

From an inferential C to a reportative C: The case of evidential *jakoby*-clauses in Polish

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1. Introduction

In Old Polish, arguments of some matrix predicates can be realized as a complement *jakoby*-clause, cf. (1)¹:

- (1) *ludziem na ziemi tako było widziało*
people.DAT on earth.LOC so be.3SG.N.l-PTCP see.3SG.N.l-PTCP
[*jakoby się ono na nie obalić było chciało*]
jakoby REFL it on them.ACC slay.INF be.3SG.N.l-PTCP want. 3SG.N.l-PTCP
'The people on earth interpreted it as if it wanted to slay all of them.'
(KG, *Kazanie I: Na Boże Narodzenie* 26-7)

In (1), the dependent clause is introduced by the hypothetical comparative complementizer *jakoby* ('as if') and it is embedded under the matrix predicate *widzieć* ('seem'). In Old Polish, *jakoby*-clauses can be embedded only under verbs of seeming. In (2), a Present-day Polish example, the *jakoby*-clause is embedded under the speech verb *zaprzeczać* ('deny'):

- (2) *Firma zaprzeczyła, [jakoby były*
company.NOM deny.3SG.F.l-PTCP jakoby be.PL.N-VIR.l-PTCP
zgłoszenia o wadliwych kartach]
reports.NOM about faulty cards.LOC
'The company denied that there supposedly were any reports about faulty prepaid cards.' (NKJP, *Dziennik Zachodni*, 27/9/2006)

The complementizer *jakoby* is not interpreted as a hypothetical comparative conjunction *as if* any longer, but as a hearsay complementizer (= *that* + *allegedly*). Notice, however, that in Present-day Polish, *jakoby*-clauses cannot be embedded under verbs of seeming:

- (2') **Firmie wydaje się jakoby ...*
company.DAT seem.3SG REFL jakoby
Intended: 'It seems to the company as if ...'

¹ The following abbreviations are used in handout: 1/2/3 - 1st/2nd/3rd person, ACC - accusative, AOR - aorist, DAT - dative, F - feminine, GEN - genitive, HAB - habitual, INF - infinitive, INS - instrumental, LOC - locative, l-PTCP - participle inflected for number and gender, MP - modal particle, N - neuter, NOM - nominative, N-VIR - non-virile, PERF - perfective, PL - plural, REFL - reflexive, SG - singular, SUBJ - subjunctive. This work was supported by Bundesministerium für Bildung und Forschung (Grant Nr. 01UG0711) and DFG (Project: Syntax/semantics mismatches in externally and internally headed relative constructions).

Interestingly, other West-Slavonic languages have not experienced this change:

➤ Czech (Radek Šimík, p. c.):

(3a) *zdát se* ('seem'):

Zdálo se, jako by byl opilý
seem.3SG.N.l-PTCP REFL as SUBJ be.3SG.M.l-PTCP drunk
'It seemed as though he were drunk.'

(3b) *popírat* ('deny'):

**Firma popřela, jako by byly nahlášený jakékoliv vadné karty*
company deny.3SG.F.l-PTCP jakoby be.PL.N-VIR reports any faulty cards
Intended: 'The company denied that there were reports about any faulty cards.'

➤ Slovak (Marianna Patak, p. c.):

(4a) *zdat' sa* ('seem'):

Zdá sa akoby svadby stávali vždy väčšími a vydarenejšími
seem.3SG REFL jakoby weddings become.PL.VIR more bigger and more.eccentric
'It seems as if weddings became bigger and more eccentric.'

(4b) *popriet'* ('deny'):

**Firma popriela akoby boli oznámenia chybných kariet*
company deny.3SG.F.l-PTCP jakoby be.3PL.N-VIR reports faulty cards
Intended: 'The company denied that there were reports about any faulty cards.'

Outline of the talk

Section 2: *Jakoby*-clauses in Modern Polish and their peculiarities

--> *jakoby*-embedding structures

--> *jakoby*-clauses as dependent clauses

Section 3: From Old Polish to Modern Polish: *jakoby* in flux

Section 4: Theoretical perspective: Reanalysis

--> Syntax

--> Semantics

Section 5: Concluding remarks.

2. *Jakoby*-clauses in Present-day Polish: a corpus-based survey

2.1. *Jakoby*-embedding structures

Jakoby-clauses can be complements both to verbal and nominal phrases. Most of the NPs are linked to a speech predicate, e.g. *pogłoska* 'rumour' from *głosić* ('to rumour'), *informacja* ('information') from *informować* ('to inform'), *insynuacja* ('insinuation') from *insynuować* ('to insinuate'), etc:

- (5a) *Chciałbym podkreślić, że bzdurą są dla mnie insynuacje o tym, [jakobym ją szantażował]*
would.like.1SG stress.INF that nonsense.INS be.3PL for me.ACC
insinuations about this jakoby.1SG her.ACC blackmail.3SG.M.l-PTCP

'I'd like to stress that all these insinuations that I supposedly blackmailed her are lies.' (NKJP, *Dziennik Zachodni*, 22/11/2004)

- (5b) *Mój sąsiad twierdził, [jakobym hałasował]*
my neighbor claim.3SG.M.l-PTCP jakoby.1SG make.noise.3SG.M.l-PTCP
'My neighbor claimed that I'm supposed to have made a noise.'
(NKJP, *Dziennik Zachodni*, 19/4/2006)

Following the well-known classification proposed in Karttunen (1977), the most frequent *jakoby*-embedders are due to verbs of one-way communication (e.g. *twierdzić* 'claim', *zaprzeczać*, *dementować* 'deny', *powiedzieć* 'say', *sugerować* 'suggest', etc.).

Since *jakoby*-clauses are restricted to verbs of speech, they always disambiguate the embedding predicate:

- (6) *Niektóre kluby nie wiedzą, jakoby zgłaszały graczy*
some clubs NEG NEG know.3PL jakoby propose.N-VIR.l-PTCP players.ACC
≈ 'Some clubs don't know that they supposedly proposed the players.'
(NKJP, *Gazeta Krakowska*, 25/6/2007)

In (6), *wiedzieć* is used as a *verbum dicendi* verb, not as a pure verb of retaining knowledge².

² Note that this is not new. Reis (1977: 142-8) has already observed for German *wissen* ('know') that it can be used in a similar way having an additional *verbum dicendi* usage: *Hanna: Ruth war gerade zum Kaffee da. - Fritz: So? Was wußte die Ratschbase denn alles? - Hanna: Ach, sie wußte z. B., daß Erna ein Kind kriegt* (p. 145; ex 88a).

Looking at first 100 occurrences of *jakoby* in *National Corpus of Polish*, we arrive at the following division:

	<i>jakoby</i> -clauses		others ³
	N	V	
Matrix head			
Amount	37	32	31
In total			100

Table 1: *Jakoby* and its uses in the Present-day Polish (based on NKJP)

Today, we will focus on *jakoby*-clauses selected only by VPs.

2.2. *Jakoby*-clauses as complement clauses

Although dependent *jakoby*-clauses can occupy the same syntactic position, they differ from canonical *że*-clauses ('that'-clauses) in several respects.

(i) Whereas *że*-clauses can be used with the future tense, *jakoby*-clauses cannot:

- (7) *Dorota twierdzi, że/*jakoby będzie biegać codziennie*
 D.NOM claim.3SG that/jakoby will.3SG run.INF daily
 'Dorota claims she will (*supposedly) go jogging every day.'

(ii) In contrast to *że*-clauses, the embedded verbal head in *jakoby*-clauses cannot be marked for the subjunctive mood:

- (8) *Dorota twierdzi, że/*jakoby biegałaby codziennie*
 D.NOM claim.3SG that/jakoby run.3SG.F.l-PTCP.SUBJ daily
 'Dorota claims she would (*supposedly) go jogging every day.'

This difference might be due to the fact that *jakoby* has not been fully bleached being still equipped with a subjunctive value arising from the *-by* clitic.

(iii) While *jakoby*-clauses do not allow Root Phenomena like modal particles, classical *że*-clauses do:

- (9) *Anna stwierdziła, że/*jakoby chyba pójdzie do kina*
 A.NOM claim.3SG.F.l-PTCP that/jakoby MP go.3SG to cinema.GEN
 'Anna claims that she will (*probably) go to the cinema.'

The modal particle *chyba* corresponds to the unstressed variant of German *wohl* signaling the uncertainty of the speaker towards the proposition.

³ "Others" mainly covers *jakoby* used as a reportative adverb (see *jakoby1* in Section 3.1.).

3. Diachronic development

We distinguish the following four language stages in the history of Polish (mainly based on Klemensiewicz 2009):

Abbreviation	Language Stage	Beginning	Ending
OP	Old Polish	1136	1535
MP	Middle Polish	1535	1780
NP	New Polish	1780	1939
PdP	Present-Day Polish	1939	present

Table 2: Approximate language periods in the history of Polish

3.1. Decomposing *jakoby*

Słownik Współczesnego Języka Polskiego ('Dictionary of Modern Polish') (1998) classifies *jakoby* as a polyfunctional word. On the one hand, *jakoby* can be employed as an evidential adverb:

*jakoby*1: 'tym słowem mówiący sygnalizuje, że przytacza cudzy sąd i że wątpi w prawdziwość tego sądu: Został jakoby specjalnie rozproszony. Chciał jakoby tylko pożyczyć tę sumę. To był jakoby jego własny pomysł.' (vol. 1: 336) (*jakoby*: 'using this word, the speaker indicates that he or she is stating a foreign judgment and that the speaker doubts the veracity of this judgment: He has been allegedly distracted on purpose. He allegedly wanted to borrow this amount. It was allegedly his own idea'; our translation, ŁJ & MS).

On the other hand, *jakoby* can be used as an evidential complementizer:

*jakoby*2: 'łączy zdanie nadrzędne ze zdaniem podrzędnym, które jest jego rozwinięciem, uzupełnieniem, wskazuje także na niepewność treści przyłączonego zdania: Wspomniano mi, jakoby miał taki zamiar. Twierdził, jakoby znał tego malarza.' (vol. 1: 336) (*jakoby*: 'links the main clause with the subordinate clause that is its complement. *Jakoby* also points toward the uncertain contents of the subordinate clause: They mentioned to me that he allegedly intended (doing this). He claimed he allegedly knew this painter; our translation, ŁJ & MS).

Etymologically, *Glosariusz Staropolski* ('The Old Polish Glossary') considers *jakoby*2 to be a typical example of fusion. Its origin is traced back to the preposition *jako* ('as') and the complementizer *by* ('that')⁴:

⁴ It is worth noticing here that *by* in Present-day Polish, as well as in Old Polish, fulfills a number of different functions. In both stages *by* can be used as a conditional clitic merging with almost all parts of speech (cf. Witkoś 1998 for an overview and a minimalist analysis). On the other hand, it introduces miscellaneous types of subordinate clauses. As for Present-day Polish, *Współczesny Słownik Języka Polskiego* (1998: 84-5) mentions the following dependent clauses: (i) purpose clauses, (ii)

- (10) *Od 18 lat pracuje [P jako] księgowy*
 from 18 years work.3SG as public.servant.NOM
 ‘He has been working as public servant for 18 years.’
 (NKJP, *Tygodnik Podhalański*, 31/1999)

- (11) *Zdecydowaliśmy, [C by] zorganizować akcję wśród harcerzy*
 decide.1PL.VIR.l-PTCP that organize.INF.PERF action.ACC among scouts.GEN
 ‘We decided to organize an action among scouts.’
 (NKJP, *Dziennik Zachodni*, 17/8/2002)

The origin of the complementizer *by* is traced back to **by*, i.e. 3rd person singular aorist of the Proto-Slavic predicate **byti* (‘be’).

3.2. Old Polish - Middle Polish

In OP, *jakoby* fulfills different functions.

- (i) It can introduce comparative hypothetical clauses, cf. (1) repeated here as (12) for convenience:

- (12) *ludziem na ziemi tako było widziało*
 people.DAT on earth.LOC so be.3SG.N.l-PTCP see.3SG.N.l-PTCP
 [*jakoby się ono na nie obalić było chciało*]
 jakoby REFL it on them.ACC slay.INF be.3SG.N.l-PTCP want. 3SG.N.l-PTCP
 ‘The people on earth interpreted it as if it wanted to slay all of them.’
 (KG, *Kazanie I: Na Boże Narodzenie* 26-7)

There is one example showing a PdP behavior. In (13), one can get the impression that the *jakoby*-clause is introduced by the matrix predicate *radzić się* (‘to ask sb’s advice’). According to this interpretation, *jakoby* would be interpreted as a reportative C head:

- (13) *Z Greglarem się radzili,*
 with G.INS REFL consult.PL.VIR.l-PTCP
 [*jakoby ji zabić mieli*]
 jakoby them.ACC kill.INF.PERF have.PL.VIR.l-PTCP
 ‘(They) consulted with Greglar to the extent as if they had wanted to kill them.’
 (WozAT, line 21)

consecutive clauses, (iii) prospective clauses (in the sense claimed by Pauly 2012), and (iv) complement clauses in general. According to *Glosariusz Staropolski* (2008: 10), Old Polish *by* could only introduce (i) and (iv).

(14) a. *[matrix clause V [complement clause *jakoby* V]] *jakoby* = reportative

Notice, however, that the embedded *jakoby*-clause is not a complement clause. It is a consecutive clause referring to an empty matrix correlate (\emptyset) and an omitted adverb, e.g. *tak głośno* ('so loud'):

b. [matrix clause [\emptyset + adverb] V [consecutive clause *jakoby* V] *jakoby* = inferential

(ii) *Jakoby*-clauses can be realized as adjunct clauses as well:

(15) *ja na tem świecie tako tobie służył*
 I on this world so you.DAT serve.3SG.M.l-PTCP
jakobych ci ja swoje duszy znalazł zbawienie
 jakoby.AOR you.DAT I my soul find.3SG.M.l-PTCP salvation
 '(...) I was serving to you on this world to the extent as if my soul would find salvation.' (KG, *Kazanie I: Na Boże Narodzenie* 20-1)

(iii) *Jakoby* can also modify NPs, similar to English *like*:

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

In MP, *jakoby* does not undergo any noticeable changes.

3.3. New Polish - Present-day Polish

In NP, like in OP, *jakoby* still fulfills many functions:

<i>jakoby</i> ('like') + NP/PP	hypothetical <i>jakoby</i> + adjunct clause	inferential <i>jakoby</i> + complement clause	reportative <i>jakoby</i> + complement clause
68 (67,4%)	22 (21,8%)	10 (9,9%)	1 (0,9%)

Table 3: The distribution of *jakoby* in *Chłopi*

Additionally, *jakoby*-clauses start to be introduced by verbs referring to the information coming from a second-hand source, cf. (17) for *stać napisanym* ('be written'):

- (17) *Mojego nie ma, pojechał do powiatu,*
 my.GEN NEG have.3SG go.l-PTCP.M.3SG to district.GEN
a stójka jeno powiadał, że
 and sentry.NOM only say.l-PTCP.HAB.M.3SG that
tam stoi napisane, [jakoby Grzela pomarł ...]
 there stand.3SG written jakoby G.NOM die.l-PTCP.M.3SG

'My husband is not at home. He has gone to the district office, and the sentry was repeatedly saying that you can find there an announcement about the supposed death of Grzela.' (Ch, p. 616)

From NP on, *jakoby*-clauses are embeddable under classical *verba dicendi* and under NPs related to verbs of saying (see Section 2.1.):

- (18) *Nie mamy potrzeby rumienić się wobec*
 NEG have.1PL need.GEN blush.INF REFL towards
zarzutu kolegi (...), jakoby lekarz dzisiejszy był
 charge.GEN colleague.GEN jakoby doctor of.today be.3SG.M.l-PTCP
lekarzem ludzi bogatych
 doctor.INS people.GEN rich

'There is no need to blush due to the imputation of our colleague claiming that today's doctors are supposed to be doctors of rich people.' (LB, p. 32)

4. Theoretical perspective: Reanalysis

4.1. Syntax

Willis (2007: 433) argues that the emergence of a new complementizer might involve three scenarios:

- a) reanalysis of main-clause phrasal elements as complementizer heads,
- b) reanalysis of main-clause heads (e.g. verbs, prepositions) as complementizer heads,
- c) reanalysis of embedded phrases (e.g. specifiers of CP) as complementizer heads.

Jakoby-clauses instantiate a fourth scenario:

- d) reanalysis of a complementizer head as another complementizer head.

Van Gelderen (2004: 126) observes that "for most languages, we lack the information whether a C is low or high in the tree structure." A similar situation holds for *jakoby*-

clauses as well. To account for the development of *jakoby*-clauses, one can assume that *jakoby* externally merges as a higher C head.

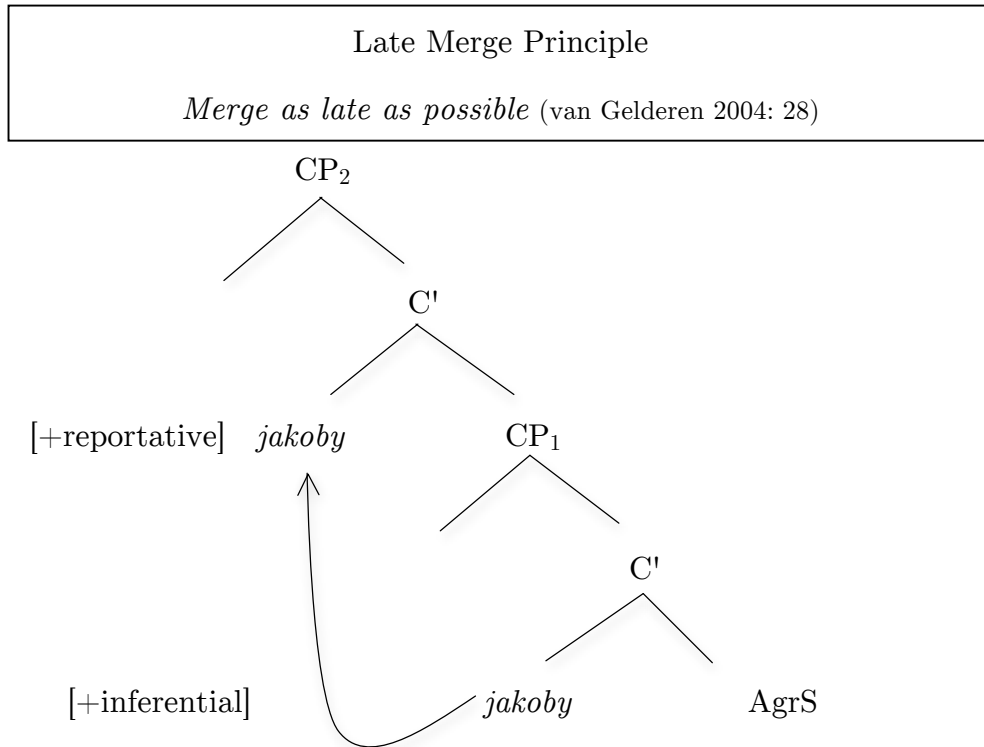


Figure 1: Grammaticalization of *jakoby* in the history of Polish.

How do we know that evidential *jakoby* externally merges as a higher C head?

This development accords to the evidential hierarchy proposed by de Haan (1999):

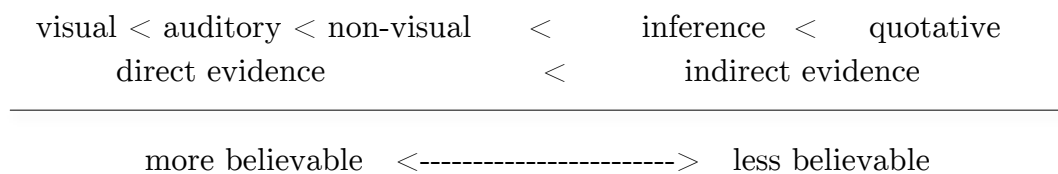


Figure 2: Evidential hierarchy from de Haan (1999)

On the other hand, it contradicts the earlier evidential grammaticalization hierarchy envisaged by Willett (1988):

(19) attested --> reported --> inferring

4.2. Semantics

Our main goal in this section is to describe the contribution of *jakoby* in two central constructions: (1) in complement clauses of *seem*-type matrix verbs in Old Polish, (2) in complement clauses of *say*-type matrix verbs in Present-day Polish. We will focus on identifying constant factors in the lexical meaning of *jakoby* over time and try to locate the aspects responsible for the semantic change that *jakoby* underwent.

Origins: As detailed in section 3, *jakoby* can be traced back to the fusion of a complementizer *jako* and a preposition *by*. We will argue that these components contributed two semantic seeds that determined the further development of *jakoby*: (a) equative comparison, (b) non-factivity (or rather “subjunctive” meaning).

<i>jako-</i>	<i>-by</i>
“as”	“that”
comparison	subjunctive
(equative)	(non-factive)

Table 4: Etymological composition of *jakoby*.

Preview: For Old Polish, the combination of these two elements is sufficient to explain the semantic contribution of *jakoby*. In the further development, component (a) paved the way for the use of *jakoby* in comparative adjunct clauses in New Polish where it can be translated as *like* (as in *He was singing like a girl*). And component (b) paved the way for the dubitative meaning that *jakoby* contributes in complement clauses of *verba dicendi* in Present-day Polish.

Old Polish:

In 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 TP:

(20) [seem [jakoby *p*]]

Our task is to explain how these three components (embedding verb, complementizer and embedded proposition) play together to yield the final meaning “it seems as if *p*”.

First, what is the contribution of the *seem*-type verb? As a first approximation, *seem* expresses indirect evidence, that is (21) expresses that the speaker (or some salient

group of individuals) has some body of evidence X from which it follows (or which at least strongly suggests) that Alice is at home, as sketched in (22).

(21) *Alice seems to be at home.*

(22) $X \Rightarrow$ Alice is at home.

Indicating indirect evidence is a common feature of necessity modals across languages. Consider, for example, English *must* (von Stechow and Gillies 2010):

(23) Looking out of the window into the pouring rain:

a. *It's raining.*

b. ?? *It must be raining.*

The general idea for the case of *seem* can be expressed as follows:

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

which can be spelled out in a Kratzer-style modal semantics, here roughly along the lines of Faller (2011):

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

Coming back to our structure (26): If the matrix verb already expresses indirect evidence, what is the contribution of *jakoby*?

(26) [seem [jakoby p]]

In order to answer this question, we need to look at a broader range of *seem* constructions (here for German and English; recall that Present-day Polish does not allow *jakoby* in this configuration anymore):

- | | | |
|---------|--|----------------------------|
| (27) a. | <i>Die Katze wirkt glücklich.</i> | ADJ |
| | The cat seems happy. | |
| b. | <i>Die Katze scheint glücklich zu sein.</i> | INF |
| | The cat seems to be happy. | |
| c. | <i>Es scheint, dass die Katze glücklich ist.</i> | <i>that</i> + indicative |
| | It seems that the cat is happy | |
| d. | <i>Es scheint (so), als ob die Katze glücklich ist.</i> | <i>as if</i> + indicative |
| | It seems as if the cat is happy. | |
| e. | <i>Es scheint (so), als ob die Katze glücklich wäre.</i> | <i>as if</i> + subjunctive |
| | It seems as if the cat were happy. | |

(This set of data raises some interesting issues by itself. For the English data, de Haan (2007) argues that (27a) indicates *visual* evidence, whereas (27b)-(27c) are compatible with either direct or indirect evidence. Grimm (2010) derives from a careful corpus study that raising variants like (27b) express *direct* evidence, whereas non-raising constructions like (27c) express *indirect* evidence. The *as if* cases in (27d) and (27e) usually don't receive much attention and we are not aware of any detailed formal treatments.)

Idea: The contribution of *jakoby* is to map (27c)-type meanings to (27e)-type meanings.

But what is the meaning of (27e)? Here is a paraphrase that uncovers that the two original components of *jakoby* – equative comparison and “counter-factuality” (subjunctive meaning) – are involved:

(28) If the cat were happy, I would have the same evidence as I actually have.

We can picture this as follows:

(29) actual situation:	cat is purring	=>	(cat is happy?)
	=		
hypothetical situation:	cat is purring	=>	cat is happy

The basic idea is stated more generally in (30):

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

Let's make this more concrete by looking at two explicit scenarios:

(31) Scenario 1: I believe that if a cat is purring, it is happy. The cat is lying on the couch. The cat is purring.

Scenario 2: I believe that if a cat is purring, it is happy. I'm taking the cat to the veterinarian. I believe it's not happy there. The cat is purring.

	modal base (perceptual/epistemic)	ordering source (doxastic)
Scenario 1	the cat is purring	if a cat is purring, it is happy
Scenario 2	the cat is purring	if a cat is purring, it is happy the cat is not happy

Table 5: Modal bases and ordering sources for the two scenarios in (31).

In scenario 1 it is natural to assert (27b) or (27c), in scenario 2 it is natural to assert (27e). The latter case gives rise to conflicting beliefs and (27e) is one way to express a certain reluctance to embrace the proposition for which there is indirect evidence. This calls for *belief revision*. In general, the conflict can be resolved in either way (depending on the distribution of the degrees of belief):

(32) *It seems as if the cat were happy.*

- a. ... But this cannot be. I know it hates being at the veterinarian.
- b. ... It must be since it's purring. So I guess it likes being at the veterinarian after all.

The general idea is that *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. (In the indicative case, this accounts for mirative readings.)

Interestingly, this type of example is reminiscent of examples like (33) that are used in the literature to argue that subjunctive conditionals are not counter-factual (Anderson 1951, von Stechow 1997). We can paraphrase (33), leaving some details implicit, using *as if*, as in (34). The conceptual relations are depicted in (35).

(33) *If Jones had taken arsenic, he would have shown just exactly those symptoms which he does in fact show.*

(34) *It seems as if Jones took arsenic.*

(35) actual situation:	Jones shows these symptoms =>	(Jones took arsenic?)
	=	
hypothetical situation:	Jones shows these symptoms =>	Jones took arsenic

In sum, the contribution of *jakoby* in Old Polish does not seem to be genuinely evidential, but naturally arises from the meanings of the two elements it is composed of: equative comparison and subjunctive meaning.

This is in line with the use of *jakoby* in comparative adjunct clauses in New Polish where it can be translated as *like*, as in (36). We can make the link even clearer by paraphrasing the translation *He was singing like a girl* as *He was singing as if he were a girl*.

(36) *tak dzwonił jakoby [DP ta dziewczka poniektóra]*
 so sing.l-PTCP.M.3SG jakoby this girl.NOM some
 '(He) was singing like a girl.' (Ch, p. 591)

Present-day Polish:

In PdP, *jakoby* is restricted to complement clauses of speech verbs. It shares with its earlier instances the indirect evidential environment, but now requires a reportative rather than an inferential context. A natural option is to analyze these clauses as involving **evidential concord** with the embedding matrix predicate. This is in line with the use of *jakoby* as a reportative adverbial (*allegedly*).

Cross-linguistically, there appear to be two types of reportatives, depending on whether they involve some kind of speaker commitment to the reported proposition (see Kratzer 2012, p.34; Fallner 2011). PdP *jakoby* clearly does not require any degree of speaker commitment, as (37) illustrates.

- (37) *Mówi się, jakoby Roger został wybrany na naczelnika,*
say.3SG REFL jakoby R.NOM PASS.AUX.3SG.M.PST elected on chief.ACC
ale ja w to nie wierzę
but I in this NEG believe.1SG
'It is said that Roger was elected chief, but I don't believe that.'

In fact, *jakoby* arguably contributes a **dubitative** component that is likely related to the subjunctive character of its linguistic ancestors. There is a clear difference between *jakoby*-clauses and regular subjunctive clauses as complements to speech verbs: If the speaker wants to distance herself from the content of the reported proposition, *jakoby* has to be used instead of a regular complement clause.

- (38) a. *Anna twierdzi, [jakoby wygrała w lotka]*
A. claim.3SG jakoby win.3SG.F.l-PTCP in lottery.LOC
'Anna claims she (supposedly) won the lottery.'
- b. **Anna twierdzi, [że wygrałaby w lotka]*
A. claim.3SG that win.3SG.F.l-PTCP.SUBJ in lottery.LOC

Explaining the transition from inferential to reportative:

But how did the inferential meaning of *jakoby* change to a reportative one? One natural explanation is based on the two “layers” of inferential evidentials, in particular *seem*-type verbs that were the original hosts of *jakoby* complements. Intuitively, *it seems that p* expresses that there is some body of information X (the “evidence”) which entails (or at least suggests) that *p* is the case. But what kind of information is X? Consider the three cases in Table 6 (the terminology in the right-most column is from Aikhenvald 2004).

from <i>perceptual</i> information X	infer p	(INFERRED)
from <i>conceptual</i> information X	infer p	(ASSUMED)
from <i>reportative</i> information X	infer p	(---)

Table 6: The evidential basis of inferential evidentials.

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. This flexibility of inferential evidentials is reflected in the wide range of evidence types that *seem*-type verbs can express cross-linguistically. We already mentioned that de Haan (2007) and Grimm (2010) noticed that English *seem* is capable of expressing both direct and indirect evidence. Diewald (2001) describes German *scheinen* as an “unspecific” evidential marker that is not restricted to inferential readings. Its Dutch counterpart *schijnen* actually developed into a marker of reportative evidence and is joined by *lijken* for expressing visual evidence, both investigated in detail in Koring (2013). This shows that *seem*-type verbs are surprisingly flexible and are definitely not limited to expressing inferential evidence.

Using the idea from Faller (2011) that inferential evidentials involve a non-empty ordering source whereas (informational) reportative evidentials make no reference to an ordering source at all, we can picture the development of *jakoby* contexts as follows:

	Modal Base	Ordering Source
Old Polish	perceptual/conceptual	doxastic
Transition	perceptual/conceptual/reportative	doxastic
Present-day Polish	reportative	-

Table 7: Diachrony of *jakoby* in terms of admissible information types in the modal base.

The idea is that the transition 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 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

Table 8 summarizes the development of *jakoby* from an inferential to a reportative marker:

	Old Polish	Middle Polish	New Polish	Present-day Polish
inferential	+	+	+	-/?
reportative	-	-	+	+

Table 8: The usage of *jakoby* in the history of Polish

Primary sources

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- EZ *Ewangeliarz Zamoyskich* ['The Zamoyskich' Gospel']
- KG *Kazania Gnieźnieńskie* ['The Sermons of Gniezno']
- LB Stanisław Żeromski (1899): *Ludzie Bezdomni*. ['Homeless People']
- NKJP *Narodowy Korpus Języka Polskiego* (<http://nkjp.pl>)
['National Corpus of Polish']
- WozAT *Wiersz o zabiciu Andrzeja Tęczyńskiego* (1462). ['The dead poem of Andrzej Tęczyński']

All OP texts are available at:

<https://www.ijp-pan.krakow.pl/publikacje-elektroniczne/korpus-tekstow-staropolskich?lang=pl>

All MP and NP texts are available at:

<http://wolnelektury.pl>

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Appendix A: Previous approaches

[1] Taborek (2008)

According to Taborek (2008: 110-1, 156-7), *jakoby*-complement clauses are introduced by *verba dicendi* and they express speaker's doubts about the validity of the embedded proposition. The complementizer *jakoby* is interchangeable with two other complementizers, *jakby* and *jak gdyby* (both 'as if').

Problem 1: Taborek (2008) does not provide any examples with *verba dicendi*. The examples he gave are mainly from NP, not from PdP and they do not include any verb of speech. Taborek mentions the following *jakoby*-embedding predicates: *wydawać się*, *widzieć się*, *zdawać się* (all 'seem'), *być napisanym* ('be written'), *być prawdą* ('be true').

Problem 2: The complementizer *jakoby* is interchangeable neither with *jakby* ('as if') nor with *jak gdyby* ('as if'):

- (i) *Firma* *zaprzeczyła*, [*jakoby*/**jakby*/**jak gdyby* *były*
 company.NOM deny.3SG.F.l-PTCP *jakoby*/**as if*/**as if* be.PL.N-VIR.l-PTCP
zgłoszenia *o* *wadliwych* *kartach*]
 reports.NOM about faulty cards.LOC
 'The company denied that/**as if* there (supposedly) were any reports about faulty prepaid cards.'

Jakby and *jak gdyby*, like Czech *jako by* and Slovak *akoby*, are hypothetical comparative complementizers (= 'as if', 'as though') that didn't develop any

evidential values (see also *Dictionary of Modern Polish* and *Dictionary of Correct Use of Polish*).

Moreover, whereas *jakoby*-clauses can be licensed by NPs, hypothetical comparative clauses cannot:

- (ii) *Absurdalne jest twierdzenie [jakoby/*jakby*
 absurd is claim jakoby/*as if

okulary przeciwsłoneczne miały ograniczać widoczność
 sunglasses have.PL.N-VIR restrict.INF visibility.ACC

'The claim that/*as if sunglasses (supposedly) restrict visibility is absurd.'
 (NKJP, *Gazeta Ubezpieczeniowa*, 7/3/2006)

[2] Wiemer (2005)

Wiemer (2005, pers. comm.) claims that *jakoby*-complements can still occur after verbs of seeming:

- (iii) *Zdaje mi się, [jakobym słyszał jakieś wołanie]*
 seem.3SG me.DAT REFL jakoby.1SG hear.3SG.M.l-PTCP some crying.ACC

'It seems to me as if I heard someone crying.' (Łojasiewicz 1992: 105)

Problem 1: First, from a PdP perspective we judge (iii) as ungrammatical. It is also not clear how old this example is. It is grammatical iff the comparative hypothetical complementizer *jakby* ('as if') is used:

- (ii') *Zdaje mi się, [jakbym słyszał jakieś wołanie]*.

Second, we were able to find only one corpus examples in the *National Corpus of Polish* (excluding NP examples):

- (iv) a. Query: [base=zdać] się jakoby
 (= all morphological forms of perfective *seem* + REFL + *jakoby*)
 Results: *Found 0 results*
- b. Query: [base=zdać] [case="dat"] się jakoby
 (= all morphological forms of perfective *seem* + NP[DAT] + REFL + *jakoby*)
 Results: *Found 0 results*
- c. Query: [base=zdawać] się jakoby
 (= all morphological forms of imperfective *seem* + REFL + *jakoby*)
 Results: *Found 0 results*
- d. Query: [base=zdawać] [case="dat"] się jakoby
 (= all morphological forms of imperfective *seem* + NP[DAT] + REFL + *jakoby*)

Results: *Found 1 result*

- (v) *Zdaje mi się [jakoby Hobbit uważał inaczej]*
seem.3SG me.DAT REFL jakoby H.NOM think.3SG.M.l-PTCP differently
'It seems to me that/as if Hobbit would think differently.'
(NKJP, *an internet forum*, 19/8/1999)

Notice, however, that *zdaje się* ('it seems') does not really correspond to its pure inferential use. It has some evidential flavor.

Problem 2: Wiemer (2005: 122-4) discusses only NP examples and does not really show that *jakoby*-clauses can be embedded under *verba dicendi* in PdP. The only example he provides contains the impersonal matrix predicate *śnić się* ('dream'):

- (vi) *Przeszłej nocy śniło mu się,*
last night dream.3SG.N.l-PTCP him.DAT REFL
[jakoby gruszki z drzewa rwał]
jakoby pears from tree pluck.3SG.M.l-PTCP
'Last night he dreamt as if he were plucking pears from a tree.'
(Wiemer 2005: 123; ex 22; from Eliza Orzeszkowa (1888): *Nad Niemnem.*)