Chapter 4

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

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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. *iżeć się* jest *ludziem* 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

Łukasz Jędrzejowski

było chcielo
be.l-PTCP.SG.N want.l-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.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.’

(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’. 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 o wadliwych kartach.
company.DAT seem.3SG refl jakoby be.l-PTCP.N-VIR.PL reports about faulty cards.LOC

Intended meaning: ‘It seems to the company as if there were any reports about faulty prepaid cards.’

*Jakoby can also be used as a hearsay adverb:

(i) Sąsiedzi kupili jakoby nowy samochód.
neighbors buy.l-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), Stepień (2008), Wiemer (2015), Wiemer & Socka (2017a, 2017b), Zabowska (2008), among many others.
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 REFLEXIVE.SUBJ be.l-PTCP.SG.M drunk
   ‘It seemed as though he were drunk.’

b. * Firma popřela, jako by byly nahlášeny jakékoliv vadné karty.
   company deny,l-PTCP.SG.F SUBJ be.l-PTCP.N-VIR.PL reports
   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 że ‘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’. 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 company deny.l-PTCP.SG.F jakoby be.l-PTCP.N-VIR.PL reports about wadliwych kartach. faulty cards.LOC
‘The company denied that there were supposedly reports about faulty prepaid cards.’

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

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 žeby 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 že her son go.l-PTCP.SG.M to kindergarten.GEN
‘Every mother wants her son to go to the kindergarten.’

Following the generative mainstream literature on Polish complex clauses going back to Tajner (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.
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 wadliwych kartach.
    ‘I’m amazed/surprised that there were any reports about faulty prepaid cards.’

b. *Dziwi mnie, jakoby były zgłoszenia o wadliwych kartach.
    (5b)

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 skandal na arenie międzynarodowej.
    ‘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:
Łukasz Jędrzejowski

(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.3 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:

3Reis (1977: 142–148) has already observed for German wissen 'know' that it can be used in a similar way.
Absurdalne jest [DP twierdzenie], [jakoby okulary przeciwsłoneczne]
absurd be.3SG claim jakoby sunglasses
miały ograniczać widoczność.
have.l-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:


> ‘As the last category, one should mention here the subjunction jakoby (and its alternative subjunctions 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: LJ)

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:
Łukasz Jędrzejowski

(11) **Firma zaprzeczyła, jakoby / *jakby / *jak gdyby**
company deny.l-PTCP.SG.F jakoby / as if / as if
były zgloszenia o wadliwych kartach.
be.l-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 zaprzeczać ‘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], [jakoby / *jakby / *jak gdyby**
absurd be.3SG claim jakoby / as if / as if
okulary przeciwprostokątne miały ograniczać widoczność].
sunglasses have.l-PTCP.N-VIR.PL restrict.INF visibility.ACC

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

Likewise, Wiemer (2005) assumes jakby-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 jakby-clauses after verbs of seeming. Based on Łojasiewicz (1992), Wiemer (2005) elaborates on the following example:

4 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.

92
4 On the semantic change of evidential argument jakoby-clauses in Polish

(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’.

(14) **Przeszłej nocy śnilo** mu **się, jakoby** gruszki **z** drzewa **rwali.**

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.

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Glosses and English paraphrases are mine: LJ.
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)  
\begin{align*}
a. & \quad \text{Dorota twierdziła,} \quad \text{że} \quad \text{Jan był szczęśliwy.} \\
& \quad \text{Dorota claim.l-PTCP.SG.F that Jan be.l-PTCP.SG.M happy} \\
& \quad \text{‘Dorota claimed that Jan was happy.’} \\
b. & \quad \text{Dorota twierdziła,} \quad \text{jakoby} \quad \text{Jan był szczęśliwy.} \\
& \quad \text{Dorota claim.l-PTCP.SG.F jakoby Jan be.l-PTCP.SG.M happy} \\
& \quad \text{‘Dorota claimed that Jan supposedly was happy.’}
\end{align*}

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)  
\begin{align*}
a. & \quad \text{że} \quad \text{Jan był szczęśliwy, twierdziła Dorota.} \\
& \quad \text{that Jan be.l-PTCP.SG.M happy claim.l-PTCP.SG.F Dorota} \\
& \quad \text{‘That Jan was happy, Dorota claimed.’} \\
b. & \quad * \text{jakoby} \quad \text{Jan był szczęśliwy, twierdziła Dorota.} \\
& \quad \text{jakoby Jan be.l-PTCP.SG.M happy claim.l-PTCP.SG.F Dorota} \\
& \quad \text{Intended meaning: ‘That supposedly Jan was happy, Dorota claimed.’}
\end{align*}

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

Dorota twierdziła, że Jan będzie biegać codziennie.
‘Dorota claimed that Jan will go jogging every day.’

Intended meaning: ‘Dorota claimed that Jan will supposedly go jogging every day.’

The questionability of (17b) is surprising in the light of the rigid hierarchy of functional projections developed in Cinque (1999; 2006; 2017):

Accordingly, we expect jakoby as an evidential complementizer to merge as a functional head in Mood\textsubscript{evidential}, meaning that it should be able to take scope over all other functional material associated with lower functional projections including T(Future). This is not the case, though. It still needs to be accounted for why będzie is incompatible with jakoby-clauses.

2.3.3 Conditional mood

In contrast to źe-clauses, jakoby-clauses cannot contain a verbal head to which the conditional/subjunctive clitic by is attached, triggering a counterfactual interpretation of the embedded proposition:

‘Dorota claimed that Jan would have gone to the cinema.’
Łukasz Jędrzejowski

b. * Dorota twierdziła, jakoby Jan poszedł-by do kina.

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).


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

(20) *Chyba jest pani niesprawiedliwa.

‘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
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):

\[
[chyba \ p] = f^w \ \text{assume}(x, p), \ \text{whereby} \ x = \text{speaker}
\]

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

order.l-PTCP.SG.M beer but *chyba* him.DAT NEG be:tasty.3SG because

*ledwie umoczył* usta.
barely soak.l-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:


Dorota say.l-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.l-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\textsubscript{evidential} to outscope Mod\textsubscript{epistemic}, 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.l-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.l-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.\footnote{Interestingly enough, this constraint is weakened as soon as the modal verb *musieć* occurs in a complex past tense structure:}

Remarkably, this problem disappears as soon as *musieć* is replaced by the existential modal verb *móc* ‘can’/‘may’:

\footnote{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 musi być chory.*

Dorota say.l-PTCP.SG.F that Jan must.l-PTCP.SG.M be.INF sick

Intended meaning: ‘Dorota said that supposedly Jan must have been sick.’

Still, (i) sounds marked.
4 On the semantic change of evidential argument jakoby-clauses in Polish

(27) Dorota powiedziała, jakoby Jan może być chory.
Dorota say.l-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-eś, jakoby pójdziesz dzisiaj do kina.
yesterday say.l-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 pójdę dzisiaj do kina.
yesterday say.l-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-eś, że pójdziesz dzisiaj do kina.
yesterday say.l-PTCP.SG-M-2SG that go.2SG today to cinema.gen
‘Yesterday you said that you 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’*:

    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 faszyści zniszczyli jakieś biblioteki.*
    my friend say.3SG COMP COMP / COMP / COMP fascists 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:
On the semantic change of evidential argument jakoby-clauses in Polish

my friend say.3SG COMP fascists destroy.l-PTCP.VIR.PL some libraries.

my friend say.3SG COMP fascists destroy.l-PTCP.VIR.PL some 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 wysoki.
  witness claim.3SG COMP murderer be.l-PTCP.3SG.M reportedly tall.
  ‘The witness claims that allegedly the murderer was reportedly tall.’

b. Świadek twierdzi, jakoby morderca był podobno wysoki.
  witness claim.3SG COMP murderer be.l-PTCP.3SG.M apparently tall.
  ‘The witness claims that allegedly the murderer was apparently tall.’

c. *Świadek twierdzi, rzekomo morderca był jakoby wysoki.
  witness claim.3SG COMP murderer be.l-PTCP.3SG.M allegedly tall

  *Świadek twierdzi, podobno morderca był jakoby wysoki.
  witness claim.3SG COMP murderer be.l-PTCP.3SG.M allegedly 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. Concretely, it is rzekomo ‘reportedly’ in (33a) and

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7Appropriate prosodic contours are required for the concord reading.
Łukasz Jędrzejowski

`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 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
    Dorota claim.1-PTCP.SG.F that allegedly Jan will.3SG run.INF
    `codziennie`
    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
    Dorota claim.1-PTCP.SG.F `jakoby` Jan go.1-PTCP.SG.M-SUBJ to
    `kina`
    cinema.GEN
    Intended meaning: ‘Dorota claimed that supposedly Jan would have
gone to the cinema.’

b. Dorota twierdziła, `że jakoby` Jan poszedł-by do
    Dorota claim.1-PTCP.SG.F that allegedly Jan go.1-PTCP.SG.M-SUBJ to
    `kina`
    cinema.GEN
    ‘Dorota claimed that allegedly Jan would have gone to the cinema.’
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.l-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. 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.l-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.l-PTCP.N-VIR.PL reports about faulty cards.LOC
    ‘I’m amazed that there allegedly were any reports about faulty prepaid cards.’

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 naczelnika, ale ja w to nie wierzę.*

   ‘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):\(^9\)

(41) *Pay-kuna=s ñoqa-man=qa quqi-ta muntu-ntin-pi saqiya-wa-n, (s)he-pl=rep I-ILLA=top money=ACC lot-INCL-LOC leave=1O-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=1O-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)

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\(^9\)This sharply contrasts with the reportative morpheme *ku7* in St’àt’îmcets, as reported by Matthewson et al. (2007). Accordingly, *ku7* patterns with English *given that*. 

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104
4 On the semantic change of evidential argument jakoby-clauses in Polish

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:

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

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)  
\begin{align*}
\text{a. } & \text{Anna twierdzi, \textit{jakoby} wygrała w lotka.} \\
& \text{Anna claim.3SG jakoby win.l-PTCP.SG.F in lottery} \\
& \text{‘Anna claims to have won the lottery.’}
\end{align*}

\begin{align*}
\text{b. } & \text{*Anna twierdzi, że wygrała-\textit{by} w lotka.} \\
& \text{Anna claim.3SG that win.l-PTCP.SG.F-SUBJ in lottery} \\
& \text{Intended meaning: ‘Anna claims that she would have won the lottery.’}
\end{align*}

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)  
\begin{align*}
\text{Firma twierdziła, \textit{jakoby nie} bylo zgloszeń o wadliwych kartach.} \\
& \text{company claim.l-PTCP.SG.F jakoby NEG be.l-PTCP.SG.N reports about cards.LOC} \\
& \text{faulty cards.LOC} \\
& \text{‘The company claimed that there supposedly weren’t any reports about faulty prepaid cards.’}
\end{align*}

\begin{align*}
\text{a) The speaker has reportative evidence that there have not been any reports about faulty prepaid cards.} \\
\text{b) #The speaker does not have reportative evidence that there have not been any reports about faulty prepaid cards.}
\end{align*}
In this regard, *jakoby* patterns with reportative expressions attested in Cheyenne, St’át’imcets or Cuzco Quechua; cf. (45) for Cheyenne:

(45) É-sáa-nénéné-he-séstse Annie.
3-not-sing-NEG³sg 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>
<thead>
<tr>
<th>PROPERTY</th>
<th><em>że</em>-clauses</th>
<th><em>jakoby</em>-clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbs of seeming</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>exclamative verbs</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>left periphery</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>future tense</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>conditional mood</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>discourse particle <em>chyba</em> ‘presumably’</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>modal verb <em>musieć</em> ‘must’</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>matrix subject constraint</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>dubitativy</td>
<td>−</td>
<td>+</td>
</tr>
</tbody>
</table>

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-Kołaczyk & Walczak (2010), Table 2 distinguishes language stages in the history of Polish.

Table 2: Historical stages of Polish

<table>
<thead>
<tr>
<th>Language period</th>
<th>Abbreviation</th>
<th>Time period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Polish</td>
<td>OP</td>
<td>till 1543</td>
</tr>
<tr>
<td>Middle Polish</td>
<td>MP</td>
<td>1543–1765</td>
</tr>
<tr>
<td>New Polish</td>
<td>NP</td>
<td>1765–1939</td>
</tr>
<tr>
<td>Present-day Polish</td>
<td>PDP</td>
<td>since 1939</td>
</tr>
</tbody>
</table>

Dziubalska-Kołaczyk & 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 *Krótka rozprawa 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’:
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.\footnote{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. \footnote{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.”} I analyze it in (46b) as a complementizer.\footnote{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 fulfills miscellaneous functions. To determine its poly-functionality, I extracted and analyzed 262 examples containing jakoby from the PolDi corpus. Its distribution is given in Table 3.

Table 3: The use of jakoby in the PolDi corpus

<table>
<thead>
<tr>
<th>Label</th>
<th>COUNT</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>adverb</td>
<td>71</td>
<td>27%</td>
</tr>
<tr>
<td>XP jakoby XP</td>
<td>93</td>
<td>36%</td>
</tr>
<tr>
<td>DP complement</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>adv. clause</td>
<td>85</td>
<td>32%</td>
</tr>
<tr>
<td>argument clause</td>
<td>10</td>
<td>4%</td>
</tr>
</tbody>
</table>

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 golębicę s nieba] 'I saw the Holy Spirit descending from heaven like a dove.' (EZ, 6r: 7)

ze ‘that’, i.e. it occurs within the CP-domain (see also footnote 2 above). What is interesting in this context is the fact that ze ‘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, żebym 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.

12Two 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.

13PolDi 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.
Łukasz Jędrzejowski

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

   
   'There, they have set up something like a club.'
   
   (NKJP, *Dziennik Zachodni*, 30/12/2009)

   
   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 *Rozmyślania przemyskie* ‘The Przemyśl Meditation’.

(49) a. a zatem [DP krzyk] wielki pobudził wszytek dwor, and thus scream huge wake.up.l-PTCP.SG.M all court jakoby król 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’ (PolDi, *Rozmyślania przemyskie*, ≈1500, 92)

b. jako licemiernicy Żydowie z biskupy uczynili as duplicitous Jews from bishopGEN do.l-PTCP.VIR [DP rade], 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’ (PolDi, *Rozmyślania przemyskie*, ≈1500, 298)

14 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.
In addition, *jakoby* could also introduce comparative hypothetical adverbial clauses (= *adverbial clause* in Table 3):

(50) *ja na tem świecie tako tobie słżył, *jakoby-ch ci*
I on this world so you.DAT serve.l-PTCP.SG.M *jakoby-AOR you.DAT
dwoje duszy nalazł zbawienie
my soul find.l-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 bank.*
all behave.3PL refl so as if go.l-PTCP.SG.N about assault on 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, jakby chodziło o napad na bank.*
all behave.3PL refl so jakby go.l-PTCP.SG.N about assault on 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) *iżeć się jest ludziem na ziemi tako było*
that refl be.3SG people.DAT on earth.LOC so be.l-PTCP.SG.N
widziało, *jakoby się ono na nie obalić było*
seem.l-PTCP.SG.N jakby refl it on them.ACC slay.INF be.l-PTCP.SG.N
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

<table>
<thead>
<tr>
<th>verbs of seeming</th>
<th>verbs of thinking</th>
<th>verbs of speech/report</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

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 myślicł, jakoby jì za trzydzieści

from this day think.l-PTCP.SG.M jakoby him.ACC for thirty

pienięży sprzedał

money sell.l-PTCP.SG.M

‘from this day on he thought that he would have sold him for 30 silver coins’ (PolDi, Rozmyślania przemyskie, ≈1500, 479)

(55) a. powiadał przed nim, jakoby od Cesarza

say.l-PTCP.SG.M.HAB before him.DAT jakoby from Emperor

uciekł

run:away.l-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.l-PTCP.VIR conspiring refl jakoby him.ACC kill.l-PTCP.VIR

‘already Jews had a hostile attitude against him and conspired that they would supposedly kill him’ (PolDi, Rozmyślania przemyskie, ≈1500, 379)
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:15

(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 smawiąć 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*.16 An overview of how **jakoby** was used in **MP** is given in Table 5.

<table>
<thead>
<tr>
<th>adverb</th>
<th>XP jakoby XP</th>
<th>DP complement</th>
<th>adverbial clause</th>
<th>argument clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 (16%)</td>
<td>27 (17%)</td>
<td>3 (2%)</td>
<td>86 (53%)</td>
<td>20 (12%)</td>
</tr>
</tbody>
</table>

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

---

15 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 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.

16 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

<table>
<thead>
<tr>
<th>verbs of seeming</th>
<th>verbs of thinking</th>
<th>verbs of speech/report</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>17</td>
</tr>
</tbody>
</table>

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

(58)  
a. zdalo 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, *Dyszkursu o pijautwie kontynuacja*, 1681)

b. począł myślić / *jakoby* siebie i towarzystwo  
begin.l-PTCP.SG.M think.INF / jakoby REFL.ACC and company.ACC  
z niewoli wyrwać  
from bondageGEN 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)
4 On the semantic change of evidential argument jakoby-clauses in Polish

c. iż mniemali / jakoby Zona torrida miała być
that suppose.l-PTCP.VIR / jakoby Zona torrida have.l-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.l-PTCP.SG.M jakoby (...) W.Ks.L
miał się już ożenić w Śląsku
have.l-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.17

---

17I 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 × 10^{-14} |
| XP jakoby XP     | 1.0121   | 0.2472     | 4.094   | 4.24 × 10^{-5}  |
| (Intercept)      | −1.9601  | 0.2388     | −8.207  | 2.27 × 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

<table>
<thead>
<tr>
<th>adverb</th>
<th>XP jakoby XP</th>
<th>DP complement</th>
<th>adverbial clause</th>
<th>argument clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 (24%)</td>
<td>12 (14%)</td>
<td>31 (37%)</td>
<td>14 (16%)</td>
<td>8 (9%)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>verbs of seeming</th>
<th>verbs of thinking</th>
<th>verbs of speech/report</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>
4 On the semantic change of evidential argument jakoby-clauses in Polish

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 mędrze
seem.3sg refl us.dat jakoby patterns these be.l-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.prd also be.l-PTCP.SG.N claim.inf jakoby Latin bishops
stróżami byli Kościoła ruskiego
guards.ins be.l-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

<table>
<thead>
<tr>
<th>Language period</th>
<th>argument clauses (verbs of seeming)</th>
<th>argument clauses (verbs of speech/report)</th>
</tr>
</thead>
<tbody>
<tr>
<td>early Old Polish (until 1450)</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>late Old Polish (1450–1543)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Middle Polish (1543–1765)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>New Polish (1765–1939)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Present-day Polish (since 1939)</td>
<td>−</td>
<td>+</td>
</tr>
</tbody>
</table>

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)\(^\text{18}\).

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.\(^\text{19}\)

\(^{18}\)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.

\(^{19}\)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
4 On the semantic change of evidential argument jakoby-clauses in Polish

Table 11: Etymological composition of jakoby

<table>
<thead>
<tr>
<th>jako <code>as</code></th>
<th>by</th>
</tr>
</thead>
<tbody>
<tr>
<td>equative meaning</td>
<td>subjunctive/non-factive meaning</td>
</tr>
</tbody>
</table>

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:

\[(62) \ [\text{seem} \ [\text{jakoby} \ p]]\]

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:

\[(63) \ [\text{seem}]_{c,w} = \lambda p. \ \text{speaker}(c) \text{ has in } w \text{ inferential evidence that } p \text{ is true in } w\]

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

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

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 Fintel 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)  
\begin{itemize}
\item a. *Donald seems to be in Singapore.*
\item b. *It seems that Donald is in Singapore.*
\item c. *It seems as if Donald is in Singapore.*
\item d. *It seems as if Donald were in Singapore.*
\end{itemize}

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) \[
\left[ \text{seem as if} \right]_{c,w}^c = \lambda p. \text{the information (evidence) that speaker(c) has in w is just like the information that speaker(c) would have if p were the case}
\]

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

(67)  
\begin{itemize}
\item 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.*
\item 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.*
\end{itemize}

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

<table>
<thead>
<tr>
<th>Modal base (perceptual/epistemic)</th>
<th>Ordering source (doxastic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1 Donald is excited</td>
<td>if Donald is in Singapore, he is excited</td>
</tr>
<tr>
<td>Scenario 2 Donald is excited</td>
<td>if Donald is in Singapore, he is excited</td>
</tr>
<tr>
<td></td>
<td>Donald is bored</td>
</tr>
</tbody>
</table>

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* is used instead of *seem that* 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
On the semantic change of evidential argument jakoby-clauses in Polish

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 words. What *jakoby* does after verbs of seeming is compare them, or rather expresses equivalence as to some relevant properties.\(^{20}\) 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)?

\[\text{Jakoby}(p)_{c,w} = 1 \text{ iff there exists a non-empty reportative informational modal base } f_r(w) \text{ such that for all } w' \in \cap f_r(w), \text{Jakoby}^{w',c} = 1\]

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:

\[\text{(69) a. from perceptual information } X \rightarrow \text{ infer } p (= \text{ inferred});\]
\[\text{ b. from conceptual information } X \rightarrow \text{ infer } p (= \text{ assumed});\]
\[\text{ c. from reportative } \rightarrow \text{ infer } p (-).\]

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 *scheijnen* 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

\(^{20}\)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>
<thead>
<tr>
<th>Modal base</th>
<th>Ordering source</th>
</tr>
</thead>
<tbody>
<tr>
<td>early Old Polish</td>
<td>perceptual/conceptual</td>
</tr>
<tr>
<td>late Old Polish</td>
<td>perceptual/conceptual/reportative</td>
</tr>
<tr>
<td>Present-day Polish</td>
<td>reportative</td>
</tr>
</tbody>
</table>

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

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

Acknowledgements

This chapter emerged out of a collaboration with Mathias Schenner at the Leib-
niz-Center General Linguistics in Berlin (ZAS) in 2013, and resulted in a joint
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Łukasz Jędrzejowski

University of Oslo (September 2013), cf. Jędrzejowski & Schenner (2013). Mathias Schenner was responsible for the semantic analysis. I, in turn, was responsible for the syntactic analysis and provided substantial data from older stages of Polish. With Mathias’ kind approval, I seized on selected issues we raised in our earlier work, developed them further, and presented new results at the colloquium Semantics-pragmatics exchange at the University of Düsseldorf (June 2017), at the conference Formal diachronic semantics 2 (FoDS 2) at the Saarland University (November 2017), at the conference Formal description of Slavic languages 12.5 (FDSL 12.5) at the University of Nova Gorica (December 2017), as well as at the colloquium Slawistische Linguistik at the Humboldt University of Berlin (June 2018). I am grateful to the audiences for the inspiring feedback. For thought-provoking questions and comments, I would like to thank in particular (in alphabetical order): Nora Boneh, Ashwini Deo, Edit Doron, Hana Filip, Berit Gehrke, Remus Gergel, Chiara Gianollo, Julie Goncharov, Wojciech Guz, Verena Hehl, Vera Hohaus, Uwe Junghanns, Todor Koev, Martin Kopf-Giammanco, Roland Meyer, Roumyana Pancheva, Andreas Pankau, Radek Šimík, Peter Sutton, Luka Szucsich, Carla Umbach, Jonathan Watkins, Frederike Weeber, Henk Zeevat, and Karolina Zuchewicz. I am also indebted to two anonymous referees for their helpful feedback and genuinely interesting suggestions. Last but not least, my special thanks go to Clare Patterson and Benjamin Lowell Sluckin for proofreading. Of course, all remaining errors are my own.

Primary sources

EZ Ewangeliarz Zamoyskich [‘The Zamoyskich’ gospel’], 2nd h. 15th c.
KG Kazania Gnieźnięskie [‘The sermons of Gniezno’], 1st h. 15th c.
KorBa Elektroniczny korpus tekstów polskich z XVII i XVII 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.
References

Bates, Douglas M., Martin Maechler & Ben Bolker. 2012. *lme4: Linear mixed-effects models using S4 classes*. R package version 0.999999-0.


