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The evidential values encoded
by selected verbs of perception in Polish

Introduction

Evidentiality is a linguistic category whose primary function is to mark *the speaker's source of information* on which his/her claim is based, i.e. whether the propositional content of the utterance is based on the speaker's direct observation, past experience, inference from observable data, someone's report, or other types of evidence. Cross-linguistically, the category of evidentiality may be defined narrowly as marking of the information source only by strictly grammatical means. Alternatively, the category may be viewed broadly as marking of the information source plus additional epistemic values connected with the reliability or unexpectedness of the information content, and this can be done through grammatical and/or lexical means. The present paper adopts the latter approach to the issue of how evidentiality is construed; the reasons supporting this stance are provided in section one.

The aim of the paper is to analyze the evidential capacity of selected verbs of perception in Polish. The paper will be organized as follows. Section one explains how fully grammaticalized evidentiality works, and it gives a brief account of the recent discussion on how the notion of evidentiality may (or should) be understood. Next, the section discusses several reasons why it is practicable that the notion be applied broadly and subsume under its scope not only strictly grammatical markers of information source, but all kinds of evidential strategies. In section two, the main topic of the paper is discussed, namely, the evidential values encoded by Polish verbs of perception. This group of verbs may be divided into various subclasses depending on different criteria; from the evidential perspective, the most significant contrast is the division into object-oriented and subject-oriented verbs. This division provides a useful framework to address the question of which forms of perception verbs in Polish may have an evidential reading, and which evidential values (i.e. which sources of information) are encoded by these forms. It is convenient that the division into

object-oriented and subject-oriented verbs is applicable to both Polish and English perception verbs; this will facilitate the discussion of the evidential meaning of relevant verbs. Though, as we shall see, certain impersonal subjectless (non-finite) forms of these verbs cannot be given precise equivalents in English translation. These forms, however, are very interesting from the evidential perspective since their evidential meaning is not always the direct, firsthand evidence.

At the very beginning, one general premise underlying our further discussion should be explained. Perception verbs, as if naturally, due to their semantic content, encode access to direct evidence. In (1) below, not only is the assertion expressed that *Jan was working in the garden*, but also the basis of that assertion is provided: the direct information source (*widziałam*).

(1)   *Widziałam, jak Jan pracował w ogrodzie* ('I saw Jan working in the garden')

However, encoding someone's access to evidence does not suffice to make the evidential load of an expression; it must be the *speaker's* access to evidence. Since grammatical evidentials typically reflect the speaker's perspective and are used mostly in statements, the present paper will concentrate on those forms of perception verbs which, in a declarative sentence, encode the speaker's source of information for a given propositional content *p*.

Throughout the paper, it will be very important to distinguish the perspective of the speaker from the perspective of the grammatical and/or epistemic subject. In (1), the two perspectives converge because the speaker is the grammatical subject. However, in (2), the information source of the epistemic and grammatical subject (Robert) concerning Jan's activity is different from the information source of the speaker who makes the utterance. The latter's information source is unspecified; it may be direct perception, or the speaker may know about Robert's seeing Jan in the garden from Robert's report or thirdhand.

(2)   *Robert widział, jak Jan pracował w ogrodzie* ('Robert saw Jan working in the garden')

Since the speaker's source of information for the whole assertion is unknown in (2), such forms will be regarded as non-evidential and irrelevant to our discussion. Evidential status will be assigned to a linguistic form only if it encodes the *speaker's* information source.

Also, in what follows, it will be assumed that a word has an evidential value if that semantic feature is a regular, stable and non-detachable component of the semantic structure of that word. This evidential component must be recognizable to the speaker and to the addressee alike, and it cannot depend merely on the pragmatic or emotive context of the utterance.

1. What makes evidentiality:
towards a broad understanding of the category

In the literature on evidentiality, it is assumed that all natural languages have means and strategies which allow their speakers to express how they came to know something and what kind of evidence supports their claims. However, some languages have fully grammaticalized evidentials, or, as they are often called, 'evidentials proper', which constitute a specific category in grammar encoding the type of information source available to the speaker. What is more, in many languages, grammatical markers of information source are obligatory within a clause (they are usually verbal affixes), and a sentence without an evidential marker is deemed grammatically (and semantically) unacceptable.[1] In such languages, providing the source of information whenever one makes an assertion is a prerequisite of successful communication.

To explain briefly how grammatical evidentiality works, I will quote an example of evidential markers in Quechua[2], which is an interesting language to illustrate evidentiality for at least two reasons. Firstly, its three evidentials (*-mi*, *-si* and *-chá*) cover what is regarded in the literature as three basic domains of evidential marking: direct, reported and inferred evidence (Willett 1988). Secondly, evidentials in Quechua are not fused with markers of any other categories; they are independent suffixes/enclitics which occupy their slot in a sentence regardless of other grammatical affixes (e.g. markers of tense or aspect)[3]. The Quechua evidentiality system can be exemplified with three simple sentences from Cuzco Quechua, as in (3.a–c).

(3)   Cuzco Quechua (after Faller 2002: 3)
(a)
Para-sha-n-mi
rain-PROG-3-DIRECT
'It is raining' (the speaker sees that *p*)
(b)
Para-sha-n-si
rain-PROG-3-REPORTED
'It is raining' (the speaker was told that *p*)
(c)
Para-sha-n-chá
rain-PROG-3-CONJECTURE
'It might/must be raining' (the speaker conjectures that *p*)

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[1]   Cf. De Haan (1999, 2005); Aikhenvald (2003, 2004).

[2]   Quechua is spoken by approximately 8.5–10 million people, mainly in Peru, Bolivia, Ecuador, and the north of Chile. It has several different dialects, or Quechua languages, as some linguists prefer to call them (Adelaar 2007: 168). Evidentiality in Quechua boasts considerable literature, including studies on the following varieties of the language: Tarma Quechua (Adelaar 1977, 2007), Huallaga Quechua (Weber 1986, 1989), Wanka Quechua (Floyd 1999) and Cuzco Quechua (Faller 2002).

[3]   These evidential suffixes can be agglutinated to any syntactic category, not necessarily to a verb; they are typically attached last to the first available syntactic element of a sentence, However, the word order and the placement of evidentials in Quechua are frequently determined by pragmatic considerations (Weber 1989: 429).

In the above examples, the suffix *-mi* means 'learned by direct experience', *-si* encodes 'learned indirectly, from someone's report, secondhand, hearsay', and *-chá* indicates 'conjecture based on the speaker's reasoning'. As in many other evidentiality systems, Quechua evidentials may also, in certain contexts, indicate the speaker's attitude to the veracity of the statement. This epistemic extension considerably overlaps with their evidential function[4].

Languages with grammatical evidentiality vary widely in how large their evidential systems are. There are very small systems, where only one type of information source is formally marked (reported or generalized indirect), while other information sources go unmarked. In some large systems, however, there are five or more evidentials for different information sources (e.g. visual, auditory, inferential, assumed, reported). Cross-linguistically, three types of evidence: direct, inferential and reported constitute the basic domains of evidentiality marking (cf. Willett 1988: 57; Plungian 2001: 352–54; Aikhenvald 2004: 23–66).

Evidentiality has recently aroused considerable interest, but one must bear in mind that the study of evidentiality as an independent grammatical category is a relatively new field in linguistics, dating to the beginning of the 1980s. It was only in 1981 that the first symposium devoted specifically to the topic of evidentials was organized (Berkeley). The resulting volume *Evidentiality: The Linguistic Coding of* Epistemology, edited by Wallace Chafe and Johanna Nichols (1986), was a breakthrough in evidentiality studies as it was the first book on evidentiality *per se*. Though important research on evidentiality markers in particular languages had been conducted in the preceding decades, and several important papers had appeared (e.g. Lee 1938, Jakobson 1957[5]), these were independent studies, and the category of evidentiality did not enjoy wide recognition comparable to the status of some well-established grammatical categories, such as tense, person, or gender. This state of affairs can be explained by the absence of *grammatical* evidentials from most Indo-European languages, including the classical ones, whose grammars were the reference point for the description of other languages throughout the history of linguistics. Since evidentials as a distinct category could not be found in classical grammar texts or in many well-documented languages, the category was long little known and generally overlooked[6].

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[4]   Quechua evidentials have been regarded as *validationals* (i.e. epistemic markers) by some linguists; cf. Weber (1986: 139–40; 1989: 419–39); Adelaar (2007: 210–11).

[5]   The term *evidential* in the sense of a generic label for the whole category comes from Roman Jakobson's work *Shifters, Verbal Categories, and the Russian Verb* (1957). Referring to vastly different grammar systems, such as those found in native American and Balkan Slavic languages, Jakobson introduced evidentiality as a separate verbal category marking four possible sources of information: quotative, revelative (dream), presumptive (guess), and memory (one's own experience).

[6]   Given current research, it is estimated that grammatical evidentials are found in about 25% of the world's languages (Aikhenvald 2004: 17). They can be found on all continents but are relatively infrequent in Africa and Australia. Also in Europe, with the exception of the Balkan Slavic languages and languages from the Baltic region (Estonian, Latvian and Lithuanian), strictly grammatical evidentials do not occur. In contrast, North and South American languages have exceptionally rich and elaborate systems of evidentiality (cf. Jacobsen 1986: 7–8). Grammatical evidentials also occur in many

In addition to marking the information source, evidentials often develop semantic extensions; they may indicate the speaker's positive attitude to the veracity of the claim (the visual/direct evidentials), or they may imply the speaker's mental distance to the propositional content of his/her utterance (the reported or indirect). Also, when an indirect evidential is used in first-person context, it may imply surprise (mirativity) or lack of responsibility for the action or state of affairs described. In those additional functions, evidentials resemble epistemic modals or mirativity markers. Such semantic extensions of evidentials are not universal; however, the languages in which grammatical evidentials have epistemic (or mirative) overtones definitely outnumber the languages (described in the literature) where evidentials are regarded as epistemically neutral.

These additional functions of evidentials and the resulting overlap of evidentiality with other semantically related categories (the epistemic modality in particular) have caused an animated discussion on what makes and what does not make evidentials[7]. For example, in the aforesaid first volume of papers devoted strictly to evidentiality (Chafe, Nichols, eds. 1986), Lloyd B. Anderson writes: "it is important to distinguish true evidential categories from other forms which SEEM evidential, but are not" (1986: 274). He further defines the category as follows:

(a) Evidentials show the kind of justification for a factual claim which is available to the person making that claim, whether direct evidence plus observation (no inference needed), evidence plus inference, inference (evidence unspecified), reasoned expectation from logic and other facts, and whether the evidence is auditory, or visual, etc.

(b) Evidentials are not themselves the main predication of the clause, but are rather a specification added to a factual claim ABOUT SOMETHING ELSE.

(c) Evidentials have the indication of evidence as in (a) as their primary meaning, not only as a pragmatic inference.

(d) Morphologically, evidentials are inflections, clitics, or other free syntactic elements (not compounds or derivational forms). (Anderson 1986: 274–75).

In the above definition, there appears to be no room for any epistemic values that evidentials might encode or imply. However, in the same volume, Wallace Chafe introduces a distinction between evidentiality understood in a 'narrow sense', which marks the *source* of knowledge only, and evidentiality in a 'broad sense', which covers marking the speaker's *attitude* towards his/her knowledge. In his article "Evidentiality in English conversation and academic writing" included in that volume (1986: 261–72), Chafe himself opts for a very broad understanding of the term *evidentiality*, covering a wide range of evidential phenomena: those involving the reliability of

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languages in Asia in the so-called 'great evidentiality belt' (cf. Johanson, Utas, eds. 2000; Aikhenvald, Dixon, eds. 2003; see also the discussion on the geographic distribution of evidentiality in Aikhenvald 2004: 303 and Plungian 2010: 19–23).

[7]   An account of that discussion is given in Łukasiewicz (2018: 47–70, 105–77).

knowledge, the mode of knowing, the source of knowledge, and also those matching knowledge against prior expectations. Importantly, he includes in the category of evidentials any linguistic resources – not only grammatical ones – which allow us to express the source of and attitudes towards knowledge, for example, adverbial expressions (*presumably*, *apparently*…), sensory perception verbs, epistemic *must*, etc.

In contrast, in Ferdinand De Haan's papers on evidentiality, especially in (1999), the boundary between the two categories, evidentiality and epistemic modality, is sharply delineated. It is not negated that there are close links between them, but he advocates a clear divide since "evidentials *assert* the nature of the evidence for information in the sentence, while epistemic modals *evaluate* the speaker's commitment for the statement" (De Haan 1999). Similarly, Alexandra Y. Aikhenvald (2004) argues that the broad definition of evidentiality (covering also epistemic values of evidentials) produces a state of conceptual and terminological confusion; in effect, this leads to the watering down of the boundaries between evidentiality and epistemic modality:

> Evidentials are part of the linguistic encoding of epistemology in the sense of how one knows what one knows, but they are not part of linguistic encoding of probability and possibility (or 'epistemic modalities' which reflect the degree of certainty the speaker has) (2004: 186).

The most contentious issue in the debate is how to account for the non-evidential values of evidentials, particularly their epistemic aspects, and whether such values should be included in a cross-linguistic definition of evidentiality. Another questionable assumption to be found in many definitions of evidentiality is that evidentials are to be expressed grammatically, not lexically. This might appear less controversial since the recognition of evidentiality as a separate category was a result of studies on strictly grammatical evidentials. However, with the growing number of works on evidentiality in different languages (including many studies on 'mixed' evidential systems), it has become debatable whether evidentiality must indeed be coded grammatically (i.e. with bound morphemes) and cannot be expressed, for example, with modal verbs, auxiliaries, adverbials, adpositions, free particles, etc.

The present paper aims to show how certain evidential meanings are rendered in a language without grammaticalized evidentials, such as Polish. In opposition to some of the above-mentioned authors, I will adopt a fairly broad understanding of evidentiality, following Chafe's approach in that respect. The reasons for this choice are as follows.

It is uncontroversial that the primary function of evidentials is marking the information source, and in this way they differ from epistemic modals, which evaluate the speaker's commitment to the truth of the proposition expressed. As concerns the issue of whether epistemic values should be included in a cross-linguistic definition of evidentiality, I believe that the main problem to be considered is the frequency of occurrence of epistemic extensions in evidentiality systems. Though it is not a universal

feature of evidentials, in the majority of systems described in the literature, evidential markers do have an additional function and they express (or imply) the speaker's attitude to the reliability of his/her information source – so they combine evidential and epistemic values. Hence, a narrow definition of evidentiality, which does not account for this fact, seems to be wanting.

Regarding the second contentious issue, namely, how evidentiality is to be formally encoded in a sentence, it is worth noting that this category is expressed in vastly different ways. There are systems with evidential affixes whose sole function is marking of the information source; in others, evidentials are fused with other categories (e.g. tense, person or gender) in *portmanteau* morphs. Moreover, evidentials can be scattered across the grammar, using different grammatical mechanisms to mark information source, but without making one coherent and distinct paradigm. So evidential values may be encoded in various ways in different languages, but it must be acknowledged that typical markers of evidentiality – in evidential languages – are fully grammaticalized, and they are usually verbal affixes or clitics.

However, the term *evidentiality* may also be used 'broadly' to cover information source markers of any morphological type: affixes and clitics, but also function words, like adpositions, determiners, auxiliaries, particles, or even lexical items. In the broad approach, evidentiality is construed as a semantic domain of information source. The narrow approach (grammatical evidentials only) long prevailed in the literature (*pace* Chafe 1986); the trend to subsume under the category of evidentiality also the information source markers which are not, strictly speaking, part of grammar or whose evidential function has not stabilized yet is recent[8]. But it is a practicable approach; grammaticalization entails (synchronically and diachronically) the existence of a continuum of forms, from content words to affixes[9], and without a continuum the emergence of fully-grammaticalized evidentiality systems is theoretically inexplicable. Moreover, if evidentiality is interpreted broadly, as a semantic domain, it is possible to give a unified account of mixed systems, in which evidentiality is expressed by both affixes and, for example, free particles.

To show the advantages of the broad approach, let me mention the problem of the hearsay meaning of the expression *mieć*+infinitive in Polish. Polish does not have fully grammaticalized evidentiality; however, there is a grammatical construction, *mieć*+infinitive, which marks the reported in certain contexts. This construction is polysemous, as it may also express obligation. Interestingly, the reportative evidential meaning of *mieć*+infinitive is not easily recognizable to native speakers of Polish, even in the contexts where the deontic interpretation is not plausible[10]. Thus, the reported cannot be regarded as the *primary* meaning of this construction. The problem is that in numerous contexts the reported meaning is the *only* possible interpretation, and

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[8]   Cf. Diewald, Smirnova (2010).

[9]   Cf. Hopper, Traugott (1993: 7).

[10]   Inadequate recognition of the hearsay meaning of *mieć*+infinitive probably results from the frequent use of this construction in the deontic sense (cf. Roszko 1993, Wiemer 2010, Łukasiewicz 2018: 264).

then, one has to classify *mieć*+infinitive as a marker of the reported. It is only within the broader definition of evidentiality that such classification is unproblematic.

Other markers of the reported evidence in Polish include hearsay particles (e.g. *rzekomo*, *jakoby*, *podobno*, *niby*), adpositions (*zdaniem*, *według*), and a large group of report verbs with related parenthetical and idiomatic expressions. Most of these expressions combine evidential and epistemic values[11], ranging between the speaker's neutral distance (as in *podobno*) to her disbelief in the truth of *p* (*rzekomo*). This again points to the need to account for the overlap between the evidential and epistemic meanings. One could add at this point that it is equally difficult to separate the epistemic and evidential values in the expressions which mark the inferred evidence in Polish[12].

Therefore, in the present paper, a formally and semantically broad definition of evidentiality has been adopted. Grammatical evidentials and lexical evidentials are assumed to form a continuum within one conceptual domain. Also, it is acknowledged that although the core meaning of evidentials is information source, they may encode (or at least strongly imply) certain epistemic values. It would be impracticable to draw, cross-linguistically, clear-cut boundaries between the two categories where, in real languages, there exist semantic overlaps between evidentiality and epistemic modality.

In contrast to the above-mentioned reportative and inferential markers, direct evidence markers in Polish are formally less diversified; they are mostly perception verbs. However, it must be noted that not all perception verbs encode the direct evidential meaning. Within this class of verbs, different semantic and syntactic subtypes can be distinguished which render major or subtle evidential distinctions. From the evidential viewpoint, the most important divide concerns object-oriented and subject-oriented perception verbs, because only object-oriented verbs encode the speaker's information source in first, second and third person; subject-oriented verbs have evidential meaning in first person only. Also, what will be of particular interest to us is the evidential meaning encoded by three types of impersonal subjectless forms: the *-no* suffixed forms (e.g. *widziano*), the analytic forms (e.g. *widzi się*) and the quasi-infinitives: *widać*, *słychać* and *czuć*. As we shall see, these impersonal subjectless forms of visual perception verbs need not encode visual/direct evidence; some of them may point to indirect evidential values[13].

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[11]   With the exception of adpositions *zdaniem* and *według*, which are purely evidential in meaning.

[12]   Such expressions represent morphologically different types: epistemic verbs (cf. Danielewiczowa 2002), conjunctions, particles, predicatives and parentheticals (cf. Bralczyk 1978, Grochowski 1986, Wiemer 2006, Stępień 2008b, Żabowska 2008).

[13]   In what follows, I will refer to several works on the semantics of Polish perception verbs, among others: Grzesiak (1983), Grzegorczykowa (1990), Dobaczewski (2002). Though these studies are not evidentiality-oriented, they often provide valuable insights and comments related to the evidential capacity of the units analyzed in this paper. However, when referring to the above-mentioned studies, the present paper will not take over their methodological assumptions or more general linguistic commitments.

2. Perception verbs in Polish and their evidential values:
some general divisions

Perception verbs may refer to different senses: vision, hearing, tactile perception, smell and taste. The world's languages lexicalize the semantic domain of perception in different ways; for example, there may be one word for seeing and one for perception by any of the other senses[14]. However, in most languages, Polish and English included, visual perception seems to be privileged. As sight is the basic source of knowledge about the external world, verbs expressing various ways and aspects of seeing are far more numerous than verbs expressing perception by other senses (e.g. by smell, taste or touch). The higher status of visual perception verbs is also reflected in their more frequent use in idiomatic phrases and considerable polysemy, which can be easily observed when relevant dictionary entries are compared.[15] For example, in (4), the perception verbs (*widzę*, *see*) express the fact of understanding something, not sensory perception.

(4)   *Widzę, o co ci chodzi* ('I see your point')

Some degree of polysemy is also revealed by other sensory verbs; in (5) and (6), the Polish verb *czułam* and English *smell* express inference or premonition, not tactile or olfactory perception. However, the contexts where we find non-perceptual inferential 'seeing' are more common than those with non-perceptual inferential 'smelling'.

(5)   *Czułam, że coś złego się stało* ('I could feel that something bad happened')
(6)   *I could smell trouble* (*MacMillan English Dictionary,* the entry *smell*)

Moreover, compared to other sensory verbs, visual perception verbs offer more possibilities of figurative use. As noted by Wierzbicka, there is nothing surprising in saying that God can *see* our actions (or that God can *hear* our prayers), but it would be utterly unacceptable to claim that God can *smell* or *taste* something (1996: 82).

Classification of perception verbs according to the five senses in humans is an obvious division of the domain, with the caveat that seeing and perhaps hearing deserve a special place. Another classification, which in many languages, including English and Polish, runs across the foregoing division, takes into account the role of the grammatical subject. Thus, perception verbs (referring to any senses) can be divided into subject-oriented and object-oriented verbs[16]. The former are verbs whose grammatical subject is the perceiver (though the perception act need not be volitional), as in *Patrzyłam na ten dom* ('I looked at the house') or *Widziałam ten dom* ('I saw the

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[14]   See Wierzbicka (1996: 81), where Hausa (Chadic) is referred to, which has one lexeme for sight and one for all other senses; see also Classen (1993).

[15]   See several different meanings of the perception verb *widzieć* in *Słownik języka polskiego* edited by Witold Doroszewski (SJPD) ([1958–1969] 1996).

[16]   Cf. Whitt (2010), which offers a comparative study of English and German constructions with perception verbs and their evidential function; see also Viberg (1983).

house'). In object-oriented verbs, the perceiver is the speaker, but he/she need not be syntactically present in the clause; the grammatical subject slot is occupied by the object of perception, as in *Dom wyglądał pięknie* ('The house looked beautiful'). Explicit information about the perceiver can be added, for example, *The house looked beautiful to me/to us*, but even without such specification, the implicit perceiver is the speaker.

Subject-oriented verbs can be further divided into agent-verbs, which encode the perceiver's intention to see, hear or feel something, and experiencer-verbs, which do not indicate any intended act on the perceiver's part. This agent vs. experiencer contrast may be expressed via the use of different lexemes (*look* vs. *see*, *listen* vs. *hear* in English, or *patrzeć* vs. *widzieć, słuchać* vs. *słyszeć* in Polish), through affixation (as in German *ansehen* vs. *sehen*), or the same lexical exponent can be used to cover both meanings (e.g. English *taste*), and the context indicates whether the subject is a volitional agent or simply an experiencer[17].

The division of perception verbs into subject- and object-oriented is closely related to their possible evidential meaning. Object-oriented perception verbs encode evidential values when used in first, second and third person (since the implicit perceiver is always the speaker), whereas subject-oriented perception verbs may encode evidential values only in first person forms and in some impersonal subjectless constructions (see below). This difference is determined by the aforementioned prerequisite that in order to be classified as an evidential marker, the relevant linguistic form must indicate the *speaker's* information source.

Section 2.1 will concentrate on the evidential capacity of some object-oriented perception verbs, e.g. *wyglądać* ('look'), *brzmieć* ('sound'), *smakować* ('taste'). Section 2.2 will discuss the evidential value of subject-oriented perception verbs. First, we will consider the verbs whose grammatical subject is a passive experiencer, such as *widzieć, słyszeć, czuć*$_{1\ smell}$, *czuć*$_{2\ taste}$, *czuć*$_{3\ feel}$ ('see', 'hear', 'smell', 'taste', 'feel'). These five verbs constitute the basic predicates covering perception through five different senses. There are many other perception verbs in Polish, particularly those referring to vision: *zobaczyć, ujrzeć, spostrzec, zauważyć*, to mention some most commonly used (English 'near' equivalents are also numerous: *see, behold, catch sight of, spot, notice, …*). It is beyond the scope of this paper to analyse the semantics of all of them; suffice it to say that the general evidential value of these verbs (when used in first person) is similar: the direct. But it must be noted that each of the above-mentioned verbs may point to very subtle and interesting evidential distinctions (within the visual source of information) certainly deserving further study.

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[17]   A divide similar to the foregoing can be found in Romuald Grzesiak's study of the semantic and syntactic features of Polish perception verbs (1983). However, Grzesiak's terminology is different; after Rogers (1971), he distinguishes cognitive verbs (*stanowe czasowniki percepcyjne*) and agentive verbs (*czynnościowe czasowniki percepcyjne*). If matched to the aforesaid divide, cognitive and agentive verbs are subject-oriented experiencer-verbs and subject-oriented agent-verbs, respectively. Regarding the object-oriented verbs (called 'descriptive verbs of perception' by Rogers 1971), in Grzesiak's study, they are analysed as a separate group (*opisowe czasowniki percepcyjne*), but he ultimately classifies them as modal predicates, not verbs of perception in the proper sense (1983: 46–54).

Next, section 2.2 will discuss the evidential capacity of the so-called agentive verbs of perception, i.e. subject-oriented verbs which encode the perceiver's intention to perceive: *patrzeć, słuchać, wąchać, smakować, dotykać* ('look', 'listen', 'smell', 'taste', 'touch'). Undoubtedly, also in this group, many other interesting verbs could be listed, and again, the most numerous would be those referring to vision. However, despite the markedly different semantic content of forms like śledziłam *wzrokiem x* ('I watched/kept track of *x*'), *obserwowałam x* ('I observed *x*'), *zaglądałam do x* ('I looked at/peeped into *x*'), their general evidential meaning is not different from that found in *patrzyłam na x* ('I looked at *x*'). Therefore (of necessity), the discussion will concentrate on the most representative lexical items.

Finally, section 2.3 will address the issue of which evidential meanings are rendered by certain subjectless impersonal forms of the foregoing verbs, like *widziano, widzi się, widać* ('one can/could see'), etc. As we shall see, the evidential load of these forms varies remarkably. Special attention will be paid to the evidential capacity of three predicatives, which constitute a set of highly exceptional forms in Polish: *widać, słychać* and *czuć* ('one can see, hear, smell').

2.1. Object-oriented 'descriptive' verbs of perception

As mentioned in the introductory section, in clauses with object-oriented perception verbs (or 'descriptive' verbs), the grammatical subject slot is occupied by the object of perception. In such clauses, the speaker is normally the perceiver, but he/she need not be syntactically represented and is usually absent from the clause. Explicit information about the perceiver (identical or not with the speaker) can be added, as in (7), but without such specification, it is the speaker who is the implicit perceiver.

(7) *Dom wyglądał* (*mi, nam, jej, …*) *na zadbany* ('The house looked tidy (to me, to us, to her, ...)')

Because the grammatical subject slot is occupied by the object perceived, and the implicit perceiver is the speaker (unless marked otherwise), such verbs encode the direct evidential value when used in first, second and third person constructions, as exemplified by (8).

(8) *W tym ubraniu wyglądam/wyglądasz/Maria wygląda elegancko* ('I/you/Maria look(s) elegant in this outfit')[18]

It is must be noted, however, that the evidential meaning will change radically if an explicit marker of the reported is added to the clause. In (9), the speaker's perspective

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[18] The descriptive verb *wyglądać* ('look') is surely used in forms representing a full person and number paradigm (*wyglądam, wyglądasz, wygląda, wyglądamy, wyglądacie, wyglądają*); it might be more difficult, however, to find natural contexts in which *brzmieć* ('sound') or *smakować* ('taste') would be employed with first or second person subjects.

is no longer identical with the perceiver's; the sentence has an evidential value, but the speaker's information source is not direct evidence but reported (encoded by the hearsay particle *podobno*).

(9) *Podobno dom wygląda na zadbany* ('Reputedly, the house looks tidy')

The following sentences, referring to the four senses, exemplify the evidential use of object-oriented perception verbs (the tactile perception does not have its lexical exponent in this group of verbs).

(10) *Maria wygląda elegancko* ('Maria looks elegant')
(11) *Jej* głos brzmi zdecydowanie ('Her voice sounds resolute')
(12) *To wino smakuje jak Malbec* ('This wine tastes like Malbec')
(13) *Te perfumy pachną jak Chanel* ('This perfume smells like Chanel')

In all these sentences, (10–13), the speaker makes an assertion (concerning Maria's look, the tone of someone's voice, the taste of wine or the smell of perfume) on the basis of relevant sensory perception; the evidential meaning here is indisputable. If someone says: *Maria wygląda elegancko*, it means that the person has seen Maria and makes an assertion based on that perception act. The same presupposition of prior perception is found in the English equivalent: *Maria looks elegant.*

The major problem with the above verbs is not their evidential reading, which is clear, but the question of what is actually asserted; interpretations provided by different authors vary. For the sake of brevity, we will concentrate on the first of the above verbs, *wyglądać* ('look') as it is used in (10), but one encounters similar problems when interpreting the other verbs.

In Grzesiak (1983: 46), the sentence *Maria wygląda elegancko* ('Maria looks elegant') is explicated as follows:

 (14) *Widziałem Marię i twierdzę (na podstawie jej wyglądu), że jest elegancka* ('I have seen Maria and I claim (on the basis of her looks) that she is elegant')

Thus, a seemingly simple sentence, *Maria wygląda elegancko* ('Maria looks elegant'), has a rather complex semantic structure, which includes a presupposed content: *I have seen Maria*, and an assertoric content: *I claim: Maria is elegant* (Grzesiak 1983: 46). What is problematic in Grzesiak's account is the issue of whether by saying *Maria wygląda elegancko* ('Maria looks elegant') we claim (on the basis of visual perception) that *Maria jest elegancka* ('Maria is elegant'). As argued by Dobaczewski (2002: 93–96), the verb *wyglądać* (the same would be true about English *look*) has in its semantic structure a very important component of the speaker's subjective impression that things in the world appear to him/her so-and-so. Therefore, in the sentence *Maria wygląda elegancko* ('Maria looks elegant'), the evaluative adverb *elegancko* refers to how Maria appears to the speaker; it does not refer to Maria herself. Dobaczewski recommends (2002: 98) that sentences like *Maria wygląda elegancko* ('Maria

looks elegant'), where the verb is followed by an evaluative adverb, be interpreted in a comparative manner: *Maria wygląda jak ktoś elegancki* ('Maria looks like someone elegant'). The adverb is treated as a comparative expression and thus the 'subjective impression' component is preserved.

It is beyond the scope of the present section to consider the vast range of philosophical and semantic problems connected with the question of the extent to which *X looks elegant* entails *X is elegant*. What matters to us is that also in Dobaczewski's explication of the semantics of the verb: *X wygląda jakoś, X wygląda jak ktoś/coś* ('X looks *Adverb*, X looks like someone/something'), the verb entails having some specific knowledge about *X* which can be possessed by someone *Y* only because *Y* can see or has seen *X* (2002: 151). This aspect of the semantic definition of the verb (also presupposed in Grzesiak's account) is the most important for the evidential capacity of the verb.

Another important issue is the polysemy of *wyglądać* ('look'). The meaning of the verb *X wygląda jakoś / X wygląda na jakieś/coś/kogoś* changes if the slot of the grammatical subject *X* is occupied by an abstract noun or by a noun which cannot signify an object of visual perception. In such cases, the verb acquires inferential meaning, as in (15). Because the verb indicates inferential reasoning, not perception, the source of information will likewise change to inferential.

(15) *Zadanie wygląda na łatwe* ('The task looks easy')

In the category of object-oriented 'descriptive' verbs of perception, the group of 'visual' verbs is particularly numerous. There are many semantically different, object-oriented visual perception verbs: *pojawić się* ('appear, emerge'), *prześwitywać* ('shine/show through'), *ukazywać się* ('appear, come into sight'), *widnieć* ('loom, show'), *wyłaniać się* ('emerge, appear'), *wyzierać* ('peek out/from'), *uwidaczniać się* ('become visible'), to mention just a few. The main semantic component of all these verbs could be characterized as 'being seen by someone', and they represent the viewpoint of the speaker. Since their general evidential meaning does not vary, and they all indicate the speaker's direct perception, our discussion has concentrated on just one verb, *wyglądać* ('look'), which is probably the most commonly used in this miscellaneous group. It must be noted, however, that the rich and diverse semantics of the verbs (e.g. *prześwitywać* 'shine through' vs. *wyłaniać się* 'emerge') allows for encoding very subtle differences in evidential values – all within the direct evidence.

2.2. Subject-oriented perception verbs: experiencer- and agent-verbs

The following sentences, (16–20), with subject-oriented perception verbs exemplify the capacity of such verbs to encode the speaker's direct information source; in all these sentences the grammatical subject is a non-agentive passive experiencer:

(16) *Widziałam, jak Jan wszedł do domu* ('I saw Jan enter the house')
(17) *Słyszałam, jak Jan wszedł do domu* ('I heard Jan enter the house')
(18) *Czułam₁ smell perfumy* ('I could smell perfume')
(19) *Czułam₂ taste w zupie smak czosnku* ('I could taste garlic in the soup')
(20) *Czułam₃ feel piasek pod stopami* ('I could feel sand under my feet')

Since our interest is focused on the evidential value of perception verbs (i.e. their encoding of the *speaker's* information source), all above sentences are cast in first person. With due changes, it might be first person plural as well; the grammatical subject must be the speaker or must include the speaker. However, as we shall see in the next section, some non-first person constructions with these verbs – with clearly evidential meaning – are also possible.

Perhaps the most striking feature to be observed in sentences (18–20) is that Polish non-agentive perception verbs referring to the senses of smell, taste and touch are homonymic; in the sentences above they are distinguished by bottom indices. Since the relevant perception organ need not be explicitly mentioned, as in (18) or (19), it is the context that must disambiguate the meaning of the sensory perception verb *czuć*. Therefore, the thing perceived must be explicitly mentioned in the utterance or unambiguously marked in the preceding context. However, as rightly noticed by Grzesiak (1983: 18), it is ultimately our knowledge about the world that enables us to understand which sense the verb refers to. There is nothing in the structure of the Polish sentence which would formally prevent interpreting (18) as based on gustatory or tactile perception.

As the verb *czuć* is polysemous, in some contexts neither the verb itself nor the verb in connection with the perceived object can unambiguously indicate the speaker's source of information for the assertion. Consequently, if the information source is ambiguous, one could ask whether the verb has any evidential value. But the evidential function of this verb need not be threatened due to its ambiguity. The verb still indicates a direct source of information; furthermore, once the meaning of the verb (and the whole utterance) is clarified, the source of information for the assertion is clarified likewise. The fact that perception verbs are polysemous does not eliminate or weaken their evidential function; that polysemy is simply passed on to their evidential meaning.

The most common verb encoding visual perception, *widzieć* ('to see'), is also highly polysemous. In SJPD,[19] a number of vastly different meanings of the verb can be found: 'to notice with eyes', 'to visit someone', 'to pay attention to someone/something', 'to regard someone/something as_', 'to conclude', 'to understand', 'to retrieve from memory', and others. But even if we limit our interest to meanings connected with visual perception, the verb is still polysemous. To illustrate the point, seeing a cup on the desk before me is different from seeing something in a dream, or seeing an event taking place for a period of time, etc.

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[19] *Słownik języka polskiego pod red. W. Doroszewskiego* (*Dictionary of the Polish Language edited by W. Doroszewski*) ([1958–1969] 1996).

In his semantic study of visual perception verbs in Polish, Dobaczewski (2002: 24–25) postulates distinguishing the following units with *widzieć* ('see') as separate objects of description: *ktoś widzi coś gdzieś* ('someone sees something somewhere'), *ktoś widzi, jak* ('someone sees how'), *ktoś widzi, że* ('someone sees that'). These three units require a different argument structure. Dobaczewski's rationale for this division is quite convincing; it is an attempt to disambiguate the meaning of visual *widzieć* on the one hand, and to provide sufficiently generalized semantic descriptions of expressions with *widzieć*, on the other. However, considered from the evidential perspective, the units postulated by Dobaczewski are not very useful. Foremost, his semantic analysis concerns expressions with *widzieć* cast in third person (the subject is *ktoś* 'someone'), whereas the present paper is concerned with the forms of perception verbs which carry the evidential value; in subject-oriented perception verbs, these are primarily first person forms. As noted by Dobaczewski (2002: 32–34), first person forms of *widzieć* (and other visual perception verbs) reveal different semantic properties from third person forms since they entail the subject/speaker's knowledge concerning the relevant state of affairs *p* and the awareness of that knowledge. In everyday use of language, one cannot say in first person:

(21) **Widzę filiżankę na biurku, ale nie wiem, że filiżanka jest na biurku* ('I see a cup on the desk, but I do not know that the cup is on the desk')

In contrast, utterances cast in third person do not entail the epistemic subject's knowledge concerning the relevant state of affairs *p* and the appropriate awareness thereof; one can say (22) without falling into contradiction.

(22) *Jan widzi x na biurku, ale nie wie, że x jest na biurku* ('Jan sees *x* on the desk, but he does not know that *x* is on the desk')

In (22), *x* is an object whose identity Jan cannot properly recognize; the speaker's awareness of what Jan can see is simply greater than Jan's awareness. However, the above third person form, *Jan widzi x* ('Jan sees *x*'), is not evidential because it does not indicate the speaker's source of information. It is precisely this presupposition of the subject/speaker's awareness of the relevant perception content *p* built into the semantic structure of first person forms of perception verbs that is responsible for their evidential value.

Apart from the first person form, the evidential meaning of the verbs discussed in this section depends also on the type of their complement. Some of them may encode either direct or inferred evidential values, as in (23) and (24). The sheer fact that the verb *widzę/widziałam coś* ('I see/saw something') is followed by a nominal argument does not determine the evidential value of the verb, i.e. that the speaker's source of information is visual perception. It is so in (23), but (24) is based on inference.

(23) *Widzę płonące drzewa* ('I see burning trees')
(24) *Widzę błąd w tym rozumowaniu* ('I see a mistake in this argumentation')

The argumentation mentioned in (24) need not be presented to the speaker in a written form; the speaker may know it from listening to someone's talk. However, even if the argumentation is known from auditory perception, the speaker cannot say:

(25) *Słyszę błąd w tym rozumowaniu.* (*'I hear a mistake in this argumentation')

Błąd ('mistake') can be 'seen' or 'noticed' (or we can use another visual perception verb), but it cannot be 'heard'. It is the semantics of the nominal complements in (23–24), not nominal complements *per se*, that allows us to interpret the meaning of the verb *widzę* along with its evidential value.

However, the type of conjunct, *jak* ('how') or *że* ('that'), introducing a propositional argument may be considered a formal indicator of the evidential value of the verb, as it may change the evidential reading of an utterance with a perception verb. Consider sentences (26–27) with *widziałam* ('I saw'), which differ only in the way the propositional argument is introduced:

(26) *Widziałam, <u>jak</u> Jan poszedł do kina* ('I saw Jan go to the cinema')
(27) *Widziałam, <u>że</u> Jan poszedł do kina* ('I saw Jan go to the cinema' or 'I saw that Jan went to the cinema')

In (27), the source of information is either direct or inferred, whereas *jak* in (26) unambiguously indicates the visual interpretation of *widziałam*.

The verb *widzieć* may also occur in parenthetical constructions: *jak widzę*, *jak widzimy*, *jak widzieliśmy* ('as I see, as we see, as we saw'), etc. In such constructions, the verb may indicate inferential reasoning, and visual perception need not be involved.

Summing up, Polish *widzieć*, like its English equivalent *to see*, is characterized by a high degree of polysemy, which is also revealed in its evidential values. Thus, assertions with *widzieć* cast in first person (singular or plural) may indicate either the direct or inferred source of information, depending on the type of conjunct and the semantics of the complement.

The evidential value of the auditory perception verb *słyszeć* ('hear') may similarly depend on the type of conjunct introducing the propositional complement *p*. In (28), the conjunct *jak* ('how') unambiguously indicates auditory perception as information source, whereas if the same propositional complement is introduced by *że* ('that'), the evidential value of the verb is the reported, as in (29).

(28) *Słyszałam, <u>jak</u> Jan pracował w ogrodzie* ('I heard Jan working in the garden')
(29) *Słyszałam, <u>że</u> Jan pracował w ogrodzie* ('I heard that Jan worked in the garden')

Now, let us consider the evidential capacity of the other group of subject-oriented perception verbs: the agent-verbs (e.g. *patrzeć* 'look', *słuchać* 'listen', *wąchać* 'smell', *smakować* 'taste', *dotykać* 'touch'). In the group of agentive perception verbs in Pol-

ish, all five senses are represented by different lexemes, unlike in experiencer-verbs, where the olfactory, gustatory and tactile perception are covered by one polysemous verb (*czuć*) and the context must disambiguate the meaning. The sentences (30–31) exemplify the evidential use of two most common agentive verbs related to visual and auditory perception. The verbs explicitly indicate the *speaker's* source of information for the propositional content. As in experiencer-verbs, the evidential values of agent-verbs are expressed by constructions cast in first person (singular or plural) since the grammatical subject must be (or must include) the speaker; with second or third person subject the meaning of the verbs would not be evidential.

(30) *Patrzyliśmy, jak samolot startował* ('We looked at/watched the plane taking off')
(31) *Słuchaliśmy, jak pracowały silniki* ('We listened to the engines working')

The main difference between experiencer-verbs and agent-verbs depends on the active role of the perceiver. The latter involve two semantic components: some purposeful activity on the subject's part *aimed at* perceiving *x* (which need not entail his/her *will* to perceive *x*) and perceiving *x* as a result of that activity. The component of success can be negated; it is possible to 'look' at something without 'seeing' it (in both English and Polish). However, such failed perception (due to some unusual circumstances, e.g. long distance or poor lighting) has to be explicitly marked; otherwise, agentive verbs of perception imply perceiving. Thus, the subject's 'looking at *x*' implies her being in a mental state of 'seeing *x*'; furthermore, this very implication is responsible for the evidential value of agentive perception verbs.

An interesting question arises whether the evidential value of *patrzyliśmy* and *słuchaliśmy*, see (30–31), is as prominent as in the relevant forms of experiencer-verbs (*widzieliśmy*, *słyszeliśmy*). If, as stated above, 'looking at *x*' normally implies being in a mental state of 'seeing *x*', it might be expected that the evidential load of 'seeing *x*' is fully present in 'looking at *x*'. This, however, does not seem to be the case. The evidential meaning found in 'looking', when compared to the evidential meaning of 'seeing', appears to be diluted; marking the source of information in (30–31) is less noticeable than in the relevant experiencer-verbs, or not so *evident*, to use the key word. This weakening of the evidential load in agentive perception verbs might be explained by their semantic complexity. These verbs bring to the fore the active role of the perceiver, so whatever is in the second component of their semantic structure (i.e. perceiving) is overshadowed by the prominence of the first component (i.e. the perceiver's activity aimed at perceiving).

2.3. The evidential meaning
of subjectless forms of perception verbs

In the previous section, we concentrated on the subject-oriented perception verbs whose first person grammatical subject is (or includes) the speaker – as an experiencer or an agent. The evidential meaning of such forms is obvious, and it is usually the

direct (in some special contexts, it may be the inferred or reported). But perception verbs can also be used in impersonal subjectless constructions in which the experiencer/agent argument is empty; i.e. it is not syntactically represented. These subjectless forms are very interesting from the evidential viewpoint because some of them indicate the speaker's direct information source, while others indicate the opposite, namely, that the speaker *did not* have access to the direct source of information. The latter exclude the speaker from the perceivers, and thus they strongly imply his/her non-firsthand information source. Depending on the present or past time reference, these subjectless forms are of three types:

(I.) the synthetic form suffixed -*no* (e.g. *widziano x*) for the past only;
(II.) the analytic forms: verb.3SG.PRES+*się* (e.g. *widzi się x*) for the present and verb.3SG.MASC.PAST-*o*+*się* (e.g. *widziało się x*) for the past;
(III.) quasi-infinitival forms (e.g. *widać x / widać było x*) for the present and the past, respectively.

There are no constructions in English which would syntactically correspond to the above forms in Polish. Perhaps the closest semantic equivalents are the passives or constructions with *one* as the subject (*It is/was seen that x* or *One can/could see that x*). It should be stressed, however, that the relevant forms in Polish sentences are syntactically subjectless; hence, they are invariable and lack person, number and gender marking, which is normally found in Polish finite verbs. The following set of sentences, (32–38), exemplify the use of such forms with experiencer-verbs:

(32) *Widziano czołgi na ulicach* ('Tanks were seen on the streets' [i.e. the speaker did not see them])
(33) *Słyszano wybuchy* ('Explosions were heard' [i.e. the speaker did not hear them])
(34) *Widzi się teraz więcej żołnierzy na ulicach* ('One can see more soldiers on the streets' [i.e. the speaker and others can see the soldiers])
(35) *Słyszy się wybuchy* ('One can hear explosions' [i.e. the speaker and others hear explosions])
(36) *Widać (było) góry* ('One can/could see the mountains / The mountains are/were visible' [i.e. the speaker can/could see them])
(37) *Słychać (było) wybuchy* ('One can/could hear the explosions / The explosions are/were audible' [i.e. the speaker can/could hear them])
(38) *Czuć (było) amoniak*[20] ('One can/could smell ammonia' [i.e. the speaker can/could smell it])

Grzesiak (1983: 25–31) classifies these forms as *formally* impersonal, because they do not allow for any grammatical subject; however, he argues, they are *semantically* personal because they strongly imply that there is/was a human perceiver (or some perceivers). He interprets these subjectless forms as means to topicalise the object of perception. The information content concerning the object or situation perceived is

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[20] Forms of the analytic type for the present and the past (e.g., *czuje się/czuło się x*) are possible, but the quasi-infinitival *czuć (było)* seems to be more common.

emphasized by minimizing the interest in the perceiver; the experiencer argument in such forms is always absent from the surface structure. Thus, the role of these impersonal forms is similar to the function of intonation, stress or some topicalising syntactic devices.

However, taking into account the topic of the present paper, one could also construe these forms as time and information-source markers, because what is inherently built into their semantic structure is the time reference and information source. These are the two meanings always found in forms like *widziano, widzi się, widać* (*było*)*, słyszano, słyszy się, słychać* (*było*)[21]. It is important to note that the evidential value of the above forms is not the same. Let us remember that in order to be considered evidential, a given form must indicate the *speaker's* source of information. These forms are markedly different in that respect; all three types encode that the assertion is ultimately based on perception, but the *speaker's* information source varies.

The forms with *-no*: *widziano, słyszano* (which refer to the past only) presuppose that there was a perceiver or perceivers, but it was not the speaker. Moreover, because the form is subjectless, the speaker is not interested in who the perceiver was. In effect, *widziano* can be understood as though the speaker was saying: 'someone else, whoever it was, saw *x*, but I did not see *x*'. What these forms strongly imply is an *indirect* source of information on the speaker's part (which need not imply any specific truth value). By contrast, in the analytic forms (*widzi się*, *słyszy się*) and the quasi-infinitival *widać*, *słychać* and *czuć* the speaker is the perceiver (the sole one or one of many). Thus, *widzi się x* and *widać x* are equivalent to the speaker saying: 'I see *x* and other people can see *x*'; these forms unambiguously indicate the speaker's perception as the *direct* information source.

It must be noted, however, that if the subjectless forms *słyszy się* or *słychać* ('one can hear') are followed by the conjunct *że* ('that'), they indicate a reported information source, not the direct one. Similar to how the type of conjunct changes the evidential reading of *słyszałam, że p* as opposed to *słyszałam, jak p* (see [28–29] above), the conjunct *że* ('that') introducing a propositional complement *p* changes the auditory evidential value of *słyszy się/ słyszało się*, as in (35), into the reportative, as in (39).

(39) *Słyszy się, że siły rządowe nie kontrolują niektórych obszarów* ('It is said / one can hear that the government forces do not control certain areas' [i.e. the speaker has access to reported information])

Similarly to experiencer-verbs, agentive perception verbs may also form impersonal subjectless constructions, referring either to the present or to the past. These constructions are of two types:

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[21] It is noteworthy that in such forms used with non-perception verbs, e.g. *czytano, czyta/czytało się*, etc., the strictly evidential component (i.e. information source) is replaced by a deictic component, i.e. marking of the speaker's distance to the activity described by the verb; this component can also be accounted for as evidential within the 'broader' definition of evidentiality (cf. Chafe 1986; Lazard 2001).

(I.)   the synthetic form suffixed -*no* (e.g. *patrzono na x /słuchano x*) for the past only;

(II.) the analytic forms: verb.3SG.PRES+*się* (e.g. *patrzy się na x* / słucha się x) for the present and verb.3SG.MASC.PAST-*o*+*się* (e.g. *patrzyło się na x* / *słuchało się x*) for the past.

However, the three-element set with infinitival endings (*widać*, *słychać* and *czuć*) does not have any corresponding equivalent in the group of agentive verbs. The following sentences exemplify the impersonal subjectless constructions with the agentive perception verb *patrzeć*:

(40)   *Patrzono na czołgi w centrum miasta* ('Tanks were observed/looked at in the city centre' [the speaker did not look at them])

(41)   *Patrzyło się na czołgi w centrum miasta* ('One observed/looked at tanks in the city centre' [the speaker and others looked at them])

(42)   *Dzisiaj patrzy się na czołgi z obojętnością* ('Today, one looks at tanks with indifference' [the speaker and others look at them])

Like in the case of experiencer-verbs, such constructions may be interpreted as topicalising devices; the focus of attention is drawn to the object of perception by eliminating the grammatical subject (Grzesiak 1983: 39–40).

Regarding the evidential value of the above forms, again one can observe an analogy to experiencer-verbs. As in the latter, there is a difference between (I) and (II) concerning the speaker's participation in the perception act. The synthetic forms suffixed -*no* (e.g. *patrzono na x, słuchano x*) imply that the speaker was *not* one of the perceivers. The -*no* forms might be understood as the speaker saying: 'someone looked at *x* / listened to *x*, but I did not do it' – as if the speaker was distancing him-/herself from the perceivers. However, in analogous experiencer-verb forms with -*no* (*widziano x, słyszano x*; see above), the speaker's indirect source of information concerning *x* seems to be more conspicuous than in agentive -*no* forms: *patrzono na x, słuchano x*. As said above, the agentive verbs draw attention to the perceiver's activity aimed to perceive *x*, thus backgrounding his/her perceiving *x*. That is also true of these subjectless forms, and this might explain a considerably weaker evidential load of *patrzono* and *słuchano* compared with *widziano* and *słyszano*. In contrast to -*no* forms, impersonal subjectless constructions of the analytic type with *się* (see [II] above), both for the present and the past (e.g. *patrzy się*/*patrzyło się*, as in [41–42]), clearly imply that the speaker is/was one of the perceivers, so his/her information source is direct. However, also here the evidential meaning is weakened by the focus on the 'agentive' component.

Particularly interesting are the three quasi-infinitival forms: *widać*, *słychać*, and *czuć* ('one can see, hear, smell'), as in (36–38), because they form a somewhat unique three-element set. The impersonal suffix -*no* or the analytic pattern: verb.3SG.PRES/MASC.PAST+*się* can be used productively with other (i.e. non-perception) verbs to say that an activity was/is performed, without providing a grammatical subject, e.g. *czytano*, *czyta się* ('one read/reads'), *sprzedawano*, *sprzedaje się* ('one sold/sells'), etc. However, the three forms, *widać*, *słychać* and *czuć*, whose occurrence is quite frequent

in both formal and casual speech style, make a closed three-element set based on an utterly unproductive pattern[22]. These forms used to be normal perception verbs with iterative meaning: the original meaning of *widać* and *słychać* was '*widzieć często*' ('to see often') and '*słyszeć często*' ('to hear often'). However, over time, the iterative contrast of *widzieć/widać* and *słyszeć/słychać* blurred, and the two forms came to be used interchangeably. As normal verbs, *widać*, *słychać* and *czuć* had full, person-inflected paradigms. So was the situation until the end of the seventeenth century. Throughout the seventeenth and eighteenth centuries, the inflectional forms of *widać*, *słychać* and *czuć* were gradually lost. The last attested forms of person-inflected *widać* and *słychać* are from the end of the seventeenth and the mid-eighteenth century; in the nineteenth-century Polish, person-inflected forms of the two verbs do not occur. *Czuć* most probably lost its inflectional paradigm at about the same time (Grzegorczykowa 1990: 565–66).

In consequence, today *widać*, *słychać* and *czuć* have remained as fossilized quasi-infinitival forms, which constitute impersonal predicatives of subjectless sentences. Significantly, they are not true infinitives because they cannot be used in constructions and contexts typical of Polish infinitives. Syntactically, they are quite exceptional; even assigning them to verbal forms may be questioned[23].

The semantic interpretation of the three forms is as problematic as their syntactic classification. They clearly imply a human perceiver, but because they are subjectless and do not allow for any explicit representation of the experiencer argument, the question is whether the perceiver is actualized or potential. In what follows, for the sake of brevity, we will consider examples with *widać* only, which refers to visual perception, but the same could be said, *mutatis mutandis*, about auditory *słychać* and olfactory *czuć*. Grzesiak (1983: 30–31) claims that a sentence like *Widać dom* can be explicated as follows: *Można* (*da się*) *widzieć dom* ('One can see a house/ it is possible (for anybody) to see a house'), so the perception is rather potential in his interpretation. According to Renata Grzegorczykowa (1990: 565), *widać*, when occurring alone (i.e. without the auxiliary *było*), is ambiguous in its meaning. It may encode a potential or actualized perception. However, if *widać* occurs with the auxiliary *było* and thus refers to the past, the sentence is unequivocally about actual perception, not a possible one. Halina Rybicka and Roxana Sinielnikoff (1990) claim that sentences with *widać* with present time reference should be differentiated into two types. If the perception act is only potential, they argue, the sentence will include some conditions which must be fulfilled by a potential perceiver. For example, in the following sen-

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[22]   Some authors add to this set two other verbs: *znać* ('one can recognise') and *stać* ('be sufficient' or 'be able to afford something'), but the two have different semantic and syntactic features; see Grzegorczykowa (1990).

[23]   See Brajerski (1975: 119), where they are in the category of adverbials; Jodłowski (1976: 79), however, classifies them as non-inflectional verbs making impersonal predicatives (in the same category we find *trzeba, można, wolno, warto, niepodobna, nie sposób*); in Bartnicka (1982: 17–18), they are categorized as infinitives; Saloni and Świdziński (1985: 42) put them into the group of 'defective verbs' (*czasowniki niewłaściwe*), along with items like *trzeba, szkoda, brak*.

tence: *Ze wzgórza widać dom* ('One can see a house from the hill'), being on the top of the hill is a condition which must be fulfilled in order to see the house. However, if the conditions of perception are not explicitly provided, a sentence like *Widać dom* indicates actualized perception; there is an actual perceiver, and it is the speaker (Rybicka, Sinielnikoff 1990: 161).

The issue of actualized vs. potential perception is quite important from the evidential viewpoint. If the meaning of *widać* is potential perception only, the sentence does not have an evidential content, because it does not indicate the speaker's source of information. Rybicka and Sinielnikoff rightly point to the problem of the conditions of perception, which have to be explicitly marked if potential perception is involved. The problem might be illustrated using the following set of sentences:

(43) *Widać góry* ('One can see the mountains / The mountains are visible')
(44) *Z kopca Kościuszki widać góry* ('One can see the mountains from Kościuszko Hill')
(45) *Z kopca Kościuszki widać było góry* ('One could see the mountains from Kościuszko Hill')

The first sentence, (43), can only be uttered when the speaker can see the mountains him-/herself at the moment of speaking. Without such implicit deictic reference to the speaker-perceiver, the sentence is incomprehensible. On the other hand, if the conditions of perception are given as in (44), *widać* unambiguously refers to a potential perception. One can hardly imagine a situation in which the speaker utters (44) when he/she is on the top of Kościuszko Hill in Cracow and can see the mountains; the sentence clearly implies that the speaker is not there. The assertion may be based on his/her previous sensory experience, someone's report or hearsay, but it is not based on simultaneous direct perception. In consequence, because the speaker's source of information in (44) is unknown, the sentence does not have any evidential meaning. In contrast, (45) is clearly evidential because it unambiguously indicates that the speaker's assertion is based on his/her prior direct perception.

Analogically to *widzieć* ('see'), *widać* can be polysemous. It need not refer to sensory perception only but may also encode inference based on observation and drawing conclusions from available data. When *widać* functions as an inferential marker, it is followed by a propositional argument introduced by *że* ('that'), as in (46), and it has forms referring to the present: *widać, że p*, or the past: *widać było, że p*. The inferential use of *widać* has given rise to an epistemic-evidential particle *widać*, which is semantically equivalent to *widocznie* ('evidently, most probably'), as in (47)[24].

(46) *Widać (było) jasno, że pieniędzy nie wystarczy* ('One can/could see clearly that there is/was not enough money')
(47) *Jan widać przyjechał, skoro jego samochód stoi przed domem* ('Evidently, Jan has come since his car is in front of the house')

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[24] The semantic and syntactic properties of *widać* as a particle and defective verb are analysed in Stępień (2008a).

Could *widać* along with *słychać* and *czuć* be interpreted as markers of direct evidentiality in the process of grammaticalization? These quasi-infinitival forms are syntactically unique in the grammar system of Polish; they have lost their original meaning together with the inflectional paradigms they had as normal verbs. Today, their sole meaning is marking that a given object/event is/was perceived (seen, heard or smelled). Interestingly, cognate forms in Russian (видать, слыхать) and Czech (*vidáti*, *slýchati*) have retained their full inflectional paradigms[25]. It would be tempting to see these forms in Polish as emerging grammatical evidentials. However, that interpretation would face some problems. Firstly, both *widać* and *słychać* are polysemous. Apart from the direct (visual and auditory) perception, the two may denote inferential (*widać*) and reportative (*słychać*) evidential meaning; they are followed then by propositional arguments: *widać, że p, słychać, że p*. The third one, *czuć*, is polysemous too, because it may refer to perception by different senses, e.g. *Czuć papierosy* ('One can smell cigarettes'), *Czuć twardy grunt w tym miejscu* ('One can feel hard ground in this place'). Ambiguous meaning ranging between direct and indirect information source is not a desirable feature in candidates for grammaticalizing evidentials. Secondly, if potential, not actual, perception is involved as in (44), the evidential meaning of *widać* disappears; the form does not encode or imply in any way the speaker's source of information for the assertion expressed. Since sentences with *widać, słychać* and *czuć* in which the perception act is only potential make a considerable part of the overall occurrence of these forms, it is hard to expect that the three predicatives will develop into typical evidentials, however unpredictable language change may be. Thirdly, grammatical evidentials are not the main predicates in the clauses where they occur; they provide additional information (see Anderson's definition above). In contrast, the predicatives *widać, słychać* and *czuć* constitute subjectless sentences, which is another reason why they make poor candidates for emerging grammatical evidentials. To conclude, though these three exceptional forms have lost their syntactic connection with other perception verbs, and they (usually) encode direct perception as their sole meaning, it would be difficult to see them as typical evidentiality markers in the process of grammaticalization.

Conclusion

Regarding the way evidential meanings are encoded, the term *evidentiality* may be used narrowly and refer to strictly grammatical evidentials (usually verbal affixes or clitics, as exemplified in section one), or it may be used broadly to cover information source markers of any morphological type: affixes and clitics, but also function words, like adpositions, determiners, auxiliaries, particles, or even lexical items. In the latter approach, evidentiality is construed as a semantic domain of information source, and

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[25] However, in contrast to Polish, where these three forms are stylistically unmarked, the Russian ones are limited to casual speech style; in literary style they have been replaced by видно, слышно. The analogous forms in Czech have maintained not only their full inflection but also the original iterative meaning (see Rybicka, Sinielnikoff 1990: 163).

this perspective has been adopted in the present paper to discuss the evidential values encoded by Polish verbs of perception.

The speaker's direct source of information (e.g. firsthand experience) is, understandably, the most common evidential value encoded by perception verbs, but not the only one. Depending on the semantics of the following nominal complement or the conjunct introducing a propositional complement (*jak* vs. *że*), perception verbs may also have the inferential or reportative meaning.

The distinction between object-oriented and subject-oriented verbs shows clearly that, in the latter group, the evidential meaning is rendered by first person forms only, in contrast to object-oriented verbs, which indicate the speaker's information source when used in first, second and third person. Subject-oriented verbs may also have evidential meaning when used in subjectless impersonal predicatives. However, such forms indicate the speaker's information source only when actual perception (not a potential one) is involved. Moreover, certain subjectless predicatives of perception verbs (-*no* suffixed) indicate the indirect, non-firsthand information source, rather than the direct one.

References

Adelaar, W. F. H. (1977). *Tarma Quechua: Grammar, Text, Dictionary*. Lisse: Peter de Ridder Press.

Adelaar, W. F. H. (with the collaboration of P. C. Muysken) (2007). *The Languages of the Andes*. Cambridge: Cambridge University Press.

Aikhenvald, A. Y. (2003). Evidentiality in typological perspective. In: A. Y. Aikhenvald & R. M. W. Dixon (eds.), *Studies in Evidentiality* (pp. 1–31). Amsterdam, Philadelphia: John Benjamins Publishing Company.

Aikhenvald, A. Y. (2004). *Evidentiality*. Oxford: Oxford University Press.

Aikhenvald, A. Y. (2014). The grammar of knowledge: a cross-linguistic view of evidentials and the expression of information source. In: A. Y. Aikhenvald, A. Y. & R. M. W. Dixon (eds.), *The Grammar of Knowledge. A Cross-Linguistic Typology* (pp. 1–51). Oxford: Oxford University Press.

Aikhenvald, A. Y. & Dixon, R. M. W. (eds.) (2003). *Studies in Evidentiality*. Amsterdam, Philadelphia: John Benjamins Publishing Company.

Aikhenvald, A. Y. & Dixon, R. M. W. (eds.) (2014). *The Grammar of Knowledge. A Cross-Linguistic Typology*. Oxford: Oxford University Press.

Anderson, L. B. (1986). Evidentials, paths of change, and mental maps: typologically regular asymmetries. In: W. Chafe & J. Nichols (eds.), *Evidentiality: The Linguistic Coding of Epistemology* (pp. 273–312). Norwood, NJ: Ablex Publishing Corporation.

Bartnicka, B. (1982). *Funkcje semantyczno-składniowe bezokolicznika we współczesnej polszczyźnie*. Wrocław: Ossolineum.

Brajerski, T. (1975). *Język staro-cerkiewno-słowiański*. Lublin: Towarzystwo Naukowe KUL.

Bralczyk, J. (1978). *O leksykalnych wyznacznikach prawdziwościowej oceny sądów*. Katowice: Uniwersytet Śląski.

Chafe, W. (1986). Evidentiality in English conversation and academic writing. In: W. Chafe & J. Nichols (eds.), *Evidentiality: The Linguistic Coding of Epistemology* (pp. 261–272). Norwood, NJ: Ablex Publishing Corporation.

Chafe, W. & Nichols, J. (eds.) (1986). *Evidentiality: The Linguistic Coding of Epistemology*. Norwood, NJ: Ablex Publishing Corporation.

Classen, C. (1993). *Worlds of Sense: Exploring the Senses in History and across Cultures*. London: Routledge.

Danielewiczowa, M. (2002). *Wiedza i niewiedza. Studium polskich czasowników epistemicznych*. Warszawa: Uniwersytet Warszawski, Katedra Lingwistyki Formalnej.

De Haan, F. (1999). Evidentiality and epistemic modality: Setting boundaries. *Southwest Journal of Linguistics*, *18(1)*: 83–101.

De Haan, F. (2005). Encoding speaker perspective: Evidentials. In: Z. Frajzyngier & A. Hodges & D. S. Rood (eds.), *Linguistic Diversity and Language Theories* (pp. 379-397). Amsterdam: Benjamins.

De Haan, F. (2012). Evidentiality and mirativity. In: R. I. Binnick (ed.), *Tense and Aspect* (pp. 1020–1046). Oxford: Oxford University Press.

Diewald, G. & Smirnova, E. (2010). Introduction. Evidentiality in European languages: the lexical–grammatical distinction. In: G. Diewald & E. Smirnova (eds.), *Linguistic Realization of Evidentiality in European Languages* (pp. 1–14). Berlin: De Gruyter Mouton.

Dobaczewski, A. (2002). *Zjawiska percepcji wzrokowej. Studium semantyczne*. Warszawa: Uniwersytet Warszawski, Katedra Lingwistyki Formalnej.

Doroszewski, W. (ed.) (1996 [1958–1969]). *Słownik języka polskiego.* Warszawa: Państwowe Wydawnictwo Naukowe.

Faller, M. (2002). *Semantics and Pragmatics of Evidentials in Cuzco Quechua*. PhD Dissertation, Stanford University. http://personalpages.manchester.ac.uk/staff/martina.t.faller/documents/Thesis.pdf, accessed June 2016.

Floyd, R. (1999). *The structure of evidential categories in Wanka Quechua*. Dallas: Summer Institute of Linguistics and The University of Texas at Arlington Publications in Linguistics.

Grochowski, M. (1986). *Polskie partykuły. Składnia, semantyka, leksykografia*. Wrocław: Ossolineum.

Grzegorczykowa, R. (1990). Geneza i współczesne funkcje konstrukcji z bezokolicznikami: *czuć*, *słychać*, *widać*, *znać*, *stać*. Poradnik Językowy, 8: 564–571.

Grzesiak, R. (1983). *Semantyka i składnia czasowników percepcji zmysłowej*. Wrocław: Zakład Narodowy im. Ossolińskich, Wydawnictwo Polskiej Akademii Nauk.

Hopper, P. J. & Traugott, E. C. (1993). Grammaticalization. Cambridge: Cambridge University Press.

Jacobsen, W. H. Jr. (1986). The heterogeneity of evidentials in Makah. In: W. Chafe & J. Nichols (eds.), *Evidentiality: The Linguistic Coding of Epistemology* (pp. 3–28). Norwood, NJ: Ablex Publishing Corporation.

Jakobson, R. (1957). Shifters, verbal categories, and the Russian verb. Cambridge, MA: Department of Slavic Languages and Literatures, Harvard University. Reprinted in: R. Jakobson (1971). *Selected Writings*, *Vol. II* (pp.130–147). The Hague: Mouton.

Jodłowski, S. (1976). *Podstawy polskiej składni*. Warszawa: PWN.

L. Johanson, L. & Utas, B. (eds.) (2000). *Evidentials: Turkic, Iranian and Neighbouring Languages*. Berlin: Mouton de Gruyter.

Lazard, G. (2001). On the grammaticalization of evidentiality. *Journal of Pragmatics*, *33*: 358–68.

Lee, D. D. (1938). Conceptual implications of an Indian language. *Philosophy of Science*, *5*: 81–102.

Łukasiewicz, E. (2018). *Linguistic Evidentiality and Epistemic Justification of Beliefs*. Bydgoszcz: Wydawnictwo Uniwersytetu Kazimierza Wielkiego.

Plungian, V. A. (2001). The place of evidentiality within the universal grammatical space. *Journal of Pragmatics*, *33* (*2001*): 349–357.

Plungian, V. A. (2010). Types of verbal evidentiality marking: an overview. In: G. Diewald & E. Smirnova (eds.), *Linguistic Realization of Evidentiality in European Languages* (pp. 15–58). Berlin: De Gruyter Mouton.

Rogers, A. (1971). Three kinds of physical perception verbs. *Chicago Linguistic Society 7*: 206–223.

Roszko, R. (1993). *Wykładniki modalności imperceptywnej w języku polskim i litewskim*. Warszawa: Polska Akademia Nauk, Instytut Slawistyki.

Rybicka, H. & Sinielnikoff, R. (1990). Predykatywne funkcje czasowników *widać*, *słychać* i ich odpowiedników w języku rosyjskim i czeskim. *Prace Filologiczne*, *XXXV*: 159–165.

Saloni, Z. & Świdziński, M. (1998). *Składnia współczesnego języka polskiego. Wydanie czwarte*. Warszawa: Wydawnictwo Naukowe PWN.

Stępień, M. (2008a). Najwyraźniej widać…Analiza semantyczna. *Biuletyn Polskiego Towarzystwa Językoznawczego*, *LXIV*: 159–171.

Stępień, M. (2008b). O wzajemnym przenikaniu się ewidencjalności i modalności (na przykładzie wybranych polskich czasowników i wyrażeń funkcyjnych. *Wiener Slawistischer Almanach Sonderband*, *72* (*2008*): 313–333.

Viberg, A. (1983). The verbs of perception: a typological study. *Linguistics*, *21*: 123–162. Berlin, New York, Amsterdam: Mouton Publishers.

Weber, D. J. (1986). Information, perspective, profile and patterns in Quechua. In: W. Chafe & J. Nichols (eds.), *Evidentiality: The Linguistic Coding of Epistemology* (pp. 137–155). Norwood, NJ: Ablex Publishing Corporation.

Weber, D. J. (1989). *A Grammar of Huallaga (Huánuco) Quechua*. Berkeley, Los Angeles, London: University of California Press.

Whitt, R. J. (2010). Evidentiality, polysemy, and the verbs of perception in English and German. In: G. Diewald & E. Smirnova (eds.), *Linguistic Realization of Evidentiality in European Languages* (pp. 249–278). Berlin: De Gruyter Mouton.

Wiemer, B. (2006). Particles, parentheticals, conjunctions and prepositions as evidentiality markers in contemporary Polish (a first exploratory study). *Studies in Polish Linguistics, Vol. 3, 2006*, Cracow: Lexis.

Wiemer, B. (2010). Hearsay in European languages: toward an integrative account of grammatical and lexical marking. In: G. Diewald & E. Smirnova (eds.), *Linguistic Realization of Evidentiality in European Languages* (pp. 59–130). Berlin: De Gruyter Mouton.

Wierzbicka, A. (1996). *Semantics. Primes and Universals*. Oxford: Oxford University Press.

Willett, T. (1988). A cross-linguistic survey of the grammaticalization of evidentiality. *Studies in Language*, *12*: 51–97.

Żabowska, M. (2008). Polskie wyrażenia ewidencjalne a partykuły epistemiczne. *Wiener Slawistischer Almanach, Sonderband*, *72* (*2008*): 377–393.

The evidential values encoded
by selected verbs of perception in Polish

Abstract: The aim of the paper is to analyse the evidential meanings encoded by selected Polish verbs of perception. Evidentiality is a category whose primary function is to mark the speaker's source of information on which his/her claim is based; this may be direct observation/experience, inference from observable data, general knowledge, someone's report, or other types of evidence. Cross-linguistically, the category of evidentiality may be defined narrowly as marking of the information source only by strictly grammatical means; alternatively, evidentiality may be understood broadly as marking of the information source plus additional epistemic values, and this can be done through grammatical and/or lexical means. The present paper adopts the latter understanding of evidentiality; within this broadened view, evidential strategies can be discussed more holistically. Perception verbs in Polish may be divided into different subgroups; from the evidential perspective, the division into object-oriented and subject-oriented verbs provides the most significant contrast to consider the problem of which forms of perception verbs encode evidential meanings. The next problem to be addressed is which evidential values are encoded by these forms. It is usually the speaker's direct perceptual experience that is indicated by perception verbs; however, certain forms may encode indirect information sources, such as inference or someone's report.

Keywords: evidentiality, perception verbs, object-oriented verbs, subject-oriented verbs, subjectless predicatives