

## Chapter 4

# On the semantic change of evidential argument *jakoby*-clauses in Polish

Łukasz Jędrzejowski

Universität zu Köln

The main aim of this chapter is to examine the semantic change of evidential argument clauses headed by the complementizer *jakoby* in the history of Polish. Mainly, I argue that *jakoby* developed from a hypothetical comparative complementizer meaning ‘as if’ into a hearsay complementizer, and provide empirical evidence showing that this process happened in the late Old Polish period, i.e. around 1500. To begin with, I compare *jakoby*-clauses with complement *że*-clauses (‘that’-clauses) at the syntax-semantics interface, elaborate on their selected differences, and account for the source of these differences. Diachronically, I show that two factors in the lexical meaning of *jakoby* were responsible for the semantic change that it underwent: (i) equative comparison and (ii) counterfactual meaning. Both factors are taken to have paved the way for inferences from reportative or hearsay information and, simultaneously, for the compatibility with an informational conversational background.

## 1 The puzzle

Compare the two following sentences from Polish introduced by the complementizer *jakoby*. Whereas the example given in (1a) is from Old Polish, (1b) illustrates how argument *jakoby*-clauses are mainly used in Present-day Polish:

- (1) a. *izeć się jest ludziami na ziemi tako było*  
that REFL be.3SG people.DAT on earth.LOC so be.1-PTCP.SG.N  
*widziało, jakoby się ono na nie obalić*  
seem.1-PTCP.SG.N jakoby REFL it on them.ACC slay.INF



było                      chciało  
 be.I-PTCP.SG.N want.I-PTCP.SG.N  
 ‘that it seemed to the people on earth as if it wanted to slay all of  
 them’ (KG, *Kazanie I: Na Boże Naordzenie*, 26–27)

- b. Firma zaprzeczyła, **jakoby** były zgłoszenia o  
 company deny.I-PTCP.SG.F jakoby be.I-PTCP.N-VIR.PL reports about  
 wadliwych kartach.  
 faulty cards.LOC  
 ‘The company denied that there were supposedly reports about faulty  
 prepaid cards.’ (NKJP, *Dziennik Zachodni*, 27/9/2006)

In (1a), the dependent clause is introduced by the hypothetical comparative complementizer *jakoby* corresponding to the meaning of the English complex complementizer *as if*, as the English paraphrase of (1a) indicates, and it is embedded under the matrix verb *widzieć* ‘seem’. In (1b), in turn, the *jakoby*-clause is embedded under the speech verb *zaprzeczać* ‘deny’.<sup>1</sup> What both clauses have in common is that they occupy one of the argument positions of the matrix verb (= argument clauses). However, in (1b) *jakoby* itself does not render the meaning of what English *as if* expresses; instead it comprises the compositional meaning of a complementizer introducing a dependent declarative clause (= *that*) and, at the same time, of a hearsay adverb (e.g. *allegedly*, *supposedly* or *reportedly*), giving rise to a hearsay or a reportative interpretation. The meaning of *jakoby* must have changed because in Present-day Polish *jakoby*-clauses are unembeddable under verbs of seeming, as was the case in Old Polish, see (1a) above:

- (2) \* *Firmie* wydaje się, **jakoby** były zgłoszenia  
 company.DAT seem.3SG REFL jakoby be.I-PTCP.N-VIR.PL reports  
 o wadliwych kartach.  
 about faulty cards.LOC  
 Intended meaning: ‘It seems to the company as if there were any  
 reports about faulty prepaid cards.’

<sup>1</sup>*Jakoby* can also be used as a hearsay adverb:

- (i) *Sąsiedzi* kupili **jakoby** nowy samochód.  
 neighbors buy.I-PTCP.VIR.PL jakoby new car  
 ‘Supposedly, our neighbors have bought a new car.’

I am not concerned with *jakoby* used as an adverb in this chapter; for more details see Jędrzejowski (2012), Socka (2010), Stępień (2008), Wiemer (2015), Wiemer & Socka (2017a, 2017b), Żabowska (2008), among many others.

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Remarkably, other West-Slavic languages like Czech have not experienced this change:

(3) Czech, Radek Šimík (pc.):

- a. *Zdálo se, jako by byl opilý.*  
seem.l-PTCP.SG.N REFL as SUBJ be.l-PTCP.SG.M drunk  
'It seemed as though he were drunk.'
- b. \* *Firma popřela, jako by byly nahlášený*  
company deny.l-PTCP.SG.F as SUBJ be.l-PTCP.N-VIR.PL reports  
*jakékoliv vadné karty.*  
any faulty cards  
Intended meaning: 'The company denied that there were reports  
about any faulty cards.'

The main objective of this study is to figure out to what extent and under what circumstances *jakoby* used as a complementizer changed in the history of Polish.

The structure of this chapter is as follows. Section 2 is concerned with the question of how argument *jakoby*-clauses are used in Present-day Polish. In this context, I will compare *jakoby*-clauses with canonical subordinate clauses headed by the complementizer *že* 'that', and point out several striking differences between both clause types at the syntax-semantics interface. In Section 3, I will give an overview of how *jakoby*-clauses could be used in older stages of Polish. A formal account of to what extent and under what circumstances *jakoby* changed is presented in Section 4. In modeling this change, I will make use of the possible worlds semantics initiated by Kratzer (1981; 1991; 2012) and developed further for evidential expressions by Faller (2002; 2011) and Matthewson et al. (2007). Finally, I conclude the findings in Section 5.

## 2 *Jakoby*-clauses in Present-day Polish

In this section, I examine selected properties of *jakoby*-clauses in Present-day Polish at the syntax-semantics interface. In doing so, I focus first on syntactic peculiarities by comparing *jakoby*-clauses to canonical declarative *že*-clauses (= *that*-clauses). Then, I account for where the differences between both clause types come from by decomposing the meaning of the complementizer *jakoby*.

## 2.1 Licensing conditions

Complement clauses in Polish are usually headed by the complementizer *że* ‘that’.<sup>2</sup> In this connection, I propose the following descriptive condition: If a *jakoby*-clause occupies an argument slot of a clause-embedding predicate, it can always be replaced by a *że*-clause. Correspondingly, the embedded *jakoby*-clause given in (1b) – repeated here for convenience as (4a) – is supposed to be replaceable by a *że*-clause. This prediction is borne out:

- (4) a. *Firma zaprzeczyła, jakoby były zgłoszenia o wadliwych kartach.*  
 company deny.l-PTCP.SG.F jakoby be.l-PTCP.N-VIR.PL reports about  
 faulty cards.LOC  
 ‘The company denied that there were supposedly reports about faulty prepaid cards.’
- b. *Firma zaprzeczyła, że były zgłoszenia o wadliwych kartach.*  
 company deny.l-PTCP.SG.F that be.l-PTCP.N-VIR.PL reports about  
 faulty cards.LOC  
 ‘The company denied that there were any reports about faulty prepaid cards.’

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<sup>2</sup>Note that in some environments a more complex complementizer is required, i.e. *żeby*:

- (i) *Każda matka chce, żeby jej syn chodził do przedszkola.*  
 every mother want.3SG żeby her son go.l-PTCP.SG.M to kindergarten.GEN  
 ‘Every mother wants her son to go to the kindergarten.’

Complements embedded under volitional or desiderative predicates require the presence of the complex complementizer *żeby*, consisting of the simple complementizer *że* ‘that’ and the conditional/subjunctive clitic *by*. The clitic has to occur adjacent to *że* and cannot be omitted:

- (ii) \* *Każda matka chce, że jej syn chodził do przedszkola.*  
 every mother want.3SG że her son go.l-PTCP.SG.M to kindergarten.GEN  
 Intended meaning: ‘Every mother wants her son to go to the kindergarten.’

Following the generative mainstream literature on Polish complex clauses going back to Tajsner (1989), Willim (1989), Witkoś (1998), Bondaruk (2004), among many others, I take *żeby* to be a complex C-head. Alternatively, one could argue for a more fine-grained C-layer analysis along the lines of Rizzi (1997) and postulate two different structural positions – one for *że* and one for *by* – within the C-domain, as Szczegielniak (1999) does. Alternative analyses are offered by Migdalski (2006; 2010; 2016) and Tomaszewicz (2012). As nothing hinges on whether one compares *jakoby* with *że* or with *żeby*, I restrict myself to the former in the present chapter.

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However, not every *że*-clause can be replaced by a *jakoby*-clause. In other words, the condition proposed above is not bidirectional:

- (5) a. *Dziwi mnie, że były zgłoszenia o*  
 be.amazed.3SG me.ACC that be.I-PTCP.N-VIR.PL reports about  
*wadliwych kartach.*  
 faulty cards.LOC  
 ‘I’m amazed/surprised that there were any reports about faulty prepaid cards.’
- b. \* *Dziwi mnie, jakoby były zgłoszenia o*  
 be.amazed.3SG me.ACC jakoby be.I-PTCP.N-VIR.PL reports about  
*wadliwych kartach.*  
 faulty cards.LOC

Based on this contrast, we observe that *jakoby*-clauses cannot be embedded under exclamative predicates like *dziwić (się)* ‘be amazed’/‘be surprised’. Such a restriction does not occur with regard to *że*-clauses. A similar conclusion can be drawn as to perception verbs being used metaphorically. Ibarretxe-Antuñano (1999) points out, based on Sweetser (1990), that olfactory verbs, e.g. *smell*, in English, Spanish and Basque can have a non-literal meaning that, in turn, depending on the language can be paraphrased as *trail something*, *suspect*, *guess* or *investigate*. They are often connoted with negative situations, as the following example illustrates:

- (6) *I smell something fishy about this deal.* (Sweetser 1990: 37)

The Polish olfactory verb *czuć* ‘smell’ (lit. ‘feel’) behaves in a similar way. If it is used metaphorically, it means ‘suspect’ and can embed *że*-clauses:

- (7) *Jeden z polityków czuje, że niebawem wybuchnie wielki*  
 one of:the politicians feel.3SG that soon break:out.3SG huge  
*skandal na arenie międzynarodowej.*  
 scandal on arena.LOC international  
 ‘One of the politicians suspects that a huge scandal will soon break out in the international arena.’

Similar to the situation with exclamative predicates outlined above, the use of *jakoby*-clauses leads to ill-formed results:

- (8) \* *Jeden z polityków czuje, jakoby niebawem wybuchnie wielki skandal na arenie międzynarodowej.*  
one of:the politicians feel.3SG jakoby soon break:out.3SG huge  
scandal on arena.LOC international

(8) appears to be appropriate only in a context in which the sentence subject, i.e., one of the politicians, literally uttered that a huge scandal will break out. The speaker wants to distance himself/herself from what the politician said by using the complementizer *jakoby*. On the other hand, (8) is infelicitous in the context in which the speaker describes what the politician might suspect without having written or said it. In other words, the content of the proposition must be known to the speaker from a foreign source. This also accounts for why (2) is ungrammatical: using verbs of seeming, the speaker mainly draws conclusions based on what (s)he has perceived, and not based on what (s)he has heard from others. As *jakoby*-clauses tend to occur in the context of speech/report expressions, they can disambiguate or specify the meaning of a clause-embedding predicate, cf. (9) below:

- (9) *Niektóre kluby nie wiedzą, jakoby zgłaszały graczy.*  
some clubs NEG know.3PL jakoby propose.1-PTCP.N-VIR.PL players.ACC  
'Some sports clubs admit not knowing that they supposedly proposed players.'

(NKJP, *Gazeta Krakowska*, 25/6/2007; slightly modified by author: ŁJ)

The semi-factive matrix verb *wiedzieć* 'know' is usually used as a verb of retaining knowledge. In (9), the embedded *jakoby*-clause adds an additional layer of meaning to it, turning it into a *verbum dicendi*.<sup>3</sup> Accordingly, we have to conclude that *że* and *jakoby* as complementizers differ in meaning and that their licensing conditions depend on lexical properties of clause-embedding predicates. Following the well-known classification of embedding verbs proposed in Karttunen (1977), the most frequent *jakoby*-embedders are verbs of one-way communication, e.g. *twierdzić* 'claim', *zaprzeczać*, *dementować* both: 'deny', *powiedzieć* 'say' or *sugerować* 'suggest'.

A final note is in order here concerning the licensing conditions of *jakoby*-clauses. Remarkably, they can also be attached to DPs:

<sup>3</sup>Reis (1977: 142–148) has already observed for German *wissen* 'know' that it can be used in a similar way.

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- (10) *Absurdalne jest* [<sub>DP</sub> *twierdzenie*]<sub>i</sub>, [*jakoby* *okulary przeciwsłoneczne*  
absurd be.3SG claim jakoby sunglasses  
*miały* *ograniczać widoczność*]<sub>i</sub>.  
have.I-PTCP.N-VIR.PL restrict.INF visibility.ACC

‘The claim that sunglasses supposedly restrict visibility is absurd.’

(NKJP, *Gazeta Ubezpieczeniowa*, 7/3/2006)

In (10), the DP *twierdzenie* ‘claim’ is derived from the verb *twierdzić* and its content is modified or specified by the following *jakoby*-clause. For the sake of convenience, I restrict myself in the present study to *jakoby*-clauses that are selected by verbs. Currently, there are different technical possibilities for how one could analyze examples as given in (10). For an overview the interested reader is referred to Moulton (2009), Haegeman & Ürögdi (2010), and de Cuba (2017), among many others.

## 2.2 Previous descriptions

The view on licensing conditions presented in this subsection sharply contrasts with what Taborek (2008: 110–115, 156–157) claims about *jakoby*-clauses:

Als die letzte Kategorie gilt hier der mit der Subjunktion *jakoby* (und ihren Alternaten *jakby* und *jak gdyby*) eingeleitete Komplementsatz in der Subjektfunktion. Die *jakoby*-Sätze werden von Verben des Sagens selektiert und implizieren Zweifel des Sprechers.

‘As the last category, one should mention here the subjunction *jakoby* (and its alternative subjunctives *jakby* and *jak gdyby*) introducing complement clauses in the subject position. The *jakoby*-clauses are selected by verbs of saying and imply speaker’s doubts.’ (my translation: ŁJ)

Taborek (2008: 100–101)

Although Taborek (2008) correctly observes that *jakoby*-clauses are selected by verbs of saying, he does not discuss any appropriate examples from Present-day Polish. Instead, he cites examples from older stages of Polish with *jakoby*-clauses occurring after verbs of seeming. The second problem concerns the replaceability of *jakoby* by *jakby* and *jak gdyby*, both meaning ‘as if’. As the following example illustrates, neither *jakby* nor *jak gdyby* can replace *jakoby*:

- (11) *Firma zaprzeczyła, jakoby / \*jakby / \*jak gdyby*  
 company deny.1-PTCP.SG.F jakoby / as if / as if  
*były zgłoszenia o wadliwych kartach.*  
 be.1-PTCP.N-VIR.PL reports about faulty cards.LOC

Intended meaning: ‘The company denied that there were supposedly any reports about faulty prepaid cards.’

If one continues (11) with *jakby* or *jak gdyby*, the dependent clause modifies the way the company denied (= adjunct clause), not what the company denied (= complement clause). In other words, the embedded clause headed by *jakby* or *jak gdyby* does not occupy the internal argument position of the matrix verb *zaprzeczyć* ‘deny’. Instead, it forms an A-bar dependency with the matrix clause, giving rise to a hypothetical comparative interpretation. Independent evidence for this argument follows from the observation that *jakby*- and *jak gdyby*-clauses (contrary to *jakoby*-clauses) cannot modify DPs derived from speech/report expressions:

- (12) *Absurdalne jest [DP twierdzenie]<sub>i</sub>, [jakoby / \*jakby / \*jak gdyby*  
 absurd be.3SG claim jakoby / as if / as if  
*okulary przeciwsłoneczne miały ograniczać widoczność]<sub>i</sub>.*  
 sunglasses have.1-PTCP.N-VIR.PL restrict.INF visibility.ACC

Intended meaning: ‘The claim that sunglasses supposedly restrict visibility is absurd.’

Likewise, Wiemer (2005) assumes *jakoby*-clauses to be still embeddable under verbs of seeming. Empirically, this view cannot be upheld, though. I was not able to find solid evidence from Present-day Polish in the *National Corpus of Polish* illustrating the usage of *jakoby*-clauses after verbs of seeming.<sup>4</sup> Based on Łojasiewicz (1992), Wiemer (2005) elaborates on the following example:

<sup>4</sup>I built queries looking for all morphological forms of both perfective and imperfective verbs of seeming; compare, for example, the aspectual pair *zdać się* vs. *zdawać się*. As verbs of seeming are reflexive in Polish, I also built queries with syntactic interveners between the verb and the reflexive pronoun *się*. One of such interveners is, for example, a DP argument marked for the Dative case and stemming from the matrix verb, giving rise to such results as *wydaje mi się* ‘it seems to me’. I was able to find only one example from an internet forum:

- (i) *Zdaje mi się, jakoby Hobbit uważał inaczej.*  
 seem.3SG me.DAT REFL jakoby Hobbit think.1-PTCP.SG.M differently  
 ‘It seems to me as if Hobbit would think differently.’

(NKJP, an internet forum, 19/8/1999)

Personally, I judge this example as ungrammatical and would use *jakby* instead of *jakoby*.



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- (13) *Zdaje mi się, jakobym słyszał jakieś wołanie.*  
 seem.3SG me.DAT REFL jakoby.1SG hear.l-PTCP.SG.M some crying.ACC  
 ‘It seems to me as if I heard someone crying.’ (Łojasiewicz 1992: 105)

It is not clear, however, how old this example is. Moreover, I judge it as ungrammatical and would use the hypothetical comparative complementizer *jakby* ‘as if’ instead of *jakoby* in this context. In addition, Wiemer (2005: 122–124) notices that *jakoby* clauses can be embedded under speech verbs. However, he discusses only one example with the matrix verb *śnić się* ‘dream’:<sup>5</sup>

- (14) *Przeszłej nocy śniło mu się, jakoby gruszki z drzewa rwał.*  
 last night dream.l-PTCP.SG.N him.DAT REFL jakoby pears.ACC from tree.GEN pluck.l-PTCP.SG.F  
 (i) ‘Last night he dreamt as if he were plucking pears from a tree.’  
 (ii) ‘Last night he dreamt that he was supposedly plucking pears from a tree.’  
 (iii) ‘Last night he is supposed to have dreamt that he was plucking pears from a tree.’ (Wiemer 2005: 123, ex. 22)

Three issues deserve to be addressed in connection with the example given in (14). Firstly, (14) is taken from the Positivist novel *Nad Niemnem* ‘On the Niemen’, which was written in the New Polish period in 1888 by Eliza Orzeszkowa. Secondly, *śnić się* ‘dream’ is not an inherent verb of saying. In essence, dream reports allow a multiplicity of readings. If someone dreams, (s)he can dream that (s)he is someone else. In this sense, one reports what (s)he dreamt about and VP denotes a set of situations in which someone had a dream/dreams. Though *śnić się* ‘dream’ does not necessarily involve a speech context (for more details on dream reports, see Shanon 1980, Percus & Sauerland 2003 or Kauf 2017). Thirdly, in my opinion (14) is ambiguous and has three different readings. *Jakoby* can be interpreted either as the hypothetical comparative complementizer ‘as if’ or as a reported speech complementizer in the Present-day Polish sense. In the former case, it is used because the matrix subject cannot remember what he exactly dreamt about. He has the impression that he were plucking pears from a tree, but he is not sure. In the latter case, two readings have to be distinguished. It can be either the subject himself who reports about his dreams or someone else who tries to render the content of subject’s dreams. Both scenarios are imaginable; see also the discussion in Section 3.

<sup>5</sup>Glosses and English paraphrases are mine: ŁJ.

## 2.3 Syntax

If lexical licensing conditions of *jakoby*-clauses differ from those of *że*-clauses, there must also be syntactic differences between both clause types. Some of them are presented in this section.

### 2.3.1 Left periphery

One of the differences between *że*- and *jakoby*-clauses refers to movement to the left periphery of the matrix clause. Consider the following pair:

- (15) a. *Dorota twierdziła, że Jan był szczęśliwy.*  
Dorota claim.l-PTCP.SG.F that Jan be.l-PTCP.SG.M happy  
'Dorota claimed that Jan was happy.'
- b. *Dorota twierdziła, jakoby Jan był szczęśliwy.*  
Dorota claim.l-PTCP.SG.F jakoby Jan be.l-PTCP.SG.M happy  
'Dorota claimed that Jan supposedly was happy.'

What distinguishes both clause types is that only *że*-clauses can be A-bar-moved to the left periphery. As the following contrast illustrates, movement of *jakoby*-clauses is prohibited:

- (16) a. *Że Jan był szczęśliwy, twierdziła Dorota.*  
that Jan be.l-PTCP.SG.M happy claim.l-PTCP.SG.F Dorota  
'That Jan was happy, Dorota claimed.'
- b. \**Jakoby Jan był szczęśliwy, twierdziła Dorota.*  
jakoby Jan be.l-PTCP.SG.M happy claim.l-PTCP.SG.F Dorota  
Intended meaning: 'That supposedly Jan was happy, Dorota claimed.'

At this moment, I have no explanation for why *jakoby*-clauses are banned from a higher structural position in the Polish clause structure. There must be a conflict between the meaning of the complementizer and an information-structural movement.

### 2.3.2 Future tense form

Another difference is connected to the use of the future auxiliary verb *będzie* 'will'; for its detailed analysis see in particular Błaszczak et al. (2014). Interestingly enough, *jakoby*-clauses cannot combine with *będzie*, whereas no such restrictions occur with regard to *że*-clauses:



- b. \* *Dorota twierdziła, jakoby Jan poszedł-by do kina.*  
Dorota claim.I-PTCP.SG.F jakoby Jan go.I-PTCP.SG.M-SUBJ to  
cinema.GEN  
Intended meaning: ‘Dorota claimed that Jan would supposedly have gone to the cinema.’

This difference might be due to the fact that *jakoby* as an evidential complementizer has not been fully bleached yet and that the clitic *by* still contributes to the compositional evidential meaning of what *jakoby* expresses in Present-day Polish. It straightforwardly follows that the second occurrence of *by* appears to be redundant in this context. I will come back to this issue later on.

#### 2.3.4 The discourse particle *chyba*

According to *Słownik Współczesnego Języka Polskiego [Dictionary of Modern Polish]* (1998), *chyba* ‘presumably’ is defined as follows:

*chyba*: tym słowem mówiący sygnalizuje, że nie wie czegoś dokładnie, nie jest czegoś pewien, ale decyduje się to powiedzieć, sądząc, że to prawda; przypuszczalnie; być może, prawdopodobnie, bodaj;

‘*chyba*: using this word, the speaker signals that (s)he doesn’t know something exactly, that (s)he is not certain about something, but at the same time (s)he decides to say it, claiming it is true; assumedly; maybe, probably, perhaps;’ (my translation: ŁJ).

*Słownik Współczesnego Języka Polskiego [Dictionary of Modern Polish]* (1998: 117)

Consider the example given in (20), illustrating the use of *chyba* in a declarative clause:

- (20) *Chyba jest pani niesprawiedliwa.*  
*chyba* be.3SG lady unjust  
‘Miss, I think you are unjust.’ (FP, p. 140)

Using the discourse particle *chyba* ‘presumably’, the speaker establishes a particular common ground relationship among discourse interlocutors. Concretely, the speaker indicates that her/his commitment towards the truth of what is embedded is speculative. Accordingly, I analyze *chyba* as a modifier of assertive

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speech acts, contributing to a weaker commitment of the speaker to the proposition, cf. Zimmermann (2004; 2011) for a similar analysis of the German discourse particle *wohl*.

(21) Meaning of *chyba*(p):

[[*chyba p*]] =  $f^w$  assume( $x, p$ ), whereby  $x$  = speaker

Usually, it is the speaker who is uncertain about the content of the embedded proposition using *chyba*:

- (22) *Zamówił piwo. Ale **chyba** mu nie smakuje, bo ledwie umoczył usta.*  
 order.I-PTCP.SG.M beer but *chyba* him.DAT NEG be:tasty.3SG because  
 barely soak.I-PTCP.SG.M lips  
 ‘He ordered a beer. But he probably doesn’t like it because he barely soaked his lips in it.’ (FP, p. 44)

However, in reported speech the attitude holder can be shifted to the clause subject itself (for more details on discourse particles in shifted contexts, see Döring 2013 and references cited therein):

- (23) *Adam twierdzi, że piwo mu **chyba** nie smakuje.*  
 Adam claim.3SG that beer him.DAT *chyba* NEG be:tasty.3SG  
 ‘Adam claims that he probably doesn’t like the beer.’

What is interesting about *jakoby*-clauses is that they cannot license the discourse particle *chyba*, contrary to *że*-clauses:

- (24) a. *Dorota powiedziała, że **chyba** pójdzie do kina.*  
 Dorota say.I-PTCP.SG.F that *chyba* go.3SG to cinema.GEN  
 ‘Dorota said that she presumably will go to the cinema.’  
 b. \* *Dorota powiedziała, **jakoby chyba** pójdzie do kina.*  
 Dorota say.I-PTCP.SG.F *jakoby chyba* go.3SG to cinema.GEN  
 Intended meaning: ‘Dorota said that supposedly she presumably will go to the cinema.’

The speaker questions the truth value of the embedded proposition using *jakoby*. If we shift the attitude holder to the clause subject, it should be possible to combine *jakoby* and *chyba*, as the latter is not attributed to the speaker. (24b) is ruled out, though. A possible explanation comes from the fact that *chyba* as a speech

act modifier takes a wider scope: It involves the matrix subject and its subjective attitude. *Jakoby*, in turn, does not take scope over the matrix subject leading to a clash. This is to be expected if we assume Mood<sub>evidential</sub> to outscope Mod<sub>epistemic</sub>, see (18) above.

### 2.3.5 Modal verb *musieć* ('must')

It is a well-known fact that modal verbs can occur in embedded environments resulting in a shift of the attitude holder, cf. Hacquard (2006) and Hacquard & Wellwood (2012):

- (25) *Dorota powiedziała, że Jan musi być chory.*  
 Dorota say.I-PTCP.SG.F jakoby Jan must.3SG be.INF sick  
 a) deontic: 'Dorota said that Jan has to be sick.'  
 b) epistemic: 'Dorota said that Jan must be sick (now).'

In (25), the modal verb *musieć* can be interpreted in two different ways. Imagine a situation in which Dorota is a stage director of a play and determines how the stage play should be. According to this interpretation, *musieć* is evaluated against a bouletic modal base and narrowed down by a deontic conversational background. If, on the other hand, Dorota supposes Jan to be ill, but she is not sure about this, *musieć* is interpreted epistemically. In both cases, the attitude holder is the matrix subject, i.e. Dorota. *Jakoby*-clauses restrict the quantification domain of *musieć*:

- (26) *Dorota powiedziała, jakoby Jan musi być chory.*  
 Dorota say.I-PTCP.SG.F jakoby Jan must.3SG be.INF sick  
 a) deontic: 'Dorota said that supposedly Jan has to be sick.'  
 b) ?/\*epistemic: 'Dorota said that supposedly Jan must be sick (now).'

It is very hard to imagine a scenario in which *musieć* would be interpreted epistemically, even though the attitude holder has shifted to the matrix subject.<sup>6</sup> Remarkably, this problem disappears as soon as *musieć* is replaced by the existential modal verb *móc* 'can'/'may':

<sup>6</sup>Interestingly enough, this constraint is weakened as soon as the modal verb *musieć* occurs in a complex past tense structure:

- (i) ? *Dorota powiedziała, jakoby Jan musiał być chory.*  
 Dorota say.I-PTCP.SG.F that Jan must.I-PTCP.SG.M be.INF sick  
 Intended meaning: 'Dorota said that supposedly Jan must have been sick.'

Still, (i) sounds marked.

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- (27) *Dorota powiedziała, jakoby Jan może być chory.*  
Dorota say.I-PTCP.SG.F jakoby Jan can.3SG be.INF sick  
a) deontic: ‘Dorota said jakoby supposedly Jan is to be allowed to be sick.’  
b) epistemic: ‘Dorota said that supposedly Jan may be sick (now).’

It still needs to be figured out why the complementizer *jakoby* and the epistemic modal verb *musieć* cannot co-occur.

##### 2.3.6 Matrix subject constraint

If *jakoby*-clauses occupy one of the arguments of a clause-embedding predicate, the matrix subject usually occurs in the third person. 1st and 2nd person subjects, on the other hand, disprefer *jakoby*-clauses:

- (28) a. ? *Wczoraj powiedział-e-ś, jakoby pójdziesz dzisiaj do kina.*  
yesterday say.I-PTCP.SG-M-2SG jakoby go.2SG today to cinema.GEN  
Intended meaning: ‘Yesterday you said that you will supposedly go to the cinema today.’  
b. \* *Wczoraj powiedział-e-m, jakoby pojedę dzisiaj do kina.*  
yesterday say.I-PTCP.SG-M-1SG jakoby go.1SG today to cinema.GEN  
Intended meaning: ‘Yesterday I said that I will supposedly go to the cinema today.’

(28a) appears to be appropriate in one specific context. Let assume that A is the speaker, whereas B is the matrix subject. Imagine that B uttered *p* to C, i.e., to another discourse interlocutor, but not to A. It is natural to utter (28a) provided that C reported to A that B is supposed to have said *p*. The incompatibility of the 1st person with *jakoby*-clauses can, in turn, be accounted for by assuming that the speaker cannot question the truth value of what is embedded if *jakoby* presupposes the existence of a foreign information source and if (s)he herself/himself is the information source (see also the discussion in Curnow 2002). No such restrictions occur with respect to *że*-clauses:

- (29) a. *Wczoraj powiedział-e-ś, że pójdziesz dzisiaj do kina.*  
yesterday say.I-PTCP.SG-M-2SG that go.2SG today to cinema.GEN  
‘Yesterday you said that you will go to the cinema today.’

- b. *Wczoraj powiedział-e-m, że pójde dzisiaj do kina.*  
 yesterday say.1-PTCP.SG-M-1SG that go.1SG today to cinema.GEN  
 ‘Yesterday I said that I will go to the cinema today.’

Interestingly enough, this constraint is not absolute and depends on the semantics of the clause-embedding verb. It can be overwritten, as soon as the matrix verb is an inherent negative verb, e.g. *zaprzeczać* ‘deny’:

- (30) a. *Zaprzeczył-e-ś, jakoby wygrał-e-ś w lotka.*  
 deny.1-PTCP.SG-M-2SG jakoby win.1-PTCP.SG-M-2SG in lottery  
 ‘You denied that you have supposedly won the lottery.’  
 b. *Zaprzeczył-e-m, jakoby wygrał-e-m w lotka.*  
 deny.1-PTCP.SG-M-1SG jakoby win.1-PTCP.SG-M-1SG in lottery  
 ‘I denied that I have supposedly won the lottery.’

The use of inherent negative verbs presupposes the existence of a covert negation resulting in  $\neg p$ . In this context,  $p$  is known to the speaker from hearsay. Using an inherent negative verb in combination with an *jakoby*-clause opens up the possibility for the speaker to question the validity of  $p$ .

A final note is in order here about the status of *jakoby* occurring as an evidential complementizer. One of the anonymous reviewers objects that *jakoby* as a complementizer can co-occur with other complementizers, e.g. with *że* ‘that’, posing a challenge for my account:

- (31) *Mój przyjaciel mówi, że podobno / jakoby / rzekomo faszyci*  
 my friend say.3SG COMP COMP / COMP / COMP fascists  
*zniszczyli jakieś biblioteki.*  
 destroy.1-PTCP.VIR.PL some libraries.  
 ‘My friend keeps saying that apparently / allegedly / reportedly fascists destroyed some libraries.’

The anonymous reviewer assumes (31) to be a case of complementizer doubling, a phenomenon which is taken to be absent in the grammar of Polish in general. I disagree with the view that (31) exemplifies complementizer doubling and analyze *jakoby* as an evidential adverb (see also footnote 1 above and references cited there). There are several arguments showing why *jakoby* ‘supposedly’ – as well as *podobno* ‘apparently’ and *rzekomo* ‘reportedly’ – in (31) cannot be analyzed as complementizers. In what follows, I discuss some of them.

Firstly, neither *podobno* ‘apparently’ nor *rzekomo* ‘reportedly’ can introduce embedded clauses:



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- (32) a. \* *Mój przyjaciel mówi, **podobno** faszyści zniszczyli jakieś*  
 my friend say.3SG COMP fascists destroy.I-PTCP.VIR.PL some  
*biblioteki.*  
 libraries.
- b. \* *Mój przyjaciel mówi, **rzekomo** faszyści zniszczyli jakieś*  
 my friend say.3SG COMP fascists destroy.I-PTCP.VIR.PL some  
*biblioteki.*  
 libraries.

(32a) and (32b) are only well-formed when *podobno* and *rzekomo* are analyzed as evidential adverbs expressing the matrix subject's attitude towards what is embedded. In this case, direct speech complements are embedded, and not subordinate clauses. This mainly follows from concord relations:

- (33) a. *Świadek twierdzi, **jakoby** morderca był **rzekomo***  
 witness claim.3SG COMP murderer be.I-PTCP.3SG.M reportedly  
*wysoki.*  
 tall  
 'The witness claims that allegedly the murderer was reportedly tall.'
- b. *Świadek twierdzi, **jakoby** morderca był **podobno***  
 witness claim.3SG COMP murderer be.I-PTCP.3SG.M apparently  
*wysoki.*  
 tall  
 'The witness claims that allegedly the murderer was apparently tall.'
- c. \* *Świadek twierdzi, **rzekomo** morderca był **jakoby***  
 witness claim.3SG COMP murderer be.I-PTCP.3SG.M allegedly  
*wysoki.*  
 tall
- d. \* *Świadek twierdzi, **podobno** morderca był **jakoby***  
 witness claim.3SG COMP murderer be.I-PTCP.3SG.M allegedly  
*wysoki.*  
 tall

If *jakoby* introduces evidential subordinate clauses as given in (33a) and (33b) taking a propositional scope, it is also possible to use additional evidential adverbs having a narrow scope.<sup>7</sup> Concretely, it is *rzekomo* 'reportedly' in (33a) and

<sup>7</sup>Appropriate prosodic contours are required for the concord reading.

*podobno* ‘apparently’ in (33b) taking scope over the adjective *wysoki* ‘tall’. I refer to such cases as evidential concord in the sense claimed by Schenner (2007). However, it is impossible to reverse the order of the evidential expressions. As (33c) and (33d) illustrate, *podobno* and *rzekomo* cannot be employed as complementizers and glossed as COMP, as suggested by the reviewer. Correspondingly, I exclude *podobno* and *rzekomo* from further investigation here.

Secondly, as mentioned above *jakoby*-complements are banned from the matrix prefield position. If *że* ‘that’ precedes *jakoby*, the embedded clause can move though:

- (34) *Że jakoby Jan był szczęśliwy, twierdziła Dorota.*  
 that allegedly Jan be.1-PTCP.SG.M happy claim.1-PTCP.SG.F Dorota  
 ‘That supposedly Jan was happy, Dorota claimed.’

This clearly indicates that *jakoby* is an adverb, not a complementizer.

Thirdly, if a *że*-clause hosts *jakoby*, future reference in the embedded clause itself becomes possible:

- (35) a. \**Dorota twierdziła, jakoby Jan będzie biegać codziennie.*  
 Dorota claim.1-PTCP.SG.F jakoby Jan will.3SG run.INF daily  
 Intended meaning: ‘Dorota claimed that Jan will go jogging every day.’  
 b. *Dorota twierdziła, że jakoby Jan będzie biegać codziennie.*  
 Dorota claim.1-PTCP.SG.F that allegedly Jan will.3SG run.INF daily  
 ‘Dorota claimed that allegedly Jan will go jogging every day.’

Furthermore, conditional mood is also allowed:

- (36) a. \**Dorota twierdziła, jakoby Jan poszedł-by do kina.*  
 Dorota claim.1-PTCP.SG.F jakoby Jan go.1-PTCP.SG.M-SUBJ to cinema.GEN  
 Intended meaning: ‘Dorota claimed that supposedly Jan would have gone to the cinema.’  
 b. *Dorota twierdziła, że jakoby Jan poszedł-by do kina.*  
 Dorota claim.1-PTCP.SG.F that allegedly Jan go.1-PTCP.SG.M-SUBJ to cinema.GEN  
 ‘Dorota claimed that allegedly Jan would have gone to the cinema.’

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Lastly, (28b) illustrates that evidential *jakoby*-complements cannot be embedded if the matrix verb is inflected for the first person. No such constraint occurs with regard to the combination of *że* ‘that’ and *jakoby* ‘allegedly’:

- (37) *Wczoraj powiedział-e-m, że jakoby pójdę dzisiaj do kina.*  
 yesterday say.I-PTCP.SG-M-1SG that allegedly go.1SG today to cinema.GEN  
 ‘Yesterday I said that I will supposedly go to the cinema today.’

(37) convincingly demonstrates that *jakoby* as an evidential adverb can be in the scope of the declarative complementizer *że* ‘that’.

Finally, the diachrony of Polish provides abundant evidence showing that *jakoby* ‘supposedly’ as an evidential adverb came into being in Middle Polish, whereas *jakoby* as a complementizer existed already in the early Old Polish period.

In other words, the co-occurrence of *że* and *jakoby* does not instantiate complementizer doubling. Instead, they ought to be analyzed as a declarative complementizer and an evidential adverb, respectively. In this context, the same reviewer asks what the difference is between evidential *jakoby*-complements, on the one hand, and complement clauses headed by the complementizer *że* ‘that’ and containing the evidential adverb *jakoby*, on the other hand. Importantly, the main difference refers to embedding restrictions and selection.<sup>8</sup> As illustrated in Section 2.1, *jakoby*-complements are not embeddable under, for example, exclamative verbs. This restriction disappears as soon as a *że*-complement clause contains the evidential adverb *jakoby* ‘allegedly’:

- (38) a. \**Dziwi mnie, jakoby były zgłoszenia o wadliwych kartach.*  
 be.amazed.3SG me.ACC jakoby be.I-PTCP.N-VIR.PL reports about  
 faulty cards.LOC  
 Intended meaning: ‘I’m amazed that there supposedly were any reports about faulty prepaid cards.’
- b. *Dziwi mnie, że jakoby były zgłoszenia o wadliwych kartach.*  
 be.amazed.3SG me.ACC that allegedly be.I-PTCP.N-VIR.PL reports  
 about faulty cards.LOC  
 ‘I’m amazed that there allegedly were any reports about faulty prepaid cards.’

<sup>8</sup>As there are many structural differences between *jakoby* used as a complementizer and as an adverb, it seems reasonable to assume the restrictions on the use as a complementizer to be syntactic by nature. I thank Todor Koev for drawing my attention to this issue.

Based on the syntactic differences between *jakoby*- and *że*-clauses pointed out above, one needs to examine semantic properties of the complementizer *jakoby*.

## 2.4 Semantics

### 2.4.1 Speaker commitment

Cross-linguistically, there are two types of reportatives, depending on whether they involve some kind of speaker commitment to the reported proposition, cf. Faller (2011), Kratzer (2012), Murray (2017), among many others:

- (39) a. *Given the rumour*, Roger must have been elected chief (#but I wouldn't be surprised if he wasn't).  
 b. *According to the rumour*, Roger must have been elected chief (but I wouldn't be surprised if he wasn't). (Faller 2011: 679)

*Jakoby* clearly does not require any degree of speaker commitment (for a possible analysis of similar cases cross-linguistically, see AnderBois 2014):

- (40) *Mówi się, jakoby Jacek został wybrany na*  
 say.3SG REFL jakoby Jacek PASS.AUX.I-PTCP.SG.M elect.PTCP.M on  
*naczelnika, ale ja w to nie wierzę.*  
 chief.ACC but I in this NEG believe.1SG  
 'It is said that supposedly Jacek was elected chief, but I don't believe that.'  
 (Jędrzejowski & Schenner 2013: 14)

In this respect, Polish *jakoby* patterns with the English phrase *according to* as well as with the reportative suffix =*si* in Cuzco Quechua. The speaker using the reportative morpheme =*si* has the possibility of not having any opinion on the truth of *p* (for more details see Faller 2011):<sup>9</sup>

- (41) *Pay-kuna=s ñoqa-man=qa qulqi-ta muntu-ntin-pi saqiy-wa-n,*  
 (s)he-PL=REP I-ILLA=TOP money-ACC lot-INCL-LOC leave-10-3  
*mana-má riki riku-sqa-yki ni un sol-ta centavo-ta=pis*  
 not-IMPR right see-PTCP-2 not one Sol-ACC cent-ACC=ADD  
*saqi-sha-wa-n=chu.*  
 leave-PROG-10-3=NEG  
 'They left me a lot of money, (but) that's not true, as you have seen, they didn't leave me one sol, not one cent.' (Faller 2011: 679, ex. 37)

<sup>9</sup>This sharply contrasts with the reportative morpheme *ku7* in St'át'imcets, as reported by Matthewson et al. (2007). Accordingly, *ku7* patterns with English *given that*.

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Following Kratzer (2012) and Faller (2011), I construct a modal base based on the contents of relevant reports giving rise to an *informational* conversational background. Such conversational backgrounds represent the information conveyed by reports and other sources of information:

$$(42) f_r(w) = \{p \mid p \text{ is the content of what is said in } w\}$$

##### 2.4.2 Dubitativity

*Jakoby* contributes a dubitative component. There is a clear difference between *jakoby*-clauses and regular conditional/subjunctive *że*-clauses as complements to speech verbs. If the speaker wants to distance herself/himself from the content of the reported proposition, *jakoby* has to be used instead of a regular complement clause:

- (43) a. *Anna twierdzi, jakoby wygrała w lotka.*  
Anna claim.3SG jakoby win.l-PTCP.SG.F in lottery  
'Anna claims to have won the lottery.'
- b. \* *Anna twierdzi, że wygrała-by w lotka.*  
Anna claim.3SG that win.l-PTCP.SG.F-SUBJ in lottery  
Intended meaning: 'Anna claims that she would have won the lottery.'

##### 2.4.3 Negation

Similar to other evidential expressions attested cross-linguistically, *jakoby* cannot be under the scope of a negation marker. It takes a wide scope:

- (44) *Firma twierdziła, jakoby nie było zgłoszeń o wadliwych kartach.*  
company claim.l-PTCP.SG.F jakoby NEG be.l-PTCP.SG.N reports about  
faulty cards.LOC  
'The company claimed that there supposedly weren't any reports about faulty prepaid cards.'
- a) The speaker has reportative evidence that there have not been any reports about faulty prepaid cards.
- b) #The speaker does not have reportative evidence that there have not been any reports about faulty prepaid cards.

In this regard, *jakoby* patterns with reportative expressions attested in Cheyenne, St’át’imcets or Cuzco Quechua; cf. (45) for Cheyenne:

- (45) *Ĕ-sáa-némené-he-séstse* Annie.  
 3-not-sing-NEG<sub>AN</sub>-REP.3SG Annie  
 a) ‘Annie didn’t sing, they say.’  
 b) #‘I didn’t hear that Annie sang.’  
 c) #‘Annie sang, they didn’t say.’ (Murray 2017: 29, ex. 2.56b)

## 2.5 Interim summary

What we have seen so far is that *jakoby*-clauses radically differ from complement clauses introduced by the declarative complementizer *że* ‘that’ in Present-day Polish. The former are much more restricted than the latter, not only with respect to their licensing conditions but also with respect to their syntactic and semantic properties. As it turns out, these differences follow from the compositional meaning of the complementizers in question (cf. Moulton 2009). Table 1 furnishes the main differences between both clause types.

Table 1: Selected differences between *jakoby*-clauses and *że*-clauses in Present-day Polish

PROPERTY	<i>że</i> -clauses	<i>jakoby</i> -clauses
verbs of seeming	+	–
exclamative verbs	+	–
left periphery	+	–
future tense	+	–
conditional mood	+	–
discourse particle <i>chyba</i> ‘presumably’	+	–
modal verb <i>musieć</i> ‘must’	+	–
matrix subject constraint	–	+
dubitativity	–	+

In what follows, I give an overview of the way *jakoby*-clauses could be used in older stages of Polish. Having described the usage and the distribution of *jakoby* in individual historical periods, I analyze its semantic change.

### 3 *Jakoby*-clauses in the history of Polish

Based on Klemensiewicz (2009), Walczak (1999), and Dziubalska-Kołodziejczyk & Walczak (2010), Table 2 distinguishes language stages in the history of Polish.

Table 2: Historical stages of Polish

Language period	Abbreviation	Time period
Old Polish	OP	till 1543
Middle Polish	MP	1543–1765
New Polish	NP	1765–1939
Present-day Polish	PDP	since 1939

Dziubalska-Kołodziejczyk & Walczak (2010: 823) summarize the most important reasons for assuming this classification as follows:

The Old Polish period is assumed to have terminated in 1543 with the publication of all the bills of a parliamentary session for the first time in Polish. Thus, the year 1543 marks the introduction of Polish as an official language of documents beside Latin. Additionally, it was in the same year that the first popular literary piece written in Polish was published. It was *Krótką rozprawą między trzema osobami: Panem, Wójtem i Plebanem* (‘a short debate among three persons: a lord, a commune head and a pastor’), by Mikołaj Rej, who was the first Polish Renaissance writer writing exclusively in Polish. Middle Polish lasted till 1795 – the election year of king Stanislaus August Poniatowski and symbolic beginning of the period of Enlightenment. The outbreak of the World War II marks the end of the New Polish period and beginning of Modern Polish.

As it turns out, the proposed classification is to be traced back to historical events in the first instance. For major system-internal changes being distinctive of a particular language period, the interested reader is referred to the references cited above.

#### 3.1 Etymology

*Jakoby* is a typical example of head adjunction. Its origin is traced back to the preposition *jako* ‘as’ and the conditional/subjunctive clitic *by* ≈ ‘would’:

- (46) a. *Od 18 lat pracuje jako księgowy.*  
 from 18 years work.3SG as public:servant  
 ‘Has has been working as public servant for 18 years.’  
 (NKJP, *Tygodnik Podhalański*, 31/1999)
- b. *Zdecydowaliśmy, by zorganizować akcję wśród harcerzy.*  
 decide.1-PTCP.VIR.1PL SUBJ organize.INF action.ACC among scouts  
 ‘We decided to organize an action among the scouts.’  
 (NKJP, *Dziennik Zachodni*, 17/8/2002)

The conditional/subjunctive clitic *by*, in turn, is traced back to *by*, i.e. 3rd person singular aorist of the Proto-Slavic predicate *byti* ‘be’; for its diachrony, see in particular Migdalski (2006; 2010; 2016) and Willis (2000). I analyze it in (46b) as a complementizer.<sup>10,11</sup>

<sup>10</sup>Berit Gehrke (p.c.) pointed out to me that *by* in Czech can never be used as a complementizer. This might explain why (3b) is ungrammatical. If neither *jako* nor *by* merge as C-heads, the development into a hearsay complementizer is blocked.

<sup>11</sup>One of the anonymous reviewers points out that “*by* is never a complementizer in Polish. It is a conditional/subjunctive auxiliary, and it may occur in the complementizer position only when it incorporates into true complementizers or conjunctions (e.g. *aby* or *żeby* ‘that’). So it is not only Czech that does not use *by* as a complementizer, the same holds for Polish.” It is not clear what syntactic position *by* occupies in (46b). Following Migdalski (2006), *by* originates in MoodP below TP. On the one hand, we can assume it to be base-generated in MoodP and to remain in-situ in (46b). But on the other hand, there is no evidence showing that *by* in (46b) cannot be associated with the CP layer occupying the C-head position. According to Migdalski (2016: 171), “[a]ll the examples that require encliticization of the auxiliary clitic *by*, which may occur in second position immediately following the complementizer express some kind of non-indicative Force-related meaning, such as hypothetical counterfactual conditionality, potentiality, or optative mood.” Tomić (2000, 2001) treats such clitics as operator clitics, as they scope over the entire proposition. And this is what we observe in (46b), too. The embedded clause is a complement clause of the perfective verb *zdecydować* ‘take a decision’ expressing purposiveness. This indicates that the declarative complementizer *że* ‘that’ may have been dropped, that the clitic *by* took over its function and, finally, that it has frozen as a C-head:

- (i) *Zdecydowaliśmy, żeby zorganizować akcję wśród harcerzy.*  
 decide.1-PTCP.VIR.1PL COMP organize.INF action.ACC among scouts  
 ‘We decided to organize an action among the scouts.’

This scenario is not surprising at all in the history of Polish because *by* incorporated into *jako* forming together the hearsay complementizer *jakoby* being a clear C-head. In other words, *by* is eligible for the C-head position. At this moment, I am not aware of any arguments speaking against *by* being base-generated as a C-head and establishing a subordinating relation between the matrix clause and the embedded clause. Notably, there is one strong counter argument against the view that *by* cannot be used as a complementizer. In complement clauses under desiderative/volitional predicates *by* has to occur adjacent to the declarative complementizer



## 3.2 Old Polish (until 1543)

Already in OP, *jakoby*<sup>12</sup> fulfills miscellaneous functions. To determine its poly-functionality, I extracted and analyzed 262 examples containing *jakoby* from the PolDi corpus.<sup>13</sup> Its distribution is given in Table 3.

Table 3: The use of *jakoby* in the PolDi corpus

adverb	XP <i>jakoby</i> XP	DP complement	adv. clause	argument clause
71 (27%)	93 (36%)	3 (1%)	85 (32%)	10 (4%)

The label *adverb* refers to all cases in which *jakoby* is used as an adverb, see also the example in (i, fn. 1) above. The question of whether it could have different meanings in OP still needs to be addressed. I am not concerned with this use of *jakoby* in this chapter. In 93 cases *jakoby* combines and compares two phrases, for example two DPs, two PPs or a DP with a PP. In this function, *jakoby* is comparable with English *like*. The next example shows a combination of two DPs:

- (47) *widziałem* [DP *Ducha* *zstępującego*] *jakoby* [DP *gołębicę* *s*  
see.l-PTCP.M.1SG Holy:SPIRIT descending jakoby dove from  
*nieba*]  
heaven  
'I saw the Holy Spirit descending from heaven like a dove.' (EZ, 6r: 7)

*że* 'that', i.e. it occurs within the CP-domain (see also footnote 2 above). What is interesting in this context is the fact that *że* 'that' can be deleted. It is then *by* which introduces the embedded clause and marks its illocutionary force as well its subordinate status:

- (ii) *Każda matka chce, żeby jej syn chodził do przedszkola.*  
every mother want.3SG COMP her son go.l-PTCP.SG.M to kindergarten.GEN  
'Every mother wants her son to go to the kindergarten.'

Concretely, the view that *by* is disallowed from being a C-head introducing embedded clauses in Polish is not correct.

<sup>12</sup>Two alternative orthographic variants of *jakoby* existed in older stages of Polish: (i) *jako by* and (ii) *kakoby*. For methodological reasons, I ignore both variants in this study.

<sup>13</sup>PolDi is a collection of texts from Polish language history. 40 texts, both from Old and Middle Polish, are supposed to be annotated and integrated into the ANNIS search engine. Unfortunately, I was not able to find any information about how large the corpus is in terms of word counts. According to my understanding, 22 texts are currently searchable. The 262 examples stem from these 22 texts. However, in this section I elaborate only on cases from OP.

PDP *jakoby* cannot compare one DP with another DP. Instead, *jakby* ‘as if’ has to be used:

- (48) a. *Urządzili tam sobie [DP coś] jakby [DP set:up.l-PTCP.VIR.3PL there REFL.DAT something jakby klub].*  
 club  
 ‘There, they have set up something like a club.’  
 (NKJP, *Dziennik Zachodni*, 30/12/2009)
- b. \**Urządzili tam sobie [DP coś] jakoby [DP set:up.l-PTCP.VIR.3PL there REFL.DAT something jakoby klub].*  
 club  
 Intended meaning: ‘There, they have set up something like a club.’

When and under what circumstances *jakby* replaced *jakoby* in the history of Polish still needs to be investigated. The next label – *DP complement* – includes all cases in which a DP is modified by a *jakoby*-clause. In all three attested cases the modified DP is related to a verb of speech: *wzmianka* ‘mention’, *rada* ‘advise’, and *krzyk* ‘scream’, see also the example given in (10) and the discussion in Section 2.1. The first example I came across includes the DP *wzmianka* ‘mention’ and stems from MP. I will not discuss it here. The last two examples come from late OP (around 1500) from *Rozmyślenia przemyskie* ‘The Przemyśl Meditation’:<sup>14</sup>

- (49) a. *a zatem [DP krzyk] wielki pobudził wszytek dwor,*  
 and thus scream huge wake.up.l-PTCP.SG.M all court  
*jakoby krol jż umarł*  
*jakoby king already die.l-PTCP.SG.M*  
 ‘and thus a loud scream woke up all the court that the king supposedly died already’ (PoDi, *Rozmyślenia przemyskie*, ≈1500, 92)
- b. *jako licemiernicy Żydowie z biskupy uczynili*  
 as duplicitous Jews from bishop.GEN do.l-PTCP.VIR  
 [DP radę], *jakoby umęczyli Jesukrysta*  
 advise.ACC jakoby harass.l-PTCP.VIR Jesus Christ  
 ‘as duplicitous Jews they followed the bishop’s advice by supposedly killing Jesus Christ’ (PoDi, *Rozmyślenia przemyskie*, ≈1500, 298)

<sup>14</sup>The example (49a) is ambiguous. Out of the blue, it can be interpreted either as an adjunct clause or as an argument clause. A further context, however, disambiguates its interpretation.

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In addition, *jakoby* could also introduce comparative hypothetical adverbial clauses (= *adverbial clause* in Table 3):

- (50) *ja na tem świecie tako tobie służył, jakoby-ch ci*  
 I on this world so you.DAT serve.I-PTCP.SG.M jakoby-AOR you.DAT  
*swoje duszy znalazł zbawienie*  
 my soul find.I-PTCP.SG.M salvation  
 ‘I was serving you in this world to the extent that my soul would find salvation.’  
 (KG, *Kazanie I: Na Boże Narodzenie*, 20–21)

As (50) exemplifies, OP *jakoby*-clauses could modify the matrix clause without being an argument of the matrix verb. Concretely, they could merge as modal adjunct clauses being often linked with a degree correlate occurring in the matrix clause, cf. *tako* ‘so’ in (50). In PDP, this clause type is headed by the complementizer *jakby* ‘as if’:

- (51) *Wszyscy zachowują się tak, jakby chodziło o napad na*  
 all behave.3PL REFL so as if go.I-PTCP.SG.N about assault on  
*bank.*  
 bank  
 ‘Everyone is behaving as if it were a bank robbery.’  
 (NKJP, *Samo życie*, episode 237)

The use of *jakoby* in such contexts is not possible any longer:

- (52) \* *Wszyscy zachowują się tak, jakoby chodziło o napad na*  
 all behave.3PL REFL so jakoby go.I-PTCP.SG.N about assault on  
*bank.*  
 bank  
 Intended meaning: ‘Everyone is behaving as if it were a bank robbery.’

Finally, as has been illustrated in Section 1, *jakoby* could introduce comparative hypothetical argument clauses after verbs of seeming. For the sake of convenience, I repeat the example given in (1a) as (53) below:

- (53) *izeć się jest ludziami na ziemi tako było*  
 that REFL be.3SG people.DAT on earth.LOC so be.I-PTCP.SG.N  
*widziało, jakoby się ono na nie obalić było*  
 seem.I-PTCP.SG.N jakoby REFL it on them.ACC slay.INF be.I-PTCP.SG.N

*chciało*

want.I-PTCP.SG.N

‘that it seemed to the people on earth as if it wanted to slay all of them’

(KG, *Kazanie I: Na Boże Naordzenie*, 26–27)

In Table 3, I refer to cases like in (53) as *argument clauses*. What is important here is that (53) is one of the oldest examples stemming from early OP. In late OP *jakoby*-clauses began to be embedded under other clause-embedding verbs. An overview is given in Table 4.

Table 4: The distribution of *jakoby*-clauses as argument clauses in OP based on the data extracted from the PolDi corpus

verbs of seeming	verbs of thinking	verbs of speech/report
3	5	2

The occurrences with verbs of seeming are the oldest ones. Around 1500, verbs of thinking and verbs of speech/report started to occur with *jakoby*-clauses:

- (54) *od tego dnia myślił, jakoby ji za trzydzieści*  
 from this day think.I-PTCP.SG.M jakoby him.ACC for thirty  
*pieniędzy sprzedał*  
 money sell.I-PTCP.SG.M  
 ‘from this day on he thought that he would have sold him for 30 silver coins’  
 (PolDi, *Rozmyślenia przemyskie*, ≈1500, 479)

- (55) a. *powiadał przed nim, jakoby od Cesarza*  
 say.I-PTCP.SG.M.HAB before him.DAT jakoby from Emperor  
*uciekł*  
 run:away.I-PTCP.SG.M  
 ‘he used to tell him that he had supposedly run away from the Emperor’  
 (PolDi, *Pamiętniki janczara*, 1496–1501, 100:3)
- b. *już Żydowie wielką nieprzyjaźń przeciw jemu*  
 already Jews huge inhospitableness against him.DAT  
*mieli smawiając się, jakoby go ubili*  
 have.I-PTCP.VIR conspiring REFL jakoby him.ACC kill.I-PTCP.VIR  
 ‘already Jews had a hostile attitude against him and conspired that they would supposedly kill him’  
 (PolDi, *Rozmyślenia przemyskie*, ≈1500, 379)

#### 4 On the semantic change of evidential argument *jakoby*-clauses in Polish

Remarkably, in PDP *myśleć* ‘think’ is not inclined to occur with *jakoby*-clauses, as it is not a classical verb of speech. However, there is one specific context in which someone renders someone else’s thoughts reporting on what other persons (might) think. Although I was not able to find any appropriate corpus example, the following sentence sounds well-formed but marked a bit:<sup>15</sup>

- (56) ? *Myśli, jakoby jest najlepszy.*  
 think.3SG *jakoby* be.3SG best  
 ‘He think that he would be the best.’

Another possibility to interpret the five cases with verbs of thinking would be to analyze them as verbs of seeming in a broader sense. This would explain the expansion of *jakoby*-clauses after verbs of seeming to other clause-embedding verb classes. To what extent both classes are related and whether this link is conceptually reasonable remains an open issue. What is more striking with regard to the development of *jakoby*-clauses is their use after verbs of speech, *powiadać* ‘keep saying’ in (55a) and *smawiać się* ‘conspire’ in (55b). In this respect, late OP does not deviate from PDP. As it turns out, not much changed in MP.

### 3.3 Middle Polish (1543–1765)

The situation in MP resembles the picture of how *jakoby* was used in OP. In general, I extracted 162 cases from the KorBa corpus, also known as *The baroque corpus of Polish*.<sup>16</sup> An overview of how *jakoby* was used in MP is given in Table 5.

Table 5: The use of *jakoby* in the KorBa corpus

adverb	XP <i>jakoby</i> XP	DP complement	adverbial clause	argument clause
26 (16%)	27 (17%)	3 (2%)	86 (53%)	20 (12%)

Two major language changes can be observed. In what follows, I briefly comment on them.

<sup>15</sup>One of the anonymous reviewers remarks that (56) improves when the speaker objects to what the matrix subject claims:

- (i) *Myśli, jakoby jest najlepszy, ale ja w to nie wierzę.*  
 think.3SG *jakoby* be.3SG best but I in this NEG believe.1SG  
 ‘He thinks that he would be the best, but I don’t believe this.’

I agree with this view and share the same intuition.

<sup>16</sup>KorBa contains historical texts from the 17th and 18th centuries, consists of 718 texts, counts over 10 million word forms, and is available for free.

Firstly, the use of *jakoby* as a comparative particle decreases (37% in OP vs. 17% in MP), whereas as an adverbial clause complementizer it is still often used. What should be kept in mind, though, is that *jakoby* does not always introduce hypothetical comparative clauses; in some cases, it can also introduce purpose clauses:

- (57) *Tak trzeba Rzemień ciągnąć / jakoby się nie zerwał*  
 so need belt.ACC pull.INF / jakoby REFL NEG peter:away.l-PTCP.SG.M  
 ‘One needs to pull the belt in such a way as to not break it off.’  
 (KorBa, *Proverbium polonicorum*, 1618)

I leave it as an open question here what kinds of adverbial clauses *jakoby* could introduce in older stages of Polish.

Secondly – and more importantly – the use of *jakoby*-clauses as argument clauses increases (4% in OP vs. 12% in MP). Among 20 examples, different classes of clause-embedding verbs can be attested (Table 6).

Table 6: The distribution of *jakoby*-clauses as argument clauses in MP based on the data extracted from the KorBa corpus

verbs of seeming	verbs of thinking	verbs of speech/report
2	1	17

Selected examples follow; (58a) for *zdać się* ‘seem’, (58b) for *myśleć* ‘think’ and (58c) for *mniewać* ‘suppose’:

- (58) a. *zdało się im / jakoby się wielkie wzruszenie na*  
 seem.l-PTCP.SG.N REFL them.DAT / jakoby REFL huge move on  
*morzu było stało;*  
 sea.LOC be.l-PTCP.SG.N happen.l-PTCP.SG.N  
 ‘it seemed to them as if something huge would have moved on the  
 sea;’ (KorBa, *Dyskursu o pijaństwie kontynuacja*, 1681)
- b. *począł myśleć / jakoby siebie i towarzystwo*  
 begin.l-PTCP.SG.M think.INF / jakoby REFL.ACC and company.ACC  
*z niewoli wyrwać*  
 from bondage.GEN take:away.INF  
 ‘[he] began to think as if he would have the intention to rescue  
 himself and the company’  
 (KorBa, *Opisanie krótkie zdobycia galery przedniejszej  
 aleksandryjskiej*, 1628)

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- c. *iz mniemali / jakoby Zona torrida miała być*  
 that suppose.I-PTCP.VIR / jakoby Zona torrida have.I-PTCP.SG.F be.INF  
*dla zbytniego gorąca*  
 for too:him hot  
 ‘that [they] supposed that supposedly Zona torrida would be too hot  
 for him’ (KorBa, *Relacje powszechne*, part I, 1609)

Similar to the situation in the late OP period, *jakoby* can be used as a hearsay complementizer in MP. As for embedding verbs, verbs of speech or report definitely outnumber verbs of seeming. What is different in MP in comparison to what we have observed in OP is the expansion of argument *jakoby*-clauses to other verb classes. In the next example, the internal argument of the transitive verb *czytać* ‘read’ is occupied by a *jakoby*-clause:

- (59) *listy (...), w których czytał, jakoby (...) W.Ks.L.*  
 letters (...) in which read.I-PTCP.SG.M jakoby (...) W.Ks.L  
*miął się już ożenić w Śląsku*  
 have.I-PTCP.SG.M REFL already get:married.INF in Silesia  
 ‘letters in which he could read that supposedly W.Ks.L would have  
 already gotten married in Silesia’  
 (KorBa, *Pamiętnik z czasów Jana Sobieskiego*, between 1690 and 1696)

Uttering (59) the speaker is reporting on what the clause subject was reading. This context enables the speaker to turn the verb *czytać* ‘read’ into a verb of report. At the same time, the speaker may question either the claim that someone got married or the observation that the clause subject was reading this claim. Both interpretations are conceivable.

To test for statistical reliability, statistical tests were run. The two language change processes described above were analyzed by means of generalized linear modeling using the package *lme4* (Bates et al. 2012) in R (R Core Team 2012). Table 7 shows the results and the last column lists the *p*-values.

The relevant factors, i.e. language period as an independent variable and complement type as a dependent variable, were coded to test whether differences between both language periods are significant. As it turned out, the tests statistically confirmed the diachronic observations.<sup>17</sup>

<sup>17</sup>I thank Frederike Weeber who helped me with the statistics.

Table 7: Summary of the relevant factors in the generalized linear model

	Estimate	Std. Error	z value	Pr(> z )
(Intercept)	-1.6094	0.2108	-7.634	$2.27 \times 10^{-14}$
XP <i>jakoby</i> XP	1.0121	0.2472	4.094	$4.24 \times 10^{-5}$
(Intercept)	-1.9601	0.2388	-8.207	$2.27 \times 10^{-16}$
argument clause	-1.2667	0.4013	-3.157	0.00159

### 3.4 New Polish (1765–1939)

The use of *jakoby* in NP remains constant. Its all main functions attested in OP and MP still occur in the 19th century. I extracted and analyzed a sample of 85 *jakoby*-cases from NewCor, a corpus of 1830–1918 Polish. Table 8 portrays the picture of how *jakoby* is used.

Table 8: The use of *jakoby* in the NewCor corpus

adverb	XP <i>jakoby</i> XP	DP complement	adverbial clause	argument clause
20 (24%)	12 (14%)	31 (37%)	14 (16%)	8 (9%)

Interestingly enough, *jakoby*-clauses modifying DPs dominate. They usually modify such DPs as *pogłoska* ‘rumour’, *wieść* ‘news’, *wiadomość* ‘message’, *twierdzenie* ‘claim’, *mniemanie* ‘opinion’ or *zarzut* ‘accusation’. All of the DPs are related to verbs of speech/report. *Jakoby* can still occur as a hypothetical comparative element, either comparing two phrases or introducing adverbial *as-if*-clauses. In eight cases, *jakoby*-clauses occupy an argument of a clause-embedding predicate (Table 9).

Table 9: The distribution of *jakoby*-clauses as argument clauses in NP based on the data extracted from the NewCor corpus

verbs of seeming	verbs of thinking	verbs of speech/report
2	0	6



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I could not find any examples with verbs of thinking. Of course, more data needs to be analyzed in order to be able to exclude this class altogether. In two cases, the *jakoby*-clause is an argument of a *seem*-verb, as the next example shows:

- (60) *zdaje się nam, jakoby wzory te były mądrsze*  
seem.3SG REFL US.DAT jakoby patterns these be.I-PTCP.N-VIR smarter  
*od nas*  
from us  
'it seems to us as if these patterns would be smarter than us'  
(NewCor, *O związku pomiędzy światłem i elektrycznością*, 1890)

The other cases illustrate the use of *jakoby*-clauses after verbs of speech/report, known from PDP:

- (61) *i nie można też było twierdzić, jakoby łacińscy biskupi*  
and NEG can.PRED also be.I-PTCP.SG.N claim.INF jakoby Latin bishops  
*stróżami byli Kościoła ruskiego*  
guards.INS be.I-PTCP.VIR Church.GEN Ruthenian  
'and one couldn't claim either that supposedly Latin bishops would have  
been guards of the Ruthenian Church'  
(NewCor, *Sprawa ruska na Sejmie Czteroletnim*, 1884)

The availability of *jakoby*-clauses after verbs of seeming in NP might account for why Łojasiewicz (1992), Wiemer (2005) and Taborek (2008) still cite their occurrence in PDP. Since their incompatibility appears to be a very young development in the history of Polish, one would not be surprised to come across similar examples from the beginning of the 20th century.

### 3.5 Interim summary

In this section, we have seen that *jakoby* developed its main functions already during the OP period. As far as argument *jakoby*-clauses are concerned, they started to occur after verbs of speech/report in late Old Polish and ceased to be used after verbs of seeming in Present-day Polish (Table 10).

Along with the latter change, *jakoby* also ceased to occur as a (hypothetical) comparative particle being replaced by *jakby* 'as if'. The question of how *jakoby* developed from a hypothetical comparative complementizer into a hearsay complementizer is addressed in the next section.

Table 10: The development of *jakoby*-argument clauses in the history of Polish

Language period	argument clauses (verbs of seeming)	argument clauses (verbs of speech /report)
early Old Polish (until 1450)	+	–
late Old Polish (1450–1543)	+	+
Middle Polish (1543–1765)	+	+
New Polish (1765–1939)	+	+
Present-day Polish (since 1939)	–	+

## 4 Reanalysis

The main objective of this section is to reanalyze the development of *jakoby* in the history of Polish. The main focus is on *jakoby*-clauses being used after verbs of seeming and after verbs of speech/report. I aim at identifying constant factors in the lexical meaning of *jakoby* over time and, at the same time, at locating the aspects responsible for the semantic change that *jakoby* underwent.

As detailed in Section 3, *jakoby* can be traced back to the fusion of the comparative preposition *jako* and the conditional/subjunctive clitic *by*. I argue that these components contributed two semantic seeds that determined the further development of *jakoby*: (i) equative comparison, (ii) non-factivity. I take *jako* ‘as’ to be a lexical anchor for an equivalence relation – along the lines proposed by Umbach & Gust (2014) – between the matrix clause and the embedded clause. The role of *by* is to mark non-factivity giving rise to a counterfactual reading, as defined in Bücking (2017: 988)<sup>18</sup>.

For Old Polish, the combination of these two elements is sufficient to explain the semantic contribution of *jakoby* itself. While component (i) enabled the use of *jakoby* in adjunct clauses, component (ii) paved the way for the dubitative meaning that *jakoby* contributes in complement clauses of verbs of speech/report.<sup>19</sup>

<sup>18</sup>Bücking (2017) examines hypothetical comparative clauses in German and distinguishes four different readings: i) extensional, ii) generic, iii) counterfactual, and iv) epistemic. All of them were available with *jakoby* in Old Polish, though it was the counterfactual reading that gave rise to the development of *jakoby* into a hearsay complementizer.

<sup>19</sup>One of the anonymous reviewers objects that the reanalysis concerns conditionality and does not involve subjunctive meaning as proposed here. As *by* can express both conditionality and

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Table 11: Etymological composition of *jakoby*

<i>jako</i> ‘as’	<i>by</i>
equative meaning	subjunctive/non-factive meaning

In early Old Polish, *jakoby* heads complement clauses of *seem*-type verbs that express indirect inferential evidence. The logical structure of these sentences is as follows, where  $p$  represents the proposition expressed by the embedded clause:

(62) [*seem* [*jakoby*  $p$ ]]

The central question to be asked here is how these three elements, i.e. the clause-embedding verb, the complementizer, and the embedded proposition play together to yield the final meaning ‘it seems as if  $p$ ’. The clause-embedding verb *seem* expresses indirect evidence, indicating that the speaker has some body of evidence  $X$  from which it follows – or which at least strongly suggests – that  $p$  is true. The general idea for the case of *seem* can be thus expressed as follows:

(63)  $\llbracket \textit{seem} \rrbracket^{c,w} = \lambda p. \text{speaker}(c) \text{ has in } w \text{ inferential evidence that } p \text{ is true in } w$

which can be modeled in the Kratzerian style along the lines of Faller (2011) as follows:

(64)  $\llbracket \textit{seem} \rrbracket^{c,w} = \lambda p. \text{the content}(c) \text{ provides a perceptual or epistemic modal base } B \text{ and a doxastic ordering source } S \text{ such that for all worlds } v \text{ in } \min_{S(w)}(\cap B(w)) \text{ it holds that } p \text{ is true in } v$

---

subjunctive meaning, it is not surprising that the anonymous reviewer argues for one of the categories. What *by* does is that it introduces a set of alternative worlds, a hallmark of both conditionality and of subjunctive meaning. It is conditionality in Old Polish *jakoby*-complements embedded under verbs of seeming that is crucial for interpretative purposes (cf. Stalnaker 1968, Lewis 1973, von Stechow 2011, and in particular Bücking 2017). But if *jakoby*-clauses are complements to verbs of saying or reporting, it is rather a subjunctive meaning of *by* absorbing the illocutionary force in the sense claimed by Truckenbrodt (2006). It has been cross-linguistically observed that embedded clauses in reporting contexts are usually marked by subjunctive mood; for an overview, see Becker & Remberger (2010), Fabricius-Hansen & Sæbø (2004), Portner (1997, 2018), Sode (2014), among many others. *Jakoby*-complements in Present-day Polish ought to be treated as cases of reportive mood, and not as cases of conditionality.

If the matrix verb already expresses indirect evidence, what is the contribution of *jakoby*? Confer the following examples:

- (65) a. *Donald seems to be in Singapore.*  
 b. *It seems that Donald is in Singapore.*  
 c. *It seems as if Donald is in Singapore.*  
 d. *It seems as if Donald were in Singapore.*

In a nutshell, the contribution of *jakoby* is to map (65b)-type meanings to (65d)-type meanings, whereas (65d) uncovers the two original components of *jakoby* pointed out above, i.e. equative comparison and counter-factual meaning. The basic idea is stated as follows:

- (66)  $\llbracket \textit{seem as if} \rrbracket^{c,w} = \lambda p$ . the information (evidence) that speaker(*c*) has in *w* is *just like* the information that speaker(*c*) *would have* if *p* were the case

Let's make (66) more concrete by examining two explicit scenarios:

- (67) a. *I believe that if Donald is in Singapore, he is excited. Donald is talking to Kim at the Capella Hotel on Singapore's Sentosa island. Donald is excited.*  
 b. *I believe that if Donald is in Singapore, he is excited. Donald is flying to Helsinki to meet Vladimir. I believe Donald is bored. Donald is excited.*

Table 12: Modal bases and ordering sources for the two scenarios

Modal base (perceptual/epistemic)		Ordering source (doxastic)
Scenario 1	Donald is excited	if Donald is in Singapore, he is excited
Scenario 2	Donald is excited	if Donald is in Singapore, he is excited Donald is bored

In scenario 1 it is natural to assert (65a) or (65b). In scenario 2, in turn, it is natural to assert (65d). The latter case gives rise to conflicting beliefs and (65d) is one way to express a certain reluctance to embrace the proposition for which there is indirect evidence. Accordingly, *seem as if p* is used instead of *seem that p* if what the available evidence suggests is somehow in conflict with what the speaker (used to) believe. If one looks at the relevant properties of the actual reference world, one can see that they look the same as the properties of the possible

worlds where Donald is in Singapore. To put it differently: *As if* introduces the accessibility relation by way of an explicit comparison between two classes of worlds. The accessibility relation simply relates two sets of worlds. What *jakoby* does after verbs of seeming is compare them, or rather expresses equivalence as to some relevant properties.<sup>20</sup> This corresponds to Bücking (2017: 988)'s counterfactual reading of hypothetical comparative clauses, according to which only those worlds are taken into account that are as similar as possible to the actual world, given of course that the conditional's antecedent is true.

In sum, the contribution of *jakoby* in OP does not seem to be genuinely evidential. Rather, it arises from the meaning of the two elements it is composed of: equative comparison and counter-factual meaning. If this is this case, the following question automatically arises: How did the inferential meaning of *jakoby* change to a reportative one specified in (68)?

- (68)  $\llbracket \textit{jakoby}(p) \rrbracket^{c,w} = 1$  iff there exists a non-empty reportative informational modal base  $f_r(w)$  such that for all  $w' \in \cap f_r(w)$ ,  $\llbracket p \rrbracket^{w',c} = 1$

Intuitively, *it seems that p* expresses that there is some body of information X which entails that *p* is the case. What kind of information is X? Verbs of seeming are surprisingly flexible and are definitely not limited to expressing inferential evidence:

- (69) a. from *perceptual* information X  $\rightarrow$  infer *p* (= inferred);  
 b. from *conceptual* information X  $\rightarrow$  infer *p* (= assumed);  
 c. from *reportative*  $\rightarrow$  infer *p* (-).

The last case is usually not registered as an *inferential* evidential. However, in practice reportative strategies often involve a fair amount of inference from the original utterance to its reported version. De Haan (2007) and Grimm (2010) notice that English *seem* is capable of expressing both direct and indirect evidence. A similar observation has been made by Reis (2007) with respect to German *scheinen* 'seem'. Its Dutch counterpart *schijnen* developed into a marker of reportative evidence and is joined by *lijken* for expressing visual evidence, see Koring (2013). For Cuzco Quechua, Faller (2001: 53–55) claims that by using the reportative morpheme =*si*, the speaker does not necessarily deny having inferential evidentials.

Using the idea from Faller (2011) that inferential evidentials involve a non-empty ordering source whereas (informational) reportative evidentials make no

<sup>20</sup>I would like to thank Radek Šimík (pc.) for pointing this out to me.

reference to an ordering source at all, we can picture the development of *jakoby* as in Table 13.

Table 13: Diachrony of *jakoby* in terms of admissible information types in the modal base

	Modal base	Ordering source
early Old Polish	perceptual/conceptual	doxastic
late Old Polish	perceptual/conceptual/reportative	doxastic
Present-day Polish	reportative	–

The semantic shift of *jakoby* involved two main developments. First, the meaning of *jakoby* was broadened to allow for inferences from reportative information (compatible with but not enforced by its *seem*-type embedding verbs). Second, the reportative flavor acquired by *jakoby* licensed its use in complements of speech/report verbs. Since these new contexts were no longer compatible with the original inferential meaning, they ultimately lead to the inability to use *jakoby* in its original contexts.

## 5 Conclusion

The main aim of this chapter has been to examine the development and the semantic change of the evidential complementizer *jakoby* in the history of Polish with the main focus on argument clauses. It has been shown that *jakoby* developed a hearsay meaning in the late Old Polish period (1450–1543) and that it ceased to be selected by verbs of seeming in Present-day Polish (1939–present). The semantic shift outlined above corresponds to the evidential hierarchy proposed by de Haan (1999) according to which inferential evidentials can give rise to reportative evidentials.

As for emergence scenarios of complementizers, Willis (2007: 433) argues that the emergence of a new complementizer may involve three scenarios: (i) reanalysis of main-clause phrasal elements as complementizer heads, (ii) reanalysis of main-clause heads (e.g. verbs, prepositions) as complementizer heads, (iii) reanalysis of embedded phrases (e.g. specifiers of CP) as complementizer heads. The development of *jakoby* instantiates a fourth scenario: reanalysis of a complementizer head as another complementizer head.

Finally, the question of where evidentials come from has been addressed in different studies so far, cf. Willett (1988), Lazard (2001), Aikhenvald (2004: 271–

302), Aikhenvald (2011), Jalava (2017), Friedman (2018), to name but a few. Various development patterns have been attested cross-linguistically. Aikhenvald (2011) points out two major sources for the development of evidentials. They can either evolve from open classes (e.g. verbs) and from closed classes (e.g. pronouns) or emerge out of an evidential strategy as an inherent marker of the grammatical category of evidentiality. The case of *jakoby* illustrates the former scenario, in which a complementizer develops into another complementizer. However, not much attention has been paid to the pattern described in this chapter and fine-grained analyses depicting individual micro-steps of how evidential expressions come into being and develop still require further research.

## Abbreviations

1/2/3	1st/2nd/3rd person	M	masculine
ACC	accusative	N	neuter
ADD	additive	NEG	negation
AN	animate	N-VIR	non-virile
AOR	aorist	PL	plural
COMP	complementizer	PRED	predicative
DAT	dative	PROG	progressive
F	feminine	PST	past tense
GEN	genitive	REFL	reflexive
HAB	habitual	REP	reportative
ILLA	illative	SG	singular
IMPR	impressive	SUBJ	subjunctive mood
INCL	inclusive	TOP	topic
INF	infinitive	VIR	virile
LOC	locative		
l-PTCP	<i>l</i> -participle (inflected for number and gender)		

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## Primary sources

- EZ            *Ewangeliarz Zamoyskich* ['The Zamoyskich' gospel'], 2nd h. 15th c.  
FP            Sebastian Koperski (2015): *Falszywy prorok* ['The deceitful prophet'].  
Poznań: Zysk i S-ka Wydawnictwo.  
KG            *Kazania Gnieźnieńskie* ['The sermons of Gniezno'], 1st h. 15th c.  
KorBa        *Elektroniczny korpus tekstów polskich z XVII i XVIII w. (do 1772 r.)* ['Electronic corpus of 17th and 18th century Polish texts (up to 1772)'] also known as *The baroque corpus of Polish*.  
NewCor     Korpus tekstów z lat 1830–1918 ['Corpus of 1830–1918 Polish'].  
NKJP        *Narodowy Korpus Języka Polskiego* ['National corpus of Polish'].  
PolDi        A Polish diachronic online corpus.



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