dative argument is the highest argument of the verb, and that it thus has to occupy the VP external position. However, "verfügbar sein" and "zur Verfügung stehen" denote very similar concepts - as is revealed by the English translation. One can *claim* but not give much conceptual reason that one of these predicates speaks about situations/events, but not the other one.

4.5. Summary

The theory of Kratzer/Diesing might be considered as one where a conceptual criterion (presence/absence of an event) is turned into a syntactic feature (arity of the predicate) which in turn has influence on semantic interpretation. I have argued that the conceptual basis of this picture has to be rethought seriously, and I have moreover tried to show that a notion like "judgement structure" is the driving factor in the overall picture. The arguments against the theory [Diesing[92]] can be complemented by the objections discussed in Jäger[96] and Ladusaw[94]. I will not repeat them here for reasons of space.

Note that a judgement driven interpretation of indefinites does not necessarily have to ignore syntax. Diesing argues in favour of her qualification of NPs as "inside" or "outside" VP mainly on syntactic grounds. We can still do justice to her syntactic observations by aiming at the following integrated picture:

VP = default F1 focussed domain
= predication part

= domain of existential closure

One major technical refinement will have to be made in Diesing's syntactic assumptions, in order to make this picture work. Section 1 included examples where scrambled NPs could still be in F1 focus. This means, they are still in the predication part of the sentence, that is, still in the domain of existential closure, that is, still in VP. Therefore we have to allow for adjunction *inside* VP as well as *outside* VP. Diesing originally assumed that any adjunction gave the NP the status of "being outside VP". We have seen that intonation data are telling with respect to predication structure of the sentence, and that an analysis of intonation data also refers to the notion of "scrambling". This is why the examples in 1.3. were analysed as involving moved NPs, while the interpretation of the respective indefinite NPs classified them as inside F1, that is, inside VP. For more details see Eckardt[96].

The main difference between the focus-judgement-driven interpretation of indefinites and the syntax driven theory consists in the localization of the factors that are held responsible for the respective division of sentence material. Moreover, taking focus into account we have access to many more examples where the division is not testable through indefinite NPs, but through intonation alone.

5. A note on sentence accents.

Many of the accents in the examples throughout this paper are of the kind that were formerly called "sentence accents". The following may be taken as a side result of the theory of judgement and focus structure:

There is no such thing as a "meaningless sentence accent" in German.

(This is probably also true for English.) Every utterance contains at least an F1 focus which is audible as long as not other (semantic F2) foci intervene. Therefore the hierarchy hypothesis in section 1 translates the old insight in the investigation of sentence accents that all predictions of a theory of sentence accent can be overruled once a "semantic focus" is in play (that is, an F2 focus in our terms). In contrast to traditional views on sentence accents, however, our theory in no way implies that there should be, for each sentence, the one and only place where the F1 focus accent turns up. Any sentence can have any one of the admissible F1 structures. F1. There are sentences which are *preferably* uttered in situations where the speaker wants to make a thetic judgement and others which are *preferably* uttered in situations where the speaker wants to make a categoric judgement. This explains why the respective accent patterns sound more "normal" - however they are by no means "better" or "more correct". Accordingly, we also had accent patterns which were F1 patterns but would never have qualified as "sentence accent" in traditional terms.

Focus projection rules are such that transitive verbs give rise to sentences which are ambiguous with respect to focus structures: An accent on the object NP can reflect both a thetic judgement and a categoric judgement about the (grammatical) subject. Therefore these sentences are comparatively stable with respect to accent patterns. Only the obligatorily double-generic "double ILPs" of section 3.3 are an exception.

Sentences with intransitive verbs show more variations with respect to accent patterns. This can be explained by observing that the focus projection regularities force the F1 accent from the subject NP to the verb as soon as the sentence expresses a thetic judgement and not a categoric one. This is why intransitive sentences have first raised the suspicion that something semantic might be driving the position of sentence accents at least in intransitive sentences (see Schmerling[76]) although normally semantic accents were the kind of accents which overwrite any kind of sentence accenting. (Which is a notoriously schizophrenous point in theories of sentence accent.)

6. References

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