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# How much does pragmatics help to contrast the meaning of hearsay adverbs? (Part 1)

## Abstract

The present study aims at differentiating between semantically-coded and pragmaticallyconditioned meaning components of Polish and German sentence adverbs whose meaning is conventionally associated with hearsay ( $\approx$  Eng. allegedly, reportedly, supposedly). In the first part, we present a systematic corpus study of hearsay adverbs in Polish and German providing the empirical basis for our analysis and conclusions. In the second part, we provide reasons why our objective should be reached on the basis of Generalized Conversational Implicatures (GCIs), and we show which particular communicative principles distinguished in Neo-Gricean frameworks can sensibly be considered as triggers of GCIs that evoke 'epistemic overtones' in the use of hearsay adverbs. We differentiate between GCIs which work for all relevant adverbs and implicatures which only apply to more individual properties of hearsay adverbs on more specific levels of their meaning structure. In accordance with this more descriptive task, we discuss general issues concerning presumable hierarchies of factors that influence (trigger or cancel) epistemic implicatures in the usage of lexical markers of information source. We argue that many discourse properties on the semantics-pragmatics interface which are characteristic of grammatical evidentials also hold true for lexical markers of information source.

#### Key words

Polish, German, reportive evidentiality, sentence adverbs, Generalized Conversational Implicatures, coded vs. inferred meaning

## Streszczenie

Artykuł stanowi próbę rozróżnienia zakodowanych semantycznie oraz uwarunkowanych pragmatycznie komponentów znaczenia polskich i niemieckich reportatywnych przysłówków zdaniowych (ang. allegedly, reportedly, supposedly). W części pierwszej przedstawiamy badania korpusowe stanowiące empiryczną podstawę naszych rozważań. W części drugiej na podstawie teorii Uogólnionych Implikatur Konwersacyjnych (Generalized Conversational Implicatures, GCI) pokazujemy, w jaki sposób mechanizmy komunikacyjne przyjęte w ujęciach neo-Grice'owskich prowadzą do GCI nadających przysłówkom reportatywnym zabarwienie epistemiczne. Odróżniamy przy tym GCI towarzyszące użyciu wszystkich przysłówków reportatywnych oraz te implikatury, które wiążą się z ich indywidualnymi cechami na głębszym poziomie struktury znaczeniowej. Następnie poruszamy problem ogólniejszy, dotyczący przypuszczalnych hierarchii czynników, które wywołują (lub znoszą) implikatury epistemiczne u jednostek leksykalnych wyrażających źródło informacji. Uważamy, że jednostki te wykazują na poziomie dyskursu wiele właściwości dotyczących styku semantyki i pragmatyki, które dotychczas przypisywano tylko gramatycznym eksponentom ewidencjalności.

## Słowa kluczowe

język polski, język niemiecki, ewidencjalność reportatywna, przysłówki sentencjalne, uogólnione implikatury konwersacyjne, znaczenie zakodowane vs. znaczenie wywnioskowane

## 1. Introduction

The aim of our contribution is to differentiate between semantically coded and pragmatically conditioned meaning components of Polish and German sentence adverbs whose meaning is conventionally associated with hearsay. Hearsay is a subdomain of information source, understood as a notional category (i.e. a substance domain), and sentence adverbs are usually considered as lexical units. They are widespread at least in European languages, i.e. in languages which appear to have poorly developed grammatical evidentiality. We do not want to enter the discussion on what should be regarded as a grammatical(ized) or as a lexical unit; but in order to not obscure what we want to properly show, it seems necessary to begin with some general remarks on the relation between 'evidentiality' and 'information source.'

Aikhenvald's original (and widely cited) definition of evidentiality goes as follows: "Evidentiality proper is understood as stating the existence of a source of evidence for some information; that includes stating that there is some evidence, and also specifying what type of evidence there is" (Aikhenvald 2003: 1; cf. also Aikhenvald 2004: 3). On the one hand, this formulation prima facie captures evidentiality as a substance domain (just as, say, 'modality' and 'aspectuality' are notional domains vs. 'mood' and 'aspect' being grammatical categories with diverse paradigmatic oppositions in many languages). Aikhenvald's practice has been to treat evidentiality as a grammatical category while naming the substance domain behind it information source (cf. Aikhenvald 2004; 2007; 2014). She has repeatedly emphasized that evidentiality has to be distinguished from information source more or less in the same way (and for analogous reasons) that linguists distinguish between tense vs. time, or gender vs. sex. The former terms are related to (usually tightly organized) paradigmatic subsystems, which languages may have or which they may lack, whereas the latter terms are related to knowledge about distinctions in the "real world,"

which any language is presumably able to express but with different positions on a lexicon—grammar cline (however it may be conceived of) and different degrees of morphosyntactic elaborateness (i.e. of overt complexity).

Many other researchers have treated evidentiality as a notional domain, although hardly ever has a justification for the treatment of evidentiality as a substance domain been argued for as explicitly and convincingly as in Boye and Harder (2009). Recently, Aikhenvald has, to this extent, specified her conception of evidentiality: "Evidentiality' is grammaticalized marking of information source. (...) 'evidentiality' is a linguistic category whose real-life counterpart is information source" (2014: 1–2). This clarifies things at least terminologically, and this phrasing reads like a reaction to a cognitive-functional approach toward evidentiality advocated for, among many others, by Boye and Harder (2009) as well as by ourselves. Thus, if we henceforth use the term 'evidentiality' ('evidential meaning' and so on) and apply it to such units as sentence adverbs, and if this causes discomfort for the reader, the term may be replaced by '(reference to) information source.'

In abiding by a notional conception of evidentiality, we do not deny that there are differences between evidential markers with a (more) grammatical status and markers with a (more) lexical status. In particular, Aikhenvald is certainly right when she says that lexical units (like sentence adverbs) are richer (or more specific) in content and, for this reason, may prove to be less suitable as ubiquitous, "handy" indicators of information source (cf., for instance, Aikhenvald 2004: passim; 2014: 28). In certain respects, our analysis of data from Polish and German following below confirms this assumption. However, additional and individual meaning components (beside a reference to hearsay) do not invalidate the fact that lexical means ('function words') happen to be capable of marking evidential **functions** (or: reference to information source), which lie at the basis of taxonomies or the classification of systems of evidential markers, among others the systems described in Aikhenvald (2004). These functions may also be considered as the "linking members" between grammatical evidentials and lexical markers of information source, both in terms of their often observed diachronic (etymological) connection and in terms of core notions shared by the semantics of grammatical and lexical means. Usually the evidential functions of grammatical markers are, as it were, inherited from their lexical (or circumlocutional) sources (e.g. speech act or perceptive verbs with or without complementizers) after all other, more individual meaning components have been "stripped away" from the latter ones. This seems to be a tenet of studies on typical grammaticalization scenarios. Apart from such typical scenarios and on a purely synchronic level, one observes that, for instance, adverbs whose primary function is to indicate hearsay share this core meaning with affixes or auxiliaries, although the fact that adverbs are not obligatory parts of a language's morphosyntax may lead to other consequences than those discussed at length in Aikhenvald's publications and in the majority of papers that deal with bound or cliticized morphology indicating evidential functions.

Moreover, some statements made by Aikhenvald herself arguably show that there is no difference in principle between markers acknowledged by her as grammatical evidentials and other markers of information source. First, "[t]he scope of grammatical evidentials is usually the clause, or the sentence. Only very occasionally can a noun phrase have its own evidentiality specification, different from that of a verb" (Aikhenvald 2014: 2-3, see also p. 16). All the adverbs that are the topic of our analysis below are characterized by scoping over clauses. Later, Aikhenvald continues her argument by saying: "The choice of a grammatical evidential often depends on the mood or tense of the clause (...). The choice of a parenthetical or an adverb depends on what the speaker wants to say. A parenthetical, an adverb, or a modal verb can have an NP or a whole clause in its scope. For grammatical evidentials, these options are restricted" (2014: 28). Whilst admitting this, the fact that sentence adverbs (among them those marking hearsay) often prove to be restricted by sentence mood, or illocutionary properties of the utterance, in a similar way has to be reckoned with. For instance, they cannot, as a rule, be used in imperatives (see 2.1; Wiemer 2015a: 226-235). The reasons for such parallels in grammatical distribution are surely to be found, again, in a common semantic core shared by grammatical evidentials and sentence adverbs with evidential functions. Furthermore, note that Aikhenvald speaks about scope properties in syntactic terms. Actually, any evidential marker takes scope over a proposition (either an explicit or an implicit one). This scope property is defined on semantic grounds, and one should be careful about distinguishing syntactic from semantic scope (see 2.1). In semantic terms, reportive adverbs basically do not differ from evidential affixes or clitics.

Second, "[t]he conventionalized attitude to hearsay as a source of information determines whether or not a reported evidential, or a speech report in general, has epistemic extensions" (Aikhenvald 2014: 14). This is actually the central point we want to make, namely: can the relation between a reportive meaning and epistemic implications be generalized (a) spanning different hearsay adverbs (i) in the same language or (ii) in language comparison, and (b) can it be generalized independent of higher-order pragmatic considerations rooted in attitudes to communicative situations and cultural background, including knowledge about discourse genres? Aikhenvald herself shows that languages manifest considerable divergence when it comes to the pragmatic relation between reference to hearsay and epistemic support (or lack thereof); and she seems to admit that this property is shared by grammatical and lexical (or circumlocutional) devices of marking information source. We will take up this issue in section 4.

Finally, concerning syntactic properties of unbound or weakly bound markers of evidentiality, Aikhenvald (among many others) seems to take it for granted that a unit declared as a 'particle' in some descriptive work (and having an evidential function as its primary meaning) can be accepted as a grammatical evidential, whereas if it goes under the label of 'sentence adverb' (other things being equal) it is not thus accepted. This practice does not seem to have ever been grounded in a cross-linguistically applicable procedure reliable enough to validate and compare what linguists classify as particles vs. (sentence) adverbs. To the best of our knowledge, claims about particles tending to group into paradigmatic sets (replacing, but not combining in given syntagmatic slots) and the (sentence) adverbs not showing any such tendency have not been sufficiently substantiated empirically; nor can labels like 'particles' vs. 'sentence adverbs' in linguistic descriptions (grammars, textbooks, etc.) be accepted as reliable sources of a typologically meaningful opposition of word classes. More often than not, it seems that linguists classify unbound units as 'particles' just because they behave like clitics, and this qualification seems to suffice for these units to be considered as grammatical markers,<sup>1</sup> while nonclitic units pass as '(sentence) adverbs' and are, for this reason, relegated to the (more) lexical pole on a lexicon-grammar cline. We think that this practice is vulnerable, first and foremost for two reasons: (i) because particles (being clitics or not) and adverbs (provided some independent, empirically justifiable distinction is made at least for one language or the comparison of a small amount of languages) happen to share important distributional properties; and (ii) because, from a typological viewpoint, a distinction between adverbs and particles could not so far be based on any well-established empirical ground (Boye and Harder 2009: 20f.). In other words, we lack comparative concepts for distinguishing such morphosyntactic classes.

In the following, we will refer to the reportive markers of our study as 'sentence adverbs' (not as 'particles') on the basis of some language-specific criteria and for the sake of convenience (see 2.1); but this does not prejudice any stance concerning more generalizable crosslinguistic concepts. The important thing is that we are interested in distinct lexical units with a conventionalized reportive meaning component. In this respect, we stick to the four criteria of evidentials formulated by Anderson (1986: 274f.), namely:

- [A] "Evidentials show the kind of justification for a factual claim which is available to the person making that claim (...)."
- [B] "Evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim ABOUT

<sup>&</sup>lt;sup>1</sup> For this practice cf. Aikhenvald (2004: 70 and passim; 2014: 20, 28), Alcázar (2010). The same caveat holds for auxiliaries.

SOMETHING ELSE [i.e. the propositional content of the utterance; emphasis original, BW/AS]."

- [C] "Evidentials have the indication of evidence (...) as their primary meaning, not only as a pragmatic inference."
- [D] "Morphologically, evidentials are inflections, clitics, or <u>other free syn-</u> <u>tactic elements</u> (not compounds or derivational forms)." [emphasis added, BW/AS].

These criteria are compatible with Aikhenvald's (2003; 2004) original definition of evidentiality cited above, and it is in accordance with the treatment of evidentiality as 'epistemic justification' in Boye (2012).

Our main concerns in this article are restricted to the following. We will be dealing with Polish and German equivalents of Engl. allegedly, reportedly, supposedly, i.e. Pol. podobno, ponoć, rzekomo, jakoby and Germ. angeblich. Although translation often poses a problem (see 2.2.1), these units are the closest equivalents to these English sentence adverbs both in terms of meaning and of syntactic behavior. Therefore, we will use the short-cut 'ALLEGEDLYunits.' Our first concern is to determine which parts of their meaning are really coded, i.e. constitute contextually independent components of the meaning of these units, and which parts are only associated, in some way or other, as contextually inferable. In other words: we are examining the distinction between semantic (= coded) and pragmatic (= inferred) meaning components in the (Neo-)Gricean sense (cf. Levinson 2000; Huang 2007).<sup>2</sup> In section 2, we will present the basic facts about these units, starting with what one might call the "received opinion" in grammars and reference books of Polish and German, respectively (2.1). Furthermore, we will present corpus-based facts that diverge from this opinion and investigate the problems arising from this clash (2.2). In Part 2 of the article, section 3 will be devoted to a reinterpretation of these facts in which we will propose a methodologically coherent analysis mainly in terms of Neo-Gricean pragmatics.

Our second concern consists in moving toward a unified approach to the description of units in different languages, i.e. we will ask for a possible *tertium comparationis*, which is indispensable for any contrastive analysis and, as we think, for a methodologically sustainable and more useful lexicographic account of the units in question. Section 4 contains considerations regarding this account and emphasizes some parallels between grammatical and lexical markers of information source. Here our contribution links up with other case studies carried out on similar units in other languages, such as, for instance,

<sup>&</sup>lt;sup>2</sup> The coded—inferred distinction is accepted in other approaches within pragmatics too. Cf., for instance, Ariel (2008), who decidedly advocates Relevance Theory. It is, furthermore, accepted in functional frameworks such as, for instance, Boye's (2012) typological investigation of epistemic support and epistemic justification (= evidentiality), where a distinction between situation-dependent and conventional(ized) meaning is made consistently.

Alcázar (2010) and Korta and Zubeldia (2014) on Basque omen, Travis (2006), Olbertz (2007), and Cruschina and Remberger (2008) on hearsay markers based on sAY in various Romance varieties, or Wiemer (2010a, b) on Lithuanian *esq*. Section 5 summarizes the findings and presents a schema picturing roughly the layered meaning structure of ALLEGEDLY-units.

# 2. Reportive adverbs in Polish and German and their epistemic overtones

In 2.1, we summarize the kind of information one gets concerning the meaning and use of ALLEGEDLY-units in standard works on Polish and German. We also provide brief remarks on why we classify these units as sentential adverbs (and not as particles) and comment on epistemic overtones. After that, in 2.2, we present some observations based on corpus data concerning these units and formulate the questions to be pursued further in section 3.

# 2.1. The "received view" on allegedly-units in Polish and German

Polish and German AllegedLy-units have usually been discussed (or simply listed) among markers of epistemic modality, not of evidentiality. In accordance with this, such units are very often described as a means of "attenuating" the speaker's epistemic attitude toward their assertion, in particular as markers of distrust or disclaimers of the speaker's own responsibility for the veracity of the conveyed propositional content. Briefly: traditional descriptions (and lexicographic practice) normally assumed the primary purpose of ALLEGEDLY--units to lie in their epistemic load; in many descriptions the reportive function is not acknowledged at all, or it is characterized as subordinate to epistemic evaluation.<sup>3</sup> This has been due partially to the fact that evidentiality, even as a conceptual domain, only recently started to raise the interest of linguists (beyond, first of all, Amerindian languages) - whereas the study of epistemic modality is quite time-honoured - and reference to the cognitive or communicative basis of one's judgment and assessment of knowledge, or belief, states in terms of certainty have been mixed up for quite long a time (and still often are). But a more objective reason for the traditional treatment of evidential adverbs (particles and other 'function words') can be seen in the often observed interference of evidential and epistemic functions in the meaning potential of the same units, functions which indeed happen to be difficult to disentangle in analyses with a semasiological starting point (Wiemer and Stathi 2010: 277).

<sup>&</sup>lt;sup>3</sup> For an overview on research in Poland cf. Wiemer (2006: 14–17).

Moreover, already some cursory "browsing" through the literature makes it obvious that the treatment of ALLEGEDLY-units (at least as for Polish and German) diverges considerably when it comes to determining their membership to some kind or other of minor parts of speech. Such lexemes are sometimes counted among epistemic adverbs (mainly by authors writing in English, cf., e.g. Wierzbicka 2006; Abraham 2010, but cf. also Zaron 1993 on sentence adverbs), epistemic particles (e.g. Grochowski 2003: 220; Żabowska 2006, 2008; Grochowski et al. 2014), or 'modal modulants' (Pol. modulanty modalne in Jodłowski 1976 and Laskowska 1992). In German linguistics, lexemes like angeblich, vorgeblich and mutmaßlich are usually subsumed under 'modal words' (Germ. Modalwörter; e.g. Admoni 1972; Bartsch 1972; Lang 1979; Heidolph et al. 1981; Helbig and Helbig 1990) or modal particles (e.g. Ballweg 2007; Rytel-Schwarz et al. 2012). However, Eisenberg (2006) included them in the adverb category. Many authors mention that these uninflected lexemes have homonyms among adjectives; for Zifonun et al. (1997: 1003f., 1131f.) the ability of being inflected is essential, so the units are treated as adjectives with sentence adverbial function.

One might, of course, say that labels are just labels, and as long as there are no clearly defined criteria of divisions into minor parts of speech, a distinction between 'sentence adverb' and '(modal) particle' remains useless. Going into more subtle distinctions between syntactic classes of 'function words' (and whether sentence adverbs belong to them) is beyond the goals of this paper. What, however, both particles and sentence adverbs have in common is that they take semantic scope over propositions. It is certainly this property which has been causing a mess in terminology and actual practice. In the following, we will consider ALLEGEDLY-units as sentence adverbs. For these units, all or at least most of the following properties hold true: (a) They do not constitute phrasal heads, can hardly be coordinated among each other and do not at all allow for asyndetic combinations. (b) They can be neither negated, nor replaced by pronouns. (c) Most of them can answer yes-no questions. (d) Most of them cannot be used in questions, imperative or optative clauses.<sup>4</sup> (e) They can be paraphrased by matrix clauses with clausal arguments (e.g. Angeblich P. 'Allegedly P'. > Jemand gibt an, dass P. 'Somebody asserts that P'.). For an overview concerning German cf. especially Helbig and Helbig (1990: 12-29), the Polish Allegeply-units have been included into Grochowski et al. (2014),

<sup>&</sup>lt;sup>4</sup> This property applies to imperatives and optative utterances without restriction, but not for yes-no questions. For instance, Pol. *podobno* and Germ. *angeblich* can readily be used in real and rhetoric questions (e.g., *Podobno wygrałeś ten konkurs?*; *Angeblich hast du den Wettbewerb gewonnen?* 'Allegedly, you won the competition, didn't you?'), this, however, does not apply to Pol. *rzekomo* and *jakoby* (Grochowski et al. 2014: 101–107). This occurrence can be explained: questions (rhetoric or not) encode propositions, whereas imperatives and optatives do not (cf. Boye 2012: 187–195; Wiemer 2015: 229–232).

which is the most recent systematic lexicon of Polish particles (defined as such and not as sentence adverbs).

Furthermore, we should be aware that semantic scope applies not only to explicit pieces of utterances, but also to implied ones. In other words: the proposition over which reportive sentence adverbs scope can remain implicit, as occurs, for instance, in dialogue where only new (or re-actualized) information is uttered (Boye 2012: 183–185). By the same token, the scope of reportive sentence adverbs is also propositional if, from a syntactic viewpoint, such an adverb modifies a unit at lower than clause level. For instance, ALLEGEDLY-units often occur in linear sequence with NP-internal attributes, as in the following (constructed) example:<sup>5</sup>

## (1) They found the money in his allegedly new car.

At face value, allegedly here modifies the adjective new, nothing more. However, NP-internal modification implies a proposition which can be paraphrased in a simple predication like 'allegedly, his car was new.' In other words: in linear syntax, reportive sentence adverbs can modify almost any explicitly uttered type of constituent (from clause level down to NP-internal modifiers), and if this constituent happens to be at a level lower than the clause, it represents, so to say, a truncated proposition inserted into a syntactically higher node. Thus, in the following, 'wide' or 'narrow scope' means scope in a syntactic sense, which refers to explicitly expressed constituents. This, however, should not invalidate the point that if a marker is ascribed propositional scope, scope must be treated as a semantic notion. Aikhenvald drew attention to the fact that grammatical evidentials are less versatile than lexical markers of information source exactly in the syntactic sense of scope, insofar as the former grammatical evidentials cannot usually be used as NP-internal modifiers (see section 1). Here indeed we observe a salient difference of syntactic distribution between grammatical and lexical markers of information source.

## 2.2. Corpus-based revisions

Let us confront these received views with empirical facts. In a sense, and similarly to Korta and Zubeldia (2014), we intended to check our native speaker intuitions about the alleged epistemic overtones of hearsay adverbs on more objective grounds. We did not perform experiments (as did Korta and Zubeldia), but we conducted a thorough analysis of corpus data in both languages. Contrary to Alcázar (2010) who used a parallel corpus with one-sided translations from Spanish into Basque, the corpora we used were monolingual (see References); but

<sup>&</sup>lt;sup>5</sup> For further examples cf. Wiemer (2010c: 95f.; 2015: 1.2.1). Scope is treated as a semantic notion by Korta and Zubeldia (2014: 404f.), too.

they were comparable insofar as they were composed, more or less, of the same text genres (see 2.2.2). Comparability manifested itself in the fact that the relative frequency with which the Polish and German hearsay adverbs appeared in corpus hits are distributed over identical registers and text genres (see below).

## 2.2.1. Reportive meanings, epistemic scales and functional markednes

We should start by emphasizing that all five units (Pol. *podobno*, *ponoć*, *jakoby*, *rzekomo*, Germ. *angeblich*) code reference to hearsay as an inherent component of their lexical meaning. This can be easily checked by applying an ordinary test of dissent showing that the hearsay component cannot be cancelled. Compare, for instance, *podobno* in (2) and *angeblich* in (3). If (2c) and (3c), respectively, are to form a coherent piece of discourse with either the (a)- or the (b)-sentence, the (c)-sentence would be deviant with the (a)-, but not with the (b)-sentence:

- (2a) Jan podobno zgubił swój portfel.
- (2b) Jan zgubił swój portfel.
- (2c) Ale nikt mi o tym nic nie mówił./Ale nic o tym nie słyszałem.
- (3a) Jan hat angeblich sein Portmonnaie verloren.
- (3b) Jan hat sein Portmonnaie verloren.
- (3c) Aber niemand hat mir etwas darüber gesagt./Aber ich habe nichts davon gehört.
  - (a) 'Supposedly, Jan lost his wallet.'
  - (b) 'Jan lost his wallet.'
  - (c) 'But nobody told me anything about that./But I haven't heard anything about that.'

The explanation can only be found in the semantics of podobno, angeblich and supposedly, respectively.<sup>6</sup> We yield the same result for Pol. *jakoby*, *ponoć* 

<sup>&</sup>lt;sup>6</sup> The (c)-sentence sounds somewhat strange after the (b)-sentences too. This effect is, however, of a merely pragmatic nature (in the sense of being inadequate and uninformative) and only as long as the speaker would not continue by affirming, for instance, that they were eye witness to how Jan lost his wallet (and did not need to rely on hearsay): Pol. (*Tylko*) sam to widziałem/ Germ. Das habe ich (einfach) selbst gesehen 'I (just) saw it myself'. This, however, would not be counterevidence to an inherent hearsay component of these adverbs since one's basis of judgment can always be strengthened – with all the implications this may result in for the speaker's knowledge or belief state, which are the subject of our analysis in section 3. (Cf. also Yildiz 2015 on the relation between knowledge, epistemic judgment and hearsay.)

and *rzekomo* (as we would, we suppose, for their closest equivalents in English; see fn. 8).<sup>7</sup> All these adverbs can thus confidently be acknowledged as markers of hearsay (regardless of whatever components they may additionally imply).

However, although these adverbs are often considered as close synonyms – both within the same language and in language comparison – they often cannot faithfully be translated by each other, nor by Engl. *allegedly*.<sup>8</sup> One of the reasons for this resides in the fact that the reportive function of these adverbs is often accompanied by the speaker's<sup>9</sup> epistemic assessment toward the propositional content of the message (P); by using one of these units, the speaker can also transmit their varying commitment as to whether *P* is true. Above that and regardless of such "overtones", we have to distinguish hearsay adverbs from adverbs whose function merely consists in conveying the speaker's epistemic stance toward P, without indicating hearsay. Engl. *probably, certainly, presumably*, Germ. *wahrscheinlich, sicher(lich), vermutlich*, Pol. *prawdopodobnie, pewnie, przypuszczalnie*, for instance, belong to the latter class of adverbs.

Now, at first sight, corpus data lead to the impression that the Polish and German reportive adverbs are associated with epistemic assessment to a varying extent: with some of them, e.g. *podobno*, epistemic overtones arise only via some sort of conversational implicature, while for others, e.g. *rzekomo*, they seem to form part of their conventionalized meanings (Wiemer 2006). Compare the following examples:

(4) – (...) jak jest sezon, to ja robotę mam zawsze. Ten, dzisiaj też mam po dwudziestej pierwszej dzwonić do faceta, bo podobno wczoraj do mnie dzwonił, no ale nie mógł się dodzwonić. Nie wiem, dlaczego. Słuchawka może była źle odłożona. – Bardzo możliwe. (PWN, Rozmowa o meblach ...; 2001).

'- in the season, I always have work. Like, today, I'm calling this guy after nine too, because he {**podobno**} called me yesterday, only he couldn't get through. I don't know why, though. Maybe the receiver was replaced the wrong way. – Quite possible.'

<sup>9</sup> By default, we use 'speaker' to mean the speaker of the actually occurring (reporting) speech event. This speaker cannot be coded in the same proposition by which they retell previous speech acts, but simultaneously the speaker is, of course, a conscious subject whose judgment may differ from the judgment of the author(s) of the re-narrated speech event (*P*). In this case, this subject's stance toward P is neutral ('agnostic'), epistemic judgment is suspended (see 2.2.2 and section 4).

<sup>&</sup>lt;sup>7</sup> Cf. Korta and Zubeldia (2014: 405f.) for a similar test and results carried out on Basque *omen*.

<sup>&</sup>lt;sup>8</sup> In some examples, *reportedly* or *supposedly* seem to be more adequate translations of the respective Polish or German unit. In passing, it turned out that all three English units bear different overtones similar to the features we are concentrating on here for Polish and German. However, any examination of these differences in English is beyond our present concern. In order to not evoke inadequate associations, we refrain from translating the respective unit in the examples, instead we place this unit into the translation in mathematical brackets {}; alternatively one could have used a gloss like {hs} for 'hearsay'. (For an analogous point concerning Basque *omen* cf. Korta and Zubeldia 2014.)

(5) Panuje powszechne przekonanie, że była NRD – jakoby, tak jak PRL, dziesiąta potęga przemysłowa świata – została w wyniku zjednoczenia całkowicie odprzemysłowiona. (PWN, Polityka, 10.02 (40), 2004)
'It is generally believed that the former German Democratic Republic – {jakoby}, literal Polityka, polityka

like the Polish People's Republic, the 10th industrial power in the world – was completely de-industrialized as a result of the union.

(6) W tej chwili ważniejsza jest możliwość wyeliminowania zjawiska rejestracji kradzionych samochodów jako nowych, **rzekomo** kupionych w salonie. (PWN, Życie Warszawy 17.02.2002)

'At present, it is more important to eliminate the phenomenon of registering stolen cars as new ones, {**rzekomo**} bought in a car showroom.'

It might even appear to be the case that the three Polish adverbs can be ordered along degrees of epistemic strength, according to a Horn-scale. In Wiemer (2006), these differences were captured by paraphrases in the vein of Natural Semantic Metalanguage (following Wierzbicka 1971); see Figure 1.

Figure 1: Meaning components of Pol. *podobno, jakoby,* and *rzekomo* (according to Wiemer 2006: 24, 39, 43)

Podobno P.	Jakoby P.	Rzekomo P.				
(i) 'I want to say what someone else says.' (= reportive component)						
(ii) 'I don't say I know that P' (= epistemic component, agnostic stance)						
(iii) 'I think that P might be	hat P might be (iii) 'I think that P can be (iii) 'I think that P is					
not true.'	not true.' true.'					
1		1				

increase of uncertainty regarding the veracity of P

In German, only one undisputable and sufficiently frequent hearsay adverb, *angeblich*, exists. There are two other adverbs, *vorgeblich* and *mutmaßlich*. These are, however, far less frequent, more restricted in terms of text genres and register, and their relation to hearsay is not as clear as it is with angeblich (see below). Probably for these reasons, German is normally mentioned among languages which have only one hearsay adverb, namely *angeblich*. Moreover, according to Ramat and Ricca (1998: 270, f. 30), "German *angeblich* tends to be more often employed to express distrust than neutral non-commitment." This characterization fits well with the received opinion concerning this adverb which we surveyed in 2.1.

However, in her corpus-based study on Polish-German translational equivalence, Socka (2014; 2010) showed that **any** of the aforementioned hearsay markers can become void of epistemic overtones in specific contexts. The "negative" epistemic default (expression of doubt) can be cancelled even for Pol. *rzekomo* (see ex. 7–8) and Germ. *angeblich* (see ex. 9–10).

(7) Przy określaniu wymogów wizowych głównym argumentem ma być nie poziom rozwoju albo więzi historyczne z Unią, ale liczba nielegalnych imigrantów przedostających się do krajów członkowskich UE. Według niektórych dyplomatów państw Unii wyjątkowo trudny może być zatem przypadek Rumunii, skąd rzekomo wciąż napływają nowi imigranci. Jędrzej Bielecki z Brukseli. (PWN, Rzeczpospolita, 01.15.2000)

'While defining visa requirements, the main argument is not to be the level of development or historical bonds with the Union, but the number of illegal immigrants getting into the EU member states. According to some diplomats from the Union countries, the case of Romania, where new immigrants {**rzekomo**} constantly come in from, may be exceptionally difficult. Jędrzej Bielecki from Brussels.'

(8) Teraz okazuje się, że te dwa hektary Deniz przekazał spółce RFC. Rzekomo do przekazania gruntów doszło w zamian za długi. Deniz miał być winny RFC ok. 25 mln zł. Obecne władze spółki Ratusz Wilanów (...) twierdzą, że odbyło się to z naruszeniem prawa. (PWN, Fakt, 01.15 (12), 2004).

'As it now turns out, Deniz made these two hectares over to the RFC company, {**rzekomo**} paying off his debts this way. Deniz was said to owe RFC 25 million PLN. At present, the authorities of the company Wilanów Town Hall claim that this happened by violating a law.'

(9) Altreifen im Feuer. Fall für die Polizei. Gnoien. Wegen eines Gartenfeuers rückte gestern ein Streifenwagen auf einem Grundstück bei Gnoien an. Die Polizei war verständigt worden, weil dort angeblich nicht nur Gartenabfälle verbrannt wurden. Zeugen berichteten, dort würden Altreifen und Dachpappe brennen. Dies zu prüfen, rollte die Polizei an. (Cosmas, Nordkurier, 03.03.2012)

'Old tires on fire. A case for the police. Gnoien. A patrol car came to a plot near Gnoien because of a garden bonfire. The police were informed, because {**angeblich**} not only the garden waste was being burned. Witnesses told that old tires and tar paper were burning. The police came to check it out.'

(10) Bei der Borussia zeichnet sich ab, daß Scala schon in Kürze seinen Stuhl räumen muß. Als Nachfolger genannt wurden auch der beim spanischen Rekordmeister Real Madrid umstrittene Jupp Heynckes und Johan Cruyff. Dem Niederländer erteilten die Westfalen wegen **angeblich** allzu hoher Gehaltsforderungen jedoch bereits eine Absage. (Cosmas, Mannheimer Morgen, 12.05.1998)

'At Borussia, it is apparent that Scala soon will have to vacate his position. Jupp Heynckes, who is controversial also as the coach of Real Madrid, the Spanish champions, and Johan Cruyff have been mentioned as his possible successors. The Dutchman has already received a rejection from the Westphalians, {**angeblich**} because of his demand for too high of a salary.'

For a similar observation regarding Engl. *allegedly* cf. Ramat and Ricca (1998: 230). On the basis of their survey over sentence adverbs in European languages, they surmised that the epistemic value of the respective sentence adverb is influenced mainly by paradigmatic contrasts, i.e. by the presence (or absence) of alternative hearsay adverbs in the language, which, as it were, divide among each other the scale that corresponds to the arrow under Figure 1.

They furthermore assumed an analogy between merely epistemic adverbs and reportive adverbs (often implying a negative epistemic commitment towards P) to rest on Horn-scales, each with a marked and an unmarked member. With a privative opposition in mind, they assumed that the unmarked member frequently covers the meaning range of the marked one if the particular language lacks the latter, i.e. 'possibly' (unmarked) instead of 'probably' (marked) (Ramat and Ricca 1998: 228–230). Remarkably, according to this reasoning, in an opposition of merely epistemic adverbs, it is the marked member which is closer to the certainty-pole of the scale (see left part of Figure 2), while in an opposition of evidential adverbs the marked member is more neutral with respect to whether the speaker holds P true or not (see middle part of Figure 2). In trying to interpret Ramat and Ricca's European-wide findings, we may subsume that, on an epistemic scale, the marked member of either opposition is located closer to the certainty pole (relative to the opposite member(s)). This assumed parallelism is shown in Figure 2:

Figure 2: Horn-scale based analogy between epistemic and reportive adverbs

epistemic	reportive		
	'allegedly'	k i i i i i i i i i i i i i i i i i i i	< .5 P
		subjective assessment of	
≰ 'possibly / perhaps'	'reportedly'	likelihood of P being untrue	≈ .5 P
'probably'			< 1.0, but > .5 P

## marked member of opposition

The arrows indicate an increase of uncertainty as to whether P holds.

Pursuing this manner of thinking, we may presume that, with a pair (or set) of merely epistemic adverbs, this opposition results in certainty higher than 50% (prob P > 0.5) for the marked member ('probably'), the marked member of the reportive pair (set) is supposed to be simply neutral ('reportedly'), thus close to 50% (prob P  $\approx$  0.5), since its unmarked counterpart ('allegedly') has been observed to imply the speaker's distrust toward P being true, i.e. an epistemic value below 50% (prob P < 0.5). Thus, if Ramat and Ricca's findings are adequate, they imply an asymmetry not only in the relation between the respective pairs (sets) of adverbs, but also on the whole between the scales of merely epistemic adverbs, on the one hand, and reportive adverbs (with epistemic implicatures), on the other.

The general problem with considerations such as those developed by Ramat and Ricca lies in their basically intuitive nature of judgment. The authors worked with questionnaires but provided no method to test the adequacy of the stages on the assumed scale. This basic obstacle seems to have remained unresolved in the literature on epistemic modality (and wherever it interferes with evidentiality). It seems intuitively plausible to have gradients of epistemic commitment (certainty), but, as far as we know, we lack a method to really objectify such intuitive approaches (Lampert and Lampert 2000: ch. 5–6; Krause 2007: ch. 1–2; Boye 2012: 43–47, ch. 2; Rentzsch 2015: ch. 5; Yıldız 2015, among others).

Another objection might be that operating with a scale of epistemic (un) certainty in order to differentiate the meaning of lexemes, like allegedly-units, does not guarantee that we disclose those components of meaning (either coded or inferred) which are responsible for the subtle interplay between evidential and epistemic values. Thus, for instance, Danielewiczowa (2012: 49) points out that one cannot assume without proof that the meaning oppositions between such units are purely quantitative, i.e. that they may be captured just by different "amounts" of doubt, certainty or uncertainty. In fact, there are conspicuous and provable differences between the discussed linguistic items in terms of their affinity to syntactic constructions, text types, linguistic registers, or else. We believe that a usage-based account of such properties can make particular meaning components more accessible and, consequently, help to describe the meaning of each lexeme adequately. Contrary, however, to quite many exponents of usage-based linguistics, we also maintain that it is not only useful, but even necessary to make a distinction between semantic and pragmatic (or: coded vs. inferred) content if the aim is a functionally adequate and cross-linguistically applicable description of propositional markers (to which both evidential and epistemic markers belong).

## 2.2.2. A systematic corpus study

Now, in order to move out of a dead end, we propose to look at a particularly interesting kind of context (or text genre) in which the marker assumed as bearing the strongest epistemic load (Pol. *rzekomo*) or otherwise claimed to always include an indication of the speaker's negative assessment of P (Germ. *angeblich*) does not retain this additional meaning component. In other words: there are (con)texts for which Pol. *rzekomo* and Germ. *angeblich* lose (or: do not acquire) epistemic overtones, which have otherwise been treated as stable elements of their lexical meaning. These are contexts in which the speaker (author) utters statements for which they can be made juridically responsible, such as reports on court trials, activities of the police or similar. Apart from (7–10), see the following examples:

#### Polish

(11) Francja. Oskarżony rosyjski marynarz. Przed sądem w mieście Brest na zachodzie Francji rozpoczął się proces (...) drugiego dowódcy na statku Melbridge Bilbao, który rzekomo nie zapobiegł osadzeniu jednostki na mieliźnie na wodach Zatoki Mojańskiej. 43-letni Władimir Czernyszow został oskarżony o spowodowanie zagrożenia życia i zdrowia załogi przez pogwałcenie podstawowych obowiązków i zasad sztuki nawigacyjnej – napisano w akcie oskarżenia. (PWN, Rzeczpospolita 2002, Nr 01.09) 'France. Russian officer accused. The trial began in the city of Brest in Western France of (...) an officer on the ship Melbridge Bilbao, who {rzekomo} did not prevent the ship from running aground in the Bay of Molene. Vladimir Tshernyshov, aged 43, is accused of endangering the lives of his fellow crew by flouting basic duties and rules of the art of navigation – the indictment states.'

#### German

(12) Das Gericht läßt derzeit auch jene bulgarische Freundin Crapanzanos suchen, die am Tatabend angeblich kurz vor dem Opfer die Bar verließ. Für die Verteidigung ist denkbar, daß diese Frau die Täterin sein könnte. (...) Die Verhandlung wird am Mittwoch um 9 Uhr fortgesetzt. (Cosmas, Mannheimer Morgen, 14.07.1995)
'At present, the court orders the search for the Bulgarian girl friend of Crapanzano's, who in the night of the act {angeblich} left the bar shortly before the victim. For the defense, it is conceivable that this woman could have been the offender. (...) The trial is to be continued on Wednesday at 9 a.m.'

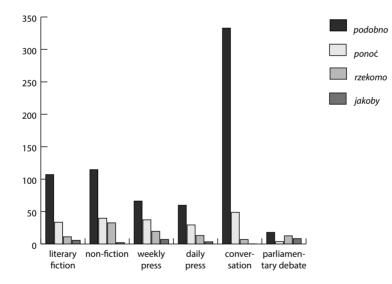
Celle (2009: 285) observed an analogous behavior of English *allegedly*: "By using *allegedly*, the speaker (...) disclaims responsibility for the validity of each accusation until facts are established by the investigation or the trial. This does not mean, however, that the speaker does not believe these accusations (...). It should be stressed that unlike *reportedly*, *allegedly* is extensively used in reports of criminal cases. As noted by Palmer (1986: 73), »it is important for the writer to report what has been said in criminal cases without being caught by the laws of libel.«" In the following, we discuss the results of corpus research on three text types from the National Corpus of Polish (NKJP), namely, daily press, literary fiction, and parliamentary debates. From each text type, 50 items for each of the lexemes *podobno*, *ponoć*, *jakoby*, and *rzekomo* have been excerpted. Table 1 and Figure 3 give an overview of the frequency of Polish hearsay adverbs in different discourse types and text genres.

As we see, the Polish sentence adverbs differ in terms of distributional and textual properties. The largest frequency differences between the four Polish hearsay adverbs can be observed in everyday conversation, the smallest in parliamentary debates.

Corpus	Amount of words	podobno	podobno / per 1 million words	ponoć	<i>ponoć</i> / per 1 million words	rzekomo	<i>rzekomo</i> /per 1 million words	jakoby	<i>jakoby</i> / per 1 million words
Literary fiction	23,740,774	2,540	107.0	797	33.6	264	11.1	133	5.6
Non- fiction	8,349,230	957	114.6	332	39.8	272	32.6	133	2.1
Weekly press	69,949,916	4633	66.2	2616	37.3	1364	19.5	489	7.0
Daily press	68,102,763	4,066	59.7	2,044	29.4	887	13	228	3.4
Conver- sation	573,830	191	332.8	28	48.8	4	6.9	0	0
Parlia- mentary debate	102,080,651	1827	17.9	377	3.7	1283	12.6	845	8.3

Table 1: Frequency of Polish hearsay adverbs in some on-line corpora

Figure 3: Frequency (per million words) of Polish hearsay adverbs (based on Table 1)



*Podobno* is by far the most frequent unit. Its most typical register is everyday conversation (see ex. 4). The adverb occurs most frequently in main clauses. The reported information is simply marked as hearsay. The identity of the original speaker is not relevant and hence not specified. In the daily press, *podobno* is typically used in texts concerning, for example, travelling, holiday destinations, history, and sightseeing (see ex. 13). In parliamentary debates, it typically introduces truisms or marginal notes (see ex. 14). However, from an agnostic stance a skeptical or polemic undertone can emerge via implicature (see ex. 15).

- (13) Podobno w upalne noce węgorze wychodzą z wody, by żerować w "grochwinie". Podobno potrafią także pokonywać znaczne odległości poruszając się po lądzie. <u>Nie</u> wiem, ile jest prawdy w tych opowieściach, wiem natomiast jedno – nocny połów węgorzy ma w sobie zawsze iskierkę tajemniczości. (Trybuna Śląska, 28.06.2002) '{Podobno} on hot nights, eels come out of the water to prey on pea haulm. {Podobno}, they can also cover long distances moving on land. I don't know how much truth there is in these stories. I know one thing – night fishing for eels always has a spark of mystery.'
- (14) To inni, co ten wniosek złożyli, ludzie tworzący dziś AWS się obudzili. Tak na oko o 10 lat za późno. Choć **podobno** lepiej późno, niż wcale. (Sejm, 21.07.2000)
  'It is others who submitted this motion the people who now form the AWS have woken up, more or less ten years too late. Although, {**podobno**}, better late than never.'
- (15) Gdyby zechciał pan sprecyzować to pytanie, które podobno pan zadał i na które pan nie uzyskał odpowiedzi? (Sejm, 16.02.2000)
  'Could you please specify the question which you {podobno} asked and which wasn't answered?'

*Ponoć* in many cases also functions as a hearsay marker with agnostic epistemic stance. For this reason, it might appear as a synonym of *podobno* (Wiemer 2006: 27f.). However, it differs from *podobno* in its much lower frequency and a more literary flair, which also comes through in official text genres. Additionally, it is more often used in persuasive contexts which induce that the proposition in the scope of *ponoć* is false or doubtful. Behind this slight difference in usage, Grochowski et al. (2014: 106f.) recently claimed to have detected a rather context-independent difference in meaning: contrary to *podobno*, *ponoć* does not necessarily imply that the speaker's epistemic stance is agnostic. Thus, for instance, *ponoć* can become similar to *jakoby* (see below), since it sounds normal in contexts in which a reported assertion is rejected by the speaker and in which *ponoć* cannot be replaced by *podobno*. Compare an example from Grochowski et al. (2014: 107):

(16) Śmiałem się z tego, bo niektórzy wpierają nam nawet,

że **ponoć** (\*podobno) sprzedajemy dom. To bzdura.

comp {*ponoć* / \**podobno*} sell:ipfv.prs.1pl house.acc

'I laughed at this since some people even are arguing us into believing that we  $\{ponoć/*podobno\}$  are selling our house. This is nonsense.'

This semantic difference in comparison to *podobno* would bring *ponoć* close to Russ. *jàkoby*, discussed in section 4. In our opinion, however, both *podobno* and *ponoć* can be used in contexts which demonstrate the proposition in scope of the hearsay adverb to be false (as in ex. 16). *Ponoć* is more likely to be used here because of its affinity to official situations, as mentioned above. Apart from that, we should first ascertain ourselves that the difference between

*podobno* and *ponoć* does not rise rather from yet another property, namely: that *podobno* is not (or much less) able to be used as a propositional modifier if the perspective is switched from the actual speaker to the person(s) to whose utterances (assertions) the speaker refers to. Examples like (16) can also be interpreted in this way. Surely, further research is needed here.

Let us now continue with *jakoby*. In general, it is clearly less frequent than the other hearsay adverbs.<sup>10</sup> Its frequency is highest (8.3 per one million words) in parliamentary debates (in inquiries, answers, and corrections, see ex. 17), although it can be found quite often in the daily press, in particular in letters to the editor (see ex. 18), too. *Jakoby* is preferred in polemic, persuasive contexts in which the speaker not only doubts the reported original utterance but also conveys their own opinion and tries to convince the addressee. Typically, the original utterance is reported and subsequently fought by means of arguments. Usually, the original speaker is explicitly (sometimes metonymically) mentioned, or even directly addressed. Furthermore, "[q]uite often *jakoby* is used as a means of letting the hearer/reader know that the metaspeaker is seeing through the intentions of the original speaker(s) (...). This probably explains the often ironic flair of utterances containing *jakoby*" (Wiemer 2006: 40; see ex. 18).

(17) [...] jeszcze jedna kwestia natury ogólnej, (...) tj. częsty zarzut, (...) że ustawa jakoby miałaby zawierać takie rozwiązania, które nie stwarzają pola do tego, ażeby wprowadzić po wejściu Polski do Unii Europejskiej stawki konkurencyjne dla polskich przedsiębiorców. Nie podzielam takiego stanowiska, wręcz przeciwnie, uważam, że ta ustawa zawiera rozwiązania korzystne dla polskich przedsiębiorców. (Sejm, 23.01.2004)

'One more general matter (...) which is a frequent objection: (...) that the bill {**ja-koby**} contains solutions which do not leave scope for introducing competitive rates for Polish business after Poland joins the European Union. I don't share this view; on the contrary, in my opinion this bill contains solutions favorable to Polish entrepreneurs.'

(18) Czy to źle, że naszą postawą pokazujemy, iż nie chcemy być marionetką w rękach możnych tego świata? (...) najpierw dostaliśmy zielone światło, a potem decyzjami fitosanitarnymi próbowano nam zablokować wejście na wspólny rynek. Nagle nasze świnie zapadły jakoby na opryszczkę, a owoce miękkie na jakąś inną cholerę. (Słowo Polskie Gazeta Wrocławska, 29.04.2004)

'Is it bad that we show with our conduct that we don't want to be a puppet in the hands of the high and mighty of this world? (...) at first we got the green light and then there were attempts via phytosanitary decisions to block our entrance into the common market. Suddenly our pigs <u>fell ill</u> **{jakoby**} to herpes and our soft fruits contracted another cholera.'

<sup>&</sup>lt;sup>10</sup> Among all ALLEGEDLY-units considered here, *jakoby* is also the only one occurring as a complementizer (with reportive or inferential meaning); cf. Wiemer (2006: 40–43; 2010b: 192–194; 2015a).

*Jakoby* often appears in subordinate clauses (especially in *że*-complement clauses reporting the information under discussion: see ex. 17). Furthermore, and more often than *rzekomo* and *podobno*, *jakoby* takes a position to the right of the verb (while scoping over a clause, see ex. 18) or of the adjective (while scoping over an NP, see ex. 19), so that in spoken language the verb or adjective are prosodically highlighted. This marked position of *jakoby* might be at least partly responsible for its persuasive or ironic effect.

(19) Teraz mają się martwić nadmierną jakoby siłą złotego.
now have.prs.3pl. refl worry.inf excessive.ins hs strength.ins zloty.gen
'Now they are said to be worried about Polish zloty {jakoby} growing too strong.'
(Dziennik Polski, 5.07.2002)

Regarding *rzekomo*, this reportive adverb occurs most frequently in nonfictional literature and in the press, especially in texts about crimes, their investigation, and judgment. Most often, *rzekomo* introduces an utterance of the perpetrator which in the given context proves to be false (see ex. 20). A little less frequent are cases where accusations are reported and *rzekomo* is used in order for the speaker to remain neutral (see ex. 8, 11). In addition, in texts on other topics, *rzekomo* accompanies information the verification of which is substantial and desired but impossible at the current point in time; compare, e.g., ex. (7): because of spatial barriers the journalist is not able to verify the reported information with due diligence. However, in approximately half of the analyzed records, the proposition in the scope of *rzekomo* is demonstrated to be false already by the linguistic context.

(20) Mężczyzna, który chciał je **rzekomo** od niego odkupić, próbował je skraść. (Dziennik Bałtycki, 17.03.2001)

'The man who {rzekomo} wanted to buy them from him tried to steal them.'

In parliamentary debates, *rzekomo* is used mostly in statements (e.g. the position of some club X concerning the bill Y). The proposition in its scope also appears to be doubtful or false. However, and in contrast to *jakoby*, it is not used when one fights with arguments, but rather put in parenthetical clauses, relative clauses, participial constructions, or adjectival attributes, which typically contain additional information that is not up for debate (see ex. 21). The original speaker often remains unknown; sometimes general world knowledge or a common opinion is reported.

(21) Jednak opozycja oczekuje tego w odniesieniu do pana ministra Zbigniewa Sobotki, mimo że po otrzymaniu informacji od komendanta głównego Policji o wycieku informacji poufnej, którą posłużył się poseł Jagiełło, rzekomo uzyskując ją od niego, minister Sobotka natychmiast powiadomił o tym ministra Krzysztofa Janika (Sejm, 10.07.2003) 'However, the opposition expects it with reference to Minister Zbigniew Sobotka, despite the fact that, when he learned from the Police Chief Commander about the leak of confidential data used by MP Jagiełło who {**rzekomo**} got it from Minister Sobotka, he immediately informed Minister Krzysztof Janik about it.'

Our findings suggest that the four lexemes discussed here share three meaning components: (i) a reportive (i.e. hearsay) component, (ii) a component indicating that the speaker takes an epistemically agnostic stance ('I don't say I know if P?), and (iii) a component conveying an assessment of uncertainty. The last component is epistemic and can be paraphrased as 'I think that P can be untrue' (see Figure 4). The difference between the four ALLEGEDLY-units appears to be that, in case of podobno and, probably, also ponoć, component (iii) is only activated sometimes because it needs special contexts to be evoked (see the white background in Figure 4). As concerns jakoby and rzekomo, component (iii) can be treated as their default, as it arises regardless of the context. However, as we saw above, component (iii) displays two important properties of conversational implicatures with any of these units, namely the ability to be canceled and to be reinforced (cf. Levinson 2000: 15); see the light gray background in Figure 4. Since all four Polish reportive adverbs seem to be able to occur in contexts which unambiguously falsify the modified proposition and thereby cancel the agnostic stance (see ex. 6 and 16), we treat the component (ii) as a default conversational implicature as well. We will further explore this issue in section 3. On the other hand, the dark grey background of the reportive component (i) in Figure 4 means that it is a stable, non-cancellable part of the lexical meanings.

Moreover, it seems that the meaning difference between *jakoby* and *rze-komo* does not primarily consist in the degree of expressed doubt (cf. already Stępień 2010: 53f.), but rather in a further component which is, by default, a part of the meaning of *rzekomo*, but not of *jakoby* (nor of *ponoć* or *podobno*). This meaning can be conceptualized as a sort of origo-exclusiveness or distance (cf. Diewald 1991: 19–44; Diewald and Smirnova 2010: 9–15) between the judging instance (usually the actual speaker) and the proposition concerning the described situation. It can manifest itself in one of the following ways:

- a) The truth cannot be ascertained because of a space or time distance.
- b) The speaker reporting criminal cases which are still *sub iudice* is, by a social convention, disallowed to issue judgments.
- c) The context information identifies the proposition in the scope as undoubtedly false.

These and other manifestations of this meaning component can be preliminarily paraphrased as 'I cannot access the situation about which it is said: P.' The described situation is either inaccessible for a judgment concerning its factual status (a) and b) above; see ex. 7, 8, 11), or it is contextually marked as non-factual (c); see ex. 20). The speaker refrains from trying to convince the hearer because of the inaccessibility of the reported situation or because the speaker's skeptical stance has already been overridden by the context. *Rzeko-mo* owns the distance meaning as a default, independent of the context, but an appropriate context can cancel it. Reversely, for *podobno*, *ponoć* and *jakoby*, it can be evoked by the context of use; see the light grey vs. white background in Figure 4, which revises Figure 1 (cf. also Socka 2015).

Rzekomo P.	Jakoby P.	Ponoć P. / Podobno P.				
(i) I want to say v	(i) I want to say what someone else says (P). (= reportive component)					
(ii) I don't say I know that P. (= epistemic component, "agnostic" stance)						
(iii) I think that P can be not true. (= "proper" epistemic component)						
(iv) I cannot	access the situation about which it is said: P.					
	(= "distance" component)					

Figure 4: Meaning components of Polish hearsay particles (revised)

Let us now turn to German. Table 2 and Figure 5 show the frequencies of the German sentence adverbs *angeblich* and *vorgeblich* in some on-line corpora. We see that *angeblich* is relatively rare in literary fiction and, even more so, in spoken conversation; it occurs most often in the press and non-fiction-al literature. Its distribution resembles the frequency pattern of Pol. *rzekomo*. Concerning *vorgeblich*, it is – at least in the corpora considered here – severely restricted to the press and non-fiction, while it practically does not appear in fiction and spoken conversation.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Moreover, some native speakers see a meaning difference between both sentence adverbs: *vorgeblich* differs from *angeblich* in that it ascribes the proposition in its scope more unambiguously to the performer of the action mentioned in the sentence (compare with the difference between *sollen* and *wollen*; Diewald 1999: 225–230). Thus, in the following example, *vorgeblich* infers that it was Berlusconi himself who claimed that his proposal was ironical, whereas *angeblich* would allow an interpretation according to which the author of this claim was another person commenting on the incident:

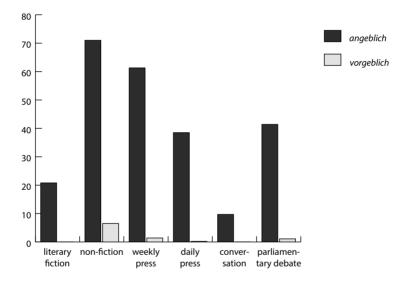
Berlusconi hatte als EU-Präsident in seiner Antrittsrede vor dem Europaparlament dem SPD-Abgeordneten Martin Schulz – vorgeblich ironisch – eine Rolle als Aufseher in einem KZ-Film empfohlen und damit Empörung in Deutschland ausgelöst. (Cosmas, Mannheimer Morgen, 13.08.2003)

<sup>&#</sup>x27;Berlusconi as the president of the European Union during his inaugural speech at the European Parliament {**vorgeblich**} ironically recommended to Martin Schulz, SPD member of the European Parliament, a role of a guard in a film about a concentration camp. This sentence caused indignation in Germany.'

Corpus	Amount of words	angeblich	<i>angeblich</i> / per 1 million words	vorgeblich	<i>vorgeblich</i> /per 1 million words
Literary fiction	3,660,810	76	20.8	0	0
Non-fiction	619,399	44	71.0	4	6.5
Weekly press	4,890,997	300	61.3	7	1.4
Daily press	248,322,255	9,818	38.5	59	0.2
Conversation	721,477	7	9.7	0	0
Parliamentary debate	2,652,754	110	41.4	3	1.1

Table 2: Frequency of angeblich and vorgeblich

Figure 5: Frequency (pe	1 million words) of Germa	an hearsay adverbs (based on Table 2)
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Because of its very low frequency and its specific status as a hearsay marker (see fn. 13), we will not consider *vorgeblich* anymore and concentrate on *angeblich*.

Yet another sentence adverb exists:  $mutma\beta lich$  ( $\approx$  'presumably'). It seems to be specialized in crime reports as well and, at first sight, one could consider it as a candidate able to replace angeblich as a reportive marker. See the following example:

(22) Britische und russische Ermittler befragten gestern in Moskau drei Stunden lang den Schlüsselzeugen in der Affäre, Andrej Lugowoi. Der Ex-Geheimdienstler sagte danach der Agentur Interfax, er sei als Zeuge befragt worden. Lugowoi hatte am 1. November das Treffen in London organisiert, bei dem Litwinenko mutmaßlich mit dem radioaktiven Polonium 210 vergiftet wurde. (Cosmas, Mannheimer Morgen, 12.12.2006) 'Yesterday British and Russian investigators questioned Andrey Lugovoi, a key witness in the affair, for three hours. This former intelligence officer then told the Interfax news agency that he had been questioned as a witness. On November 1<sup>st</sup>, Lugovoi arranged a meeting in London at which Litvinenko was {**mutmaßlich**} poisoned with radioactive polonium-210.'

From the point of view of epistemic assessment, mutmaßlich might be classified as belonging to the group of sentence adverbs which are associated with high certainty (prob P > 0.5). But, first of all, its affiliation to reportive adverbs is not as straightforward as with angeblich (or vorgeblich, for that matter): mutmaßlich can indicate hearsay, but it does so only "intermediately" to state more explicitly what the speaker thinks other people are assuming. It thus betrays a (rather non-trivial) inferential usage: it allows the speaker to point out that their assumptions about somebody else's mental states are backed by sensory data and/or verbal information. It is often an inference made on the basis of somebody's statement(s) mentioned in the context (e.g., the police, the public prosecutor), which is/are reported by the speaker/writer (typically a journalist). By using *mutmaßlich*, the speaker "disclaim[s] responsibility for the validity of each accusation until facts are established by the investigation or the trial" (Celle 2009: 285), probably even more consistently than by using angeblich. The speaker thus obeys the regulations of the Press Code, which was drawn up by the German Press Council (a selfmonitoring institution of the press) and defines the professional ethics of journalists.<sup>2</sup>

Here two seemingly contradictory observations should be pointed out. On the one hand, the epistemic overtone of distrust carried by Germ. *angeblich* seems to be weaker than with Pol. *rzekomo*. Among 100 occurrences of *angeblich* in different text types we found it 46 times in contexts which deliver some evidence strengthening the veracity of the proposition in the scope of this sentence adverb. Only for 13 tokens does the context demonstrate that this proposition turned out to be false, thus strengthening the overtone of distrust. For

<sup>&</sup>lt;sup>2</sup> See guideline 13.1, which deals with prejudice: "Reports on investigations and court cases serve to inform the public in a careful way about crimes and other infringements of the law, their prosecution and court judgment. In the process it must not prejudge them. The Press may call a person a perpetrator if he/she has made a confession and there is also evidence against him/her or if he/she committed the crime in public view. [...] Reports should make a clear distinction between suspicion and proven guilt." (http://www.presserat.info/service/english/press-code. html) This regulation is based on the media laws of the particular German federal states and on the European Convention of Human Rights, which in article 6 provides a detailed right to a fair trial including the presumption of innocence. Cf. also the Code of Journalism Ethics developed by the Association of Polish Journalists (http://old.sdp.pl/Kodeks-etyki-dziennikarskiej-SDP). We are obliged to Pelin Yıldız for having brought this point to our attention and to prof. Volker Wolff (JGU Mainz) for having provided us with pertinent information about the German medial law.

*rzekomo*, we get 34 and 29 tokens from among 100, respectively.<sup>3</sup> Examples for the defeat of the overtone are thus a bit easier to find for Germ. *angeblich* than for Pol. *rzekomo*. This is probably (at least partly) due to the fact that *angeblich* is sometimes used instead of the modal verb construction *sollen*+infinitive, which is widely used as a reportive marker and by default does not carry any epistemic overtones (Diewald 1999: 229, among others). This auxiliary cannot be used if a clause contains another modal verb (see ex. 23), a verb in the subjunctive or the analytic subjunctive (*würde*-construction, see ex. 24). In such cases *angeblich* is used despite its default meaning of doubt.

- (23) Angeblich <u>will</u> Moskau dem General Waffen und Panzer zum Kampf gegen Mao Tsetung liefern. (Cosmas, Bild, 16.2.1967)
  'Moscow <u>is</u> {angeblich} <u>eager</u> to supply general Wang-Mao with tanks and weapons for a fight against Mao Tse-Tung.'
- (24) Ich habe von einer Studie gehört, in der angeblich jeder dritte Mann Frauen vergewaltigen würde, wenn es nicht unter Strafe stünde. (Cosmas, Dietrich, J.: Ich bin okay!, Föritz 2006: 144)

'I heard about a study according to which {**angeblich**} every third man <u>would rape</u> women if it were not punishable.'

On the other hand, the epistemically neutral reading of *angeblich* is much less characteristic for contexts of legal reports than is the case with *rzekomo*. It is rather the mere text genre (newspaper report) which seems to eliminate (or block) an epistemic overtone (cf. ex. 10) – unless there are linguistic elements in the context, which could strengthen it or demonstrate the proposition in scope of *angeblich* to be false (cf. ex. 25).

(25) [J]etzt waren wieder falsche Kripobeamte unterwegs. Am Mittwoch, gegen 17 Uhr, haben sie im Stadtteil Süd eine 84 Jahre alte Seniorin bestohlen. In der Wittelsbachstraße sprachen sie ihr Opfer an der Haustür an, **angeblich** auf der Suche nach einer Frau, bei der eingebrochen worden sei. Das Opfer war völlig arglos und folgte der Aufforderung der beiden Männer, nachzuschauen, ob Bargeld und Wertsachen noch da sind. (Cosmas, Mannheimer Morgen, 17.04.1998)

'Fake police act again. On Wednesday, at around 5 p.m., they robbed an 84-year-old lady in the southern district. In the Wittelsbach Street they accosted their victim at the door of her flat {**angeblich**} looking for a woman whose flat had been broken into. The victim, suspecting nothing, checked on their order if her cash and valuables were still there.'

A coherent explanation of our corpus-based observations is offered in the second part of this article (to be published in a forthcoming issue of this journal).

<sup>&</sup>lt;sup>3</sup> For Polish, we took into account the following subcorpora of the NKJP: *typ\_lit*, *typ\_fakt*, *kanal\_prasa\_dziennik*, *typ\_qmow* (accessed June – July 2012 and July 2013).

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## Sources

- *Cosmas* Electronic online corpus of the Institut für Deutsche Sprache (Mannheim): https://cosmas2.ids-mannheim.de/cosmas2-web/
- DGD Archiv für Gesprochenes Deutsch of the Institut für Deutsche Sprache (Mannheim): http://dgd.ids-mannheim.de/
- NKJP Narodowy Korpus Języka Polskiego: http://www.nkjp.uni.lodz.pl/
- NKRJa Nacional'nyj korpus russkogo jazyka: http://www.ruscorpora.ru/
- PWN Electronic online corpus of the PWN publishing company: http://sjp.pwn.pl/ korpus

Table 3: Subcorpora and access dates

	Polish	German
Literary fiction	NKJP – subcorpus typ_lit (December 2010, June/July 2012)	Cosmas – subcorpora div, wam, gr1 (except "Trivialliteratur") (September 2010)
Non-fiction	NKJP – subcorpus typ_fakt (October 2010)	Cosmas – subcorpus Fsp (Sep- tember 2010)
Weekly press	NKJP – subcorpus prasa_tygod- nik, restricted to 1950–2010 (De- cember 2010)	Cosmas – "Die Zeit", online edi- tion 2009 (September 2010)
Daily press	NKJP – subcorpus kanał_prasa_ dziennik (October 2010, June/July 2012, August 2014)	Cosmas – subcorpus mm ("Mannheimer Morgen" 1995– 2008) (April 2010)
Conversation	NKJP – subcorpus typ_konwers (December 2010)	DGD – subcorpora DS and FR (December 2010)
Parliament- tary debate	NKJP – subcorpus typ_qmow (December 2010, June/July 2012)	Deutscher Budenstag – Plenar- protokolle 24.03.–30.09.2010 (http://www.bundestag.de/doku- mente/protokolle/plenarprotokol- le/plenarprotokolle/index.html) (October 2010)

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