This is the version of Matic, Dejan and Nikolaeva, Irina (2018) 'From polarity focus to salient polarity: From things to processes.' In: Dimroth, Christine and Sudhoff, Stefan, (eds.), *The Grammatical Realization of Polarity Contrast: Theoretical, empirical, and typological approaches.* Amsterdam: John Benjamins, pp. 9-54. (Linguistics Today). Published version available

from: https://benjamins.com/catalog/la.249.01mat/

Accepted version downloaded from SOAS Research Online:

https://eprints.soas.ac.uk/25634

From polarity focus to salient polarity: From things to processes

Dejan Matić and Irina Nikolaeva

1. Introduction

The role of grammatical categories in cross-linguistic research is known to be a highly debated issue (see Nevins et al. 2009, Evans & Levinson 2009, Newmeyer 2007, Haspelmath 2010, Rijkhoff 2009, and a discussion in one the 2016 issues of *Linguistic Typology*, to name just a few). Haspelmath (2010) refers to the two major positions as 'linguistic universalism' and 'linguistic particularism'. The former posits a set of universally available categories from which languages can choose, while the latter asserts that each language works 'in its own terms' and cross-linguistic comparison can only be achieved via some sort of abstract concepts with no psychological reality for language speakers.

Most research on categories focuses on phonetics/phonology, semantics and morphosyntax, but less so on a more scantily studied area known as information structure, which is our main concern here. Information structuring is usually understood as the grammatical packaging of information that meets the immediate communicative needs of the interlocutors. The major function of information structure is to manage the shared knowledge referred to as Common Ground by optimizing the form of the message in the relevant context (Krifka 2008, and other work). Since information structuring affects the form of sentences relative to the contexts in which they are used as units of information, it is usually understood as part of grammar and represented either as a separate module or distributed among other modules.

This raises the question of information structure categories, their universal applicability, the range of parametric variation, cross-linguistic comparison, and methodological principles underlying research. There is no shortage of positions here, but the usual procedure of defining categories of information structure consists in identifying meaning effects which occur under similar contextual conditions and then using these effects as indicative of the category itself. It is in this way that, for example, the category of focus is established. It is usually identified as (i) having the effect of indicating the presence of alternatives, newness and (the centre of) assertion, and (ii) regularly occurring in a number of diagnostic contexts, the most prominent being answers, explicit contrast, and elaboration (Büring 2010: 178, 2016: 131). Various intricate definitions exist, but in its essence this procedure remains invariable and is equally characteristic of both more formally oriented approaches to information structure, e.g. the influential Alternative Semantics (Rooth 2016, and other work), and linguistic functionalism (e.g. Lambrecht 1994).

However, cross-linguistic research shows that context types are not a reliable indicator of information structuring: languages differ dramatically in how speakers pragmatically structure propositionally identical utterances in identical discourse and situational environments (Dimroth et al. 2010, Matić & Wedgwood 2013, Turco 2014, among others). What is more, the expression of information structuring can vary in the same context within one and the same language (Zimmermann 2008, Zimmermann & Onea 2011). This can be taken to mean that either the categories of information structure have different content across languages and therefore can perhaps be decomposed into smaller sub-units (in relation to focus see e.g. the early work of Dik et al. 1981), or the categories are in fact unitary but discourse rules that define the structuring of information vary from language to language (this seems to be the underlying thought in Prince 1998 and Birner & Ward 1998). The third, more radical approach developed in the past decade by Wedgwood and Matić (Wedgwood 2006, Matić 2009, Matić & Wedgwood 2013) maintains that information structure categories such

as focus are not even linguistic categories, but types of inferentially derived interpretations with no place in grammar.

The present paper argues in favour of this third approach using the example of the information structure category that has been referred to in the literature as *polarity focus* (also: *Verum operator, auxiliary focus*, or *predication focus*). Polarity focus differs from other purported types of focus as its interpretations are more diverse and it has been also analysed as non-focus. It is difficult to pin down within the standard apparatus of focus semantics because it lacks obvious representation in the semantic and syntactic structures, so that various covert entities have to be stipulated. These are the reasons we will avoid using the term 'polarity focus' in the following and adopt the label *salient polarity* instead.

Salient polarity conveys emphasis on the polarity of the proffered proposition and tends to be associated with accented auxiliary or a distinct prosodic pattern on other types of finite verb in many languages of Europe, as shown by the following English examples:

(1) A: I don't think Peter wrote a novel.

B: a. Peter DID write a novel!

b. Peter WROTE a novel!

In many theories this purported category is believed to be directly reflected in syntax in the form of a separate functional projection (a Polarity Phrase, as in Laka 1994 and Lipták 2013), or parasitically placed in Mood or Tense Phrase (e.g. Ortiz de Urbina 1994 and Lohnstein 2012, 2016), or in both (e.g. Duffield 2007, 2013, Danckaert & Haegeman 2012, Kandybowicz 2013). In what follows we will ignore the syntactic aspect of the story because it is largely framework-dependent, and only concentrate on the purported meaning of salient polarity.

To our knowledge, all existing analyses of salient polarity rely on the standard practice of identifying linguistic structures that are assumed to instantiate a (cross-linguistic) category. The assumption here is that the category of salient polarity is associated with a distinct denotation and that this denotation is contributed by the relevant grammatical structure(s), where denotation is understood as an encoded meaning of a linguistic sign, or, more technically, as the relation between a linguistic sign and its extension. We can refer to this line of thinking as the denotational approach. The main goal of the present paper is to provide arguments against the denotational approach to salient polarity and to propose an alternative account that will altogether dispose of the idea of a discrete denotation defining a linguistic category. This account can be called *interpretational*. We use the term 'interpretation' to refer to all kinds of meanings users of language arrive at by way of inference. We will argue that salient polarity must be understood as an interpretive effect of the speaker's intention to draw the hearer's attention to the truth value of the proposition. This interpretive effect can come about through different inferential mechanisms and for various communicative reasons, and it can be derived from completely unrelated denotations. On this understanding, salient polarity does not correspond to anything resembling the traditional linguistic category if the latter is understood as a pairing between a linguistic form and a denotation, but is rather to be conceived of as a fuzzy set of family resemblances unified by shared communicative intentions.

Accordingly, the paper is divided into two large parts (sections). Section 2 discusses the standard denotational approach to salient polarity and argues that it cannot adequately capture the complexity of linguistic facts. It will provide a critical review of the relevant

We will understand 'meaning' as a hyperonym comprising both encoded denotations and inferentially derived interpretations and will use this term whenever it is not necessary to distinguish between encoded and derived semantic effects.

analytical procedure for a number of small-scale case studies and show that ascribing categorial status to salient polarity follows from the analytical practices that are based on the suppression of variation, limited empirical coverage and equating interpretive effects with encoded denotations. We then introduce the essence of our own proposal in Section 3. We will argue that there is no such thing as salient polarity in the sense of a category which pairs a discrete denotation with a discrete linguistic form. We will propose to reconceptualise salient polarity as being derived via inference from quite disparate source denotations and subject to various uses conventionalised to different degrees. The paper concludes with an attempt to frame our observations in the broader context of investigating meaning in natural language in general and conducting cross-linguistic research on information structure, in particular (Section 4).

2. Salient polarity and accented verbs

In Section 2.1 we introduce the standard procedure of identifying salient polarity relying on data from two well-studied languages, English and German, and somewhat less studied Serbian. We show that this category is largely associated with a particular prosodic pattern, accent on the lexical finite verb or the auxiliary/modal/functional element (we will often abridge this to *accent on the finite verb*). The reason why accented verbs are taken to instantiate the category of salient polarity is that they pass the crucial question-answer diagnostics. We then turn to illustrating some of the more diverse usage contexts in a comparative perspective (Section 2.2). It is not our intention to exhaustively describe salient polarity constructions in the three languages in question, but rather to bring home the point that the range of interpretations of the purported salient polarity structure is much broader than commonly assumed. Since focal, epistemic or similar interpretations are not the only

possible readings of accented verbs, there is no evidence that salient polarity is contributed by a linguistic form dedicated specifically to the expression of the relevant meaning. Section 2.3 summarizes our findings so far.

2.1. Identifying salient polarity

Even by standards of information structure research, the range of structures that have been claimed to encode salient polarity is impressive. The empirical basis of research has expanded in the past few years and cross-linguistic evidence suggests that, in addition to prosody, salient polarity can be conveyed by free-standing particles and adverbials, bound morphology, dedicated syntactic constructions or word order configurations. Consider the non-exhaustive lists for German and English:

(2) German

a. accent on auxiliary, modal verb, or complementizer (e.g. Höhle 1992,

Lohnstein 2016)

Er HAT das Buch geschrieben.

he has the book written

'He HAS written the book.'

b. accent on lexical finite verb (e.g. Höhle 1992, Lohnstein 2016)

Er SCHREIBT sein Buch.

he writes his book

'He IS writing his book.'

c. emphatic tun periphrasis (Abraham & Conradi 2001, Güldemann & Fiedler

2013)

Bücher lesen tut er.

books read does he

'And read books he does.'

d. (full or partial) VP fronting (e.g. Güldemann & Fiedler 2013)

Bücher gelesen hat er.

books read has he

'And read books he did.'

e. (accented) discourse particles such as doch, schon, wohl or ja (Egg &

Zimmermann 2012, Egg 2012; see also Grosz 2014, 2016)

Er ist DOCH gekommen.

he is PTL come

'He did come (after all).'

- f. discourse markers (*ich schwöre* 'I swear', *ehrlich*, *ungelogen* 'honestly')
 (Meibauer 2014)
- g. adverbs such as tatsächich, wahrhaftig (truly, really), etc.

(3) English

- a. accent on auxiliary or modal verb (e.g. Wilder 2013, Samko 2016)
 He WILL be on time.
- b. accent on lexical finite verb (e.g. Gussenhoven 1983, 2007; Ladd 2008) He READ it yesterday.
- c. emphatic *do*-support (e.g. Wilder 2013)

She did open the door.

d. VP fronting (Samko 2015, 2016)

He went there to learn, and learn he did.

- e. adverbs such as *really, definitely* (Romero & Han 2004, Lai 2012)
- f. particles so or too (with emphatic do), indeed (Klima 1964, Sailor 2014: 79)

He did so finish the paper.

g. so-inversion (Wood 2008, 2014)

John plays guitar and so do I.

h. *F*-inversion (Sailor 2015)

He may have luck getting Mary to vote for Tories, but will he fuck convince me!

Other languages have not been so thoroughly described, but they also show variability. Thus, in Serbian, lexical finite verbs and modals can bear the nuclear accent (4a). In periphrastic tenses and moods, clitic auxiliaries are replaced with full forms and accented (4b). A specialised construction with accented verb and postposed subject has also been described (4c), see Matić (2003, 2010), as well as a number of particles and discourse markers (4d & 4e), see Mišković-Luković (2010).

(4) Serbian

a. accent on finite verb

Ona PIŠE romane, ali su loši.

she writes novels but are bad

'She does write novels, but they're bad.'

b. accent on auxiliary/modal

On JESTE napisao tu knjigu.

he is.EMPH wrote that book

'He DID write that book.' (jeste opposed to the clitic non-emphatic = je)

c. accented verb and postposed subject

NAPISAĆE on tu knjigu, ali...
write.will he that book but

```
'He WILL write that book, but...'
```

d. particles and adverbs (stvarno 'really', fakat, baš, etc.)

Stvarno / baš mnogo jede.

really / PTL much eats

'He really eats a lot.'

e. discourse markers (majke mi 'by my mother', ozbiljno 'seriously')

Majke mi sam sâm napisao tu knjigu.

mother me am self written that book

'I swear I wrote that book myself.'

We presume that similar disparate sets of structures can be observed in many, or most, languages. However, ascribing the same denotation to, say, accented finite verbs, intensifiers and discourse particles appears impossible, so the question is whether they represent the same grammatical category, if the category is to be understood as based on a form-meaning correspondence.

At this point we would like to forestall a possible objection that we illicitly equate minor phenomena with limited distribution, such as discourse markers or particles, with such pervasive grammatical devices as nuclear stress assignment or auxiliary insertion. The justification for this follows from the very logic of defining the category of salient polarity. If interpretive effects connected with emphasis on polarity, understood as the exclusion of the opposite polarity alternative (as e.g. in Höhle 1992) or certainty that a proposition is to be added to the Common Ground (as e.g. in Romero & Han 2004), are taken to be definitional, then any linguistic element generating this effect, no matter how distributionally or otherwise restricted, must count as an instantiation of the category. For example, if the assumed epistemic operator is triggered by one sense of *really* and some uses of accented verbs, it is also triggered by discourse markers such as *ich schwöre / I swear*, since they have precisely

the same effect. Or, to take another example, if the presupposition of the alternative proposition with opposite polarity is criterial, then the German particles *doch* and *schon* must be included because they can only be used when salient contrary proposition is contextually licensed (Egg 2012, Grosz 2014). Yet another candidate, not mentioned in the literature but fitting the definition, would be expressions like *on the contrary* or *just the opposite*, or complement clauses introduced with *it is true that*. The list seems to be open. This reveals a danger inherent to the standard effect-based approach: the grammatical category gets a blurry extension and must be continuously expanded to encompass all structures carrying the desired effect, since identical effects notoriously arise out of very different sources.

A way out of this quandary is usually found in a reductionist strategy of establishing canonical categorial semantics based on what is taken to be the most central instances of the category. This kind of reductionism lies in the centre of the denotational approach and keeps the category small and semantically monolithic. If needed, additional more complex denotations may be derived through a compositional procedure of combining the denotations of its constituent expressions. Following Gutzmann (2012), we can distinguish two traditional accounts of salient polarity that rely on such a strategy: the focus-based account and the epistemic account.

The major line of theorising is via the notion of focus. Analyses along these lines span from such classical contributions as Halliday (1967), Watters (1979), Dik et al. (1981), Hyman & Watters (1984), Gussenhoven (1983), and Höhle (1992), all the way to Lohnstein (2012, 2016), Büring (2016), and many others. All focus-based accounts share the conception of focus which defines alternatives and asserts a proposition chosen from the relevant set. Given the binary nature of polarity, the alternatives are invariably p and $\neg p$. The problem is that it is not clear what exactly is focused. In order to fall under the scope of the focus operator, which is how focus is standardly analysed, polarity and/or truth value must be understood as a semantic entity with a defined denotation. This, however, is not how truth

value and polarity are usually represented. There have been a number of solutions to this problem, all invariably including covert operators. Höhle (1992) takes polarity focus to be focus on an abstract truth predicate Verum which has the form 'it is true that p'. Zimmermann & Hole (2008) talk about a realis operator and thus define polarity focus as a subtype of mood focus, while Lohnstein (2012, 2016) derives polarity effects from various other sentence mood operators.

Traditionally, the primary diagnostics for focus and the essential component of practically all focus theories is question-answer pairs. According to this criterion, focus is identified as the target of a question (see Matić & Wedgwood 2013 for a critical view on this). If we apply this test to the data in (2)-(4), we can see that the structures with the nuclear accent on the verb are neutral and appropriate in this context in all three languages in question.

(5) English

Q: Did you open the door?

A: Yeah, I OPENED it.

(6) German

Q: *Kaufst Du mir neue Schuhe?* (Will you buy me new shoes?)

A: Ja, ich KAUF sie dir.

yes I buy them to.you

'Yes, I'll buy them to you.'

(7) Serbian

Q: *Je l' ti čitaš ove knjige?* (Do you read these books?)

A: Da, ČITAM ih.

yes read them

'Yes, I read them.'

We will see in Section 2.2.1 that other purported salient polarity structures either fail the question-answer test or appear to carry additional interpretive load in this context. Now, if the question-answer test is taken as criterial, this in effect means that only accented verbs are the lawful exponents of salient polarity. All structures that fail the test or carry additional interpretations must be excluded from the category or explained otherwise.

One very prominent line of research, starting with Höhle (1992) and going all the way to Lohnstein (2012, 2016), does precisely this: the Verum category (which is how salient polarity is called in this tradition) is realized through accented verbs, accented auxiliaries, and some functional elements (complementizes, relative and interrogative pronouns), to the exclusion of all other structures. The meaning of many other structures is derived compositionally. For example, Güldemann & Fiedler (2013) argue that the polarity reading of the German VP fronting and emphatic *tun*-periphrasis is due to the more primitive device of accenting an auxiliary, while fronting provides for contrastivity, whereas Egg (2012), Egg & Zimmermann (2012) and Grosz (2016) derive the salient polar meaning of the accented versions of the particles *doch* and *schon* from the combination of the denotations of these particles with the Verum accent.

This approach seems to work well for its source language, German (Lohnstein 2016). Nuclear accents occur on finite verbs or functional elements in the way one would expect to find if one assumes a covert structural element. Höhle (1992) and many after him claim that the nuclear stress is always assigned to a left-peripheral position (C or similar), which is also the position of the covert truth (modal, polarity, etc.) operator. In declarative matrix clauses, the Verum position is occupied by a lexical finite verb or an auxiliary; in embedded clauses, it

is a complementizer, a relative or interrogative pronoun; some of the options are illustrated in (8) (all examples are construed on the basis of Höhle 1992 and Lohnstein 2016).

- (8) a. Peter SCHRIEB ein Buch.

 Peter wrote a book

 'Peter WROTE a book.'
 - b. Peter HAT ein Buch geschrieben.Peter has a book written'Peter DID write a book.'
 - c. Ich behaupte, DASS er ein Buch geschrieben hat.

 I claim that he a book written has
 'I claim that he DID write a book.'
 - d. Ich wenige, die es geschafft haben, aber diejenigen, kenne Ī know who it managed few have but those DIE ein Buch geschrieben haben, wissen, wie schwer es ist. which a book written have how hard know it is 'I know only a few who managed to do it, but those who did write a book know how difficult it is '

Accents appear to be obligatory. For instance, polarity readings in embedded clauses can only arise if the accent is on the complementizer, with all other accents resulting in non-polarity readings. This implies that the category responsible for salient polarity (Verum) is assigned an accent by a productive focus-to-accent rule comparable to narrow argument focus: what is focused must bear prosodic prominence.

This structure fully satisfies the question-answer condition, as shown above. In addition, the bulk of the literature employs other limited types of data, characteristically the

following three: (i) contradictions: A: *John doesn't like bananas?* B: *He DOES like them*; (ii) discussion-ending questions: A: *John ate the bananas*. B: *Oh well, it's not quite certain, he is a nice guy.* C: *So, DID he eat the bananas?*; and (iii) hesitation-ending directives: A: *I don't know if I should eat a banana or not*. B: *Oh, DO eat one*. This appears to cover the basic types of what is generally agreed to be focus-indicating contexts (answers, contrast, and elaboration) and fits the idea of binary alternative propositions, but it is easy to see that the reasoning is entirely form-based: a certain type of meaning is stipulated in order to explain an observed type of accent distribution.

The second type of account, labelled Lexical Operator Theory (LOT) by Gutzmann (2012), divorces polarity focus from information structure and ascribes it epistemic and/or conversational meanings. LOT is most prominently exemplified in Romero & Han (2004) and, in a somewhat modified form, in Gutzmann & Castroviejo-Miro (2011) and Repp (2013). The idea is that the focus effects of salient polarity are epiphenomenal and secondarily derived from the primary denotation of the relevant structures. This primary denotation is defined as a kind of conversational operator. In the Romero & Han (2004) version, it is epistemic in the sense that it expresses certainty, and conversational in the sense that it is not used to assert speaker's certainty in the truth value of the proffered proposition p, but rather their certainty that p should be added to Common Ground. Gutzmann & Castroviejo-Miro (2011) downplay the epistemic aspect. They describe the operator as an indication that, in a given context, the speaker intends to close ('downdate') the current maximal conversational Question Under Discussion (QUD) with p, in opposition to the assumed intention to close the QUD with $\neg p$. Focus as the generator of alternatives is unnecessary, since the alternatives arise out of contextual conditions on the use of the operator. The resulting meaning is more specific than the focus-derived binary polar alternatives, but this comes at a price of inflated ambiguity. As we will see below, most relevant structures have additional uses which do not conform to the postulated meaning of the conversational operator. The preferred solution in

this approach is to treat them as inherently ambiguous but, crucially, the primary contribution of salient polarity is still associated with one well-defined denotation.

2.2. Against form-meaning correspondence

In this section we adduce some evidence that the reduction of salient polarity to accented finite verbs is neither empirically nor conceptually valid. First, we show that accentuation rules do not always assign nuclear stress to a left-peripheral position on a salient polarity reading (2.2.1). Second, the diagnostic question-answer meaning can be expressed by other forms (2.2.2), and conversely, accented finite verbs express a large variety of other meanings (2.2.3). So, contrary to standard approaches, there is no isomorphism between form and meaning as far as the purported category of salient polarity is concerned.

2.2.1. Auxiliary constructions

To begin with, accentuation rules affect different verbs in a rather different way. In particular, auxiliary constructions show special behaviour. Consider the question-answer pairs in (9).

- (9) Have you opened the door?
 - a. accented auxiliary

German Ja. ich HABEaufgemacht. sie opened yes I have it English (#)Yeah, I HAVE opened it. Serbian (#)Da, JESAM ih otvorio. am.EMPH it opened yes

b. accented lexical verb

German # Ja, ich habe sie AUFGEMACHT.

yes I have it opened

English Yeah, I have OPENED it.

Serbian Da, OTVORIO sam ih.

yes opened am it

In German the most natural answer to the question in (9) is the one in which the auxiliary is accented (9a). This is what one would expect on the assumption that what is accented in salient polarity structures is the non-lexical component of the predicate, i.e. some other kind of operator formally associated with the auxiliary and placed in a left-peripheral position in the clause. Accordingly, the accent on the lexical verb is virtually impossible in this context (9b). This corresponds to the classical focus-to-accent rule, which requires focused elements to achieve prominence via accent assignment. However, English and Serbian behave quite differently: the most neutral answers in these languages display an accent on the lexical verb (9b). The accent on the auxiliary (9a) is possible but has a distinct slant of impatient irritated assertion (similar to emphatic *do*-support in a similar context, which we will discuss below).

English and Serbian data show that both the auxiliary and the lexical verb can also be accented in other contexts usually associated with salient polarity, such as confirmations of past intentions in English (10a) or adversative structures in Serbian (10b). In these contexts, however, no difference in interpretation seems to be apparent between the two variants of accent assignment in either language.

(10) a. He wanted to finish his lunch, and he HAS finished it. /... he has FINISHED it.

b. Ona JESTE došla, ali je otišla prerano. / Ona je DOŠLA,

she is.EMPH come but is left too.early she is come

ali je otišla prerano.

but is left too.early

'She did come, but she left too early.'

So the distribution of accents in English and Serbian is at least partly independent of position. This is further corroborated by the fact that in these languages complementizers and other functional elements cannot receive stress in salient polarity contexts, as exemplified in (11).

(11) I tell you that he IS writing a book. /*? I tell you THAT he is writing a book.

The only 'regular' language thus appears to be German. However, there is variation in German, too. Some speakers accept both (a) and (b) variants of (12) without any difference in meaning, even though it is only in (12a) that the accent falls on the left-peripheral element, while in (12b), it is on the finite verb despite that the verb is sentence-final. In actual fact, some speakers reject the expected variant (12a), so the focus-to-accent rule appears to be at least occasionally optional (or, at least for some speakers, invalid) even in German.

- (12) Er schreibt auf keinen Fall ein Buch!
 - 'He's most certainly not writing a book!'
 - a. Ich denke aber, DASS er ein Buch schreibt.
 - I think but that he a book writes
 - 'But I think he IS writing a book.'
 - b. Ich denke aber, dass er ein Buch SCHREIBT.

These data demonstrate that accenting a left-most element for the purpose of focusing is subject to various language-particular rules, and there may be language-internal variation: the purported left-peripheral operator-like entity that receives accent seems to irregularly change its position according to rather unclear criteria. This is a problem for the idea that the left-

peripheral element is assigned an accent *because* it is focus. While in some cases accents on auxiliaries/functional elements trigger different interpretations to those on lexical verbs, in other cases no difference is apparent. We therefore take examples (9) through (12) to be evidence against the accounts that combine a covert operator with the focus-to-accent rule to explain accented finite verbs.

2.2.2. Other structures in question-answer contexts

In this subsection we show that accented verbs are not the only strategy available in questionanswer pairs, even though they are the unmarked option. Although a number of salient polarity constructions fail the relevant test, other constructions are acceptable to a certain degree. Importantly, they all seem to carry additional implications, and we find variation within one language, as illustrated in (13) for English.

(13) English

Did you open the door?

- a. Yeah, I OPENED it.
- b. (#) Yeah, I DID open it.
- c. (#) Yeah, I really/definitely opened it.

Emphatic *do*-support is (marginally) possible if the speaker intends to convey impatience and imply that this same answer has been given a number of times before, while the adverbs would (marginally) work if one anticipates a doubt on the part of the hearer (*really*), or if one wants to imply one's certainty about the answer in light of possible counterevidence (*definitely*).

English is not the only language in which salient polarity structures display variable acceptability in question-answer pairs. Without attempting to be exhaustive, we list a couple

of examples from German and Serbian with a short comment on acceptability and the preferred interpretation, in order to illustrate this.

(14) German

Q: Gehst Du ins Geschäft einkaufen? 'Will you go to the store to do some shopping?'

A: 'Yes, I will go.'

a. Ja, ich GEHE.

yes I go

(accented finite verb; neutral)

b. (#)Ja, ich gehe DOCH. / Ja, ich GEHE doch.

yes I go PTL

(particle *doch*; accented: there was some doubt about me going or not; unaccented: impatient, irritated; similar, though distinct, interpretations with other particles)

c. (#)Ja, ich gehe tatsächlich/wirklich.

yes I go really/really

(adverbs *tatsächlich/wirklich* 'really'; contrary to expectations, I'm going (*tatsächlich*); reassuring (*wirklich*))

(15) Serbian

Q: Je l' ti čitaš ove knjige? 'Do you read these books?'

A: 'Yes, I read them.'

a. Da, ČITAM ih.

yes read them

(accented finite verb; neutral)

```
ja njih.
     ves read
                       I them
     (postposed subject; infelicitous)
c. (#)Da. baš
                ih
                          čitam
     ves PTL
               them
                         read
     (particle baš; implying intensity of the asserted state of affairs)
```

b. #Da, ČITAM

Other interpretations are perhaps conceivable and speakers' judgements on the diagnostic context are not always clear-cut. The point is that quite a number of salient polarity structures pass the primary test for focushood, but they usually convey more than a simple assertion of positive polarity, so the meaning goes beyond the assumed simple focus denotation.

If the idea that everything that satisfies the diagnostic context is polarity focus is to be upheld, then all the structures that trigger this interpretation must count as its instantiations. The undesired corollary of this analytical procedure is that the simple alternative-inducing semantics of polarity focus would have to be abandoned in view of the evidence of questionanswer pairs, as we have seen above: some structures do not pass the test, and those that do have variable interpretations which go beyond focus. A possible rescue for the focus analysis could be sought in the popular notions of contrastive vs. non-contrastive focus, such that, for instance, accent on the finite verb in English is non-contrastive and do-support contrastive. The problem is that, even if we put aside serious notional and empirical problems with this division in general (Matić & Wedgwood 2013), it is simply inapplicable to salient polarity. Contrast is usually conceived of as a limited set of alternatives and opposed to open sets. But if the set of alternatives is necessarily binary $(p \text{ and } \neg p)$, then it is also necessarily contrastive. Some accounts introduce an additional feature of counterassertivity or counterpresuppositionality (Gussenhoven 1983, 2007), such that, for instance, the accent on the finite verb does not have this feature, while emphatic do-support does. This solution

seems to capture the intuitions behind answers to polarity questions relatively well: the answer with emphatic *do*-support implies impatience because the speaker counters the presupposition of the hearer that the opposite of the answer is true. However, this would be an *ad hoc* explanation for one particular usage of emphatic *do*-support: as we shall see later, its other usages bear no implication of contradicting presuppositions.

LOT approaches, which dissociate salient polarity from focus, fare even poorer with respect to the data in (13)-(15). As mentioned above, in the Romero & Han (2004) version, salient polarity arises out of an epistemic conversational operator indicating certainty that p should be added to the Common Ground. This meaning is arguably present in all answers in (13)-(15) (and in all sincere answers to questions in general) and is thus not able to account for the observed interpretive differences. The same holds true for the assumed downdating operator à la Gutzmann & Castroviejo-Miro (2011): all answers in (13)-(15) equally downdate the explicit QUD, so that this cannot be the source of the differences. The meanings of salient polarity operators postulated by LOT approaches are too unspecific to account for finer differences of the kind illustrated above. At the same time, they are also too specific, so that there are a number of uses of purported salient polarity structures which these approaches dispose of by treating them as instances of ambiguity. Thus, Romero & Han (2004) distinguish three senses of really, only one of which corresponds to their epistemic conversational operator, while the other two are analysed as unrelated (see Lai 2012:101ff. for an alternative account). Accented finite verbs and emphatic do-support structures that do not induce any epistemic readings are viewed as instantiating a distinct category (dictum focus à la Cresswell 2000), or as simple contrast accents (Romero & Han 2004). However, even armed with this powerful device of multiplying ambiguity, LOT approaches cannot explain the differences observed in our data.

In sum, there is no clear solution to the problem that, on the one hand, accented finite verbs are the only constructions that seem to fully fit the diagnostic focus contexts or the

operator denotations in LOT approaches but, on the other hand, they are not the only form conveying the meaning which counts as definitional for the category of salient polarity.

2.2.3. Underspecification

Accented finite verbs occur in other types of contexts and carry other types of meanings. It has been repeatedly mentioned in the literature that structures encoding salient polarity tend to be underspecified as to the type and size of focus: polarity/Verum focus is often co-encoded with different types of TAM-focus or with the focus on the lexical content of the verb. For English consider (16):

- (16) a. Peter didn't break the Ming vase.
 - b. Peter will break the Ming vase if he keeps on playing with it.
 - c. Peter cleaned the Ming vase yesterday.

No, Peter BROKE the Ming vase yesterday.

The context (a) renders the clause in (16) a salient polarity clause. The interpretation triggered by context (b) has been labelled TAM focus (in this particular case, focus on tense), as its main point seems to be to identify the temporal (aspectual or modal) component of the proposition, while the one arising from (c) has been called 'verb focus' or 'focus on lexical verb', as it serves to identify the correct denotation of the finite verb.²

² This kind of underspecification of the major salient polarity strategy is also typical of non-

European languages. For example, Güldemann & Fiedler (2013) show that in Aja (Kwa/Niger-Kongo, Benin) predicate clefts have three readings: focus on the lexical content

of the verb, polarity focus, and TAM focus.

The standard focus analysis treats this ambiguity as a corollary of the complex structure of finite predicates. Salient polarity readings arise when the silent truth (Verum, etc.) operator on the left periphery is accented; TAM readings arise when one of the left-peripheral TAM nodes carries the accent, while verb focus is a consequence of accenting the verb itself. These three accent assignments often surface as the accent on the finite verb, even though they are underlyingly distinct. The three readings are thus expressed identically only on the surface: at a deeper level, we are dealing with three distinct structures which obey the standard focus-to-accent rule. This seems to be confirmed by the distribution of accents and interpretations in auxiliary constructions, in which the lexical verb is not in the left-peripheral operator position. In these cases, the accentuation of the lexical verb leads to verb focus interpretation, while accented auxiliaries trigger salient polarity or TAM readings, as shown by the German question-answer pairs in (17).

```
Tür geschlossen?
      Hast
              Du
                    die
(17)
      have
              you the
                         door closed
       'Did you close the door?'
                                                           (salient polarity)
      a. Ja.
                   HABE sie
                                  geschlossen.
         ves
              I
                    have
                            it
                                  closed
         'Yes, I closed it.'
                                    AUFGEMACHT.
                                                             (verb focus)
      b. Nein.
                 ich
                       habe
                               sie
                 I
                       have
                               it
                                     opened
         no
         'No, I opened it.'
```

In English and Serbian, where accentuation patterns are less rigid (Section 2.2.1), the complementarity is less clear-cut but still observable. While most forms are ambiguous between salient polarity, TAM, and verb focus readings, accented auxiliaries, i.e. the left-

peripheral accent (*I WILL open the door*), are mostly interpreted as salient polarity or TAM and only very rarely as verb focus. The overlap between verb focus and salient polarity/TAM focus seems to be only partial and possibly merely an instance of accidental homonymy.

There are problems with this simple dichotomy, though. Consider first (18), taken from Gutzmann (2010; ex. 39), both in German and English.

(18)A: David riecht Zombie. B: David ISTZombie. wie ein David smells like a zombie zombie David is a 'A: David smells like a zombie. B: David IS a zombie.'

This example is adduced by Gutzmann as an instance of Verum focus, i.e. salient polarity. Interpreted this way, *David IS a zombie* stands in opposition to 'David is not a zombie'. However, it can also be understood as verb focus, if interpreted as a correct identification of the state of affairs; in this case, *David IS a zombie* is in opposition to 'David smells like a zombie', i.e. 'being x' is in contrast to 'smelling like x'. The periphrastic variant of (18), (18'), can be pronounced with two different accents, on the auxiliary and the lexical verb.

(18') David IST ein Zombie gewesen. / David ist ein Zombie GEWESEN.

David is a zombie been

'David WAS a zombie.'

The speakers of German we interviewed appear to lack any clear intuitions about the distribution of the two possible interpretations across these two accentuation patterns: both readings are compatible with both types of accent. The neat distinction between left-peripheral accent and verb accent with different meanings does not seem to work here.

So the division of labour between salient polarity and verb focus, though easy to pin down in a number of central examples, becomes blurred if more marginal cases are taken into account. Moreover, consider further examples of the semantic indeterminacy of accented verbs:

(19) English

- a. *Pat DRESSES!* (to mean Pat dresses well) (Goldberg & Ackerman 2001, ex.65)
- b. *These red sports cars DO drive, don't they?* (Goldberg & Ackerman 2001, ex. 35)
- c. The race LASTED./ It HAS lasted, hasn't it? (Matthews 1981: 136)

(20) Serbian

Sastanak je TRAJAO. / Sastanak JESTE trajao!
meeting is lasted meeting is.EMPH lasted
'The meeting LASTED (i.e. lasted long).'

(21) German

Das Treffen GEDAUERT. / Das Treffen hat (aber) meeting the has lasted the meeting PTL HAT(aber) gedauert. has PTL lasted 'The meeting LASTED (i.e. lasted long).'

These examples are interesting for two reasons. First, they show that accentuating finite verbs can result in readings which have little to do with salient polarity, TAM, or verb focus: what

(19)-(21) convey is not an emphasis on the truth value, the correct identification of the lexical content of the verb or of the TAM features, but that the situation is being carried out to a full extent. The underspecification of this structure obviously goes beyond information-structural interpretations. Second, they are a clear indication that the dichotomy of verb focus vs. salient polarity/TAM focus is not as clear-cut as the standard approach seems to imply. The examples of auxiliary constructions demonstrate that both the accent on the left-peripheral auxiliary (i.e. on the truth/TAM operator) and the accent on the non-peripheral lexical verb result in identical, non-information-structural readings. This indeterminacy resembles example (18), in which a salient polarity structure and a verb focus structure result in similar or identical interpretations. This is by no means confined to the three languages exemplified above: Turco et al. (2013) show that the indeterminacy in accent distribution between the left periphery and the lexical verb is pervasive in the Romance languages.

Focus-based approaches have no explanation for these data: the purported dedicated markers of different types of focus encode non-focal meanings, such as intensification, while the structures which are supposed to arise out of different focus-to-accent rules (accent on the verb, accent on truth operator, etc.) can convey identical interpretations. LOT approaches do not address this kind of structural ambiguity. If they did, their solution is not likely to differ from the focus-based approaches in that they would have to postulate a structural homonymy between accented operators and accented verbs and would therefore be equally incapable of accounting for the data we presented in this section.

So accented finite verbs cannot be taken to be a dedicated expression of salient polarity, even if we try to explain the recognised ambiguity between the verb, TAM and polarity focus as an instance of superficial homonymy. The indeterminacy of interpretations rather indicates that the structure is highly underspecified semantically and that a mechanism other than the focus-to-accent rule is needed. Our take on this issue will be presented in Section 3.1.

2.3. Conclusion

Existing denotational approaches to salient polarity associate it with a well-defined formal strategy often mediated through one (covert) operator-like element. Importantly, this strategy is assumed to exist precisely *because* it conveys the salient polarity meaning. One obvious advantage of this reductionist practice is that the category is internally coherent and easy to describe. The cost at which this comes is lack of comprehensiveness.

We have shown that there is no neat correspondence between the left-peripheral accents and salient polarity readings. Accent placement on the verb is regulated by independent rules that are only indirectly linked to evoking alternatives opened by the context. These findings can be interpreted in at least two ways. A conservative account would take them as a sign that a more elaborate analysis is needed in order to capture the focus-accent relationship. A radical account would understand them as a possible indication that no cross-linguistically valid salient polarity category can be postulated based on form-meaning correspondence. Of course, with enough syntactic and prosodic know-how, the conservative account can be upheld for each individual language, but this will make cross-linguistic comparability questionable as far as categorial semantics is concerned. In view of this and based on other evidence that we will discuss below, we opt for the radical alternative, to be elaborated upon in the following section.

3. Salient polarity and interpretive effects

In this section we advance a proposal which disposes of the form-meaning isomorphism and the category of salient polarity altogether, and argue that it can accommodate more empirical evidence than any approach that relies on pre-established categories. We first briefly outline an alternative analysis of the accented verb strategy (Section 3.1). Essentially, it maintains that many of its more specific interpretations arise through non-compositional enrichment added on top of productively derivable meanings. They are conventionalised to various degrees, and Section 3.2 addresses conventionalisation in more detail. In Section 3.3 we discuss the set of interpretive effects relevant for some other structures commonly associated with salient polarity and show that, once the contexts of their use are observed in their entirety rather than selectively so as to fit semantic preconceptions, their semantic and pragmatic disparity becomes clearly patent. The next step is to demonstrate the variability of source denotations used to the effect that polarity become salient. It is illustrated with a couple of small case studies from a wider typological array of languages (Section 3.4). The overall conclusion of this section is that salient polarity can only be postulated as semantic entity in the sense of interpretive effects that arise when otherwise quite disparate linguistic structures are produced in communication.

Before laying down our proposal in detail, a notional clarification is in order. As we indicated in Section 1, we use the term *denotation* to refer to encoded meanings, while *interpretation* is a cover term for all kinds of meanings derived inferentially; *meaning* itself is a cover term for both. In this section, we also introduce the notion of *conventionalised interpretation* (usually shortened to *conventionalisation*). Conventionalisations are those inferentially generated interpretations that normally occur under certain contextual conditions, but are not encoded denotations, since they are cancellable and usually less than fully regular. They are similar to Gricean *generalised conversational implicatures* (see Levinson 2000 for a comprehensive account) and should not be confused with *conventional implicatures*, which have to do with non-truth-conditional aspects of meaning and are of no relevance for the present paper.

3.1. Accented verbs and all-given propositions

An alternative account of accented verb structures is based on the principle which was probably first formulated by Gussenhoven (1983). The main idea is that, in the structure with accented finite verbs/functional elements, verbs and functional elements are targeted by accents not due to an active focus-to-accent rule but rather as a kind of last resort operation. The focused element, polarity, has no word-size phonological realisation, and languages resort to different solutions to the problem of foci that are smaller than word. According to Gussenhoven (1983, 2007), the apparent regularity of German (and Dutch) stems from the language-specific accent placement rule which states that the accent is assigned to the element that co-encodes the focused polarity operator (auxiliary, if present; if not, a finite lexical verb), or to the functional element in the C-position in embedded contexts. In English, the rule is that the accent goes on the penultimate element of the VP, which is most commonly the finite verb, but it can also be the object, a part of a multi-word expression, or any other element that happens to be in this position. This elegantly captures the cross-linguistic differences in question-answer pairs and embedded clauses illustrated in Section 2 (if we assume that Serbian behaves similarly to English), but it still does not explain the observed variation within one and the same language. German embedded contexts do occasionally allow for accents on finite verbs instead of the predicted C-position, as in (12); English and Serbian often display nuclear stress on a 'polarity operator', i.e. auxiliary, in addition to the one on the penultimate element of the VP, partly depending on the context, as in (10). Gussenhoven's solution for English is to posit a different rule: in counterassertive contexts, English uses the German-style accent on the auxiliary. The problem is, as apparent from (10), that counterassertivity, i.e. denial of a previously uttered sentence, is not the feature responsible for different accent assignments. Even worse, both possible accents, on the penultimate element of the VP (lexical verb) and the operator (auxiliary) can sometimes have

the same interpretation, as in (10), but they can also differ in meaning, as in (9), for no apparent reason.

However, most of Gussenhoven's generalisations can be upheld with a different conceptual basis. We propose to dispose of focus altogether and describe accent assignment solely via rules of deaccentuation (in the sense of Ladd 2008 and Baumann 2006; a related idea with respect to the German accented particle *doch* was advanced by Egg & Zimmermann 2012). Our proposal capitalises on the rather universally recognised observation that salient polarity clauses are all-given, i.e. they only contain given information, the only newsworthy element being the polar/modal/etc. operator. They are therefore claimed to be impossible in out-of-the-blue contexts:

(22) German accent on the finite verb in out-of-the-blue contexts

Hey, hast Du es schon gehört? # Karl SCHREIBT ein Buch.

hey have you it already heard K. writes a book

'Hey, have you heard the news? # Karl IS writing a book.' (Gutzmann 2012:

19)³

All-given propositions must be present in the cognitive model of the interlocutors, but they lack truth value prior to the assertion contributed by salient polarity, so they cannot be in Common Ground. They are therefore a problem for Common Ground-based accounts of focusing. In order to account for them, Portner (2007) introduces the notion of Common Propositional Space, understood as a set of propositions that the participants of an utterance

blue context (see more on this point in Lai 2012: 123ff).

.

³ Of course, (22) is perfectly felicitous if the issue of Karl's writing a book had been topical before the utterance was produced, but in this case we can no longer speak of an out-of-the-

situation are mutually aware of without committing themselves to their truth value. Common Propositional Space is a superset of Common Ground, which only comprises those propositions that are mutually believed to be true. Obviously, salient polarity utterances can only be informative if they belong to Common Propositional Space, but not to Common Ground (see Repp 2013).

Our reasoning runs roughly as follows. Clauses with accented finite verbs or functional elements are not associated with a specific focus structure, but are merely identified as being all-given: they only contain the given material and are therefore fully deaccented (we use 'deaccented' in the technical sense as defined by Ladd 2008: 175ff.). Since the nuclear stress must be placed somewhere, it lands on a site specified by the grammar of the language, *not* by focus. Deaccentuation is always more or less optional, so that doublets with identical interpretative properties are always possible. The discourse meaning of such clauses is maximally underspecified: by deaccenting them, the speaker merely signals that the whole proposition is to be interpreted as known to both interlocutors. Asserting (questioning, etc.) a proposition of which both interlocutors are aware can lead to a number of additional interpretive effects. Salient polarity is the most frequent interpretation, but not the only possible reading. The structure can also indicate salient TAM features, intensification, and meanings other than those we have discussed by now.

How does the idea of givenness operate at the interpretive level, and how does it account for the variability of forms and meanings? One important point is that givenness is a matter of presentation: a proposition can be given in the context or it can be *presented* as given; in the latter case givenness arises through the use of a givenness-marking structure, in the same way in which presuppositions arise via presupposition accommodation (see example (22) and Footnote 3). Accented finite verbs/functional elements serve as instructions to the hearer to treat the proffered proposition as an element of Common Propositional Space, something both interlocutors have been aware of. Salient polarity readings will arise—as an

interpretation, not as a denotation—every time the issue of a mutually known proposition being true or not is relevant in the current point of conversation. Yes/no questions, to take a simple example, render the issue of truth explicit. Asserting a proposition marked as all-given as an answer automatically leads to the salient polarity reading. The same holds true *mutatis mutandis* for other salient polarity contexts, such as confirmation of past or conditional intentions (10a), adversative assertions (10b), or polarity corrections (12).

In German all-given clauses the nuclear stress falls on the left periphery, as we have seen, but as this accent is a product of deaccentuation and as such partly optional, deviations like the one illustrated in (12) above are always possible. English, and probably Serbian, allow for doublets in a more systematic way, with a left-peripheral type and a VP-penultimate type. But if salient polarity is just a reading of all-given sentences, why is there variability in interpretation in languages with systematic doublets? We have seen that in question-answer pairs, VP-penultimate accents (lexical verb) result in unmarked polarity, while left-peripheral accents (auxiliary) trigger additional implicatures, as shown in (8). In other contexts, such as adversative sentences (10), no such differences arise, and the two structures are interchangeable. An elegant solution to this is to assume, following Zimmermann (2008) in spirit though not in detail, that alternative prosodic realisations of all-given sentences are not equal in markedness, so left-peripheral accents are more marked than VP-penultimate ones. When speakers assume that the polarity of the proposition they intend to assert (question, order, etc.) is interpersonally more loaded, less expected, or more difficult to process, they resort to more marked structures; otherwise, the unmarked structures are used. In answers to questions, when the speaker believes that the answer is already known to the hearer, the 'irritated' emotional load is the additional interpretation they want to convey. It is therefore indicated by the marked structure, the accent on the auxiliary. The marked options of emphatic do-support that we mentioned earlier in Section 2.2.2 are probably subject to the same considerations: simple polarity assertions employ the unmarked VP-penultimate

structure, while such marked structures as emphatic *do*-support imply additional interpersonal import. This effect disappears in the contexts in which no additional interpersonal implications are possible, so that the use of one or another structure cannot produce interpretive differences. In adversative contexts, where salient polarity is embedded in a particular rhetorical relation and the givenness of the proposition projects rightwards, the two structures are interchangeable because no additional knowledge or expectation can be assumed.

In Section 2.2.3 we discussed the ambiguity of accented finite verbs which are often claimed to encode polarity, TAM or verb focus, and showed that both focus-based and LOT accounts fail to explain the data. As we have argued above, we take it that the deaccentuation-based explanation of accented finite verbs can account for many salient polarity usages of this structure. The TAM focus reading is also amenable to this kind of explanation. This reading, illustrated in (16b), has a highly restricted distribution and normally only occurs in contradictions (see Wedgwood 2006 on its borderline acceptability). It is derivable from the all-given meaning of clauses with nuclear stress on finite verbs. In a corrective context where an all-given clause does not single out polarity, which remains constant across turns, it is plausible to assume that the main point of the utterance must be its temporal or modal update. This seems to indicate that the variation between salient polarity and TAM focus readings is a result of genuine semantic underspecification of deaccented clauses.

The relationship between salient polarity and verb focus readings is more complex. Verb focus updates information about the relation that exists between given participants, as in (16c), where the type of action that Peter performed on the Ming vase is identified as breaking. As we have seen in Section 2.2.3, in some central examples of accented verbs, such as question-answer pairs in (17), there is a clear formal distinction between salient polarity/TAM focus on the one hand, and verb focus on the other. Again, concerning the central types of examples, it seems plausible to assume that verb focus is not derivable from

the all-given meaning. It does, after all, identify a relation between discourse referents which is not represented in Common Propositional Space. We can suspect that verb focus interpretations are a different kind of animal: they are not a product of deaccentuation, but rather derived via standard focus-to-accent procedure, not unlike other types of focus assignment. The nuclear accent on finite verbs can then arise out of two sources: deaccentuation (salient polarity, TAM focus) and accent assignment to the verb (verb focus).

We have, however, seen in Section 2.2.3 that the distinction between these two structures gets rather fuzzy as soon as one moves away from the central examples and considers other, non-information-structural, readings such as intensification. We will explain this as a consequence of the conventionalisation of certain interpretations, to which we turn in the following section. What we can take from the discussion up to this point is that predicting the use of the salient polarity structure on the basis of its inherent denotational properties is largely impossible. Rather, its presence depends on the communicative requirements at each specific point in the discourse, speaker's assumptions about the knowledge state of the hearer, and speaker's individual intentions and psychological state.

3.2. Conventionalised interpretations

This brings us to the question of conventionalisation. We have seen that two processes are responsible for accented finite verbs, deaccentuation and the focus-to-accent rule. The resulting structure is heavily underspecified and subject to pragmatically conditioned interpretations: the meanings of salient polarity, TAM focus, verb focus, intensification and so on are all due to different interpretive processes that take place in communication. These readings vary greatly across languages. We propose that this is due to different interpretive conventionalisations.

As we have indicated at the beginning of Section 3, we rely on the notion of generalised conversational implicatures in the sense of Levinson (2000) to formalise the idea of conventional interpretations: these are pragmatic inferences which commonly occur in connection with a linguistic form under certain conditions and are as such conventional, though they are defeasible and not fully regular. This assumption ensures that same pragmatic processes do not necessarily result in identical interpretations, as conventionalisations arbitrarily favour one type of interpretation over another, equally plausible one. The interplay of underspecified denotations, pragmatic inferences and arbitrary conventionalisations accounts for the range of inter-language and intra-language variation that we have discussed on the way. While the three languages we compare all arguably have two distinct formal devices, the all-given deaccentuation and the verb-focus accented finite verbs, the division of labour between them is fuzzy precisely because they do not *encode* salient polarity, TAM focus, verb focus, intensification, and so on. Instead, these meanings arise out of pragmatic processes which are constrained by more or less conventional interpretive routines.

Let us consider the intensification readings illustrated in (19) to (21) as an example. One possible analysis of these sentences is that they are verb-focus structures pragmatically enriched to indicate a high degree because a simple identification of the action would be uninformative. People generally dress, cars drive and events last, so these assertions are not newsworthy, but with enrichments such as 'dress well', 'drive well' or 'last long' they become so (Matić 2004: 190). The problem is that this reading can also be conveyed by structures which we have identified as unequivocally all-given (i.e. salient polarity), such as accented auxiliaries. Another possible analysis is that we are still dealing with salient polarity and the intensifying reading comes about by the very fact that the positive polarity of an uninformative predicate is asserted via pragmatic enrichment (Goldberg & Ackerman 2001). This explanation has the same problem as the previous one: intensifying readings are conveyed not only by salient polarity clauses, but also by unequivocal verb-focus structures

with nuclear stress on the lexical component of a periphrastic predicate, which is especially clear in the German examples in (21). The two structures seem to overlap in a way that cannot be accounted for compositionally, but we see conventionalised interpretations as a solution of this quandary. Let us take a closer look at this possibility.

English allows for a wide range of constructions and predicates to occur with intensified readings. This includes, in addition to predicates in (19), mediopassives like *These bureaucrats bribe* and exclamatives like *Did that mountain climb!* (Goldberg & Ackerman 2001). Serbian appears to be more restricted. The only predicates for which intensification works with accented finite verbs are verbs of temporal extension, like *trajati* 'last' in (20). Other predicates usually get a different interpretation under accent, roughly 'just enough, barely enough', as shown in (23).

(23) Serbian

a. Knjiga sePRODAJE.

book REFL sells

'The book sells (just enough).'

b. Ovaj crveni auto IDE.

this red car goes

'This red car drives (barely, but it does).'

The English and Serbian accented finite verbs are arguably derived by the same processes of deaccentuation and verb accenting. However, while in English the intensified readings are conventionalised under appropriate contextual and lexical conditions for a wide range of predicates, similar conditions usually produce 'just enough' readings in Serbian. In other words, similar or identical source denotations and similar interpretive processes do not suffice to explain the use of the structures at hand.

We thus need an additional aspect of description, conventionalised interpretations. We will maintain that (i) many interpretations are conventionalised in one way or the other, and (ii) similar readings can arise out of different denotations (and vice versa), so that both all-given deaccented clauses and verb-focus clauses can be interpreted as intensified situations, TAM focus, or with any other plausible interpretive effect. The two relevant structures overlap in a significant number of contexts due to homonymy and similar conventions of usage. This can result in a transfer of interpretations, such that, for instance, the salient polarity interpretation can be transferred from one type to the other even when there is no homonymy, although it cannot be plausibly derived from the denotation of verb-focus structures.

There is abundant cross-linguistic variation in conventionalisation patterns, as shown by the comparative studies of salient polarity in the Germanic and Romance by Dimroth et al. (2010), Turco (2014), and Turco et al. (2014). Another nice example illustrating how arbitrary conventionalisations can influence deaccented clauses is provided by what has been described as *dictum* focus (Creswell 2000). English has a wide range of uses of accented auxiliaries in *wh*-questions, some of which are illustrated in (24) and (25).⁴

(24) A: How are we getting there?

B: *I don't know. How ARE we getting there?*

(25) A: Well, we have our band practices on Monday night, and during the summer we have concerts every Monday night in the park, and we have, you know, some concerts during the year, and various people in the communities want

⁴ These examples are cited after Creswell's paper and stem from Switchboard Corpus.

us to play for things, but those are usually on the weekend, so that isn't too bad.

B: *How big IS your band?*

A: Well, we gotta pretty good size band.

In Creswell's taxonomy, the response question in (24) functions as a repetition of the first question, while the response question in (25) is a request to specify a salient property of an entity that the speaker feels has been left out in the preceding description. These and other uses of accented auxiliaries squarely fall into the range of all-given clauses: as Creswell shows in a painstaking analysis of her data, all tokens contain questions that have been explicitly or implicitly evoked in the conversation. Importantly, what is marked as given is not just the propositional content, as in standard salient polarity clauses, but also the illocutionary force. It is always the question itself that is a part of Common Propositional Space, due to the explicit mention (24) or due to the assumption that it must be inferable given the knowledge of the world (25). This interpretation of all-given clauses has little to do with polarity, but this is not a problem for our proposal that salient polarity is just one of their possible interpretations.

What is more interesting is that this interpretation has a wide range of discourse functions in English, while it is mostly restricted to discussion-ending questions in German, for instance, in cases where an all-given question ends a sequence of repeated negative assertions; both the expected accent on the functional element (question word) and on the finite verb are possible in this case (26). When questions are repeated as in (24), only the accent on the finite verb is possible (27a), while questioning a missing property as in (25) is normally not achieved through accentuating the finite verbs or functional elements (27b). The variant in (27b) with the accent on the finite verb does seem to be acceptable to some speakers

of German, but only with additional interpretive effects (irritation or puzzlement), which are completely absent in English.

- (26) A: Peter didn't break the vase, Mary didn't break it either.
 - B: WER hat sie (denn) zerbrochen? / Wer HAT sie (denn) zerbrochen?
 who has it PTL broken

 'Who did break it?'
- (27) a. (in the context of (24))

```
# WIE kommen wir denn hin? / Wie KOMMEN wir denn hin? how come we PTL there
```

b. (in the context of (25))

```
# WIE groß ist (denn) deine Band? / (#) Wie groß IST (denn) deine Band? how big is PTL your band
```

The difference has nothing to do with the encoded meaning of questions with accented finite verbs/functional elements, and it does not stem from any restrictions on inferentially derived interpretations, as both are arguably similar to those in English. So the reason the two languages differ goes beyond what is determined by compositionality and inferential pragmatics.

This discussion indicates that, although the grammar enables certain options by providing potential directions for conventionalisation, it does not require their appearance. All other things being equal, conventionalisation works in a fairly random manner, hence the resulting patterns occur in the languages where they occur and are precluded from appearing in others only in a probabilistic sense.

3.3. Other salient polarity structures

Section 2.2.2 has demonstrated that a number of structures commonly associated with salient polarity are either incompatible with question-answer contexts or result in marked readings when used in these contexts. We mentioned that this effect cannot be explained by resorting to the standard dichotomy between contrastive vs. non-contrastive foci, and that the stipulation of an additional feature, such as counterassertivity or counterpresuppositionality, would not be able to capture the whole gamut of their uses. In this section, we will look at some of these constructions in more detail in order to show that they are subject to the same variation as in accented finite verbs.

Let us begin with emphatic *do*-support in English, which is structurally and denotationally close to accented finite verbs: an auxiliary is introduced in clauses normally based on synthetic verb forms in order to bear the nuclear stress in an otherwise all-given sentence. As noted above, emphatic *do*-support triggers additional meanings when used in question-answer pairs. Also similar to accented finite verbs is the highly productive mechanism of producing intensified readings via emphatic *do*-support (28). These readings probably represent the most frequent interpretation of this structure that is fully independent of any kind of salient polarity.

- (28) A: I think he'd want to have some kind of little business. And then he can go off and pick it up.
 - B: And he does like to travel.
 - A: *I know he is thinking of going to France.* (British National Corpus)

Perhaps even more characteristically, emphatic *do*-support can be used to produce a number of inferences in directive sentences. In his classical study of English imperatives, Davies

(1986) differentiates two typical readings of emphatic *do*, 'contrastive' (29a) and persuasive (29b), to which one can add the polite usage (29c).

- (29) a. A: I know you don't like him, but Bill will be insulted if I don't invite him to the party.
 - B: Oh well, do invite him then, if you must.
 - b. A: Bill and his family are so boring.
 - B: Oh, do be kind to Mary, please!
 - c. Do take a cup of tea, please.

Davies' contrastive reading (29a) can be analysed as one of the typical instances of salient polarity, whereby a discussion is put to an end by placing a mutually known proposition under an illocutionary operator and thus indirectly contrasting it with its negative counterpart. The other two usages are less directly connected to polarity. This holds true especially for the polite reading (29c), which appears to instantiate a fully conventionalised non-compositional type of all-given clauses.

Characteristically, other languages only partly overlap with these uses. Thus, while the 'contrastive' salient-polarity reading would be perfectly felicitous if rendered by a corresponding all-given imperative clause with an accented verb in German (30a), the persuasive and, especially, the polite directives would be preferably expressed with the particles doch (in its unaccented form) or $blo\beta$, while accented finite verbs would result in different readings and are infelicitous in the given contexts (30b and 30c).

- (30) a. Gut, LADE ihn dann ein, wenn's sein muss.

 good invite him then VM if=it be must
 - b. Sei doch/bloß nett zu MARIA, bitte. / # SEI nett zu Maria, bitte.

be PTL/PTL nice to Maria please be nice to Maria please

c. Nehmen Sie doch eine Tasse TEE. /# NEHMEN Sie eine Tasse

take you PTL a cup tea take you a cup

Tee.

tea

As discussed in Section 3.1, accented finite verbs in German and English are markers of maximally underspecified all-given clauses, whereas the salient polarity reading arises under appropriate conditions via inferential reasoning. The particle *doch* has a much more specific denotation, as shown by Grosz (2014, 2016) and Egg & Zimmermann (2012), among others. Roughly, *doch* signals that the proposition in its scope is uncontroversial in the given context and that it is thus safe to discard any proposition which directly or indirectly contradicts it. The particle has a complex interactional meaning that includes inducing an alternative contradictory proposition and its exclusion due to the uncontroversiality of the proffered proposition. The relatedness of this meaning to salient polarity is obvious, and the use of *doch* does indeed often induce various polarity readings. It is, however, entirely different from the encoded meaning we proposed for accented finite verbs: the latter denote all-given propositions, while *doch* is a negation of the contradictory proposition, a double negative, as it were. This shows that languages achieve similar interpretive effects through different source denotations, and the distribution of forms across meanings is to some extent arbitrary.

Yet another example of different source denotations with similar interpretations and different conventionalised uses is provided by the Serbian intensifying particle *baš* and the English adverb *really*. The particle *baš* is a classical intensifier inducing various intensified readings and combinable with various lexical classes, as shown in (31), construed after Mišković-Luković (2010). When modifying a verb, it often triggers salient polarity interpretations in addition to intensifying meanings (32).

```
(31) baš dobar [PTL good] 'really good'

baš brzo [PTL quickly] 'really fast'

baš taj [PTL this] 'precisely this one'

baš konzulat [PTL consulate] 'consulate and nothing else'
```

'A: She didn't fail the exam. B: She did fail it!'

One salient polarity reading involves an additional indication of spite via contradicting the preceding directive utterance:

```
(33) A: Ne treba ići napolje, hladno je.

not should go outside cold is

B: Baš ću ići napolje!

PTL will go outside
```

'A: One shouldn't go outside, it's cold. B: I WILL go outside (as a matter of principle, to spite you, etc.)'

The closest counterpart of *baš* in English is *really*, which has played a prominent role in the literature on salient polarity (e.g. Romero & Han 2004 and Lai 2012: 101ff.). Similar to *baš*, *really* functions as an intensifier with adverbs, verbs and adjectives (34a), and can also trigger

a salient polarity interpretation (34b). What *really* cannot do, however, is induce the spite reading in its salient polarity function (34c).

- (34) a. really good, really fast
 - b. A: I'm not sure she failed the exam. B: I'm telling you, she really failed it.
 - c. A: One shouldn't go outside, it's cold. B: #I will really go outside!

Instead, it can trigger what Romero & Han (2004) call an 'actuality reading', indicating roughly that things are not what they seem to be by asserting a 'real' proposition against the background of the opposite proposition encapsulating the apparent state of affairs (35a). This interpretation is inaccessible to the particle *baš* (35b).

- (35) a. *Mary really is an alien*. (even though she looks human)
 - b. (#) Marija je baš vanzemaljac.

Marija is PTL alien

(only possible with THE intensifying interpretation 'She's a proper alien.')

It is immaterial for our purposes whether intensifiers are analysed truth-conditionally, as a kind of operator that selects a high degree of gradable predicates (Lai 2012: 101ff.) or relevance-theoretically, as indicators of the intended literal interpretation (Mišković-Luković 2010). The point is, like for the previous examples, that the Serbian particle *baš* and the English adverb *really* encode some kind of intensifying meaning, which is quite distinct both from the all-given semantics of accented finite verbs and the 'double negative' meaning of the German particle *doch*, and that, despite these different source denotations, they can trigger identical salient polarity effects. Furthermore, the usage of *baš* and *really* shows again that the difference between English and Serbian cannot be accounted for by compositionality plus

inference. Although *baš* and *really* have similar encoded meanings and both are able to generate salient polarity, their availability in different contexts is due to different conventionalisations.

This discussion could potentially be extended to a number of other structures somehow connected to salient polarity with similar results: none of them directly *encodes* polarity focus, a Verum or any other kind of operator, but they all have their own distinct denotation instead. These denotations are employed to convey salient polarity under appropriate conditions, but no single structure can be singled out in the relevant languages as a dedicated means for encoding it.

3.4. Source denotations

We have shown that the reductionist strategy of defining the category of salient polarity by selecting a linguistic form and providing it with a formal and semantic content might be *prima facie* successful for a description of one language, but it generally collapses when applied cross-linguistically. Instead, we have identified a handful of denotations that can give rise to salient polarity readings, such as all-given propositions, 'double negation', intensification, and so on. In this section, we adduce evidence from a typologically more diverse selection of languages to show that the range of possible source denotations is in fact much broader. In contrast to English, German and Serbian, these languages are rather poorly documented and allow merely for coarse generalisations; however, we feel this suffices to illustrate the potential range of variation.

3.4.1. Existential quantifiers

The first language we adduce is Tundra Yukaghir, an isolate spoken in north-eastern Siberia. In this language, in the answers to yes/no-questions, the finite verb must be preceded by the

proclitic particle ma(r)=, as illustrated in (36a); these answers are infelicitous without it (36b). This particle is also obligatory in a number of other typical salient polarity contexts, such as contradictions (37).⁵

```
(36)
           A: Nime m \ni = we:-\eta a?
              house M\partial(R)=do-TR.3PL
        a. В: Mә=we:-ŋa.
              M \rightarrow (R) = do - TR.3PL
              'A: Did they build a house? B: Yes, they built (it).'
        b. В: #We:-ŋa.
               do-TR.3PL
```

(37)tun köde $\partial l = amud'i:-m\partial k?$ A: Eld'ə, this man not=love-TR.2SG PTL B: $M \ni r = a m u d'i : -\eta$. $M\Theta(R)$ =love-TR-1SG 'A: What, don't you like that man? B: I do like him.' (Kurilov 2005: 304)

These distributional facts have led a number of researchers to define this particle as a dedicated marker of polarity focus or a more general predicate focus (Maslova 2003, Matić & Nikolaeva 2008). However, in Matić & Nikolaeva (2014) we show that this analysis is based on the cherry-picked litmus contexts, chosen in order to render this kind of interpretation possible, not unlike the situation with the better known European languages discussed above.

⁵ Here and elsewhere, if the source of an example is not cited, it comes from our own field data (2008-2013).

Once a larger set of data is taken into account, the polarity/predicate focus analysis loses all plausibility. More specificially, the particle $m_{\theta}(r)$ = on the verb is incompatible with focus marking and focus interpretation on non-verbs (38). On the contrary, it is obligatory when the proposition is realis and the predicate is inherently dynamic irrespective of the place and size of focus (39).

```
(38)
       la:mə-ləŋ
                     (*m = )pa:j-m = la.
       dog-FOC
                     M∂(R)=hit-OBJ.FOC.3
       'He hit a dog.'
```

```
(39)
       a. tude
                  tuːriː-yanə
                                he.POSS trousers-ACC ma(r)=tear-TR.3
          '(He took out one of his traps. While doing that,) he [tore his trousers.] FOC'
          (Maslova 2001: 58)
       b. qajče:-təgə
                        ńawńikle:-ńəη mə=ńinu:-ŋi.
          bear-AUG
                        polar.fox-COM M\Theta(R)=meet-INTR.3PL
          '(beginning of a story) [A bear and a polar fox met.]<sub>FOC</sub> (Kurilov 2005: 240)
```

With non-realis propositions and stative predicates, $m_{\theta}(r)$ is generally not used outside of salient polarity contexts (40):⁶

(40)атиčә brigad'ir ət=nod'ək. a. *tət* you be.good.PTCP foreman COND=be.INTR.2SG

⁶ It can only be used under special conditions and for special effects, see Matić & Nikolaeva (2014) for detail.

'You would be a good foreman.'

b. tayo:d'ə hanmə-pul oy-o:l-ŋi.

be.dense.PTCP willow-PL stand-STAT-INTR.3PL

'Willow thickets stood there.'

In order to account for these distributional facts, we have proposed that ma(r) is an existential quantifier, which, when applied to predicates, performs the operation of unselective existential quantification over eventualities. Its quantifying nature is quite clearly seen in combination with question words that receive a specific indefinite interpretation when they are in the scope of ma(r) =.

(41) a. *neme* 'what/who' m = neme 'something'

b. qoːdəgurčiː? mə=qoːdəgurčiː-j.

what.happen.INTERR.3 M $\Theta(R)$ =what.happen-INTR.3SG

'What happened?' 'Something happened.'

The existential denotation of ma(r) = is employed to assert the existence of an eventuality in the real world, which sufficiently explains its obligatoriness in realis contexts. Ma(r) = is mostly incompatible with stative predicates because it also has an aspectual component which requires the eventualities in its scope to be fully contained in the Topic Time (in the sense of Klein 1994), and this is not the case with statives. Ma(r) = is redundant and therefore impossible if focus falls on a non-verbal element because the relevant propositions are strongly presupposed and anchored to the real world via presupposition.

Why, then, does the existential quantifier necessarily occur in salient polarity contexts? We argued that this has to do with the semantic affinity between salient polarity and existential quantification. Salient polarity readings arise every time the question whether a

proposition from Common Propositional Space holds true or not is at issue in discourse. Existential quantification over events in realis contexts can furnish precisely this type of semantic information: by asserting that an eventuality exists in the real world, the speaker entails that the proposition that describes it is true. Importantly, this is not the only communicative effect of ma(r)=, as we have seen above (examples (39) and (41)), but one of its possible interpretations which arises if the necessary contextual conditions are given. So ma(r)= does not encode polarity focus, certainty, or any other polarity related meaning. It is merely interpretable as indicating that the polarity of a mutually known proposition is at issue, via interaction of its existential denotation with contextual considerations.

3.4.2. Miratives, evidentials, and epistemic stance

Another possible source of salient polarity readings is the somewhat diffuse family of categories comprising evidentials, epistemics and miratives. Let us begin with the relationship between miratives and salient polarity. Miratives are known to encode the speaker's surprise at the course of events (DeLancey 1997), i.e. they contrast the proffered proposition with a contextually salient set of epistemically accessible propositions (Rett & Murray 2013). This is nicely illustrated with the Albanian mirative, whose major function is to encode contrast between the observed situation and the expected ones, as in (42), where the mirative shows that eating soup without bread runs against cultural expectations.

(42) (...) e hëngërki ju gjellën fare pa bukë!

it eat.MIR.2PL you.PL soup.ACC.DEF completely without bread

'(...) You are eating the soup without any bread!' (Friedman 1986: 181;

glosses modified)

As Behrens (2013) points out, the contrast between the proffered and the set of (expected) background propositions can, and often does, result in salient polarity interpretations. As a matter of fact, salient polarity is one of the most frequent readings of the Albanian mirative (43). Clearly, the salient polarity reading in (43) is not encoded, but derived via inference from a more general denotation of contrast between the expected and actual situation.

(43) E shoh që paska pasur të drejtë.

it see.1SG that AUX.MIR.3SG have.PTCP LK right

'I see that he actually WAS right after all.' (Behrens 2012: 231)

A similar inferential path of arriving at salient polarity interpretations is apparent in a number of languages with more elaborate evidential systems, such as Quechua (Quechuan; Behrens 2013) and Nupe (Benue-Kongo; Kandybowicz 2013). Quechua is a particularly good example. The direct evidential in -mi in Cuzco Quechua is analysed by Faller (2002) as an illocutionary operator which adds a sincerity condition to the speech act by encoding that the speaker has the best possible evidence in relation to the type of information conveyed. The use of -mi is optional, in the sense that a sentence without any evidential marker has the same evidential value as the one with the 'best evidence' marker -mi. Speakers employ -mi only when they want to make a particularly strong point, i.e. to persuade their interlocutors. In other words, -mi is an interactional device to communicate persuasive intention and is as such particularly frequent in those assertions in which the speaker expects contradiction from the audience (Faller 2002: 145ff.; Behrens 2013: 210). The implicit division of Common Propositional Space into contrastive propositional sets (proffered content and expected contradiction), along with the persuasive usage, often leads to the rise of polarity effects, as in (44).

(44) [A consultant of mine was talking about a condor in the city of Cuzco itself(...), to which I replied, surprised, that I thought there were no condors in the city. She insisted with:]

Ka-sha-n-mi.

be-PROG-3-DIR.EVID

'There IS!'

[indicating that she had good evidence and that it would be fruitless for me to question her.] (Faller 2002: 151)

Here salient polarity is indicated through the interplay of the encoded meaning of direct evidentiality (best evidence) and the interactional constraints on the use of the evidential marker. It occurs merely as an effect of the conditions under which evidence for an assertion comes to be at issue.

The final example of the relationship between epistemic stance and salient polarity comes from Burmese (Tibeto-Burman). Our data stem from Ozerov (2012, 2014) and from personal communication with the author. In Burmese, verbs nominalised with *-ta* can function as main, stand-alone predicates and indicate salient polarity, as shown in (45) and (46).

(46) [I offered to my mother to go together to Bodh Gaya (...), but she said: "I heard it is very hot there. I do not want to go yet."]

Nau?=t5 θw à-ta $=\underline{p}$ 5. after=SEQ go-R.NMLZ=RINF

'In the future, I WILL (definitely) go!' (Ozerov 2014: 273)

However, nominalised verbs have a range of other functions as main predicates: they are used in exclamations (47), rhetorical questions, convey something similar to constituent focus, provide explanatory comments to previous utterances (48), indicate subjectively viewed stretches of narratives, and more.

(48) [Whenever the lion saw the bulls, he started drooling.]

$$\theta u - \underline{t} \acute{o} - \underline{t} we - \underline{k} o$$
 $s \grave{a} - \underline{t} c^h \tilde{\imath} - la i ? - \underline{t} a$.

3-PL-PL-OBJ eat-want-FOLLOW-R.NMLZ

'He wanted to eat them.' (Ozerov 2014: 272)

These apparently disparate meanings can be explained if we take stand-alone nominalisations at face value: they are chunks of information comparable to simple nouns used in isolation and are void of the assertive component of commitment to the propositional content due to the lack of finiteness. As such, they are interpreted as indicators of subjective epistemic stance and probably partly conventionalised to function as explanations, exclamations, report emotions, and so on (Ozerov 2014: 282ff., see also Merin & Nikolaeva 2008 specifically on exclamations). Among other things, this can have an effect of emphasising polarity. Due to their subjective component, they trigger the division of Common Propositional Space into the proffered subjective description of the world and other possible descriptions. If these propositions differ in their potential truth value, the salient polarity effect arises.

3.4.3. Other source denotations and a summary

Existential quantifiers, miratives, direct evidentials, and markers of subjective epistemic stance do not exhaust the possible sources of salient polarity effects. We can briefly mention two other denotations we came across. In some dialects of Even, a Tungusic language spoken in north-eastern Siberia, highly grammaticalised negative tags in the postverbal position can often have a salient polarity reading, as in (49)

(49) A: Why don't you call the neighbours? They haven't left, have they?

B: Hor-če-l e-s-ten!

leave-PST.EVID-PL NEG.AUX-NON.FUT-3PL

'They HAVE left!' (lit. 'They have left, haven't they.')

Negative tags have a specific value in Even, marking the element that precedes them as uncontroversial, often with the interactional purpose to signal to the interlocutor that they should be aware of this fact (Matić 2015). The occasional salient polarity interpretation seems to arise out of the contrast between this expected awareness of the interlocutors and their manifest lack thereof.

In Hungarian, one of the standard ways of expressing salient polarity consists in placing the aspectual verbal modifiers (VM) in the preverbal focus position:

- (50) a. Nem hív-ta meg a szomszédokat? De, MEG hívta.

 not invited VM the neighbours PTL VM invited

 'Didn't he invite the neighbours? He DID invite (them).' (Lipták 2013:73)
 - b. Nem fogja meg hívni a szomszédokat? De, MEG
 not AUX.3SG VM invite the neighbours PTL VM

fogja hívni.

AUX.3SG invite

'He won't invite the neighbours? – He WILL invite (them).' (adapted from Lipták 2013: 80)

We suspect that aspect anchors the eventuality to the world roughly in the same way as Wedgwood (2006: 266) suggested for tense: "[...] the contribution of tense to the description of any eventuality provides the essential 'anchor' point [...]. This means that the temporal anchor is uniquely suited to asserting the existence of an eventuality whose descriptive content is entirely presupposed [...]." In other words, we take it that VMs locate the eventuality in the world by mapping the Event Time to the Topic Time (Klein 1994). When these world-anchoring aspectual elements are focused, one possible interpretive effect is the emphasis on the existence of the eventuality. For instance, in (50), the Event Time of the eventuality of someone's inviting the neighbours is aspectually located relative to the Topic Time via the VM meg. Since this aspectual operator is placed in the focus position, one plausible reading is that the main point of the utterance is the anchoring of the eventuality with respect to the world, i.e. the assertion of its existence, which is precisely what salient polarity is about. If this idea is correct, the principle of deriving polarity readings from the existential import of aspectual operators in Hungarian is similar to the workings of the existential quantifier in Tundra Yukaghir, but the mechanism of deriving the inference of salient polarity is quite different.

We have no doubt that taking a broader array of languages and constructions into account can uncover many more source denotations, inferential mechanisms and conventionalised uses than we have surveyed. Nevertheless, we hope to have shown at least a few recurrent patterns that participate in polarity interpretations: givenness, negation, existence, and various meanings related to epistemic stance seem to occur with some

regularity in a number of languages. The inference that triggers polarity readings often comes in the form of dividing Common Propositional Space into two opposed sets, one of which is the proffered proposition, but other inferences are possible too. The general point is that salient polarity arises from quite different sources and on different inferential paths.

4. Final remarks

It is fairly uncontroversial that both Common Ground and the interlocutors' states of attention must be regulated in the process of communication and, despite significant difference between languages, there are persisting cross-linguistic patterns in this area. This does not imply, however, that they automatically qualify as categories of grammar, as is often assumed (cf. Matić & Wedgwood 2013). The usual strategy of establishing categories takes a certain type of linguistic form associated with a limited range of contexts and meanings as its starting point, ascribes it a discrete denotation often associated with the syntactic presence of one relevant element, and then merely seeks to confirm its existence in language after language. However, it strikes us as methodologically implausible to assume that any particular formmeaning correspondence is a likely explanatory prism through which all other meanings should be viewed. In our view, the danger of this kind of procedure is that, by singling out one salient interpretation and suppressing recalcitrant usages, one can easily fall victim to reification fallacy and treat diffuse interpretive effects as discrete categories, as things among things. This analytical practice produces generality where there is none. It ignores many of the empirical phenomena by disregarding the full range of contexts and interpretations and downplays the massive underspecification of meaning. It is therefore incapable of explaining micro-variation within and across languages. What is more, the understanding of information structure categories as discrete denotations tends to obscure the difference between

communicative processes and real grammatical knowledge because it focuses on the outcome of interpretive processes rather than the processes themselves.

In contrast to this kind of analysis, this paper advocated a more dynamic approach, partly informed by the methodological assumptions adopted in some recent literature on language variation (Evans & Levinson 2009, Goldberg 2009, Ackerman & Nikolaeva 2013, Matić & Wedgwood 2013, among others). We proposed to treat information-structural patterns as outcomes of multiple interacting factors within specific linguistic systems, namely, as recurrent types of interpretations which come about in an interplay of speaker's intentions, contextual cues and linguistic forms. We have used the example of the so-called polarity or Verum focus, which we referred to as *salient polarity*, to demonstrate this point. The evasive nature of salient polarity makes it particularly suitable for the study of the analytical procedures that normally lead to the postulation of an information structure category.

We first dealt with accented finite verbs and/or functional elements, a formal strategy that passes the question-answer test in a number of languages and is generally associated with the meaning of polarity focus, alternatives, newness, and contrast. The way this meaning has been translated into encoded denotation—roughly, an operator that interacts with focus and produces a set of two alternative propositions differing in polarity—is symptomatic of the standard analytical procedure of establishing the form-meaning correspondence. We proposed instead that this structure results from two grammatical processes, deaccentuation of given material and accent assignment to the verb. These two processes generally tend to convey two different readings, salient polarity/TAM focus and verb focus, but there are also significant overlaps and interpretive indeterminacies which, we argued, are a product of variable conventionalisations of underspecified structures. Salient polarity is just one of the possible interpretations that can be inferred from the use of deaccented clauses, but it does not represent their denotation. We then looked at other structures usually assumed to denote salient polarity and showed that they vary greatly both within and across languages in terms

of their compatibility with context types and, ultimately, in their denotations. If these additional usages are taken seriously, the clear picture of binary polar alternatives becomes even blurrier, to say the least. This suggests that denotational approach cannot account for all micro-restrictions in usage and divergences in meaning.

We proposed that variations arise out of complex interactions between encoded denotations, paradigmatic relationships between structures within a given linguistic system, speaker's intention, and various interpretive effects. The only common denominator of the many structures that have been associated with salient polarity is the direct or indirect connection to the communicative intention of the speaker to draw hearer's attention to the polarity of the conveyed proposition since, for one or another reason, the relationship of the proposition to the reference world or Common Propositional Space is at issue. This communicative act can be signalled by means of disparate denotations mediated through inferential reasoning. Importantly, inferential meanings are not unconstrained, but rather conventionalised for certain types of interpretation and certain types of discourse functions. Semi-arbitrary conventionalisations of usage may in their turn become entrenched and give rise to further inferences. This, together with structural differences, accounts for a great deal of cross-linguistic variability.

This result indicates that salient polarity cannot stand closer scrutiny as a universal category of information structure with a distinct denotation. The reasons for this lie in the nature of the conveyed meaning itself, which in many respects surpasses the simple denotational approach. Instead we can understand salient polarity as a (possibly universal) type of communicative intention manifested through a number of interpretative effects. As such it has no place in grammar, and can only be analysed as a category if we assume that cross-linguistic categories can be entirely interpretation-based.

Our proposal does not preclude the possibility that languages may differ greatly in what interpretative mechanisms produce salient polarity effects; indeed, this is the expected

outcome of the comparative empirical studies of particular languages. However, we also believe that the variation is systemically constrained and motivated. Some of the sources and paths occur in more than one language and appear to represent recurrent patterns of signalling the communicative intention of drawing attention to the polarity of proposition. We have mentioned negation, givenness, various existential and epistemic denotations, the partition of Common Propositional Space and persuasive intention, but we suspect that this may only be a fraction of processes through which salient polarity can be derived in languages.

We see the investigation of these and similar mechanisms as a very legitimate line of a typological inquiry. A major object of this inquiry, as we tried to show, should be processes, not things. The strategy therefore is not to search for the 'right' denotational properties of the purported category, but rather to show how source denotations interact with recurrent inferential mechanisms, variable contextual conditions and patterns of conventionalisation, and to investigate the common cognitive basis of this interaction.

Abbreviations

ACC - accusative; AUG - augmentative; AUX - auxiliary; COM - comitative; COND - conditional; DIR - direct; EMPH - emphatic; EVID - evidential; FOC - focus; FUT - future; INF - infinitive, INTERR - interrogative; INTR - intransitive; LK - linker; MIR - mirative; NEG - negative; NMLZ - nominaliser; OBJ - object; PL - plural; POSS - possessive; PROG - progressive; PST - past; PTL - particle; PTCP - participle; R - realis; REFL - reflexive; SEQ - sequential; STAT - stative; SG - singular; TR - transitive; VM - verb modifier

References

- Abraham, Werner & Conradi, C. Jac. 2001. *Präteritumschwund und Diskursgrammatik*.

 Amsterdam: Benjamins.
- Ackerman, Farrell & Nikolaeva, Irina. 2013. *Descriptive Typology and Linguistics Theory: a Study in the Morphosyntax of Relative Clauses*. Stanford CA: CSLI Publications.
- Baumann, Stefan. 2006. The Intonation of Givenness. Berlin: Mouton de Gryuter.
- Behrens, Leila. 2013. Evidentiality, modality, focus, and other puzzles. In *Practical Theories* and *Empirical Practice*. A *Linguistic Perspective*, Andrea C. Schalley (ed.), 185-243. Amsterdam: Benjamins.
- Birner, Betty & Ward, Gregory. 1998. *Information Status and Non-Canonical Word Order in English*. Amsterdam: Benjamins.
- Büring, Daniel. 2006. Intonation und Informationsstruktur. In *Text Verstehen. Grammatik und darüber hinaus*, Hardarik Blühdorn, Eva Breindl & Ulrich H. Waßner (eds), 144-163. Berlin: De Gruyter.
- Büring, Daniel. 2010. Towards a typology of focus realization. In *Information Structure: Theoretical, Typological, and Experimental Perspectives*, Malte Zimmermann & Caroline Féry (eds), 177-205. Oxford: Oxford University Press.
- Büring, Daniel. 2016. Intonation and Meaning. Oxford: Oxford University Press.
- Creswell, Cassandre. 2000. The discourse function of verum focus in *wh*-questions. In *Proceedings of NELS* 30: 165-180.
- Danckaert, Lieven & Haegeman, Liliane. 2012. Conditional clauses, main clause phenomena and the syntax of polarity emphasis. In *Comparative Germanic Syntax: The State of the Art*, Peter Ackema, Rhona Alcorn, Caroline Heycock, Dany Jaspers, Jeroen van Craenenbroeck & Guido Vanden Wyngaerd (eds), 133-168. Amsterdam: John Benjamins.

- Davies, Eirlys. 1986. The English Imperative. London: Croom Helm.
- DeLancey, Scott. 1997. Mirativity: the grammatical marking of unexpected information. *Linguistic Typology* 1: 33–52.
- Dik, Simon C., Hoffmann, Maria E., de Jong, Jan R., Djiang, Sie I., Stroomer, Harry & de Vries, Lourens. 1981. On the typology of focus phemomena. In *Perspectives on Functional Grammar*, Teun Hoekstra, Harry van der Hulst & Michael Moortat (eds), 41-74. Dordrecht: Foris.
- Dimroth, Christine, Andorno, Cecilia, Benazzo, Sandra & Verhagen, Josje. 2010. Given claims about new topics. How Romance and Germanic speakers link changed and maintained information in narrative discourse. *Journal of Pragmatics* 42: 3328-3344.
- Duffield, Nigel. 2007. Aspects of Vietnamese clausal structure: separating tense from assertion. *Linguistics* 45: 765-814.
- Duffield, Nigel. 2013. On polarity emphasis, assertion and mood in Vietnamese and English. *Lingua* 137: 248-270.
- Egg, Markus. 2012. Discourse particles at the semantics-pragmatics interface. In *Modality* and *Theory of Mind elements across languages*, Werner Abraham & Elisabeth Leiss (eds), 297-333. Berlin: de Gruyter.
- Egg, Markus & Zimmermann, Malte. 2012. Stressed out! Accented discourse particles the case of DOCH. In *Proceedings of Sinn und Bedeutung* 16(1), A. Aguilar, A. Chernilovskaya, and R. Nouwen (eds), 225-238. Cambridge, MA: MIT Working Papers in Linguistics.
- É. Kiss, Katalin. 2002. *The Syntax of Hungarian*. Cambridge: Cambridge University Press.
- Evans, Nicholas & Levinson, Stephen. 2009. The myth of language universals: Language diversity and its importance for cognitive science. *Behavioral and Brain Sciences* 32(5): 429-492.

- Faller, Martina. 2002. Semantics and Pragmatics of Evidentials in Cuzco Quechua. PhD dissertation, Stanford University.
- Friedman, Victor A. 1986. Evidentiality in the Balkans: Bulgarian, Macedonian and Albanian.

 In *Evidentiality. The Linguistic Coding of Epistemology*, Johanna Nichols & Wallace

 Chafe (eds), 168-187. Norwood, NJ: Ablex.
- Goldberg, Adele E. 2009. The nature of generalization in language. *Cognitive Linguistics* 20: 93-127.
- Goldberg, Adele & Ackerman, Farrell. 2001. The pragmatics of obligatory adjuncts. *Language* 77: 798-814.
- Grosz, Patrick. 2014. German *doch*: An element that triggers a contrast presupposition.

 *Proceedings of the Chicago Linguistic Society 46: 163-177.
- Grosz, Patrick. 2016. Information structure and discourse particles. In *Oxford Handbook of Information Structure*, Caroline Féry & Shinichiro Ishihara (eds), 336-358. Oxford:Oxford University Press.
- Güldemann, Tom. 2003. Present progressive vis-à-vis predication focus in Bantu: a verbal category between semantics and pragmatics. *Studies in Language* 27: 323-360.
- Güldemann, Tom & Fiedler, Ines. 2013. Verb fronting in Bantu in typological perspective.

 Paper presented at the Workshop on *Information structure in Bantu languages*,

 Humboldt University Berlin. https://www2.huberlin.de/predicate_focus_africa/data/2013-12-
 - 10_G%C3%BCldemann_Fiedler.Bantu.focus.fronting.pdf (5 November 2016).
- Gussenhoven, Carlos. 1983. Focus, mode and the nucleus. *Journal of Linguistics* 19: 377-417.
- Gussenhoven, Carlos. 2007. Types of Focus in English. In *Topic and Focus: Cross-linguistic Perspectives on Meaning and Intonation*, Chungmin Lee, Matthew Gordon, & Daniel Büring (eds), 83-100. Heidelberg: Springer.1

- Gutzmann, Daniel. 2010. Betonte Modalpartikeln und Verum Fokus. In 40 Jahre

 Partikelforschung, Elke Hentschel & Theo Harden (eds), 119-138. Tübingen:

 Stauffenburg.
- Gutzmann, Daniel. 2012. Verum Fokus Verum-Fokus? Fokus-basierte und lexikalische Ansätze. In *Wahrheit Fokus Negation*, Hardarik Blühdorn & Horst Lohnstein (eds), 67-103. Hamburg: Buske.
- Gutzmann, Daniel & Castroviejo-Miro, Elena. 2011. The Dimensions of VERUM. *Empirical issues in Syntax and Semantics*, 8: 143-165. http://www.cssp.cnrs.fr/eiss8/gutzmann-castroviejo-miro-eiss8.pdf (11 October 2016).
- Halliday, Michael A.K. 1967. Notes on Transitivity and Theme in English, Parts 1-2. *Journal of Linguistics* 3: 37–81; 199–244.
- Hartmann, Katharina; Jacob, Peggy & Zimmermann, Malte. 2008. Focus asymmetries in Bura. In *ISIS* 10, Shinichiro Ishihara, Svetlana Petrova & Anne Schwarz (eds), 45-92. Berlin: SFB 632.
- Haspelmath, Martin. 2010. Comparative concepts and descriptive categories in cross-linguistic studies. *Language* 86(4): 663-687.
- Höhle, Tilman. 1992. Über Verum-Fokus im Deutschen. In *Informationsstruktur und Grammatik*, Joachim Jacobs (ed.), 112-141. Opladen: Westdeutscher Verlag.
- Hyman, Larry & Watters, John R. 1984. Auxiliary focus. *Studies in African Linguistics* 15: 233-273.
- Kandybowicz, Jason. 2013. Ways of emphatic scope-taking: From emphatic assertion in Nupe to the grammar of emphasis. *Lingua* 128: 51-71.
- Klein, Wolfgang. 1994. Time in Language. London: Routledge.
- Klima, Eduard S. 1964. Negation in English. In *The Structure of Language*, Jerry Fodor & Jerold Katz (eds), 246-323. Englewood Cliffs, NJ: Prentice Hall.

- Krifka, Manfred, 2008. Basic notions of information structure. *Acta Linguistica Hungarica* 55: 243–276.
- Kurilov, Gavril. 2005. Fol'klor Jukagirov [Yukaghir Folklore]. Novosibirsk: Nauka.
- Ladd, D. Robert. 2008. *Intonational Phonology*. 2nd Edition. Cambridge: Cambridge University Press.
- Lai, Catherine. 2012. Rises All the Way Up: The Interpretation of Prosody, Discourse

 Attitudes and Dialogue Structure. PhD dissertation, University of Pennsylvania.

 http://www.ling.upenn.edu/~laic/dissertation/laic-diss.pdf (2 November 2016)
- Laka, Itziar. 1994. On the Syntax of Negation. New York/London: Garland.
- Lambrecht, Knud. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge: Cambridge University Press.
- Levinson, Stephen. 2000. Presumptive Meanings. Cambridge, MA: MIT Press.
- Lipták, Anikó. 2013. The syntax of emphatic positive polarity in Hungarian: Evidence from ellipsis. *Lingua* 128: 72-94.
- Lohnstein, Horst. 2012. Verumfokus Satzmodus Wahrheit. In *Wahrheit Fokus Negation*, Horst Lohnstein & Hardarik Blühdorn (eds), 31-67. Hamburg: Buske.
- Lohnstein, Horst. 2016. Verum Focus. In *Oxford Handbook of Information Structure*,

 Caroline Féry & Shinichiro Ishihara (eds), 290-313. Oxford: Oxford University Press.
- Meibauer, Jörg.2014. *Lying at the Semantics-Pragmatics Interface*. Berlin: Mouton de Gruyter.
- Martins, Ana Maria. 2013. Emphatic polarity in European Portuguese and beyond. *Lingua* 128: 95-123.
- Maslova, Elena. 2001. Yukaghir Texts. Wiesbaden: Harrassowitz.
- Maslova, Elena. 2003. Tundra Yukaghir. Munich: Lincom Europa.

- Matić, Dejan. 2003. *Topics, Presuppositions, and Theticity: An Empirical Study of VS*Clauses in Albanian, Modern Greek, and Serbo-Croat. PhD dissertation, University of Cologne.
- Matić, Dejan. 2009. On the variability of focus meanings. In *Proceedings of the 18th International Congress of Linguists, Seoul 2008.* Seoul: Linguistic Society of Korea.
- Matić, Dejan. 2010. Discourse and syntax in linguistic change: Ratified topics in Serbian/Croatian. In *Diachronic Studies on Information Structure*, Gisella Ferraresi & Rosemarie Lühr (eds), 117-142. Berlin: de Gruyter.
- Matić, Dejan. 2015. Tag questions and focus markers: Evidence from the Tompo dialect of Even. In *Information Structure and Spoken Language in a Cross-linguistic*Perspective, M. M. Jocelyne Fernandez-Vest & Robert D. Van Valin, Jr. (eds), 167-189. Berlin: Mouton de Gruyter.
- Matić, Dejan & Nikolaeva, Irina. 2008. Predicate focus and the particle $m_{\tilde{\sigma}}(r)$ = in Tundra Yukaghir. Paper delivered at *Predicate Focus Workshop*, University of Potsdam.
- Matić, Dejan & Nikolaeva, Irina. 2014. Realis mood, focus, and existential closure in Tundra Yukaghir. *Lingua* 150: 202-231.
- Matić, Dejan & Wedgwood, Daniel. 2013. The meanings of focus: The significance of an interpretation-based category in cross-linguistic analysis. *Journal of Linguistics* 49, 127-163.
- Matthews, Peter. 1981. Syntax. Cambridge: Cambridge University Press.
- Merin, Arthur & Nikolaeva, Irina. 2008. Exclamative as a universal speech act category: a case study in Decision-Theoretic Semantics and typological implications. http://semanticsarchive.net/Archive/jUwMmYxY/eusac-sspa4.pdf
- Mišković-Luković, Mirjana. 2010. Markers of conceptual adjustment. Serbian particles *baš* and *kao*. In *South Slavic Discourse Particles*, Mirjana Dedaić & Mirjana Mišković-Luković (eds), 65-88. Amsterdam: Benjamins.

- Nevins, Andrew, Pesetsky, David & Rodrigues, Carlos. 2009. Pirahã exceptionality: a reassessment. *Language* 85: 355-404.
- Newmeyer, Frederick J. 2007. Linguistic typology requires crosslinguistic formal categories.

 Linguistic Typology 11: 133-157
- Ortiz de Urbina, Jon. 1994. Verb-initial patterns in Basque and Breton. Lingua 94: 125-153.
- Ozerov, Pavel. 2012. It is not so: nominal and 'emphatic' negation in colloquial Burmese.

 *Cahiers de Linguistique Asie Orientale 42: 219-285.
- Ozerov, Pavel. 2014. The System of Information Packaging in Colloquial Burmese. PhD dissertation, La Trobe University.
- Portner, Paul. 2007. Beyond the CG: The semantics and pragmatics of epistemic modals.

 Paper presented at *International Congress of Linguists*, Seoul.

 http://faculty.georgetown.edu/portnerp/my_papers/Portner_LSK2007_modals.pdf (29 October 2016).
- Prince, Ellen. 1998. On the limits of syntax, with reference to left-dislocation and topicalization. In *Syntax and Semantic 29: The Limits of Syntax*, Peter W. Culicover & Louise McNally (eds), 281-302. New York: Academic Press.
- Repp, Sophie. 2013. Common ground management: Modal particles, illocutionary negation and VERUM. In *Beyond Expressives. Explorations in Use-conditional Meaning*,

 Daniel Gutzmann & Hans-Martin Gärtner (eds), 231-274. Leiden: Emerald.
- Rett, Jessica & Murray, Sarah E. 2013. A semantic account of mirative evidentials.

 **Proceedings of SALT 23, Todd Snider (ed.), 453-472.

 **Shttp://journals.linguisticsociety.org/proceedings/index.php/SALT/issue/view/85> (11 January 2017)
- Rijkhoff, Jan. 2009. On the (un)suitability of semantic categories. *Linguistic Typology* 13: 95-104.

- Romero, Maribel & Han, Chung-hye. 2004. On negative *yes/no* questions. *Linguistics and Philosophy* 27: 609-658.
- Rooth, Matt. 2016. Alternative Semantics. In *Oxford Handbook of Information Structure*,

 Caroline Féry and Shinichiro Ishihara (eds), 19-40. Oxford: Oxford University Press.
- Sailor, Craig. 2014. The variables of VP Ellipsis. PhD dissertation, UCLA. http://ling.auf.net/lingbuzz/002380 (31 October 2016)
- Sailor, Craig. 2015. Polarity-driven inversion in British English and beyond. Ms. http://www.craigsailor.net/papers/FI draft Feb-2015.pdf (31 October 2016)
- Samko, Bern. 2015. The emphatic interpretation of English VP preposing. Paper presented at the *89th Annual Meeting of the LSA*. https://sites.google.com/site/bsamko/handouts (15 October 2016)
- Samko, Bern. 2016. Verum focus in alternative semantics. Paper presented at the *90th Annual Meeting of the LSA*. https://sites.google.com/site/bsamko/handouts (15 October 2016)
- Turco, Giuseppina. 2014. Contrasting opposite polarity. PhD dissertation, Radboud University Nijmegen.
- Turco, Giuseppina, Braun, Bettina & Dimroth, Christine. 2014. When contrasting polarity, Germans use intonation, the Dutch particles. *Journal of Pragmatics* 62: 94-106.
- Turco, Giusy, Dimroth, Christine & Braun, Bettina. 2013. Intonational means to mark verum focus in German and French. *Language and Speech* 56: 460-490.
- Watters, John R. 1979. Focus in Aghem. In *Aghem Grammatical Structure*, Hyman, Larry (ed), 137-197. Los Angeles: University of Southern California.
- Wedgwood, Daniel. 2006. Shifting the Focus: From Static Structures to the Dynamics of Interpretation. Oxford: Elsevier Science.
- Wilder, Chris. 2013. English emphatic do. Lingua 128: 142-171.
- Wood, Jim. 2008. 'So'-inversion as polarity focus. In *Proceedings of WECOL 38*, Michael Grosvald & Dianne Soares (eds), 304–317. Davis: UC Davis.

- Wood, Jim. 2014. Affirmative semantics with negative morphosyntax: Negative exclamatives and the New England *So AUXn't NP/DP* construction. In *Micro-syntactic Variation in North American English*, Raffaella Zanuttini & Laurence R. Horn (eds), 71–114.

 Oxford: Oxford University Press.
- Zimmermann, Malte. 2008. Contrastive focus and emphasis. *Acta Linguistica Hungarica* 55: 347-360.
- Zimmermann, Malte & Hole, Daniel. 2008. Predicate focus, verum focus, verb focus: similarities and differences. Paper presented at *Predicate Focus Workshop*, University of Potsdam.
- Zimmermann, Malte & Onea, Edgar. 2011. Focus marking and focus interpretation. *Lingua* 121(11): 1651–1670.