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**SUBJUNCTIVEHOOD CRITERIA.
A THEORETICAL-COMPARATIVE STUDY
BASED ON POLISH AND ENGLISH**

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**KRYTERIA DEFINICYJNE SUBJUNKTIWU.
STUDIUM TEORETYCZNO-PORÓWNAWCZE
NA PRZYKŁADZIE JĘZYKA POLSKIEGO I ANGIELSKIEGO**

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LIST OF ABBREVIATIONS

ACC	accusative
AUX	auxiliary
COMP	complementizer
COND	conditional
DAT	dative
F	feminine
FUT	future
GEN	genitive
IMP	imperative
IND	indicative
INF	infinitive
INS	instrumental
IPFV	imperfective
IRR	irrealis
M	masculine
N	neutral
NEG	negation
NOM	nominative
NONVIR	non-virile
NO/TO	<i>-no/-to</i> construction
PART	particle
PL	plural
PLPRF	pluperfect
PNP	perfective non-past
POSS	possessive
PRS	present
PST	past
PTCP	participle
PFV	perfective
PRF	perfect
REAL	realis
REFL	reflexive
SBJV	subjunctive
SG	singular
VIR	virile

INTRODUCTION

The problem of the subjunctive as an irrealis mood contrasting with the indicative has been a subject of extensive research in numerous subfields of contemporary linguistics, such as: generative grammar (Quer, 1998; Mezhevich, 2006; Wiltschko, 2016), formal semantics (Iatridou, 2000; Giannakidou, 2009), pragmatics (Lavandera, 1983; Clark, 1991; Majías-Bikandi, 1994, 1998), cognitive linguistics (Lunn 1989; Dam-Jensen, 2011) and linguistic typology (Palmer, 2001; Quer, 2006; Tóth, 2008). Studies on the subjunctive have also covered a variety of languages, from languages in which the subjunctive is inflectionally realized as a separate verbal paradigm traditionally included in descriptive grammars, e.g., in Romance languages (see Terrell and Hooper, 1974; Quer, 1998; Gregory and Lunn; 2012), through languages characterized with a periphrastic realization of the subjunctive based on complementizers and particles, e.g., Greek (see Giannakidou, 2009) and Russian (see Mezhevich, 2006), to languages where the subjunctive as a grammatical category is in a state of flux, e.g., English (see Övergaard, 1995; Aarts, 2012). The common denominator of all those research studies is a problem with defining the subjunctive and its properties. As Quer (2006) stresses, constructions identified as the subjunctive in a given language can have properties different from the properties of analogous constructions in other languages. Furthermore, in the same language the subjunctive can have different realizations with different morphosyntactic and semantic features (*ibidem*). However, the subjunctive – or subjunctives – described in numerous research studies have one common feature: they surface in subordinate clauses selected by specific types of matrix predicates (see Quer, 2006; Topolińska, 2010).

Since the subjunctive is a complex linguistic phenomenon, research studies on this topic concentrate on narrower aspects. First, there are works examining the properties of the predicates which select for subjunctive complements – mainly volitional and directive predicates (see Terrell and Hooper, 1974; Hooper, 1975; Quer, 1998; Giannakidou, 2009). Second, there are studies focused on the morphosyntactic properties of the subjunctive (so-called ‘subjunctive-related phenomena’), such as syntactic transparency, connected with *wh*-movement (see Rudin, 1988; Witkoś, 1995; Quer, 2006; Tomaszewicz, 2009), temporal relations between the main clause and the embedded clause (see Mezhevich, 2006; Wiltschko, 2016) and pronoun referential properties, specifically obviation effects (see Quer, 2006). Finally, some linguists are concerned with the pragmatic dimension of the subjunctive, that is, its status in discourse (see Lavandera, 1983), its connection with information structure (see Majías-Bikandi, 1998; Gregory and Lunn, 2012) and its relevance in utterance interpretation (see Clark, 1991). This brief sketch of the subjunctive research agenda shows that the subjunctive is an important topic in contemporary linguistics as it combines a variety of aspects of semantic, morphosyntactic and pragmatic nature.

Research aims and hypotheses

With respect to the research perspective outlined above, it seems vital to analyze constructions which – at least to some extent – satisfy definitional criteria of the subjunctive,

but still defy a clearer characterization. This is exactly the case of Polish and English. In Polish the postulated subjunctive would be difficult to pinpoint as it does not have an inflectional form, but rather a form of a discontinuous construction. In English the subjunctive has been in flux as the very category has slowly disintegrated competing with other means of expressing deontic and epistemic modality. In this sense, Polish and English are, on the one hand, vital for the research on the subjunctive because they provide further data on possible subjunctive realizations, and, on the other hand, the literature on the subjunctive can help systematize existing mood classifications in these two languages; specifically, with respect to clauses introduced by the complementizer *żeby* in Polish and to so-called ‘mandatory subjunctive’ clauses in English. Therefore, linguistic data from Polish and English would complement the typological picture of the category of the subjunctive, which – according to Giannakidou (2009) – follows three main patterns of realization: a separate verbal paradigm of the verb (Romance languages, like Catalan), uninflected particles (Balkan languages, like Greek with the particle *na*) and complementizers combined with particles (Slavic languages, like Russian with the complementizer *чтобы*). The need to analyze Polish and English in the context of the subjunctive is even more pressing if one takes into account the majority of the subjunctive literature, which is devoted to Romance languages and the inflectional realization of the subjunctive.

The main aim of the present study is to trace constructions in Polish and English that satisfy definitional criteria of the subjunctive – a category described on the basis of typological literature. To achieve this principal aim, several steps must be taken:

- description of the subjunctive from the typological perspective including its form (morphosyntax) and meaning (semantics and pragmatics) based on the literature on various languages, e.g., Spanish, Russian or Greek;
- synthesis of existing classifications of predicates for which the subjunctive constitutes a sentential complement;
- identification of constructions which in Polish and English meet definitional criteria of the subjunctive (morphosyntactic, semantic and pragmatic properties);
- identification of predicates in Polish and English for which subjunctive clauses constitute a complement (corpus research);
- identification of morphosyntactic properties of subjunctive clauses in Polish and English (grammaticality judgement studies).

The completion of the above-described tasks will allow proving or refuting the following research hypotheses:

HYPOTHESIS 1: In Polish the subjunctive is realized in the form of complement clauses introduced by the complementizer *żeby*.

HYPOTHESIS 2: In English the subjunctive is realized in the form of the selected mandatory subjunctive.

Both research hypotheses address two significant descriptive issues found in grammars of Polish and English. First, in Polish all irrealis forms are classified as one conditional/subjunctive mood (*tryb przypuszczający*, see Nagórko, 2007), which seems too broad

a categorization, which does not successfully account for the status of embedded clauses introduced by the complementizer *żeby* (see Puzynina, 1971; Tokarski 1973/2001; Laskowski, 1984a; Szupryczyńska, 2006; Nagórko, 2007; Bańko, 2012a). Second, in English the subjunctive has slowly disintegrated and been replaced by modal verbs (*should*) and the indicative (see Quirk et al., 1985). Still, traditional grammars of English differentiate between two types of subjunctive: the present subjunctive and the past subjunctive from which only the first one seems related with the subjunctive described in typological terms. Therefore, the present research is intended to provide more insights into these constructions in Polish and English as well as to clarify subjunctivehood criteria used cross-linguistically.

Research methodology and organization of the study

The starting point for the present research is a broad characterization of the subjunctive based on the variety of research studies from various subfields of contemporary linguistics, such as structuralist descriptions (traditional descriptive grammars), generative analyses (morpho-syntactic properties) and cognitive models (semantic and pragmatic properties). I believe that both the level of form and the level of meaning should be approached to characterize the complex phenomenon of the subjunctive which itself includes also intricate relations between the main clause and the embedded clause (see Croft, 2003). Therefore, my account of the subjunctive in the present study is that of a construction which has its form, meaning and use. In a broadly understood construction grammar properties seen previously as elements of separate modules are treated as integral elements of a linguistic unit (Szymańska and Śpiewak, 2006). Such a construction perspective allows functional comparisons between languages, that is, how specific functions and meanings are encoded in one language as opposed to another (Croft, 2003; Szymańska and Śpiewak, 2006).

Specifically, in this study I use the following research methods. First, a critical review of existing subjunctive literature is conducted to characterize the subjunctive in typological terms and to pinpoint predicates that select for subjunctive complements cross-linguistically (see Apanowicz, 2002). Second, I apply corpus linguistics methods, specifically frequency counts (see McEnery and Hardie, 2014), to analyze combinations of predicates and their subjunctive complements. Third, grammaticality judgement tasks are used to investigate semantic and syntactic properties of complex sentences that comprise a subjunctive clause (see Schütze, 2016; Blume and Lust, 2017). Finally, a comparative analysis is carried out to compare subjunctive constructions in Polish and English with a cross-linguistic model of the subjunctive. More detailed methodological presentations are placed in relevant chapters where research results are shown.

The present dissertation is organized as follows. Chapter 1 presents the subjunctive, as opposed to the indicative, from the cross-linguistic perspective. It offers a typological look at the grammatical category of mood including a detailed account of the subjunctive, that is, its form, types, distribution, use as well as semantic and morphosyntactic properties, such as nonveridicality, defective tense and syntactic transparency. The discussion is complemented with the pragmatic and cognitive approaches to the subjunctive, including the aspects of assertion, discourse status, information structure, relevance and mental spaces. Chapter 2 is devoted to the mood system in Polish with a special focus on subordinate clauses introduced with the complementizer *żeby*. It shows the results of theoretical and empirical research done

on *żeby*-clauses to confirm or refute their subjunctivehood. Importantly, the chapter presents the results of the corpus research based on the National Corpus of Polish and the results of the grammaticality judgement study conducted on the group of 46 native speakers of Polish. Chapter 3 concentrates on the mood system in English, showing the problems with defining the subjunctive in English as a category in the process of decay. This part shows evidence that the so-called mandatory subjunctive can be taken as the realization of the cross-linguistic category of the subjunctive in English and discusses problems with such a claim. The chapter also presents the results of the corpus study based on the Corpus of Contemporary American English as well as the results of the grammaticality judgement study carried out on the group of 57 native speakers of American English. The last part of the dissertation offers conclusions concerning Polish and English realizations of the subjunctive as compared with the cross-linguistic model of this mood value. It also summarizes the problems with the subjunctive criteria which are revealed in the course of the study and provides directions for further research.

The present study will show that *żeby*-clauses in Polish and mandative subjunctive clauses in English exhibit different properties with respect to subjunctivehood. Specifically, I will argue that the sentential complements introduced by the complementizer *żeby* in Polish fulfill subjunctivehood criteria on the level of form and distribution as well as have semantic and morphosyntactic properties shared by subjunctives cross-linguistically. In contrast, I will demonstrate that the selected mandative subjunctive in English does not satisfy subjunctivehood criteria both formally and distributionally as well as it lacks numerous subjunctive properties attested in other languages. Furthermore, I will also reflect on the subjunctivehood criteria, showing that the subjunctive does not seem to share a unique pragmatic load which would guide utterance interpretation. I will also present a number of problems with semantic and morphosyntactic criteria, concerning specifically (non)veridicality as well as obviation and transparency effects. In general, the present work will contribute to the notional understanding of the subjunctive (see Giannakidou, 2016) as a linguistic category with a predominantly directive/volitive meaning that can be treated as an extension of the properties of the specific group of matrix predicates.

CHAPTER 1

A HOLISTIC LOOK AT THE SUBJUNCTIVE: FROM PREDICATES TO UTTERANCES

The aim of this chapter is to point out specific features or properties that would allow identifying the subjunctive, that is, to state that a structure in a given language is the realization of the subjunctive. It starts with a definition of mood in Section 1.1 in which it is stressed that mood operates on two levels: first, on the predicate and sentence/clause level, where specific predicates (since mood is a verbal category) can be marked with mood values or can select for sentential complements with specific mood values; second, on the utterance level, where sentences of certain mood values are used in the act of communication to perform a function conceived by the speaker. What follows from this definition is the division of the present chapter into two main parts: Section 1.2 concentrates on the subjunctive on the predicate and sentence level and gives basic cross-linguistic facts concerning the form, type, distribution and use of the subjunctive as well as covers semantic and morphosyntactic properties of the subjunctive, such as temporal and selectional restrictions and locality of syntactic operations, described in theoretical linguistics, mainly in studies within formal approaches to semantics and syntax. Section 1.3 provides a cognitive-pragmatic look at the subjunctive on the utterance level. It presents attributes of the subjunctive described in works rooted in speech act theory, relevance theory, prototype theory and mental space theory. The chapter ends with a detailed characterization of the subjunctive based on the findings from the previous sections, which cover the meaning and form of the subjunctive.

1.1 Mood as a grammatical category

Mood as a traditional and fundamental linguistic category is recognized in grammar descriptions of numerous languages. Therefore, a thorough look at the notion of the subjunctive should involve a cross-linguistic comparison of a variety of facts that will constitute an overall picture of mood and its possible values. Such a cross-linguistic perspective is meant to give additional insights into the nature of subjunctive and its realization in Polish and English, as Croft (1990, p. 4) states: “[...] cross-linguistic comparison places the explanation of *intralinguistic* phenomena in a new and different perspective” (emphasis – MO). According to Portner (2018, p. 1), mood, though a fundamental concept in linguistics, still awaits a uniform description, suffering from a multitude of ideas stemming from different scholarly traditions and conventions of language-specific descriptive grammars. In the forthcoming sections, I try to present a broad understanding of this category, including the meaning and form on the sentence and utterance level as well as the typological perspective on the indicative/subjunctive distinction.

1.1.1 Mood and modality

The term ‘mood’ must be seen as a part of the broader term ‘modality’ and discussed so that the difference between ‘mood’ as a grammatical category and ‘modality’ as an umbrella term

is clearly stated. According to Depraetere and Reed (2006, p. 269), modal utterances share two crucial properties: (i) lack of factuality, i.e., they do not describe situations as facts, and (ii) the speaker's comment, that is, a judgement whether a proposition is true or possible and whether the actualization of a given situation should be seen as necessary or possible. In contrast, 'mood' is defined by Depraetere and Reed (2006, p. 270) as "the grammatical coding of modal meaning in verb inflections." In this way, mood is seen as one of the forms that can express semantic modality. Similarly, Palmer (2001, p. 1) treats modality as grammatical category on par with tense and aspect, and defines it as "the status of the proposition that describes the event." In Palmer's (2001, p. 4) view, one should distinguish between a modal system comprising modal verbs, on the one hand, and mood understood in inflectional terms, on the other hand; however, both ways of expressing modality may be present in one language, e.g., Romance languages. In yet another definition, Portner (2018, p. 4) describes mood as "an aspect of linguistic form which indicates how a proposition is used in the expression of modal meaning." Such a broad definition stresses the link between the linguistic form and the modal meaning, but offers no contrast between mood in the inflectional sense and other linguistic exponents of modality, such as modal verbs or modal adverbs.

Drawing on the aforementioned differences between mood and modality, Tóth (2008, p. 13) differentiates between 'the grammatical mood' and 'the notional mood,' where the first is connected with morphosyntactic properties exhibited in verbal inflection, and the latter, which is a semantic category, is based on a function that can be fulfilled by different grammatical means. Crucially, the notional mood includes a variety of modality expressing means, including the grammatical mood; therefore, Tóth's (2008) distinction into the grammatical mood and the notional mood roughly corresponds to Depraetere and Reed's (2006) division into mood and modality, and Palmer's (2001) split into mood and modal system, respectively. Following Portner (1999), Tóth (2008, p. 13) elaborates on the inclusion relation between the notional mood and the grammatical mood; namely, the notional mood includes the grammatical mood and other linguistic phenomena that can fulfill the same functions as the grammatical mood, for instance, modal verbs in English.

Another distinction, which must be mentioned at this juncture, is the difference between 'the verbal mood' and 'the sentence mood.' As stated by Portner (2018, p. 4), verbal moods refer mainly to different forms of subordinate clauses and also, less frequently, root clauses, e.g., the indicative mood or the subjunctive mood, which are used to express some cognitive and mental states; whereas sentence moods are connected with a function that a root sentence can have, e.g., the declarative, the interrogative and the imperative. The distinction into the verbal mood and the sentence mood is important since in the case of the first the focus is on the individual's "mental life" and its relation with a proposition, whereas the latter concentrates on the communication between the speaker and some other party (Portner, 2018, p. 5). What combines these two perspectives – verbal and sentential – is indication "how a sentence's proposition is to be used" (*ibidem*). Consequently, Portner (2018, p. 7) proposes the term 'core mood,' which is a broad linguistic category used to encode "the interaction between a clause's meaning and contextually given partially ordered set of worlds." Portner's (2018) classification of mood and modality is presented in Table 1.

Table 1. Portner’s (2018) classification of mood and modality

Modality			
Core mood		Non-core mood (the rest of modality)	
Verbal mood	Sentence mood		
indicative, subjunctive, certain infinitives	imperative, declarative, interrogative	evidentials, reality status*	epistemic, priority, deontic, dynamic modals; modal adjectives, adverbs

* Portner (2018, p. 7) concedes that evidentials and elements marking reality status could be argued to belong to the core mood category.

Source: adapted from Portner (2018, p. 7).

Although in the present study I do not directly follow Portner’s (2018) idea of the core mood, I share his intuition that mood as a grammatical category should be analyzed in broad terms including the verbal mood and the way it contributes to the interpretation of a sentence’s proposition as well as the sentence mood and its role in the interpretation of an utterance. Therefore, a complete analysis of mood entails understanding how this category determines both sentence and utterance meaning and what linguistic means are used to mark a given mood value. Taking into account the discussed definitions, I propose the following definition of mood that would be useful for the purpose of the present work:

(1.1) Mood

Expression of modal meaning encoded grammatically by means of either verbal inflection or a special verb form combined with other linguistic exponents, e.g., particles and complementizers, whose function is to guide the modal interpretation of a clause’s meaning in a given context.

(by MO, based on the definitions by Palmer (2001), Depraetere and Reed (2006), Tóth (2008), Portner (2018))

Such a broadly formulated definition of mood in (1.1) allows capturing important formal and conceptual properties of mood which will be necessary to characterize the subjunctive. First of all, as will be seen later, the subjunctive cross-linguistically can have different realizations, e.g., a separate verbal paradigm (Romance languages) or a construction with a special verb form (Greek). Secondly, mood choice should be analyzed both on the sentence level in connection with semantic properties of a predicate (shown later in this chapter) and on the utterance level in connection with the ongoing discourse.

1.1.2 The indicative/subjunctive distinction and other mood values

In many approaches to mood, researchers often focus on a binary opposition between two values: indicative/hypothetical (Greenberg, 1963), realis/irrealis (Comrie, 1976), indicative/subjunctive (Palmer, 2001) (after Wiltschko, 2014, p. 147). Such a binary distinction is connected with meanings ascribed to different mood values since – on the notional level – mood is used to present a situation as asserted or non-asserted, factual or non-factual, real or unreal, certain or uncertain, etc. (Wiltschko, 2014, p. 147). As the labels are

author-specific and connected with different scholar traditions, I would like to follow Palmer's (2001) typological perspective to avoid terminological confusion.

Palmer (2001, p. 2) proposes two typological categories Realis and Irrealis (capital letters initially) to describe the discussed binary opposition between the real mood and the unreal mood across languages. However, Palmer (2001, p. 4) pinpoints that the binary Realis/Irrealis system may have different labels depending on a language family and a research convention. For instance, for European languages the equivalent of Realis/Irrealis is the indicative/subjunctive distinction,¹ whereas for Native American languages and for some Papua New Guinea languages it is realis/irrealis (Palmer (2001) uses lower case letters to distinguish from the typological categories) function as an equivalent (*ibidem*). Palmer (2001, p. 5) also stresses that typologically there is no difference between indicative/subjunctive and realis/irrealis and that both pairs correspond to Realis/Irrealis as typological categories. Still, indicative may differ from realis and subjunctive from irrealis because of morphosyntactic properties shared by a given language family. As an illustration, in many European languages mood is a part of a cumulative expression that may also include other morphosyntactic categories, such as tense, voice or person (Palmer 2001, p. 185); consider a German example in (1.2) (from Palmer, 2001, p. 114):²

- (1.2) a. *Er glaubte, ich war krank.* (German)
 he thought I be.3SG.IPVF.IND ill
 'He thought I was ill.'
- b. *Er sagt, er müsse nach Hause.*
 he says he must.3SG.PRS.SBJV to house
 'He says he must go home.'

The example in (1.2a) shows that the form *war* is a cumulative exponent of person, tense and the indicative mood; (1.2b) is an analogous example where *müsse* is marked with the subjunctive mood. In contrast, for example in Swahili realis/irrealis is marked by a single morpheme; cf. (1.3) (from Palmer, 2001, p. 108):

- (1.3) a. *ne-me-pend-a* (Swahili)
 I-PVF-love-REAL
 'I have loved.'
- b. *ni-pend-e*
 I-love-IRR
 'Let me love.'

As visible in (1.3), realis and irrealis in Swahili have a unique exponent: *-a* for realis and *-e* for irrealis. Nonetheless, since the present work is based mainly on the data from Indo-

¹ Mind that in the present work the subjunctive is understood in a narrower sense as a mood with specific meaning and form (see Section 1.2.1.5). In contrast, the subjunctive understood as part of the indicative/subjunctive distinction (equivalent to Realis/Irrealis) covers all unreal moods, such as optative, or conditional.

² In the present study I reproduce numerous examples from different authors, who use different glossing conventions. To make the presentation of examples more unified, I will stick to the labels taken from *The Leipzig Glossing Rules* (2015) and modify original glosses along this standard.

European languages, I will stick to the indicative/subjunctive terms understood as a binary distinction corresponding typologically to Palmer's (2001) Realis/Irrealis.

The indicative/subjunctive distinction is very broad and under this binary opposition different types of modality can be subsumed. Palmer (2001, p. 8) differentiates between 'propositional modality,' associated with the attitude that the speaker expresses to the truth value of a proposition, and 'event modality,' related to the attitude that the speaker has towards the potentiality of an event. Propositional modality can be expressed as the indicative when a proposition is not marked for modality and in such a case we deal with a declarative form (Palmer, 2001, pp. 64–65). The function of declaratives is to make assertion without additional qualifications with respect to the speaker's judgement of a proposition; consider (1.4) (from Palmer, 2001, p. 64):

(1.4) *John is in the office.*

Based on (1.4), the hearer does not have any information whether the speaker is sure, i.e., has knowledge, about John's presence in the office or only provides his or her opinion about the most probable version (*ibidem*).³

In contrast, propositions can be modally marked by means of modal verbs, the use of the subjunctive or the combination of a modal verb and the subjunctive; consider (1.5), (1.6) and (1.7) (from Palmer, 2001, pp. 26, 114, 32):

- (1.5) *Dan kan vaere sandt.* (Danish)
 that may.3SG.PRS be true
 'That may be true.'
- (1.6) *Quizá viene.* (Spanish)
 maybe come.3SG.PRS.SBJV
 'Maybe he is coming.'
- (1.7) *Man möchte meinen, dass...* (German)
 one mögen.3SG.IPFV.SBJV think that
 'One might think that...'

Examples (1.5)–(1.7) show the use of a modal verb, subjunctive morphology and a modal verb in combination with the past subjunctive morphology, respectively, to express speculations. On the other hand, event modality is modally marked by modal verbs; see (1.8) (from Palmer, 2001, p. 71), or the subjunctive; consider (1.9) (from Palmer, 2001, p. 127)

- (1.8) *Deve entrare.* (Italian)
 must.3SG.PRS come.in
 'You must come in.'
- (1.9) *Sed maneam etiam, opinior.* (Latin)
 but remain.1SG.PRS.SBJV still I.think
 'But I should still stay, I think.'

³ Furthermore, Giannakidou and Mari (2016b) show that unmodalized sentences are not compatible with phrases questioning the speaker's knowledge, such as 'I am not entirely sure.' Therefore, in the case of positive bare assertions the speaker believes in the truth of a proposition.

Another aspect that overlaps the indicative/subjunctive distinction is the problem of mood distribution between main and subordinate clauses. It has been a well-known observation that when the indicative is found in both main assertions and non-modal subordinate clauses, the subjunctive is considered a mood of embedded clauses (see Quer, 2009, p. 1781). Even the very term ‘subjunctive’ is translated from Classical Greek *hypotaktiké*, which means “subordinate” (Palmer, 2001, p. 108). There are many factors that may trigger the subjunctive, for instance, the emergence of the subjunctive in an embedded complement clause is connected with the type of matrix predicate. As an illustration, Romance languages exhibit the division between epistemic predicates, like *say*, which select for the indicative complement, and volitional predicates, like *want*, that select for the subjunctive complement (Quer, 2009, p. 1779; more on this issue in Section 1.2). As Palmer (2001, *passim*) stresses, the use of subjunctives in subordinate contexts is versatile and includes both propositional and event modality contexts, e.g., speculative (epistemic possibility) or desiderative (wishes) as well as other environments, such as with negation in a matrix clause or to report questions; consider (1.10) and (1.11) (from Palmer, 2001, pp. 116, 117, 121):

- (1.10) a. *Creo que aprende.* (Spanish)
 I.believe that learn.3SG.PRS.IND
 ‘I believe that he is learning.’
- b. *No creo que aprenda.*
 not I.think that learn.3SG.PRS.SBJV
 ‘I don’t think he is learning.’
- (1.11) a. *Quid agis?* (Latin)
 what do.2SG.PRS.IND
 ‘What are you doing?’
- b. *Rogo quid agas.*
 I.ask what do.2SG.PRS.SBJV
 ‘I ask what you are doing.’

As seen in (1.10), Spanish *creer* selects for the indicative complement; however, the use of negation in the matrix clause triggers the subjunctive. A similar change is visible in (1.11), where a change in the syntactic context, from a direct to an indirect question, brings about the subjunctive.

Still, there is a limited set of main-clause contexts in which the subjunctive can be used; for example, in Latin these include deontic uses, such as imperative, optative, jussive or deliberative, and epistemic uses, like potential or concessive (Lakoff, 1968 after Palmer, 2001, pp. 108–109). In the literature on the mood, one may find frequent matrix uses of the subjunctive for imperatives and optatives; consider (1.12) (from Portner, 1999 after Tóth, 2008, p. 16) and (1.13) (from Tóth, 2008, p. 16), which illustrate the imperative use, and (1.14) (from Palmer, 2001, p. 109) and (1.15) which illustrate the optative use (from Tóth, 2008, p. 15):

- (1.12) *Lo dica pure!* (Italian)
 it say.SBJV indeed
 ‘Go ahead and say it!’

- (1.13) *Nehogy megmondd nekem!* (Hungarian)
 CONJ tell.SBJV I.DAT
 ‘Mind you don’t tell me!’
- (1.14) *Ut illum di perduint.* (Latin)
 that him gods destroy.3SG.PRES.SBJV
 ‘May the gods destroy him.’
- (1.15) *Essen már az eső!* (Hungarian)
 rain.SBJV ADV the rain
 ‘Let it rain!’

As Tóth (2008, p. 15) emphasizes, the use of subjunctive in main clauses is limited to cases with special illocutionary force.

To sum up, the binary distinction into the indicative and the subjunctive, which characterizes the mood system seems imbalanced at least on two levels. First, on the notional level, we have a contrast between the indicative mood that is used to convey assertions in declarative clauses and the subjunctive, which serves as an umbrella term to cover other non-indicative contexts. Second, on the distributional level, the indicative environment is less restricted than the subjunctive one since the indicative may surface in both matrix and subordinate clauses, whereas the subjunctive is said to be the mood of embedded clauses with a limited use in main-clause contexts. Such an asymmetry raises questions about the markedness of specific mood values, which are tackled in the next section.

1.1.3 The issue of markedness

Since the seminal work of Greenberg (1966), the indicative has been considered unmarked or at least less marked than the subjunctive. The concept of markedness, which is one of the fundamental notions in typology, pertains to an asymmetry in properties of linguistically equal categories (Croft, 1990, p. 64). To evaluate a pair of values as marked/unmarked in morphosyntax, one needs to consider several criteria (Greenberg, 1966 after Croft, 1990, pp. 72–91):

- structure: the number of morphemes to express the marked value at least equals the number of morphemes expressing the unmarked one;
- inflectional behaviour: the number of distinct forms of the marked value in an inflectional paradigm at least equals the number of distinct forms of the unmarked value;
- distributional behaviour: the unmarked value at least surface in the same grammatical contexts as the marked one;
- textual frequency: in a text sample the unmarked value occurs at least in the same number of context as the marked one.

According to Greenberg (1966 after Croft, 1990, p. 93), in a paradigmatic opposition between the indicative and the subjunctive it is the latter that is marked. This means that cross-linguistically the subjunctive is not realized by fewer morphemes than the indicative, does not have fewer distinct forms than the indicative, cannot surface in more grammatical constructions than the indicative and finally cannot be more frequent than the indicative in a given text sample. The structural and inflectional criteria can be illustrated by the

compilation of data taken from Japanese, Korean, German and English done by Horie and Narrog (2014); consider Table 2.

As show in Table 2, in Japanese, German and English the indicative has zero marking and the subjunctive is marked by additional morphological exponents. Only Korean has forms for both the indicative and the subjunctive, but still it is not the case that in Korean the indicative is morphologically marked and the subjunctive has zero marking, which would be a counterargument to the claim that the indicative is unmarked and the subjunctive is marked.

Table 2. Mood in Japanese, Korean, German and English

Japanese	Korean	German	English
Indicative mood (Realis) not overtly encoded;	Indicative mood (Realis) encoded by the suffix <i>-ta</i> ;	Indicative mood (Realis) not encoded;	Indicative mood (Realis) not encoded;
Propositive (Irrealis) mood encoded by the suffix <i>-yoo</i> ;	Propositive (Irrealis) mood encoded by the suffix <i>-ca</i> ;	Subjunctive I (Irrealis) encoded by the suffix <i>-e</i> ;	Subjunctive (Irrealis) in embedded clauses encoded by a bare infinitive
Imperative mood (Irrealis) encoded by the suffix <i>-ro</i>	Imperative mood (Irrealis) encoded by the suffix <i>-kela</i> ;	Subjunctive II (Irrealis) encoded by a verb form with umlaut	
	Potential mood (Irrealis) encoded by the suffix <i>-(u)l</i> ;		

Source: adapted from Horie and Narrog (2014, p. 122).

Although there is agreement among typologists that the subjunctive is the marked mood value (see Greenberg, 1966; Croft, 1990; Timberlake, 2007; Moravcsik, 2013), some researchers propose to treat the subjunctive as an unmarked, default mood because of its unclear formal and notional properties. Such a line of reasoning is presented by Siegel (2009), who based on data from Romance and Balkan languages argues that the subjunctive is unspecified for semantic content and surfaces wherever other specified mood values are not possible. Specifically, the indicative has the [+realis] feature, meaning “speaker commitment to the truth of the embedded proposition” (Siegel, 2009, p. 1880), which rules it out from various irrealis contexts where instead the dummy subjunctive is used. Moreover, Siegel (2009) points out interesting allegedly realis contexts in which Romance languages use the subjunctive; see (1.16) (from Siegel, 2009, p. 1861):

(1.16) *Nous sommes désolés que notre président soit un idiot.* (French)
 we are sorry that our president be.3SG.SBJV an idiot
 ‘We are sorry that our president is an idiot.’

According to Siegel (2009, p. 1860), (1.16) presents an example of the emotive factive *be sorry*,⁴ whose complement is presupposed to be true and as such is a realis context;⁵

⁴ It must be noted here that Siegel (2009) provides an example of *be sorry*, which a special type of factive verb, so-called ‘emotive factive,’ which across languages exhibits different selectional properties (see Giannakidou and Mari, 2016a).

⁵ See Section 1.3.1.1 for a different treatment of presupposition in the context of the subjunctive based on the Spanish data.

nonetheless, the verb in the embedded clause is marked as subjunctive. Interestingly, Siegel (2009, p. 1865) uses examples such as (1.16) to support her claim suggesting that the indicative in (1.16) is blocked because of pragmatic reasons: a factive predicate presupposes factivity and thus the use of the indicative in (1.16) would be a redundant repetition of the same information. Consequently, if the indicative is ruled out, then the subjunctive kicks in as a default option.

Siegel's (2009) proposal entails that the subjunctive is a kind of vacuous form that does not contribute to the meaning of a proposition. This is refuted by Quer (2009), who provides a number of examples from Romance languages, where the subjunctive does not have vacuous semantics; consider (1.17) and (1.18) (from Quer, 2009, p. 1782):

- | | | |
|-----------|--|-----------|
| (1.17) a. | <i>Diu que ve.</i> | (Catalan) |
| | ‘S/he says that s/he is coming.’ | IND |
| b. | <i>Diu que surtis.</i> | |
| | ‘S/he tells you to leave.’ | SBJV |
| (1.18) a. | <i>Aunque se equivocan, no retirarán la propuesta.</i> | (Spanish) |
| | ‘Although they are wrong, they won’t withdraw the proposal.’ | IND |
| b. | <i>Aunque se equivoquen, no retirarán la propuesta.</i> | |
| | ‘Even if they are wrong, they won’t withdraw the proposal.’ | SBJV |

Example (1.17) shows that the Catalan equivalent of ‘to say’ has the reported speech reading when combined with the indicative (1.17a), but when used with the subjunctive, it changes to the directive reading (1.17b). Similarly, the use of the subjunctive in a concessive clause gives “a concessive conditional interpretation” (1.18b) (*ibidem*). Therefore, taking into account examples like (1.17) and (1.18), one can hardly defend the claim that the subjunctive is the unmarked default mood value used when the indicative is blocked since in many languages interpretational contribution of the subjunctive is attested.

1.1.4 Interim summary

So far I have analyzed various definitions of mood and proposed a definition, inspired by Portner's (2018) idea of the core mood, in which the sentence-level and the utterance-level perspectives are conflated so as to arrive at the broadest description of this category. I also stressed that mood can be realized as a separate verbal paradigm as well as a construction that involves special particles or complementizers. Next, I assumed Palmer's (2001) typological distinction into Realis and Irrealis, whose equivalent in European languages is the indicative/subjunctive distinction. Finally, I discussed the indicative and the subjunctive in the context of markedness, showing that the indicative should be considered unmarked and the subjunctive – marked. In the next section, I provide a more detailed characteristic of the subjunctive.

1.2 The subjunctive on the predicate and sentence level

In the first part of this section I provide a general cross-linguistic look at the subjunctive, including its form, type and distribution. In the second part, I move to a more detailed description of the properties of the subjunctive, grouped around three main topics: selectors' properties, temporal properties and syntactic transparency.

by.⁶ Moreover, the embedded clause introduced by *čtoby* contains the past verb form, so-called *l*-participle, that does not refer to the past.

Considering the data on the subjunctive realization, one must admit that formally this category defies a uniform description. On the one hand, there is a noticeable difference between the verbal-paradigm realization and other periphrastic realizations, which include a system of particles and complementizers. On the other hand, these two lines of realization can overlap like in Romanian; consider (1.21) (from Nordström, 2010, p. 106):

- (1.21) a. *El spune că citește o carte.* (Romanian)
 he says COMP read.3SG.IND a book
 ‘He says that he’s reading a book.’
- b. *El vrea să citească o carte.*
 he wants COMP read.3SG.SBJV a book
 ‘He wants to read a book.’

As visible in (1.21), Romanian marks the indicative/subjunctive distinction by complementizers, *că* and *să*, respectively, as well as distinct verb forms. Furthermore, even the Russian complementizer *čtoby* overlaps with the particle realization since it can be analyzed as a complex complementizer comprising a particle. Giannakidou (2009, p. 1884) also notes that in some languages, such as Albanian, Bulgarian or Serbo-Croatian, subjunctive particles look like complementizers and are sometimes analyzed in this way. Therefore, because of different and also overlapping realizations, it is very difficult to arrive at a uniform cross-linguistic description of the subjunctive form.

1.2.1.2 Type

Since cross-linguistically the subjunctive does not form a uniform linguistic object, its classifications are also varied and often rooted in a linguistic tradition of a given language; for instance, a classification into dubitative and optative subjunctive has been proposed for Spanish (see Quer, 1998, p. 31). Nonetheless, a distinction well-grounded in linguistic theory is the one into the intensional subjunctive and the polarity subjunctive proposed by Stowell (1993). Specifically, the intensional subjunctive is a mood value present in sentential complements selected by intensional verbs like ‘to want’ (“lexically selected”); the polarity subjunctive is, on the other hand, triggered by a matrix negation or a question operator (“operator-licensed”) (Quer, 1998, p. 31). As Quer (*ibidem*) emphasizes, Stowell’s (1993) distinction is not of formal nature, but rather is related with a type of element that can license, i.e., trigger or allow for, the subjunctive in a given context; consider (1.22) and (1.23) (from Siegel, 2009, pp. 1860, 1863)

- (1.22) a. **Ils veulent que tu vas avec eux.* (French)
 they want.PRES.3PL that you go.PRES.2SG.IND with them.
 ‘They want you to go with them.’

⁶ Similarly to Polish, the particle *by* can be found in conditional and hypothetical clauses. See Chapter 2 on the mood system in Polish.

- b. *Ils veulent que tu ailles avec eux.*
 they want.PRES.3PL that you go.PRES.2SG.SBJV with them.
 ‘They want you to go with them.’
- (1.23) a. *Il pense que j’en suis / *sois capable.* (French)
 he think.PRES.3SG that I of.it be.IND / be.SBJV capable
 ‘He thinks that I am capable of it.’
- b. *Il ne pense pas que j’en suis / sois capable.*
 he NEG think.PRES.3SG NEG that I of.it be.IND / be.SBJV capable
 ‘He doesn’t think that I am capable of it.’

As visible in (1.22), the French verb *vouloir* ‘to want’ selects for the subjunctive complement (1.22b) and the sentence is ungrammatical with the indicative complement (1.22a). Example (1.23) shows that the French verb *penser* ‘to think’ selects for the indicative complement (1.23a), but under negation both the indicative and the subjunctive complements are allowed (1.23b). Still there is a difference in meaning between the indicative and the subjunctive option in (1.23b); namely, the subjunctive version stresses that the speaker does not believe or shows no commitment with respect to the embedded proposition, whereas the indicative option just reports the view of the subject (Siegel, 2009, p. 1863). Furthermore, also predicates with negative meaning can trigger the subjunctive similarly to overt negation; consider (1.24) and (1.25) (from Tóth, 2008, p. 29):

- (1.24) *Dudo que llege a tiempo.* (Spanish)
 doubt that arrive.PRS.SBJV in time
 ‘I doubt that he arrives on time.’
- (1.25) *Lehetetlen, hogy Budapest-en van/ legyen.* (Hungarian)
 impossible that Budapest-on be.IND/be.SBJV
 ‘It is impossible that he is in Budapest.’

As shown in (1.24) and (1.25), the predicates *dudar* ‘to doubt’ in Spanish and *lehetetlen* ‘to be impossible’ in Hungarian allow subjunctive complements.

At this point, it seems necessary to discuss further differences between the intensional subjunctive and the polarity subjunctive because examples like (1.24) may question this division as one can ask how the verb *dudar* in Spanish, shown in the context of the polarity subjunctive, differs from other verbs that select for the subjunctive complement and are qualified as the intensional subjunctive. Quer (1998, pp. 32ff) discusses a number of differences concerning:

- tense: some intensional subjunctives exhibit temporal restriction with respect to the sequence of events; namely, the embedded event cannot be prior to the matrix event, i.e., must be future-oriented; polarity subjunctives are more free in this sense; cf. (1.26) and (1.27) (from Quer, 1998, pp. 33–34):

- (1.26) a. *Vull que acabi la tesi.* PRESENT → PRESENT (Catalan)
 want.PRS.1SG that finish.SBJV.PRS.3SG dissertation
 ‘I want her/him to finish the dissertation.’

- b. **Vull que acabés la tesi.* *PRESENT → PAST
 want.PRS.1SG that finish.SBJV.PST.3SG the dissertation
 Intended meaning: ‘S/he wants that I finished the dissertation.’
- (1.27) *No recorda que en Miquel treballés.* PRESENT → PAST
 NEG remember.PRS.3SG that the Miquel work.SBJV.PST.3SG
 ‘S/he does not remember that Miquel worked.’
- selection: the intensional subjunctive hardly alternates with the indicative, that is, it is blocked in indicative contexts; on the other hand, the polarity subjunctive exhibits more alternations with the indicative (see (1.23b) and (1.25));
 - locality: intensional verbs trigger the subjunctive only in the immediately embedded clause; whereas negation can license the subjunctive in further embedded clauses; cf. (1.28) and (1.29) (from Quer, 1998, pp. 36–37):
- (1.28) a. *Vull que creguin que ens agrada.* (Catalan)
 want.1SG that believe.SBJV.3PL that us please.IND.3SG
 ‘I want them to believe we like it.’ V[*SBJV*[*IND*]]
- b. **Vull que creguin que ens agradi/agradés/hagi agradat.*
 want.1SG that believe.SBJV.3PL that us please.SBJV.PRS/PST/PFV.3SG
 Intended meaning: ‘I want them to believe we like/liked/have liked it.’
 V[*SBJV*[*SBJV*]]
- (1.29) *No creuen que pensi que li convingui.*
 NEG believe.3PL that think.SBJV.3SG that him be.convenient.SBJV.3SG
 ‘They do not believe s/he thinks it is convenient for him/her.’ NEG[*SBJV*[*SBJV*]]
- obviation effects: in the case of the intensional subjunctive the coreference between the matrix subject and the embedded subject is blocked; whereas the polarity subjunctive allows for such a reference; cf. (1.30) and (1.31) (from Quer, 1998, p. 38):
- (1.30) **Pro_i vull que pro_i la convidi.* (Catalan).
 want.1SG that her invite.SBJV.1SG
 Intended meaning: ‘I want that I invite her.’
- (1.31) *Pro_i no crec que pro_i la convidi.*
 not think.1SG that her invite.SBJV.1SG
 ‘I do not think I will invite her.’

Summing up, the distinction into the intensional subjunctive and the polarity subjunctive needs to be held since these two sorts of the subjunctive differ in terms of semantic and morphosyntactic properties. A general observation is that the polarity subjunctive allows for greater freedom with respect to various linguistic phenomena, such as temporal relations between clauses, selectional alternations, licensing locality and reference possibilities.

1.2.1.3 Distribution

As already mentioned, the indicative is in general the mood of matrix clauses, whereas the subjunctive generally surfaces in subordinate clauses. Nonetheless, there are some matrix/root contexts that can exhibit the subjunctive, such as optatives, i.e., forms used to express wishes

and hopes, (see (1.32) and (1.33) from Tóth, 2008 p. 15), and directives, i.e., forms used to express commands of various strength, (see (1.34) and (1.35) from Tóth, 2008, p. 16):

- (1.32) *¡Viva el rey!* (Spanish)
 live.SBJV the king
 ‘Long live the king!’
- (1.33) *Essen már azeső!* (Hungarian)
 rain.SBJV ADV the rain
 ‘Let it rain!’
- (1.34) *Lo dica pure!* (Italian)
 it say.SBJV indeed
 ‘Go ahead and say it!’
- (1.35) *Să nici nu-l mai vezi.* (Romanian)
 SBJV NEG NEG-him again see
 ‘Don’t even see him again!’

Still, the use of the subjunctive in main clauses is limited and far less frequent than in embedded clauses. According to Tóth (2008, p. 17ff), subordinate uses of the subjunctive, though versatile, can be grouped into three contexts: adverbial clauses, relative clauses and lexically selected complement clauses. As far as adverbial clauses are concerned, Tóth (2008, p. 17) provides three main contexts: counterfactual conditionals, concessive clauses and purpose clauses; consider (1.36)–(1.38), respectively (from Tóth, 2008, pp. 17–19):

- (1.36) *Si Juan viniera, haríamos un picnic.* (Spanish)
 if Juan come.PST.SBJV have.COND a picnic
 ‘If Juan were coming, we would have a picnic.’
- (1.37) *Whatever be the reasons for it, we cannot tolerate his disloyalty.* (English)
- (1.38) *Sietett, hogy idő-ben odaérjen.* (Hungarian)
 hurry.PST that time-in arrive.SBJV
 ‘S/he was in a hurry so as to get there in time.’

The subjunctive can optionally surface in relative clauses, which means that it is prone to alternate with the indicative (Tóth, 2008, p. 19). Such alternations between the indicative and the subjunctive may have interpretational effects; consider data from Modern Greek in (1.39) and (1.40) (from Giannakidou, 2009, p. 1888):

- (1.39) *Dhen idha enan andra pu na forai kokino kapelo.* (Modern Greek)
 not saw.1SG a man that SBJV wear.3SG red hat
 ‘I didn’t see any man wearing a red hat.’
- (1.40) *Dhen idha enan andra pu forai kokino kapelo.* (Modern Greek)
 not saw.1SG a man that IND wear.3SG red hat
 ‘I didn’t see some man who was wearing a red hat.’

The pair in (1.39) and (1.40) illustrates two different interpretations of the relative clauses connected with their mood marking. In the subjunctive version in (1.39), one cannot be sure that such a man exists, whereas in the indicative version in (1.40) such a man exists but the subject did not see him (*ibidem*). Furthermore, Quer (1998, p. 108) stresses that in many

languages the use of the subjunctive in relative clauses is far more restricted than the use of the indicative, that is, the indicative can surface in all the contexts where the subjunctive is used, but the opposite does not hold. For instance, in Catalan the use of the subjunctive in relative clauses is limited to six contexts: strong intensional predicates, negation, future tense, interrogatives, conditionals and imperatives; consider respective examples (1.41)–(1.46) (from Quer, 1998, pp. 105–106):

- (1.41) *Vull enviar-li regals que el facin content.* (Catalan)
 want.1SG to-send-him presents that him make.SBJV.3PL happy
 ‘I want to send him presents that make him happy.’
- (1.42) *No li he enviat regals que l’hagin posat trist.*
 not him have.1SG sent presents that him-have.SBJV.3PL turned sad
 ‘I did not send him presents that made him sad.’
- (1.43) *Li enviaré regals que el sorprendran.*
 him send.FUT.1SG presents that him surprise.SBJV.3PL
 ‘I will send him presents that will surprise him.’
- (1.44) *Li envies regals que el distreguin?*
 him send.2SG presents that him entertain.SBJV.3PL
 ‘Do you send him presents that entertain him?’
- (1.45) *Si li envies regals que el facin feliç.*
 if him send.2SG presents that him make.SBJV.3PL happy
 ‘If you send him presents that make him happy.’
- (1.46) *Envia-li regals que el distreguin.*
 send.IMP.SG-him presents that him entertain.SBJV.3PL
 ‘Send him presents that entertain him.’

The necessity of licensing environments, like those presented in (1.41)–(1.46), makes Quer (1998, p. 108) conclude that the subjunctive is a dependent element in contrast to the indicative.

Finally, a context that receives a lot of research attention is a subjunctive complement clause lexically selected by a specific group of verbs called intensional verbs⁷ (Quer, 1998, p. 42). The literature enlists four main classes of subjunctive-taking verbs (see Quer, 1998, p. 43; Tóth, 2008, pp. 22–25):

- directives: e.g., cross-linguistic equivalents of ‘to order,’ ‘to require,’ ‘to demand’; see (1.47) (from Quer, 1998, p. 43) and (1.48) (from MišeskaTomić, 2003, p. 354);
- volitionals or desideratives: e.g., cross-linguistic equivalents of ‘to want,’ ‘to prefer’; see (1.49) (from Giannakidou, 2009, p. 1891) and (1.50) (from Tóth, 2008, p. 23);
- modals: e.g., cross-linguistic equivalents of ‘must’; see (1.51) (from Quer, 1998, p. 43) and (1.52) (from Quer, 2006, p. 666);
- predicates expressing possibility and necessity (semi-modals): e.g., cross-linguistic equivalents of ‘be possible,’ ‘be necessary’; consider (1.53) and (1.54) (from Tóth, 2008, p. 24).

⁷ Since the topic of intensional subjunctive is extensively exploited in various theoretical approaches, at this point I will present only major verbs classes that select for subjunctive complements and discuss them in more detail in Section 1.2.2.1 in the context of veridicality and in Section 1.3.1.1 in the context of assertion.

- (1.47) *Ens van ordenar que ens despulléssim.* (Catalan)
 us AUX.3PL order that REFL undress.SBJV.PST.1PL
 ‘They ordered us to undress.’
- (1.48) *Naredio je da dođeš.* (Serbo-Croatian)
 ordered.M.SG.PART is SBJV come.2SG.PERF.PRS
 ‘He gave an order for you to come.’
- (1.49) *Thelo o Pavlos na erthi.* (Modern Greek)
 want.1SG the Paul.NOM SBJV come.3SG
 ‘I want Paul to come.’
- (1.50) *Quiero que sepas la verdad.* (Spanish)
 want that know.PRS.SBJV the truth
 ‘I want you to know the truth.’
- (1.51) *Cal que el vestim.* (Catalan)
 must.3SG that him dress.SBJV.PRS.1PL
 ‘We have to dress him.’
- (1.52) *Trebuia ca studenții să plece.* (Romanian)
 must.3SG that students-the SBJV leave.3PL
 ‘It must have been the case that the students left.’
- (1.53) *It is necessary that he come with us.* (English)
- (1.54) *Szükséges, hogy velünk jöjjön.* (Hungarian)
 necessary that with us come.PRS.SBJV
 ‘It is necessary that s/he come with us.’

Nonetheless, it must be noted that there are certain verbs that do not exhibit a uniform behaviour cross-linguistically and in some languages they select for indicative complements but in others for subjunctive ones. A notable example is ‘to believe’ and its equivalents in various languages; cf. (55)–(57) (from Tóth, 2008, p. 25):

- (1.55) *Gianni crede che Maria sia partita.* (Italian)
 Gianni believes that Maria be.SBJV left
 ‘Gianni believes that Maria left.’
- (1.56) *Jancsi úgy véli, hogy Mari elment.* (Hungarian)
 Jancsi so thinks that Mari leave.PST.IND
 ‘Jancsi believes that Mari has left.’
- (1.57) *Juan cree que María es capaz de hacer-lo.* (Spanish)
 Juan believes that María be.IND able PREP do-it.ACC
 ‘Juan believes that María is able to do it.’

As visible in (1.55), the Italian verb *credere* ‘to believe’ selects for a subjunctive complement, whereas its Hungarian (1.56) and Spanish (1.57) equivalents select for indicative complements.

To recapitulate, one needs to distinguish between the context of sentential complements selected by intensional verbs, where the subjunctive is fairly stable cross-linguistically, though with some exceptions, and other contexts, such as relative clauses, where the subjunctive can alternate with the indicative giving different interpretations, like in

Modern Greek. Those distributional nuances and the shifty character of the subjunctive constitute yet another problem in its cross-linguistic description.

1.2.1.4 Use

To outline the use of the subjunctive, I will follow aforementioned Palmer's (2001) distinction into propositional modality, i.e., the speaker's attitude to proposition truth value, which includes epistemic modality, expressing the speaker's judgement, and evidential modality, expressing the speaker's conviction based on evidence (p. 24), and event modality, i.e., the speaker's attitude to event potentiality, which includes deontic modality, with an external conditioning factor, and dynamic modality, with an internal conditioning factor (pp. 9–10). This notional distinction allows framing – from the semantic perspective – various uses of the subjunctive.

As far as the first realm of modality is concerned, Palmer (2001, pp. 112–126) provides the following uses of the subjunctive:

- speculative: used to indicate epistemic possibility; see (1.58) (from Palmer, 2001, p. 112);
- reported: used to indicate which part of a sentence is reported; see (1.59) (from Palmer, 2001, p. 114);
- negative: used in a subordinate clause with negation or a negative verb in a matrix clause; see (1.60) (from Palmer, 2001, p. 117);
- interrogative: used to show that questions are non-assertive contexts; see (1.61) (Palmer, 2001, p. 120);
- presupposed: used to signal that information is presupposed, i.e., considered true by the speaker; see (1.62) (from Palmer, 2001, p. 121);
- future: used to express futurity, found more often in languages with realis/irrealis distinction; see (1.63) (from Palmer, 2001, p. 168)⁸;
- conditional: used to mark conditional clauses; see (1.64) (from Palmer, 2001, p. 125);
- indefinite: used to mark an entity as indefinite, i.e., not a specific entity; see (1.65) (from Palmer, 2001, p. 126).

(1.58) *Che sia finita.* (Italian)
 that be.3SG.PRES.SBJV finished
 'I wonder if it's finished.'

(1.59) *Er sagte er wäre krank.* (German)
 he said he be.3SG.IPFV.SBJV ill
 'He said he was ill.'

(1.60) *Je ne pense pas qu'il vienne.* (French)
 I NEG think NEG he come.3SG.PRS.SBJV
 'I don't think he'll come.'

⁸ Mind that Winford (2000ab) postulates that future markers should be distinguished from modal ones as future is primarily the domain of tense, expressing "later time reference." Any modal interpretations connected with the future are inferred from the context via implicatures.

- (1.61) *¿Cree Ud que venga?* (Spanish)
believe you that come.3SG.PRS.SBJV
'Do you think he will come?'
- (1.62) *Mi dispiace che impari.* (Italian)
I regret that learn.3SG.PRS.SBJV
'I regret that he is learning.'
- (1.63) *Yey b-a-n Lae nubweig.* (Muyuw, an Austronesian language)
I IRR-1SG-go Lae tomorrow.
'I will go to Lae tomorrow.'
- (1.64) *Si hoc facias, erres.* (Latin)
if this do.2SG.PRS.SBJV err.2SG.PRS.SBJV
'If you did this, you would be wrong.'
- (1.65) *Busco un empleado que hable ingles.* (Spanish)
I.look.for an employee who speak.3SG.PRS.SBJV English
'I'm looking for an employee (= anyone) who speaks English.'

With respect to event modality, Palmer (2001, pp. 126–136) gives the following contexts where the subjunctive is used:

- directive: used to express weak obligation; see (1.66) (from Palmer, 2001, p. 127);
- purposive: used to indicate purpose;⁹ see (1.67) (from Palmer, 2001, p. 131);
- optative: used to express wishes; see (1.68) (from Palmer, 2001, p. 132);
- timitive: used to express fears; see (1.69) (from Palmer, 2001, p. 133)
- resultative: used to express results, often subsumed under purposive; consider (1.70) (from Palmer, 2001, p. 136);
- jussive: used to indicate orders/commands; see (1.71) (from Palmer, 2001, p. 138).

- (1.66) *Sapessi che lusso.* (Italian)
know.2SG.PRS.SBJV that grand
'You should see how grand.'
- (1.67) *Chto-by nikto ne znal ob etom, nado molchát.* (Russian)
that-SBJV no-one not know.PST.M.SG about this necessary be.silent
'So that no-one should know about this, we must be silent.'
- (1.68) *Venha a dia.* (Portuguese)
come.3SG.PRS.SBJV the day
'May the day come!'
- (1.69) *Temo que haya muerto.* (Spanish)
I.fear that have.3SG.PRS.SBJV died
'I fear that he has died.'
- (1.70) *He worked hard so that he become rich.* (English)
- (1.71) *Tome su libro.* (Spanish)
take.3SG.PRS.SBJV 3SG.POSS book.
'Take your book.'

⁹ Mind that in this group Palmer (2001) also includes the subjunctive selected by volitionals, such as 'to want.' Thus, for him there is no separate volitive use of the subjunctive. Still, as 'to want' is a typical subjunctive selector cross-linguistically, I would propose the volitive use as a use separate from the purposive use.

At this point, several comments are needed to relate Palmer's (2001) classification to the already discussed information about subjunctive types and distribution. First, in terms of propositional modality, Palmer (2001) treats purely functional contexts, e.g., reported, on par with grammatical contexts where the subjunctive arises, for example, due to negation. Although such a description makes sense when one intends to fit together versatile subjunctive contexts and impose one perspective – that of modal meaning – we need to remember about the difference between polarity subjunctive, which is attested in many languages and considered a reflex of a more general linguistic phenomenon (see Section 1.2.1.2), and other minor contexts, such as reported, which is more restricted and fairly unstable even within a single language, e.g., in German the reported use is limited to subordinate clauses in the past, mainly in the literary style (Palmer, 2001, p. 114). Furthermore, Italian in general does not use the subjunctive in the reported contexts except for one instance with the phrase *si dice* 'one says' (*ibidem*). Second, it is crucial to realize that Palmer's (2001) list is completed in a piecemeal fashion, that is, he picks subjunctive uses from different languages and groups them under some labels. Therefore, it is not a cross-linguistic function of subjunctive to mark indefiniteness, but rather an option in some languages.

Lastly, a few remarks need to be made about the conditional use of the subjunctive. There exists a terminological jumble in which one may come across different terms, such as the subjunctive mood, the hypothetical mood or the conditional mood. As already mentioned, in the present work I assume Palmer's (2001) typological distinction in Realis/Irrealis from which the indicative/subjunctive distinction follows and thus all "unreal" contexts are subsumed under the subjunctive label. Then the term "hypothetical" may be applied to describe some uses of the subjunctive, for instance hypothetical in the sense of the speculative use. Next, the term "conditional" is understood as denoting a certain type of construction, i.e., a conditional sentence, expressing a condition–consequence relation and comprising two parts: protasis (*if*-clause) and apodosis (*then*-clause) (see Hopper, 2008, p. 283). According to Palmer (2001, p. 207), a lot of languages exhibit a contrast between real and unreal conditionals, which differ in the attitude that the speaker expresses towards a condition in a protasis. Such a difference in the speaker's attitude is often marked by the use of the past tense and the subjunctive (*ibidem*); consider (1.72) (from Palmer, 2001, p. 210):

(1.72) *Wenn ich ihm heute schriebe, bekäme* (German)
 if I to.him today write.1SG.IPFV.SBJV get.3SG.IPFV.SBJV
er den Brief morgen.
 he the letter tomorrow
 'If I wrote to him today, he would get the letter tomorrow.'

As visible in (1.72), an unreal conditional in German is marked by the subjunctive in both clauses. Still, languages differ in the way they mark a doubtful attitude in an unreal conditional; as shown in (1.72), German uses the subjunctive, but the use of the past tense only is also possible, like in English, or the combination of the subjunctive and the past tense, e.g., in Latin (*ibidem*).

1.2.1.5 Interim summary

In spite of the terminological and descriptive problems sketched in this section, I managed to show specific elements that add up to the cross-linguistic description of the subjunctive. First, the subjunctive is primarily the mood of subordinate clauses, specifically: adverbial, relative and complement clauses, only marginally present in main/root contexts to express wishes (optatives) and commands (directives). Second, formally the subjunctive is realized as a separate verbal paradigm, like in Romance languages, or periphrastically as a construction involving a special particle, like in Modern Greek, or a complementizer, e.g., Russian, often combined with a special verb form. Third, there exist two types of the subjunctive: the intensional subjunctive, selected by particular groups of verbs, mainly volitionals and directives, and the polarity subjunctive, licensed usually by negation; both types differing in morphosyntactic properties, such as temporal and selectional restrictions, locality and obviation effects. Finally, the subjunctive facilitates both types of modality, which Palmer (2001) describes as propositional modality and event modality.

1.2.2 Properties of the subjunctive

Subjunctivehood can be seen as a sum of different properties that, on the one hand, are related with a mood system of a given language, and on the other hand, are connected with the syntax of complex sentences as the subjunctive usually surfaces as a mood of embedded sentences. Therefore, the present section offers a review of subjunctive properties with respect to the matrix–embedded clause relations. First, I discuss indicative and subjunctive selectors based on Giannakidou's (2009) notion of veridicality. Second, I elaborate on temporal properties of subjunctive clauses to show that their tense is defective (Piccolo, 1984). Finally, I present evidence for syntactic transparency of subjunctive clauses (Quer, 2006).

1.2.2.1 Veridicality and mood choice

A lot of research devoted to the indicative/subjunctive distinction is focused on the properties of matrix predicates that can select for specific types of complements.¹⁰ Within the field of theoretical linguistics, Giannakidou employed the notion of veridicality to account for mood distribution in Modern Greek. Veridicality as a concept originated in the works of Montague (1969), who used it to analyze perception verbs (after Giannakidou, 1998, p. 106).¹¹ Giannakidou (2009, p. 1887) proposed a classification of Modern Greek predicates into veridical, which select for indicative complements, and nonveridical, which are subjunctive selectors. The distinction is based on the epistemic agent's (the speaker or the matrix clause subject) commitment to the truth of the embedded proposition (*ibidem*). If such commitment is expressed by a verb, then it is veridical and selects for an indicative complement; if not, then it is nonveridical and selects for a subjunctive complement (*ibidem*). Thus, the indicative/subjunctive distinction is based on the notion of (non)veridicality defined in the following way:

¹⁰ The issue of indicative and subjunctive selectors is also explored in Section 1.3 from the pragmatic and cognitive perspective.

¹¹ Since in the present work I do not follow the formal semantics approach to the subjunctive, I only concentrate on the distribution facts omitting the formalization of veridicality; see more in Giannakidou (1998).

(1.73) “(Non)veridicality for propositional operators

- i. A propositional operator *F* is veridical iff *Fp* entails or presupposes that *p* is true in some individual’s epistemic model $M_E(x)$; otherwise *F* is nonveridical.
- ii. A nonveridical operator *F* is anti-veridical iff *Fp* entails that not *p* in some individual’s epistemic model: $Fp \rightarrow \neg p$ in some $M_e(x)$.” (Giannakidou, 2009, p. 1889)

Moreover, Giannakidou (2009, pp. 1887–1888) offers a classification of Modern Greek verbs with respect to mood choice and the notion of veridicality; see Table 4.

Table 4. Mood choice in Modern Greek

Veridical verbs/indicative complement	Nonveridical verbs/subjunctive complement
<p>ASSERTIVES <i>leo</i> ‘to say’; <i>dhiavazo</i> ‘to read’; <i>isxirizome</i> ‘to claim’</p> <p>FICTION VERBS <i>onirevome</i> ‘to dream’; <i>fandazome</i> ‘to imagine’</p> <p>EPISTEMICS <i>pistevo</i> ‘to believe’; <i>nomizo</i> ‘to think’</p> <p>FACTIVE VERBS <i>xerome</i> ‘be glad’; <i>gnorizo</i> ‘to know’; <i>metaniono</i> ‘to regret’</p> <p>SEMIFACTIVES <i>anakalipto</i> ‘to discover’; <i>thimame</i> ‘to remember’</p>	<p>VOLITIONALS <i>thelo</i> ‘to want’; <i>elpizo</i> ‘to hope’; <i>skopevo</i> ‘to plan’</p> <p>DIRECTIVES <i>dhiatazo</i> ‘to order’; <i>simvulevo</i> ‘to advise’; <i>protino</i> ‘to suggest’</p> <p>MODALS <i>prepi</i> ‘must’; <i>bori</i> ‘may’</p> <p>PERMISSIVES <i>epitrepo</i> ‘to allow’; <i>apagorevo</i> ‘to forbid’</p> <p>NEGATIVE <i>apofevgho</i> ‘to avoid’; <i>arnume</i> ‘to refuse’</p>

Source: Giannakidou (2009, pp. 1887–1888).

As already mentioned, in Modern Greek mood is realized by means of complementizer-like particles; for indicative complements these are *oti* and *pu*;¹²see (1.74) and (1.75) (from Giannakidou, 2009, p. 1886):

(1.74) *O Pavlo sipe oti efije i Roxani.* (Modern Greek)
the Paul said.3SG that left.3SG the Roxani
‘Paul said that Roxanne left.’

(1.75) *O Pavlo slipate pu efije i Roxani.*
the Paul is.sad.3SG that left.3SG the Roxani
‘Paul regrets that Roxanne left.’

A subjunctive complement is introduced by the particle *na*; consider (1.76) (from Giannakidou, 2009, p. 1887):

(1.76) *Thelo na kerdisi o Janis.* (Modern Greek)
want.INP.1SG SBJV win.PNP.3SG the John
‘I want John to win.’

As visible in (1.74)–(1.76), Giannakidou’s (2009) account for mood distribution based on the notion of veridicality explains data from Modern Greek because veridical verbs in (1.74) and (1.75) select for the indicative complements introduced by *oti* and *pu*, whereas the

¹² *Oti* is compatible with factive verbs, whereas semi-factives can optionally appear with *oti* and *pu* (Giannakidou, 2009, p. 1886).

nonveridical *thelo* ‘to want’ in (1.76) selects for the subjunctive complement introduced by *na*. At this point, it must be noted that negation as such is a nonveridical environment (Giannakidou, 2000, p. 468) and thus veridical predicates under negation may turn into nonveridical and trigger the so-called polarity subjunctive (characterized in Section 1.2.1.2).

Furthermore, it must be noted that Giannakidou’s (2009) classification of indicative and subjunctive selectors converges with other proposals. First, recall Quer’s (1998) and Tóth’s (2008) examples of subjunctive selectors cross-linguistically discussed in Section 1.2.1.3; they all fall into the nonveridical category. Second, it is also in line with Palmer’s (2001) classification of subjunctive uses, which are nonveridical contexts on the event modality part. However, a point of divergence may be spotted between Palmer (2001) and Giannakidou (2009). Namely, Giannakidou (2009), based on the data from Modern Greek, classifies factive verbs, like ‘to know’ and ‘to regret’ as veridical, thus selecting for the indicative, whereas Palmer (2001) provides examples from Italian (see (1.62)), where ‘to regret’ selects for the subjunctive. This problem is already acknowledged by Giannakidou (2016), who concedes that there is a difference between factives, like ‘to know,’ and emotive factives, like ‘to regret.’ Crucially, emotive factives cross-linguistically exhibit three patterns: select for the subjunctive (Spanish, Italian, French), select for the indicative or the subjunctive (Brazilian Portuguese, Turkish, Catalan), or select for the indicative (Modern Greek, Hungarian, Romanian, Bulgarian) (Giannakidou, 2016, p. 202). Such variations may stem from morphosyntactic forms of the subjunctive in the cited languages: Romance languages with verbal subjunctive behave in a different way from languages in which the subjunctive is realized around the complementizer area (see Giannakidou, 2016, pp. 202–207 for more details).

Apart from dividing predicates into veridical/nonveridical, Giannakidou (2009) offers a selection of other contexts, which are also nonveridical and trigger the subjunctive, that is, relative clauses and adjunct clauses. She observes that in Greek the subjunctive can also appear in relative clauses which modify indefinites in the scope of negations; consider (1.77) (from Giannakidou, 2009, p. 1888):

(1.77) *Dhen idha enan andra pun na forai kokino kapelo.* (Modern Greek)
 not saw.1SG a man that SBJV wear.3SG red hat
 ‘I didn’t see any man wearing a red hat.’

Giannakidou (2009, p. 1888) claims that subjunctive relatives like (1.77) are licensed by nonveridicality as “we are not sure if a man wearing a red hat exists in the context”. Another nonveridical context in Greek is the adjunct clause introduced by the connective *prin* ‘before’ (Giannakidou, 2009, p. 1886); see (1.78) (*ibidem*):

(1.78) *I Ariadne efije prin na erthi o Janis.* (Modern Greek)
 the Ariadne lef.2SG before SBJV come.PNP.3SG the John
 ‘Ariadne left before John arrived’

As visible in (1.78), the clause introduced by *prin* ‘before’ comprises the perfective nonpast verb form, which appears in other subjunctive contexts, and the subjunctive particle *na*. The presence of the subjunctive in such a context is not surprising since its interpretation is future-oriented and the future itself is also nonveridical (Giannakidou, 2009, p. 1889).

1.2.2.2 Defective tense

Temporal properties of subjunctive clauses as opposed to indicative clauses have also come under scholarly scrutiny. In an often cited study, Picallo (1984) compared temporal properties of lexically selected indicatives and subjunctives, concluding that subjunctives are defective in the sense that they do not have an independent temporal interpretation and rely on the tense of a matrix predicate (after Quer, 1998, p. 8). More specifically, subjunctive complements – in contrast to indicative complements – exhibit sequence of tense phenomena; compare (1.79) and (1.80) from Catalan (from Picallo, 1984 after Quer, 1998, pp. 7–8):

(1.79) *Desitja que porti/hagiportat/*portés/*haguésportat un llibre.* (Catalan)
desire.PRS.3SG that bring.SBJV.PRS/PRF/*PST/*PLPRF.3SG a book
'S/he desires that s/he brings/has brought/*brought/*had brought a book.'

(1.80) *Jo sé que telefona/hatelefonat/telefonara/haviatelefonat/telefonà/telefonava.*
I know.PRS.1SG that phone.IND.PRS/PRF/FUT/PLPRF/PST/IPFV.3SG
'I know that s/he phones/has phoned/will phone/had phoned/phoned.'

The subjunctive example shown in (1.79) has a limited temporal reference since the complement event cannot be located prior to the matrix event; in contrast, the indicative complement shown in (1.80) has no temporal restrictions. According to Picallo (1984), both the indicative and the subjunctive are specified for agreement, but they differ in tense: indicatives exhibit an independent temporal interpretation and thus can be marked as [+Tense, +Agr], whereas subjunctives lack an independent temporal interpretation and as such are marked as [–Tense, +Agr] (after Quer, 1998, p. 8).

Another argument for the temporal defectivity of the subjunctive is its exclusion from root contexts; see (81) and (82) (from Quer, 1998, p. 8):

(1.81) **En Joan hagi portat un llibre.* (Spanish)
the Joan has.SBJV.PRS.3SG brought a book.
'Joan has brought a book.'

(1.82) **La Isabel dormís.*
the Isabel sleep.SBJV.PST.3SG
'Isabel slept.'

As visible in (1.81) and (1.82), the subjunctive in Spanish, both present and past, cannot be used in root sentences. In Picallo's (1984), this is due to anaphoric character of the subjunctive, which should be bound by the matrix expression with independent tense interpretation (after Quer, 1998, p. 8).

Furthermore, the subjunctive as an instance of irrealis or counterfactuality also displays so-called "fake past" or – more generally – "fake tense" understood as tense morphology, e.g., present or past, which receives neither present nor past interpretation (see Iatridou, 2000, p. 235). Such a phenomenon is present in Russian, in which the subjunctive is formed with the *l*-participle, which is past when used in the indicative, but when used in a subjunctive clause, it does not have its past interpretation; cf. (1.83) (from Mezhevich, 2006, p. 136):

- (1.83) a. *Ja ujexa-la včera / *sejčas / *zavtra.* (Russian)
 I leave.PST yesterday / now / tomorrow
 ‘I left yesterday / *now / *tomorrow.’
- b. *Ja by ujexa-la včera / sejčas / zavtra.*
 I SBJV leave.PST yesterday / now / tomorrow
 ‘I would have left yesterday / leave now / leave tomorrow.’

As show in (1.83a), the *l*-participle used in an indicative clause can only refer to the past and it is not compatible with present and future tense adverbials. In contrast, the *l*-participle used in a subjunctive clause in (1.83b) is devoid of its past reference and as such it can be used with adverbials of various reference. A similar phenomenon can be observed in Bulgarian in which present tense verbs have different temporal properties in indicative and subjunctive clauses; compare (1.84) (from Smirnova, 2009, p. 200):

- (1.84) a. *Pee *utre / *včera.* (Bulgarian)
 sing.IPFV.3SG.PRS *tomorrow/ *yesterday.
 ‘S/he is singing *tomorrow/*yesterday.’
- b. *Nakarax go da pee utre /včera.*
 force.PFV.1SG.PST him SBJV.COMP sing.IPFV.3SG.PRS tomorrow/yesterday
 ‘I forced him to sing tomorrow/yesterday.’

When used in the indicative clause in (1.84a), the present tense verb cannot be used with past and future tense adverbials since it denotes an action happening at the moment of speaking, but when used in the subjunctive clause (with the subjunctive complementizer *da*) in (1.84b), non-present tense adverbials are acceptable (Smirnova, 2009, p. 201).¹³ Therefore, the data shown in (1.83) and (1.84), illustrating the phenomenon of so-called “fake tense,” provide further evidence that the subjunctive is temporally defective.

Nevertheless, some researchers have suggested that temporal properties of certain complement clauses are not linked with mood values, but rather with properties of selecting predicates. In this line of reasoning, Raposo (1985), on the basis of temporal properties, differentiates between two types of predicates: E-predicates (epistemic and declarative predicates), which select for [+Tense] complements, and W-predicates (mainly volitionals and non-factive emotives), which select for [–Tense] complements (after Quer, 1998, p. 11). Similarly, such a link between selecting predicates and temporal properties of predicates is proposed by Suñer and Padilla-Rivera (1985), who notice that only the subjunctives selected by volitional and influence predicates exhibit temporal restrictions, whereas the subjunctives triggered by negation are unrestricted (after Quer, 1998, p. 12). They propose a [–PRECEDENCE] feature for volitional and influence predicates, which blocks the sequence past–non-past and non-past–past; cf. (1.85) and (1.86) (from Quer, 1998, p. 12):

- (1.85) *Quería que telefonaras/*telefonees.* (Spanish)
 want.IPFV.3SG that phone.SBJV.PST/*PRS.2SG
 ‘S/he wanted you to phone.’

¹³ Mind that the data shown in (1.84) have often been interpreted as an argument for the defective tense of the subjunctive, but Smirnova (2009) claims that the tense of the subjunctive is not defective and presents an alternative proposal.

- (1.86) *Les exige que estén/*estuvieran atentos.*
 them require.PRS.3SG that be.SBJV.PRS/*PST.3PL attentive
 ‘S/he requires of them to pay attention.’

The examples in (1.85) and (1.86) illustrate blocked tense configurations, but what is crucial, according to Suñer and Padilla-Rivera (1985), the restriction is not connected with the subjunctive itself, but with the [–PRECEDENCE] feature held by some predicates. As evidence, they provide examples of indicative-selecting predicates with the [–PRECEDENCE] feature; see (1.87) (from Quer, 1998, p. 12):

- (1.87) *Prometió que viene/venía/*había venido.* (Spanish)
 promise.PST.3SG. that come.IND.PRS/IPFV/*PLPRF
 ‘S/he promised that s/he is coming/would come/*had come.’

As visible in (1.87), the Spanish predicate *prometer* selects for the indicative, but still the embedded event cannot be placed prior to the event of promising.

To recap, the discussion on the temporal properties of the subjunctive has been twofold: temporal properties of complements stem either from their mood values or from properties of selecting predicates. In the first instance, temporal defectivity is ascribed to the subjunctive as a feature distinguishing it from the indicative; in the second: both indicative and subjunctive complements can be temporally defective and this property is matter of a selector.

1.2.2.3 Syntactic transparency

Another property of subjunctive clauses, as opposed to indicative clauses, is their syntactic transparency exhibited in various phenomena, such as obviation effects, long-distance anaphoric binding and NPI licensing as well as movement constraints (see Quer, 2006). As the subjunctive is primary the mood of embedded clauses, the characterization of the subjunctive as an element of a complex sentence has attracted a lot of scholarly attention, especially in the sphere of the locality of syntactic operations (see Constantini, 2005).

The first cross-clausal relation often identified with the presence of the subjunctive concerns coreference between the subjects of the matrix and the subordinate clause, which is blocked when the subordinate clause is marked as subjunctive; cf. (1.88) (from Quer, 2006, p. 662):

- (1.88) a. **Queremos_i que ganemos_i.* (Spanish)
 want.1PL that win.SBJV.PRS.1PL
 ‘We want to win.’
 b. *Queremos_i que ganen_k.*
 want.1PL that win.SBJV.PRS.3PL
 ‘We want them to win.’

Example (88a) shows so-called ‘obviation effects,’ which block coreference between subjects, i.e., the subject of wanting and the subject of winning cannot have the same referent. The sentence is only correct under an interpretation in which the matrix subject and the embedded subject refer to different entities (*ibidem*). The requirement of disjoint reference illustrated in

(1.88) stems from the rules of binding theory and, more specifically, from Principle B, which states the following:

(1.89) Binding Principle B (Chomsky, 1980 after Constantini, 2005, p. 97)

“A pronominal is free in its governing category.”

The pronominal cited in (1.89) in the case of example (1.88) is an embedded null subject, which cannot have the same referent as the matrix subject. Therefore, if the matrix subject and the null subject in (1.88) cannot corefer, they are both in the same governing category (or binding domain) (Büring, 2005, p. 129). Providing that noun phrases and clauses are considered common binding domains (Witkoś, 2004, pp. 122–123), we can stipulate that, with respect to binding, example (1.88) either constitutes one clause or the border between the matrix clause and the subordinate clause in (1.88) is transparent to binding operations.

Still, the relation between obviation effects and the subjunctive is far from obvious because this phenomenon is observed only in certain subjunctive languages, that is, in Romance languages, but not in Balkan languages (Quer, 2006, p. 662); compare example (1.90) from Italian (from Constantini, 2005, p. 98) with example (1.91) from Serbo-Croatian (from Stojanović and Merelj, 2004, p. 445):

(1.90) *Gianni_i pensa che pro^{*i/j} parta domani.* (Italian)

Gianni thinks that leaves.SBJV tomorrow.

‘Gianni thinks he will leave tomorrow.’

(1.91) *Marija_i pokušava pro_{i/*j} da spava.* (Serbo-Croatian)

Marija tries SBJV.COMP sleeps

‘Marija is trying to sleep.’

As visible in (1.90) and (1.91), the example from Serbo-Croatian exhibits opposite behavior to the Italian example as the disjoint reference is not obligatory, but excluded. According to Farkas (1992 after Constantini, 2005, p. 101), such a cross-linguistic difference should be connected with the competition between the subjunctive and the infinitive, which in Romance languages are complementary, whereas in Balkan languages they do not compete in the same contexts. Farkas (1992) proposes a generalization that if in such contexts both the infinitive and the subjunctive are available, the infinitive expresses the coreference, while the subjunctive – the obviation (after Constantini, 2005, p. 101).

Furthermore, obviation effects are not unified even within one language as they typically co-occur with the intensional subjunctive (Quer, p. 662). For instance, this can be observed in Hungarian, where coreference is blocked in intensional subjunctives but not in conditional subjunctives; cf. (1.92) (from Tóth, 2008, pp. 34–35):

(1.92) a. **Akarom, hogy meghívjam a bál-ba.* (Hungarian)

want that invite.SBJV the ball-to

Intended meaning: ‘*I want me to invite him to the ball.’

b. *Nem hiszem, hogy meghívnam a bál-ba.*

NEG believe that invite.COND.PRS the ball-to

‘I don’t think that I would invite him to the ball.’

As visible in (1.92), the subject coreference is possible for the conditional use of the subjunctive, which in Tóth's view (*ibidem*) is connected with different properties of intensional and conditional subjunctives in Hungarian, stemming from different mechanisms of triggering: the former being triggered by intensional predicates, the latter by matrix negation. On the top of that, obviation distribution is additionally blurred by contexts where disjoint reference does not hold: embedded clause with a modal (1.93), embedded clause with focus on a subject (1.94), matrix or embedded clause with a passive subject (1.95), coordinated complements (1.96), complement clause with the perfective aspect (1.97) (from Quer, 2006, pp. 663–664):

- (1.93) *Espero_i que pueda_i ir.* (Spanish)
 hope.1SG that can.SBJV.PRS.1SG to-go.
 'I hope to be able to go.'
- (1.94) *Espero_i que gane_i sólo yo ahora.* (Spanish)
 hope.1SG that win.SBJV.PRS.1SG only I now.
 'I hope to win alone now.'
- (1.95) *Espero_i que sea_i autorizado a ir.* (Spanish)
 hope.1SG that be.SBJV.PRS.1SG allow.PPL to to-go
 'I hope to be allowed to go.'
- (1.96) *?Je_i veux que tu partes et que je_i reste.* (French)
 I want.1SG that you leave.SBJV.2SG and that I stay.SBJV.1SG
 'I want you to go and for me to stay.'
- (1.97) *Je_i voudrais que je_i sois déjà parti!* (French)
 I want.COND.1SG that I be.SBJV.1SG already leave.PPL
 'I would like for me to be already gone.'

Taking into account the diversity of the shown data, it is hard to claim that obviation is a reliable diagnostic for subjunctivehood, though it is definitely a feature that coincides with the presence of the subjunctive. Moreover, obviation effects are restricted to some languages and to a limited set of contexts, and thus some researchers relate them more to the properties of subjunctive-selecting predicates rather than to the subjunctive itself (see Quer, 2006, p. 662).

Domain transparency postulated for subjunctive clauses is also evidenced by anaphoric binding. In line with binding theory, anaphors include reflexives and reciprocals and as such they need an antecedent in their local clause (Büring, 2005, pp. 3–4), which is stated in Principle A:

- (1.98) Binding Principle A (Chomsky, 1981 after Witkoś, 2004, p. 125)
 "An anaphor is bound in its governing/binding category."

Based on (1.98), one can expect that an antecedent in a matrix clause cannot bind an anaphor in an embedded clause. Nonetheless, such a situation is possible in some languages provided that an embedded clause is marked with the subjunctive; consider (1.99) (from Quer, 2006, p. 664):

- (1.99) a. *Jóni segir að Péturj raki sig_{i/j}.* (Icelandic)
 John say.3SG that Peter shave.SBJV.3SG self
 ‘John says that Peter shaves himself.’
- b. *Jóni veit að Péturj rakar sig^{*i/j}.*
 John know.3SG that Peter shave.IND.3SG self
 ‘John knows that Peter shaves himself.’

As visible in (1.99a), the Icelandic reflexive *sig* located in a subjunctive complement can refer to both the matrix and the embedded subject, but such a long-distance reference is blocked in the case of the indicative complement in (1.99b). Similar facts are also observed in Italian and French (*ibidem*). Therefore, if (1.98) holds, then a subjunctive clause in some languages is transparent domain for binding operations.

Further transparency facts are connected with NPIs (negative polarity items) and negative indefinites (n-words), which can be only licensed over a clause boundary on condition that they are placed in a subjunctive clause; cf. (1.100) (from Quer, 2006, p. 664):

- (1.100) *Non pretendo che tu arresti nessuno.* (Italian)
 not require.1SG that you arrest.SBJV.2SG no one
 ‘I do not require that you arrest anyone.’

Example (1.100) shows that the Italian n-word *nessuno* in the subjunctive embedded clause is licensed by the matrix negation, which is not possible with an indicative complement (*ibidem*).

Finally, other transparency effects that must be mentioned here are connected with constituent movement from subjunctive embedded clauses. First, some languages, like Greek and Romanian, allow subject raising from subjunctive embedded clauses; consider (1.101) and (1.102) (from Quer, 2006, p. 665):

- (1.101) *Studentjii trebuiau [să plece].* (Romanian)
 students-the must.3PL SBJV leave.3PL
 ‘The students must have left.’
- (1.102) *Ta pedhia arxisan [na trexun].* (Modern Greek)
 the children start.PST.3PL SBJV run.PRS.3PL
 ‘The children started to run.’

What is interesting in (1.101) and (1.102) is the movement of the subject from the embedded subjunctive clause (annotated with brackets) to the matrix clause even though lexical subjects can be licensed in the subjunctive embedded clause, i.e., case can be assigned in the lower clause (*ibidem*). Therefore, the embedded subjunctive clause should pose a barrier to this kind of movement in the sense that there is no motivation for the subjects in (1.101) and (1.102) to move.¹⁴ In a similar vein, the subjunctive can also lift a barrier to wh-movement, that is, in

¹⁴ However, Alexiadou and Anagnostopoulou (1999) claim that the assignment of case may not be connected with agreement, e.g., in Portuguese inflected infinitives do assign the nominative case and raising out of inflected infinitives is blocked. This is so because in Portuguese full agreement is linked with case and thus the nominative is assigned with inflected infinitives and raising is blocked. In contrast, in Greek agreement does not correlate with case since the nominative is not assigned with raising subjunctives, which though exhibit full agreement. See also Alexiadou and Anagnostopoulou (1998).

still morphosyntactic factors, like the form of the subjunctive in a given languages, may have impact on selection properties, e.g., the case of emotive factives (Giannakidou, 2016). Second, the indicative/subjunctive distinction coincides with absolute/defective tense since indicative clauses have an independent temporal interpretation, whereas subjunctive clauses are temporally restricted and dependent on the tense of the matrix clause (Picallo, 1984). Still, it is not clear whether the locus of these temporal properties is actually the mood opposition or rather it is the lexical meaning of a predicate that forces the sequence of tense limitations (Raposo, 1985; Suñer and Padilla-Rivera, 1985). Lastly, the indicative and the subjunctive seem to differ in a number of phenomena, which can be subsumed under the term “syntactic transparency” (Quer, 2006). This is an aspect that is crucial to understand how mood influences syntactic relations within a complex sentence. Yet transparency appears the most difficult to capture out of all properties described herein. On the one hand, there are phenomena showing that a subjunctive complement forms one domain with a matrix clause, e.g., obviation effects, long-distance anaphor and NPI licensing, but on the other hand, transparency facts exhibit variation between languages and even within one language, e.g., in Hungarian (Tóth, 2008).

1.3 Subjunctive on the utterance level

The pragmatic-cognitive outlook on the subjunctive described in the remainder of this chapter involves the following elements. On the pragmatic side, I will discuss earlier accounts of the indicative/subjunctive distinction rooted in speech act theory (Terrell and Hooper, 1974; Hooper, 1975) as well as later studies based on discourse analysis and information structure (Lavandera, 1983; Majías-Bikandi, 1998) and on relevance theory (Wilson and Sperber, 1993, 1998; Jary, 2002). On the cognitive side, I will begin with a study grounded in prototype theory (Lunn, 1989), and then I will move to accounts based on mental space theory (Majías-Bikandi, 1994; Dam-Jensen, 2011).

1.3.1 Pragmatic approaches to the subjunctive

The term ‘pragmatics’ in its modern sense goes back to the work of an American philosopher Charles Morris (1938) on semiotics, which as a separate field of study includes three branches: syntactics, semantics and pragmatics understood as a study of “the relation of signs to interpreters” (Morris, 1938 after Levinson, 1983, p. 1). Pragmatics as a field of linguistics, however, emerged in the late 1960s and early 1970s (Mey, 2001, p. 4) mainly as “a reaction or antidote to Chomsky’s treatment of language as an abstract device, or mental ability, dissociable from the uses, users and functions of language [...]” (Levinson, 1983, p. 35). Levinson is his definition of pragmatics stresses the relation between pragmatics and grammar in which “extrasyntactic, indeed extralinguistic factors played a major role in what was called the ‘rules of language’” (Mey, 2001, p. 4). In this sense, pragmatics can provide novel and alternative solutions to unsolved and puzzling grammatical phenomena. Such a line of research within pragmatics is labeled as form/function pragmatics and characterized as an attempt at association of “discourse functions and/or use conditions with linguistically specified forms (morphemes, phrases, or whole syntactic constructions)” (Ariel, 2012, p. 33).

One of crucial pragmatic assumptions is intensionality, that is, signals created in an act of communication are produced with specific intentions (Searle, 1969, p. 19 after Mey, 2001,

p. 94). Intensionality as described by Searle as a part of a speech act can be – to some extent – conventional, i.e., linked with special grammatical forms in the way in which a command is connected with the imperative mood (Sadock, 2004, p. 53). This leads to an observation that some constructions, or constraints on some constructions, are shaped by pragmatic information understood as “information about the relation between the user of the form and the act of using the form” (Green, 2004, p. 408). In the context of the discussion on the indicative/subjunctive distinction, intensionality is seen a decisive factor, e.g., in Terrell and Hooper’s (1974) analysis presented in the next section.

1.3.1.1 Assertion, presupposition and the indicative/subjunctive distinction (Terrell and Hooper, 1974)

Terrell and Hooper (1974) investigate the choice of mood in Spanish following the semantic approach according to which the use of the indicative or the subjunctive mood is connected with such semantic concepts as truth value, presupposition, assertion and anticipation (p. 484). Specifically, they put forward a hypothesis that “the choice of mood in Spanish is directly correlated with what the sentence as a whole expresses about the truth of the proposition included in the sentence” (Terrell and Hooper, 1974, p. 484). Their approach stands in marked contrast to the earlier structuralist or transformational-generative analyses of mood distribution in Spanish, which see the mood of an embedded clause as “a morphological reflex” of a matrix predicate. Diverging from the syntax-oriented perspective, Terrell and Hooper (1974, pp. 484–485) develop a pragmatically based analysis in which the choice of mood is meaningful in the sense that the speaker intends to convey information about the truth of a proposition, i.e., adopts an attitude towards a proposition, and – to do that – he or she chooses a syntactic construction.

Based on the notions of presupposition and assertion, Terrell and Hooper (1974, p. 486) propose three types of complements: asserted (not presupposed); see (1.104); presupposed (not asserted); see (1.105); neither asserted nor presupposed; see (1.106) (examples from Terrell and Hooper (1974, p. 486):

(1.104) *Sé que va a ir con nosotros.*

‘I know that she’s going to go with us.’

(1.105) *Es maravilloso que estudie tanto.*

‘It’s marvelous that she studies so much.’

(1.106) *No es seguro que vaya con nosotros.*

‘It’s not certain that she’s going with us.’

According to Terrell and Hooper (1974, p. 486), one proposition cannot be asserted and presupposed at the same time and hence assertion and presupposition are mutually exclusive. In their definition, presupposition can be tested by means of negation; namely, if the negation of an entire sentence does not change the truth of an embedded proposition, then the complement is presupposed. This is the case of (1.105): if we say that ‘It is not marvelous that she studies so much,’ we still assume that the embedded subject studies a lot. As far as assertion is concerned, Terrell and Hooper (1974) do not provide any precise definition of this

notion,¹⁵ but give an illustrative example; consider (1.107) (from Terrell and Hooper, 1974, p. 485):

(1.107) *It's true that Mary is beautiful.*

In (1.107) the complement is asserted as the matrix negation affects the truth of the embedded proposition (cf. *It is not true that Mary is beautiful*), which is in contrast to presupposed complements as shown in (1.105).

Next, following their three-part classification of complement types, Terrell and Hooper (1974, pp. 486–490), pinpoint six classes of matrix predicates or “matrices” in their terminology:

- 1) ASSERTIVE MATRICES: they can express strong or weak belief, e.g., impersonal predicates, such as *es seguro* ‘it is sure,’ *me parece* ‘it seems to me,’ for which the assertion is attributed to the speaker, or verbs like *creer* ‘to believe’ and *pensar* ‘to think,’ for which the assertion is attributed to the matrix subject (Terrell and Hooper, 1974, p. 486).
- 2) REPORTED MATRICES: they describe the manner of conveying asserted information, e.g., *decir* ‘to say,’ *leer* ‘to read,’ *contestar* ‘to answer’ and *contar* ‘to tell’ (Terrell and Hooper, 1974, pp. 486–487).
- 3) MENTAL ACT MATRICES: they describe a mental act fulfilled with respect to a proposition, e.g., *dares cuenta* ‘to realize,’ *aprender* ‘to learn,’ *tomar en consideration* ‘take into consideration’ (Terrell and Hooper, 1974, p. 488).
- 4) COMMENT MATRICES: their role is to comment upon embedded propositions, e.g., to express a value judgement, like *es una lástima* ‘it’s a shame,’ or to show that the matrix subject is psychologically affected by an embedded proposition, like in the case of *me alegro* ‘I’m happy’ (Terrell and Hooper, 1974, p. 487).
- 5) DOUBT MATRICES: they are used to express doubt about the validity of a proposition, e.g., *dudar* ‘to doubt,’ *negar* ‘to deny,’ *no parecer* ‘it doesn’t seem,’ *no creer* ‘not believe’ (Terrell and Hooper, 1974, p. 487).
- 6) IMPERATIVE MATRICES: they are used to qualify an imperative and are also referred to as “matrices of volition, suasion or influence,” e.g., *querer* ‘to want,’ *preferir* ‘to prefer,’ *aconsejar* ‘to advise,’ *permitir* ‘to permit,’ *ser necesario* ‘to be necessary’ (Terrell and Hooper, 1974, p. 487).

According to Terrell and Hooper (1974, p. 488), the complements of the first and the second type of matrices are asserted, then the complements of the third and fourth group are presupposed and, finally, the complements of the fifth and sixth group are neither presupposed nor asserted. Furthermore, based on the Spanish data, Terrell and Hooper (1974, p. 487) formulate a generalization that the indicative is associated with assertion, whereas the subjunctive is associated with non-assertion. As a consequence, the combination of semantic notions of assertion and presupposition, the classes of matrices and mood values allows for a full classificatory system shown in Table 5.

¹⁵ See Section 1.3.2.2 for Majías-Bikandi’s (1994) definition of assertion, which can be seen as complementary to Terrell and Hooper’s (1974) account.

Table 5. Mood choice in Spanish

Semantic notion	Class	Mood
Assertion	1) Assertion	Indicative
	2) Report	Indicative
Presupposition	3) Mental act	Indicative
	4) Comment	Subjunctive
Neither	5) Doubt	Subjunctive
	6) Imperative	Subjunctive

Source: reproduced from Terrell and Hooper (1974, p. 488).

As visible in Table 5, there is one exception to Terrell and Hooper's (1974) generalization: mental act verbs select for indicative complements, but in line with the discussed account they should select for subjunctive complements, which are presupposed but not asserted. The researchers treat this case as an exception or "area of instability." They actually support the second option – instability area – since some Spanish speakers tend to use the indicative for all presupposed complements, i.e., both the mental act group and the comment group¹⁶ (Terrell and Hooper, 1974, p. 488).

Terrell and Hooper (1974, p. 489) show that their classification based on semantic notions of assertion and presupposition is reflected in syntactic properties of complement clauses and, what follows, claim that "the semantic properties are primary." First, imperative matrices are characterized by temporal restrictions, i.e., propositions expressed by their complements need to follow the matrix event, like in the case of *querer* 'to want.' Second, the described classes exhibit different behavior under negation: presupposed complements do not change under negation, whereas, assertive matrices become dubitative under negation; compare (1.108) and (1.109) (from Terrell and Hooper, 1974, pp. 489–490):

- (1.108) a. *Estoy contento de que María haya venido a visitarnos.* (Spanish)
'I'm happy that Mary has come to visit us.'
b. *No estoy contento de que María haya venido a visitarnos.*
'I'm not happy that Mary has come to visit us.'
- (1.109) a. *Creo que Martín ha leído ese libro.*
'I think Martin has read this book.'
b. *No creo que Martín haya leído ese libro.*
'I don't think Martin has read this book.'

As visible in (1.108), the matrix negation does not change the truth value of the embedded proposition: in both (1.108a) and (1.108b) Mary's visit is considered a fact. In contrast, in (1.109) we can see a change from the expression of assertion in (1.109a) to the expression of doubt in (1.109b). The final syntactic difference is that only matrices with presupposed complements can be used with the phrase *el hecho de* 'the fact that',¹⁷ consider (1.110)–(1.113) (from Terrell and Hooper, 1974, p. 489):

¹⁶ See Section 1.3.2.2 for an alternative account of mental act matrices' selectional properties.

¹⁷ Terrell and Hooper (1974) referred to Kiparskys' factive/non-factive distinction. Factive verbs require a presupposed complement, whereas non-factive ones do not have this requirement. See Kiparsky and Kiparsky (1971).

- (1.110) *Estoy content del hecho de que María haya venido a visitarnos.* (Spanish)
 ‘I’m happy about the fact that Mary came to visit us.’
- (1.111)**Dudo el hecho de que María haya venido a visitarnos.*
 ‘I doubt the fact that Mary came to visit us.’
- (1.112)**Quiero el hecho de que María haya venido a visitarnos.*
 ‘I want the fact that Mary came to visit us.’
- (1.113)**Sé el hecho de que María vino a visitarnos.*
 ‘I know the fact that Mary came to visit us.’

The phrase *el hecho de* ‘the fact that’ is only compatible with the mental act matrix with a presupposed complement in (1.110), whereas the use of *el hecho de* ‘the fact that’ with the doubt matrix in (1.111), the imperative matrix in (1.112) and the assertive matrix in (1.113) results in ungrammaticality as all those matrices do not select for a presupposed complement.

Finally, what is significant in the context of the present study is the last observation made by Terrell and Hooper (1974, p. 490) that: “[t]here are matrices that have two possible semantic readings, and under each reading they fall within a different class. As members of different classes, however, they behave syntactically according to the syntactic constraints of that class.” This observation is also supported by a list of pairs of alternants based on the Spanish data (examples from Terrell and Hooper, 1974, pp. 490–492):

A. REPORT/IMPERATIVE

- (1.114) a. *Insisto en que no retiran las tropas.* (report) (Spanish)
 ‘I insist that they are not withdrawing troops.’
- b. *Insisto en que no retiren las tropas.* (imperative)
 ‘I insist on their not withdrawing troops.’

B. REPORT/COMMENT

- (1.115) a. *Siento que se va.* (report)
 ‘I feel he’s leaving.’
- b. *Siento que se vaya.* (comment)
 ‘I’m sorry that he’s leaving.’

C. ASSERTION/DOUBT

- (1.116) a. *No creo que tiene suficiente dinero.* (assertion)
 ‘It’s my opinion that he doesn’t have enough money.’
- b. *No creo que tenga suficiente dinero.* (doubt)
 ‘I don’t believe that he has enough money.’

D. REPORT/ASSERTION

- (1.117) a. *Vi que Susana ya se iba.* (report)
 ‘I saw that Susan was already leaving.’
- b. *Veo que José ha practicado mucho.* (assertion)
 ‘I see that José has practiced a lot.’

E. COMMENT/IMPERATIVE

- (1.118) a. *Es importante que María no vaya.*¹⁸ (comment)
'That María doesn't go is important.'
- b. *Es importante que María no vaya.* (imperative)
'It is important that María not go.'

F. DOUBT/IMPERATIVE

- (1.119) a. *Es imposible que haya regresado ayer.* (doubt)
'It's impossible that he returned yesterday.'
- b. *Es imposible que regrese esta noche.*¹⁹ (imperative)
'It's impossible for him to return tonight.'

Terrell and Hooper (1974, p. 492) conclude that the discussed reading alternations support their claim that by choosing a specific mood the speaker intends to convey information about the truth of an embedded proposition.

1.3.1.2 Assertion and discourse (Lavandera, 1983)

In her analysis of Spanish discourse, Lavandera (1983, p. 209) works on the assumption that linguistic signals, such as mood, tense and word order, contribute to the overall process of communication. In other words, certain elements of grammar – on the sentence level – can take part in developing a peculiar discourse strategy. Such an assumption is supported by the data from Spanish, in which speakers tend to switch “from a series of utterances in the indicative mood to one or two utterances in the subjunctive mood, within a text which develops a justification for the speaker's stand with respect to a particular issue” (*ibidem*). Lavandera (1983, pp. 210–211) follows Terrell and Hooper's (1974) distinction into [+assertive] value of the indicative mood and [–assertive] value of the subjunctive mood; nonetheless, her main aim is to find out why speakers in discourse raise some issues and put them in subjunctive sentences as unasserted.

To analyze shifting moods in Spanish discourse, Lavandera (1983, p. 213) conducted a series of face-to-face interviews (in total: 100 hours of recorded speech), in which she asked the interviewees about their feelings and opinions concerning mainly the current social and economic situation; consider an interview fragment in (1.120) (from Lavandera, 1983, pp. 223–224):

- (1.120) **B:**²⁰ *Yo creo que, por ejemplo, entiendo que la política internacional se explica toda desde la economía.* (Spanish)
“I think that, for example, I understand that international politics is to be explained entirely in terms of the economy.”

¹⁸ According to Terrell and Hooper (1974, p. 491), the sentence *Es importante que María no vaya* is ambiguous and can have two readings: a comment reading in (1.118a) and an imperative reading in (1.118b). Under the comment reading the sentence can be used with *el hecho de* ‘the fact that.’

¹⁹ Terrell and Hooper (1974, p. 492) noted that *es imposible* ‘it is impossible’ must be followed by a subjunctive complement for both readings. However, under the imperative reading, the tense of the complement is restricted, i.e., the embedded event follows the matrix event.

²⁰ “B” stands for Beatriz Lavandera (the interviewer) and “C” for Cecilia (the interviewee). The segmentation of Cecilia's speech is taken from Lavandera (1983).

C: La economía.	
“The economy.”	
<i>Verdaderamente es el quid de la cuestión.</i>	IND
“It is truly the quid of the question.”	
<i>Pore eso llevamos tan mal acá</i>	IND
“That’s why we do things so badly here”	
<i>porque la economía está mal.</i>	IND
“because the economy is in bad shape.”	
<i>Si estuviera bien la economía</i>	IPFV.SBJV
“If the economy were healthy”	
<i>nadie protestaría.</i>	COND
“nobody would complain.”	
<i>Yo digo que el comunismo avanza</i>	IND
“I believe communism advances”	
<i>en la medida en que los pueblos están más pobres</i>	IND
“to the extent that people are poorer”	
<i>en la medida en que hay más problemas.</i>	IND
“to the extent that there are more problems.”	
<i>Porque si no hubiera este problema</i>	IPFV.SBJV
“Because if this problem were not to exist”	
<i>el comunismo no tendría por que ser.</i>	COND
“communism would not have a reason for existing.”	
<i>No es porque yo vea mal el comunismo.</i>	<u>SBJV</u>
“It’s not because I disapprove of communism.”	
<i>No le veo mal</i>	IND
“I don’t disapprove of it”	
<i>porque la verdad que tiene muchas cosas buenas;</i>	IND
“because the truth is it has lots of good things;”	
<i>pero me parece</i>	IND
“but I think”	
<i>que si no estuviéramos con problemas económicos</i>	IPFV.COND
“that if we were not burdened with economic problems”	
<i>no tendría cabida.</i>	COND
“it would have no place.”	

The most significant part of the cited fragment in (1.120) is the sentence marked in bold in which the speaker uses the subjunctive outside a typical subjunctive context, e.g., conditional sentences, which also appear in (1.120). According to Lavandera (1983, p. 225), the interviewee is trying to be objective and by shifting the mood from the indicative to the subjunctive she stresses that her analysis of pros and cons of communism is not based on her personal views. In this way, the shift to the subjunctive serves as a discourse strategy showing that the conclusion is based on the objective facts rather than subjective personal motivations, which are dismissed as irrelevant (*ibidem*).

In sum, Lavandera (1983, p. 230) identifies discourse functions of the indicative and subjunctive: the former is used “to describe ‘events’ and ‘conditions’ which support the speaker’s stand in what he presents as uncontroversial issues and from which he claims to be drawing conclusion”; whereas the subjunctive serves to signal that “the speaker switches to issues that he neither wants to leave unmentioned nor wants to make the center of the discussion,” i.e., issues “that the speaker wants to consider only marginally to his main line of reasoning” (Lavandera, 1983, p. 234). This conclusion is corroborated by several examples shown by the researcher, in which shifts in moods are accompanied by “lexical signals,” such as modal phrases *dudo que* ‘I doubt that’ or *temo que* ‘I’m afraid that’ (Lavandera, 1983, p. 233). Therefore, as the author concludes, “grammatical forms are ‘condensed’ signals of meanings which are lexically expanded elsewhere in the text” (*ibidem*).

1.3.1.3 Presupposition and old information (Majías-Bikandi, 1998)

Still in the mode of discourse-related accounts, Majías-Bikandi (1998) attempts to explain the mood distribution in Spanish in terms of the discourse/pragmatic notion of old and new information. Crucially, Majías-Bikandi (1998, p. 944) claims that if a complement clause represents old information, it appears in the subjunctive; in other words, to mark information as old in discourse, the speaker can put it in the subjunctive mood. To show this correlation between old information and the subjunctive, the author proposes a series of tests involving the use of indefinites, intensifiers (*tan/tanto/a*) and negation (Majías-Bikandi, 1998, pp. 942–944).

He starts with the problematic issue of mental act predicates and comment predicates, which constitute a challenge to Terrell and Hooper’s (1974) claim that the indicative is connected with assertion and the subjunctive with non-assertion. Recall from Section 1.3.1.1 that Terrell and Hooper (1974) classify mental act predicates and comment predicates as one group: presupposed and not asserted. Therefore, in line with their generalization, both mental act predicates and comment predicates should select for subjunctive complements, but still mental act predicates in Spanish select for the indicative (see Table 5). However, Majías-Bikandi (1998, p. 942) notices an important difference between the complements of mental act predicates and the complements of comment predicates; namely, “an indefinite phrase within the complement of a mental act predicate may introduce a discourse referent, whereas an indefinite phrase within the complement of a comment predicate may not”; cf. (1.121a) and (1.121b) (from Majías-Bikandi, 1998, p. 942):

- (1.121) a. *Me he dado cuenta de que conoces a un amigo mío_i. (El_i) se llama José.*
 (Spanish)
 MENTAL ACT PREDICATE
 “I’ve realized you know a friend of mine_i. (He_i) is called José.”
 (translation – MO)
- b. *??Lamento que conozcas a un amigo mío_i. (El_i) se llama José.*
 COMMENT PREDICATE
 “I’m sorry that you know a friend of mine_i. (He_i) is called José.”
 (translation – MO)

As visible in (1.121), the indefinite phrase *un amigo mío* ‘a friend of mine’ is only compatible with the indicative complement of the mental act predicate (1.121a), whereas it sounds awkward in the subjunctive complement of the comment predicate (1.121b). According to Majías-Bikandi (1998, p. 942), this is because of the relation between the status of information (old/new) and an indefinite phrase, i.e., indefinite phrases cannot introduce new discourse referents in a subjunctive clause which is meant to convey old information.

Moreover, Majías-Bikandi (1998, p. 943) spots a similar difference with the intensifier *tan* ‘so,’ which this time is compatible only with the complements of comment predicates, but not with complements of mental act predicates; compare (1.122a) and (1.122b) (from Majías-Bikandi, 1998, p. 943):

- | | | |
|------------|--|---------------------------------|
| (1.122) a. | ?? <i>Me he dado cuenta de que sabes tan poco.</i> | MENTAL ACT PREDICATE |
| | “I’ve realized that you know so little.” | (translation from Spanish – MO) |
| b. | <i>Lamento que sepas tan poco.</i> | COMMENT PREDICATE |
| | “I’m sorry that you know so little.” | (translation from Spanish – MO) |

As Majías-Bikandi (1998, p. 944) explains, “the intensifier *tan* is anaphoric in nature, that is, it makes necessary reference to some degree of the property described by the adjective that is assumed to have been discussed or entertained previously by speaker and/or hearer [...]”. What follows is that *tan* must be incompatible with mental act predicates (see 1.122a) since they select for an indicative complement, which does not express old information.

Yet another context discussed by Majías-Bikandi (1998, p. 944) is the context of matrix negation, which may trigger a subjunctive complement. He provides well-known examples of assertive matrix predicates, such as *es seguro que* ‘it is certain that,’ which select for the indicative, but under negation they become dubitative predicates, *no es seguro que* ‘it is not certain that,’ and select for the subjunctive. In Majías-Bikandi’s view (1998, p. 944), “the use of the subjunctive mood in the complement may be explained by claiming that the complement if negated matrices represents old information.”

Finally, Majías-Bikandi (1998, p. 947), based on the discourse/pragmatic factors, generalizes over the distribution of the indicative and the subjunctive in sentential complements in Spanish. He states that indicative complements are selected when information is asserted, but subjunctive complements may appear in two situations: when information is presented as not true or when information is considered old (*ibidem*).

1.3.1.4 The value of information (Gregory and Lunn, 2012)

In a similar fashion to Majías-Bikandi (1998), Gregory and Lunn (2012) try to explain mood distribution in Spanish following the information-value approach. In their view, mood contrasts in Spanish arise due to “speaker evaluation of information quality,” i.e., speakers mark conveyed information with the subjunctive if they want to show that it is uninformative (because of being old) or unreliable (because of being unreal or doubtful); in contrast, information is marked with the indicative if speakers find it worth asserting (Gregory and Lunn, 2012, p. 334). According to the researchers, this kind of pragmatic account allows capturing Spanish data and omit problems of the truth-value approach (*ibidem*). Although Gregory and Lunn (2012) elaborate on the information-value explanation in the context of

teaching Spanish as a foreign language, their observations seem a relevant solution going in line with the research studies described in the previous sections.

Gregory and Lunn (2012) propose to treat the use of the indicative and the subjunctive in a broader way as a reflex of speakers' assessment of information value. They complain about narrow description of the mood distribution, e.g., connecting the subjunctive with specific conjunctions like *si* 'if,' which often results in mistakes when a conditional sentence expresses the if–then relation rather than a hypothetical situation; see (1.121) (from Gregory and Lunn, 2012, p. 335):

- (1.123) a. *Si tengo tiempo, te llamaré.* IND
 "If I have time, I will call you." (translation from Spanish – MO)
- b. **Si tenga tiempo, te llamaré.* SBJV
 Intended meaning: "If I have time, I will call you."

Gregory and Lunn (2012, p. 335) notice that learners of Spanish often make the mistake illustrated in (1.123b) as they connect – owing to narrow textbook explanations – the use of *si* 'if' with the meaning of "doubt" and apply the subjunctive instead of the indicative, which would be used in this context by native speakers of Spanish.

In contrast to traditional grammatical explanations, Gregory and Lunn (2012, p. 337) propose to treat mood selection as a tool for communicative purposes: "Information can be organized according to its relevance to the speaker's communicative needs. Speakers use the indicative to mark information they want to present as highly informative, and the subjunctive to mark information that they want to present as low-value." To illustrate the idea, they propose a flowchart of communicative decisions (see Figure 1).

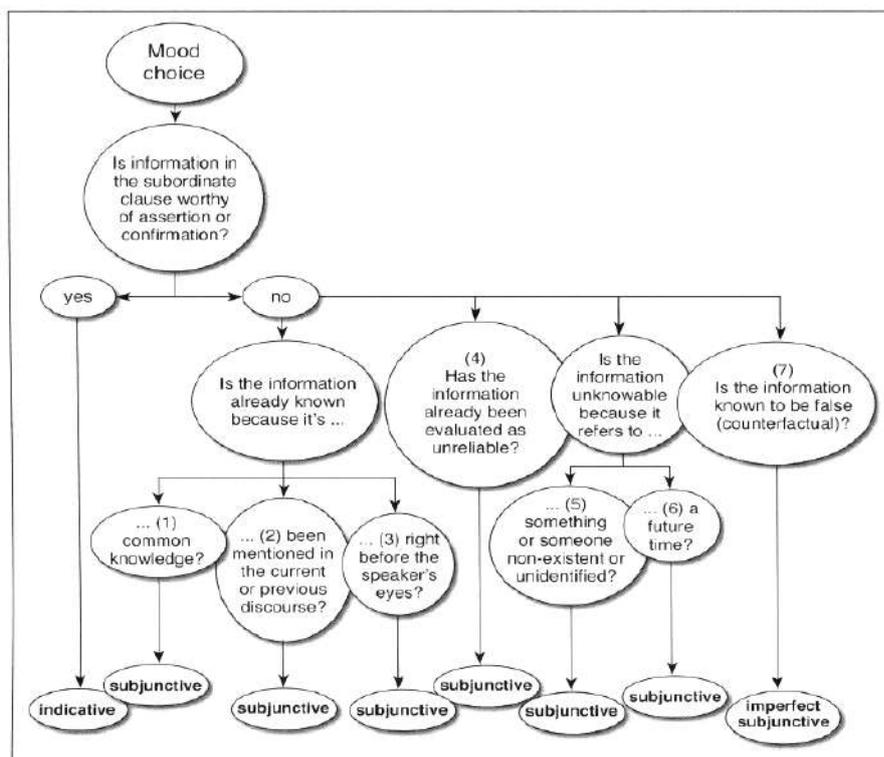


Figure 1. Flowchart for mood selection

Source: reproduced from Gregory and Lunn (2012, p. 338).

As visible in Figure 1, the choice of mood is a consequence of the speaker's decision and his/her assessment of information value: "Is information in the subordinate clause worthy of assertion or confirmation?" The positive or negative answer to this question is translated into mood selection – the indicative or the subjunctive, respectively. Crucially, Gregory and Lunn (2012, p. 337) stress that the choice of the subjunctive is based on the negative criterion and, what follows, the indicative (the mood of assertion) is the default option and is replaced by the subjunctive only if information is of low value.

Lastly, Gregory and Lunn (2012, p. 337) use the concept of subjectivity as a method of describing mood selection in Spanish. By subjectivity they mean that "speakers choose how to present information, and they can use grammatical mood to fine-tune the presentation of information" (*ibidem*). It must be noted that the concept of subjectivity understood in Gregory and Lunn's (2012) terms also reverberates in the aforementioned proposals offered by Lavandera (1983) and Majías-Bikandi (1998). As already discussed, Lavandera (1983) shows that the use of the indicative and the subjunctive can be treated as a discourse strategy to foreground/background specific information based on the speaker's assessment of the character of this information. Accordingly, Majías-Bikandi (1998) demonstrates how mood selection can be used to signal whether information is old or new also from the subjective perspective of the speaker. A similar way of reasoning about mood distribution as a result of communicative processes is followed in the relevance-theoretic accounts presented in the next section.

1.3.1.5 Subjunctive in relevance theory (Wilson and Sperber, 1998; Jary, 2002)

Refuting the code model and following the inferential model of communication, Sperber and Wilson (1995) develop relevance theory, which accounts for various pragmatic phenomena by means of the principle of relevance. From Sperber and Wilson's (1995) perspective, communication is a kind of transaction in which the hearer invests cognitive effort in order to achieve a cognitive effect²¹ understood as interpretation that brings something new to his or her knowledge (Kempson, 2001, p. 407). Therefore, utterance understanding and interpretation is seen as a process in which the hearer tries to find right balance between invested effort and collected information so that he or she arrives at the maximal informational gain with the minimal effort (*ibidem*). Sperber and Wilson (2004, p. 607) admit their grounding in Grice's ideas, mainly in that the speaker's meaning is inferred by the hearer from the provided linguistic evidence and that the hearer has expectations towards an utterance that guide the process of understanding.

Sperber and Wilson (1995, p. 246) stress a mapping between a speech act and sentence type functioning as a realization of this speech act, e.g., imperatives correlate with directives. Furthermore, according to Sperber and Wilson (*ibidem*), this mapping should be considered part of what is communicated, i.e., the speaker conveys a message with instructions how to comprehend it. In this way, mood is seen as "illocutionary-force indicator" that shows "the direction in which the relevance of the utterance is to be sought" (Sperber and Wilson, 1995, p. 254). This view on the role of mood in utterance interpretation was developed in Wilson and Sperber (1998) analysis of non-declarative sentences, where they make a claim that "the

²¹ Sperber and Wilson in their works use the term "cognitive effect" interchangeably with "contextual effect."

characteristic linguistic features of declarative, imperative or interrogative form merely encode a rather abstract property of the intended interpretation: the direction in which the relevance of the utterance is to be sought” (p. 288). They focus especially on imperative and interrogative sentences and their linguistic features that are connected with specific propositional attitudes. Imperatives exhibit characteristics, such as imperative inflection or imperative particles (*please*), which propel interpretation to potentiality and desirability (Wilson and Sperber, 1998, p. 286). Interrogatives, on the other hand, feature question word order, intonation and question particles, which link the interpretation with “desirability of a thought rather than a state of affairs” (*ibidem*). Since in relevance theory utterances are representations of thoughts, the speaker by asking a yes/no question signals what he or she expects to be a relevant answer. Therefore, utterances may include some linguistic signposts that guide inferential processes, constraining the process of utterance interpretation and hence the distinction between “conceptual encoding,” which is utterance meaning, and “procedural encoding,” which is the instruction how to grasp this meaning (Wilson and Sperber, 1993, p. 11). Referring the conceptual/procedural distinction to the category of mood, Wilson and Sperber (1993, p. 24) stress that “illocutionary force indicators should be seen as encoding procedural constraints on the inferential construction of higher-level explicatures.”²² In English word-order inversion may be analyzed as procedural encoding as it does not add up to the conceptual interpretation but constrains higher-level explicatures (*ibidem*).

Jary (2002) scrutinizes the indicative-subjunctive distinction from the relevance-theoretic perspective with a special focus on the process of interpretation. His account refers both to the earlier proposal based on the assertion/non-assertion contrast (Terrell and Hooper, 1974; Lunn 1989) as well as Wilson and Sperber’s (1998) treatment of mood as procedural encoding. Specifically, Jary (2002, p. 170) claims that moods encode how information is relevant and the difference between the indicative and the subjunctive is that the first mood value marks a proposition as “relevant in its own right,” whereas the second value precludes the possibility of such encoding.

The starting point for Jary’s (2002) analysis is the syntactic behaviour of parenthetical verbs. Their defining property is that, on the meaning side, they do not add up to what an utterance informs about, and, on the structural side, they can be placed in front of a clause or after a clause; consider (1.124) from Jary (2002, p. 164):

- (1.124) a. *I regret your application has not been successful.*
b. *Your application has not, I regret, been successful.*
c. *Your application has not been successful, I regret.*

As visible in (1.124), *I regret* is syntactically independent and can be around the sentence under the parenthetical meaning in which the speaker signals the communicated information is a source of distress for him or her (Jary, 2002, p. 164).²³ What is crucial here is Bolinger’s (1968) observation that in Spanish predicates selecting for subjunctive complement cannot

²² For Sperber and Wilson (1995, p. 185), explicature is “an explicitly communicated assumption”; however, they also distinguish “higher-level explicature,” which is “the propositional attitude of the speaker to her utterance” (Grundy, 2008, p. 135).

²³ Mind that a non-parenthetical reading is possible for which the speaker expresses his or her regret that the application was unsuccessful (Jary, 2002, p. 164).

have the parenthetical reading (after Jary, 2002, p. 167). As an illustration, compare (1.125) and (1.126) from Jary (2002, pp. 167–168):

- (1.125) a. *Creo que viene.* (Spanish)
 believe.1SG that come.3SG.IND
 ‘I think he is coming’
 b. *Viene, creo.*
 come.3SG.IND believe.1SG
 ‘He is coming, I think’
- (1.126) a. *Dudo que venga.*
 doubt.1SG that come.3SG.SBJV
 ‘I doubt he’s coming’
 b. **Venga, dudo.*
 come.3SG.SBJV doubt.1SG
 ‘*He is, coming, I doubt’

Based on the examples such those in (1.125) and (1.126), Jary’s (2002) argumentation is as follows: parentheticals show the complement proposition as relevant on its own and thus the parenthetical comment and the complement proposition function independently; consequently, subjunctive being incompatible with parenthetical interpretation is not “relevant in its own right.” This conclusion is compatible with yet another claim that subjunctive propositions are presupposed and as such – in relevance-theoretic terms – do not bring any cognitive effects, because they are already known both to the speaker and the hearer (Jary, 2002, p. 170).²⁴ Furthermore, Jary (2002) argues that his idea neatly accounts for so-called “double selection” cases in which predicates can select for both the indicative and the subjunctive complement; consider (1.127) from Jary (2002, p. 173):

- (1.127) a. *Siento que venga.* (Spanish)
 feel.1SG that come.3SG.SBJV
 ‘I’m sorry he’s coming’
 b. *Siento que viene.*
 feel.1SG that come.3SG.IND
 ‘I feel/sense he’s coming’

In (1.127a) *sentir* selects for a subjunctive complement and fulfills a comment function on the complement proposition, i.e., the speaker shows his disapproval; whereas in (1.127b) *sentir* has a parenthetical reading indicating that the complement assertion is based on a strong feeling (*ibidem*). According to Jary’s (2002) account, it is the indicative/subjunctive linguistic form that signals how to interpret the main and the subordinate clause, that is, whether the subordinate clause can be relevant on its own and bring cognitive effects to the hearer or it is relevant only in combination with the main clause predicate. Therefore, Jary (2002) offers a different perspective: in approaches based on assertion/non-assertion the indicative and the subjunctive were selected for and thus the mood value was dependent on selectional properties of the matrix predicate; in contrast, for Jary (2002), it is the mood value that

²⁴ See Section 1.3.2.1 for Lunn’s (1989) examples of the subjunctive use in journalism in Spanish to mark known information.

provides procedural encoding and guides the interpretation of the whole matrix-subordinate compound. Jary's (2002) focus on the interpretation process allows grasping the indicative/subjunctive distinction in communicative terms since mood serves as the speaker's guide how to interpret his or her utterance and, in Jary's (2002, p. 181) words, such a perspective follows naturally from "the fact that humans are interested in the assumptions of others not only as a means of predicting and explaining behaviour but also as a potential source of knowledge."

1.3.1.6 Interim summary

At the beginning of the present section on the pragmatic aspects of the subjunctive I stressed the relations between grammar and context and the way grammatical rules and contextual clues interplay to facilitate the process of utterance interpretation. Such a perspective on the indicative/subjunctive distinction moved the focus from the narrow predicate selectional properties to a broader whole sentence and utterance level. This shift of focus is already visible in Terrell and Hooper's (1974) work, where the choice of mood is seen as the speaker's information about the truth of a proposition, i.e., the speaker's vehicle for expressing his or her attitude about the truth of a proposition. According to Terrell and Hooper (1974), the indicative/subjunctive distinction mirrors the assertion/non-assertion distinction so that the choice of the indicative is associated with assertion, whereas the choice of the subjunctive is associated with non-assertion. This view is even stressed in Hooper (1975), who claims that syntactic distinctions are grounded pragmatically and some syntactic operations, e.g., complement preposing, follow from the assertion/non-assertion distinction.

The divergence from the grammar-oriented view on the indicative/subjunctive distinction caused an interest in the role of mood in discourse. Lavandera (1983) reviews the choice of mood as a discourse strategy in which the indicative is used to signal that the speaker sees a proposition as a base for his or her conclusions, whereas the subjunctive functions to remove a proposition from the center of discourse. In yet another discourse-related account, Majías-Bikandi (1998) proposes a generalization that indicative complements are associated with new, asserted information, whereas subjunctive complements are used when information is seen as not true or as old. In a similar mode, Gregory and Lunn (2012) suggest analyzing mood choice as the speaker's attempt to evaluate information. Specifically, if the value of information is high, the mood of assertion (the indicative) is used, and if the speaker evaluates information value as low, he or she chooses the subjunctive.

Finally, relevance-theoretic views on the indicative/subjunctive distinction directly refer to the discourse accounts as they consider mood choice as an interpretation instruction that the speaker provides for the hearer. Wilson and Sperber (1993) consider mood choice as procedural encoding, i.e., linguistic forms that guide inferential processes. This idea is developed by Jary (2002), who sees the use of the indicative as a signal that the subordinate proposition can be treated "relevant on its own," that is, it can bring cognitive effects alone, without any integration with a matrix clause.

1.3.2 Cognitive approaches to the subjunctive

Cognitive Linguistics²⁵ as a school of linguistics originated in the studies by George Lakoff, Ron Langacker, and Len Talmy in the 1970s in opposition to formal approaches to the study of language (Evans and Green, 2006, p. 248; Geeraerts and Cuyckens, 2007, p. 3). The emergence of the cognitive approach to linguistics primarily drew on the development of cognitive sciences in the 1960s and 1970s, especially cognitive psychology and the research on categorization (*ibidem*). According to the framework of Cognitive Linguistics, language is not an autonomous entity but it constitutes “an interactive part of the cognitive abilities of the human mind such as perception, memory, attention, emotion, reasoning” (Dirven, 2002, p. 76). In other words: “the formal structures of language are studied not as if they were autonomous, but as reflections of general conceptual organization, categorization principles, processing mechanisms, and experiential and environmental influences” (Geeraerts and Cuyckens, 2007, p. 3). As such language is linked with other types of knowledge, including encyclopedic knowledge, and there is no sharp division between linguistic knowledge and encyclopedic knowledge, as Goldberg (1992) phrased it: “knowledge of language is knowledge” (after Dirven, 2002, p. 76). It must be noted that Cognitive Linguistics is not a theory but rather a set of theories following common principles and assumptions (Evans and Green, 2006, p. 3). Therefore, in subsequent sections I will narrow my attention only to those aspects of the framework which are relevant for describing the indicative/subjunctive distinction, that is, prototype theory and mental space theory.

1.3.2.1 Prototype of assertability (Lunn, 1989) and the indicative/subjunctive distinction

Prototype theory was elaborated on due to the experimental studies by Eleanor Rosch (1973; 1975). Rosch (1975 after Taylor, 1995, p. 43) asked the participants of her experiment to rank members of several categories, e.g., FURNITURE, FRUIT or TOY, from good examples of a category through moderate up to bad examples. As a result, she obtained rankings of membership and, for instance, *chair* turned out to be the best example of FURNITURE with *sofa*, *couch* and *table* in the top five; whereas *telephone* was pointed as the worst (least typical) example of this category (after Taylor, 1995, pp. 43–44). Rosch’s experiments showed that categories are structured from central (prototypical) members to marginal ones and this degree of membership is a psychologically real notion (*ibidem*). In line with prototype theory then, categorization follows two principles: 1) “principle of cognitive economy,” which states that human beings categorize information to minimize cognitive efforts, and 2) “principle of perceived world structure,” according to which the world is structured in a correlational way and people seek connection between pieces of information (Evans and Green, 2006, p. 255). Another interesting aspect connected with categorization is family resemblance: in a category which is structured prototypically with a scale of centrality, some members of such a category do not have to share “a single defining trait,” but may be included in the category just because of similarity to other members (Evans and Green, 2006, p. 29). This is the case of the GAME category, which – according to Wittgenstein (1978) – is

²⁵ I use capital letters for ‘Cognitive Linguistics’ to mark it as a separate school of linguistics and distinguish it from ‘cognitive linguistics’ (lower case) understood as a study of language as a mental phenomenon. ‘Cognitive linguistics’ understood in such a way includes both ‘Cognitive Linguistics’ (upper case) and Generative Grammar. See Geeraerts and Cuyckens (2007, p. 4).

not characterized by a single attribute. Wittgenstein (1978) remarked that the category GAME does not have a set of common features, e.g., ball-games, card-games or board-games share some features but not one unique bundle: “[...] we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail” (Wittgenstein, 1978 after Taylor, 1995, p. 39). In this way, Wittgenstein (1978) spotted the first problem with the definitional approach to categorization which is trouble of arriving at definitions for some categories and existence of exceptions to formulated definitions (Evans and Green, 2006, p. 253). Still, one can spot similarities between different types of games and in this way construct a cluster of members that exhibit family resemblance.

The next step in the development of prototype theory was “the extension of the prototype concept from word meanings to linguistic objects” since “[...] not only do linguistic forms symbolically stand for conceptual categories, linguistic forms themselves constitute categories” (Taylor, 1995, p. 174). Traditional definitions of parts of speech started to be revised with a focus on gradience and fuzziness of grammatical categories (Lakoff, 1970; Ross 1972 after Taylor, 1995, pp. 187–188).²⁶ Grammatical categories were seen as having similar structure, with fuzzy boundaries, to conceptual categories connected with content words (Langacker, 1987 after Evans and Green, 2006, p. 555). Therefore, according to Taylor (1995, p. 196), “[g]rammatical categories have a prototype structure, with central members sharing a range of both syntactic and semantic attributes. Failure of an item to exhibit some of these attributes does not of itself preclude membership.” A similar way of reasoning is followed by Lunn (1989), who tried to account for the indicative/subjunctive distinction by means of a prototype of assertability.

Lunn (1989) offered a prototype analysis of the subjunctive mood in Spanish to show “how categories of unassertable information are related via their negative relationship to a prototype of assertability” (p. 687). The starting point of Lunn’s (1989) analysis was the claim put forward by many linguists, e.g., Terrell and Hooper, 1974; Klein, 1975 and Lavandera, 1983, that in Spanish the indicative mood is identified with assertion, whereas the subjunctive mood marks non-assertion. Lunn (1989) provided data from Spanish which defied the binary explanation between the assertable indicative and unassertable subjunctive; consider (1.128)–(1.133) from Lunn (1989, p. 688):

- (1.128) *No es verdad que lo tenga (pres subj).* (Spanish)
 ‘It’s not true that he has it.’
- (1.129) *Te lo explicaré cuando vengas (pres subj)*
 ‘I’ll explain it to you when you come.’
- (1.130) *Queríamos que nos lo vendieran (past subj).*
 ‘We wanted them to sell it to us.’
- (1.131) *El hecho de que lo sepa (pres subj) es deprimente.*
 ‘The fact that he knows it is depressing.’
- (1.132) *Es digno de destacar que el propio Papa lo alabara (past subj).*
 ‘It is worth pointing out that the Pope himself praised it.’

²⁶ See works by Langacker (2008) on prototypical nouns and verbs as well as Van Oosten (1984) on prototypical subjects.

(1.133) *Nos alegramos de que estés (pres subj) aquí.*

‘We’re happy that you’re here.’

The examples in (1.128)–(1.133) show two types of information conveyed by the subjunctive: in (1.128)–(1.130) untrue and contextually unrealized information, a typical subjunctive context, and in (1.131)–(1.133) true and real information, which – according to the binary distinction – should be marked as indicative, but still is realized as subjunctive (*ibidem*). Moreover, Lunn (1989, p. 689) stresses that the examples (1.128)–(1.130) always contain the subjunctive irrespective of the discourse environment, whereas those in (1.131)–(1.133) can also be realized as indicatives “if the information in the subordinate clause is treated as new information or is redundantly highlighted.” Lunn (1989) thus decides to go beyond the sentence level and the understanding of the mood choice as a result of semantic properties of matrix predicates and follow the accounts based on the notion of assertion. However, she stresses the necessity to “characterize subjunctivizable information” and differentiate between various degrees of assertion (“scalar contrasts”) to capture the complexity of the Spanish data.

To account for the puzzling Spanish data, Lunn (1989) elaborated on the prototype account of the indicative/subjunctive distinction and defined the subjunctive through its negative relation to the prototype of assertability. Drawing on Sperber and Wilson’s (1986) relevance theory, she connected information expressed by the indicative with relevance and assumed that “if optimal relevance is expected, it can be inferred that lesser relevance will have to be marked” (Lunn, 1989, p. 690). According to Lunn (*ibidem*), the role of the subjunctive is to signal low relevance of information: “subjunctivizable information is not irrelevant, but it is of limited usefulness in improving a hearer’s representation of the world.” In her reasoning, Lunn (1989, p. 691) interpreted assertability through the prism of optimal relevance and hence assertable information needs to bring improvement in the hearer’s world representation: “potentially assertable information must have two qualities: it must be both reliable as to truth value and informative as to news value.” In this way, “subjunctivizable information is characterized, then, by those qualities that it does not possess,” i.e., truth value and news value. Figure 2 presents the relationship between assertability, truth value and news value.

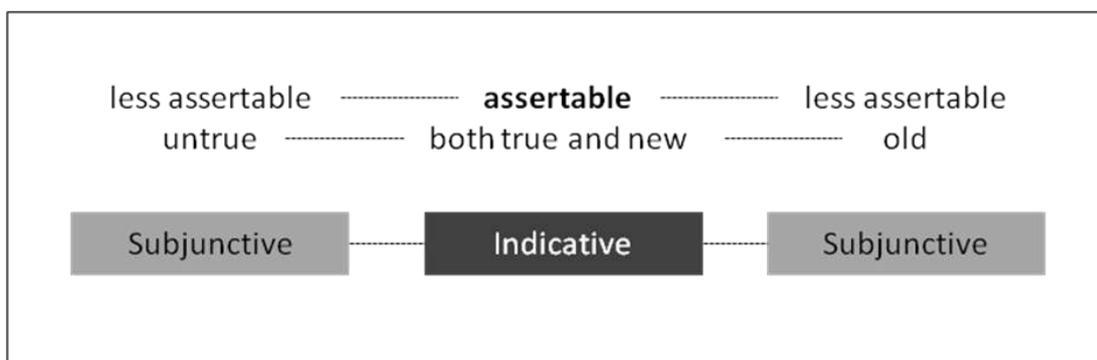


Figure 2. Assertability as a prototype category
Source: reproduced from Lunn (1989, p. 691).

As visible in Figure 2, the central members of the category of assertability should be both true and new, and as a consequence “information that is lacking in either of these qualities, that is, that is flawed in truth value or flawed in news value, is unlikely to be asserted” (Lunn, 1989, p. 691). Coming back to examples (1.128)–(1.133), one can see that (1.128)–(1.130) are flawed in truth value, whereas (1.131)–(1.133) are flawed in news value since the function of the matrix clause is to comment on the presupposed information in the subordinate clause (Borrego et al., 1985 after Lunn, 1989, p. 688). Furthermore, if there are degrees of assertability, one can easier account for the aforementioned alternations between the indicative and the subjunctive in (1.131)–(1.133), which depend on the speaker’s intensions. Therefore, as pointed out by Lunn (1989, p. 695), “[t]he Spanish mood system, as it is used by native speakers, embodies, characteristics of cognitive models such as membership gradience, motivated relatedness of noncentral members, and prototype effects.”

Lunn (1989) also provides other allegedly problematic uses of the Spanish subjunctive that support her argumentation. First, the use of the *-ra* past subjunctive in journalism to mark known information and its “lack of newsworthiness”: “[a]nother instructive contrast is that between the use of the indicative to encode headline information, and the subjunctive to encode the same information when it appears in the following text” (p. 693). Second, Lunn (1989, p. 695) shows the gradience of assertion in Spanish in which the present indicative encodes the strongest assertion and the *-ra* past subjunctive the weakest assertion, but there are also intermediate levels of assertion conveyed by the conditional form. Third, the concessive conjunction *aunque* ‘although’ can introduce either the indicative or the subjunctive: “a subjunctive clause introduced by *aunque* can have – depending on a context – either of the central meanings of the subjunctive: true but uninformative, or untrue and therefore uninformative” (Lunn, 1989, p. 697).

Lunn’s (1989) construct of the prototype of assertability is a very useful tool for describing and explaining the distribution of indicative and subjunctive clauses. Escaping the binary distinction into assertable indicative and unassertable subjunctive, she offered a scalar approach that could accommodate more nuanced usage of moods. In her account, mood is described in relation to assertability understood as a prototype category, which exhibits the aforementioned prototype effects:

- a) lack of a single set of criteria: the central member of the category is realized by the indicative clauses, which have two features: [true information] and [new information]; however, lack of any of the features does not entail exclusion from the category, but weaker assertability and peripheral membership;
- b) typicality effects: assertability as a prototype category is characterized by degrees of typicality, which explains the scalar assertability of indicative, subjunctive and conditional forms.

In the next section, I will present a proposal based on mental space theory, which can be seen as complementary to Lunn’s (1989) findings.

1.3.2.2 Mental space theory and the indicative/subjunctive distinction (Majías-Bikandi, 1994; Dam-Jensen, 2011)

Mental space theory was developed in the 1980s by its main theoretician Gilles Fauconnier in two fundamental books *Mental Spaces* (1994; first published in French in 1984) and

Mappings in Thought and Language (1997) (Evans and Green, 2006, p. 368). According to Fauconnier (1994 after Evans and Green, 2006, p. 368), language provides partial instruction or prompts that stimulate the construction of meaning. Thus, meaning construction is a complex process in which words and grammatical constructions serve as a starting point for richer and more detailed conceptualizations (*ibidem*). Fauconnier (1994 after Evans and Green, 2006, p. 368) divided meaning construction into two processes: “(1) the building of mental spaces; and (2) the establishment of mappings between those mental spaces.” In his theory, mental spaces are “[...] very partial assemblies constructed as we think and talk for purposes of local understanding and action. They contain elements and are structured by frames and cognitive models.” In other words, meaning arises due to building mental spaces and establishing mapping relations between them based on a local discourse context (Evans and Green, 2006, p. 368). As such, “mental spaces are regions of conceptual space that contain specific kinds of information” (Evans and Green, 2006, p. 369).

According to Fauconnier (2007, p. 370), the role of mood is “to indicate distinctions in space accessibility.” To show that, Fauconnier (2007, p. 370) draws comparisons between an English sentence in (1.134) and its French indicative and subjunctive counterparts in (1.135) and (1.136):

(1.134) *Diogenes is looking for a man who is honest.*

(1.135) *Diogène cherche un homme qui est honnête.* INDICATIVE (French)

(1.136) *Diogène cherche un homme qui soit honnête.* SUBJUNCTIVE

The English sentences in (1.134) can have two interpretations (Fauconnier, 2007, pp. 370–371): a nonspecific interpretation in which any man that is honest will do; a specific interpretation in which Diogenes is looking for a specific honest man. These two interpretations arise due to two different mappings between mental spaces. What is crucial is that French equivalents differ in interpretation possibilities. The indicative version in (1.135) allows for both specific and nonspecific interpretation and thus for two different mappings, whereas the subjunctive version allows only for the nonspecific reading and hence one mapping possibility (*ibidem*).

Following Fauconnier’s ideas, Majías-Bikandi (1994) uses the intension-based notion of assertion and the framework of mental spaces to account for the distribution of the indicative and the subjunctive in complement clauses in Spanish. Drawing on Terrell and Hooper’s (1974) study, Majías-Bikandi (1994, p. 892) assumes the correlation between assertion and the distribution of indicative and subjunctive complements: asserted propositions are expressed by indicative clauses, whereas non-asserted propositions are expressed by subjunctive clauses. However, what is contributed by Majías-Bikandi (1994, p. 892) is the understanding of the notion of assertion, which is based on communication-intention: “a speaker asserts a proposition P when the intention of the speaker is to indicate that P describes the world as s/he or some other individual perceives it.” In this sense, a proposition is asserted not when it is true, but when the speaker intends to present it as part of “some individual’s view of the world” (*ibidem*). Furthermore, Majías-Bikandi (1994, p. 894) decides to represent the speaker’s knowledge of the world by means of mental spaces, stating that “for any person *a* there is domain $R(a)$ that contains the propositions that describe

what the speaker believes is *a*'s view of reality"; consider the following example (from Majías-Bikandi, 1994, p. 894):

(1.137) *Peter believes that Susan is sick.*

By uttering (1.137), the speaker intends to convey that in Peter's view of the world, *Susan is sick*. Thus the proposition expressed by the embedded clause is asserted according to Majías-Bikandi's intention-based definition of assertion. Majías-Bikandi (1994, p. 895) calls the domains representing individual's knowledge mental spaces and provides the following illustration of the relationships between them and a proposition; see Figure 3.

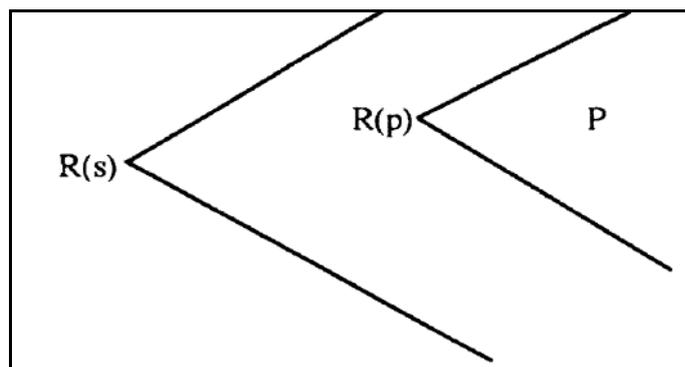


Figure 3. Relations between mental spaces for the sentence *Peter believes that Susan is sick*
Source: reproduced from Majías-Bikandi (1994, p. 895)

As visible in Figure 3, proposition *Susan is sick* is a part Peter's mental space $R(p)$, which is embedded in the speaker's mental space $R(s)$. What is crucial is that the relationship between mental spaces should not be confused with the relationship between sets and hence if P (proposition) belongs to $R(p)$, it does not mean that it also belongs to $R(s)$ in set-theoretic terms. If that were the case, the sentence in (137) would mean that both Peter and the speaker believe that *Susan is sick* (Majías-Bikandi, 1994, p. 901, note 9). What follows is the following definition of assertion (from Majías-Bikandi, 1994, p. 895):

(1.138) Assertion

“[A] speaker asserts a proposition P when the speaker intends to indicate that P is contained in some space R , that is, when the speaker intends to indicate that P provides information about some individual's view of reality.”

The model developed by Majías-Bikandi (1994) allows accounting for the examples explained by Terrell and Hooper (1974),²⁷ but also those that clearly defied their account; consider (1.139) (from Majías-Bikandi, 1994, p. 896):

(1.139) *Pedro se ha dado cuenta de que tienes razón.* INDICATIVE COMPLEMENT
‘Peter has realized that you are right.’ (translation from Spanish – MO)

The embedded proposition in (1.139) is not asserted but logically presupposed as the negation of the whole sentence does not influence its truth value (Terrell and Hooper, 1974 after

²⁷ Examples and explanations can be found in Section 3.1 of Majías-Bikandi's (1994) article. At this juncture, I will only concentrate on the examples problematic for Terrell and Hooper's (1974) account, but accounted for by Majías-Bikandi's (1994).

Majías-Bikandi, 1994, p. 901, note 5). As such, it should be realized as subjunctive, but it is the indicative that shows up in the subordinate clause in (1.139). Still, this case is predicted by Majías-Bikandi's (1994, p. 897) account as the speaker's intention in (1.139) is to convey that the embedded proposition is true for Pedro; thus P is contained in R(p). The conclusion reached by Majías-Bikandi (1994, p. 897) was that there is a correlation between assertion (defined as in 1.138) and the indicative and the non-assertion and the subjunctive, but there is no correlation between presupposition and the subjunctive and presupposition can be compatible with the indicative.

Majías-Bikandi's (1994) account also provides a neat explanation for the problematic case of the verb *creer* ('to think/to believe'); consider (1.140) (from Majías-Bikandi, 1994, p. 894):

- (1.140) *Creo que María está enferma.* INDICATIVE COMPLEMENT
 'I think that Maria is sick.' (translation from Spanish – MO)

Since *creer* selects for an indicative clause, there needs to be an explanation for the assertion of the indicative complement. Nonetheless, as Majías-Bikandi's (1994, p. 894) noted, *creer* indicates "a certain degree of uncertainty," but still the complement is asserted. According to his intention-based definition of assertion, uncertainty and assertion can go together owing to a special configuration of spaces in his model. Recall that in his account, the mental space of the speaker R(s) is a parent space, which serves as a basis of the evaluation of all statements (Majías-Bikandi, 1994, p. 898). Consequently, when the speaker utters *Mary is sick*, it means that the speaker believes that *Mary is sick* as all statements are evaluated relative to the parent space, which is in this case the mental space of the speaker R(s) (*ibidem*). In other words, statements are always subjective because they describe the world in the way the speaker perceives it. In this view, in (1.140) the speaker makes "explicit what is implicit whenever an assertion is made" (*ibidem*).

Yet another interesting example, or rather a pair of examples, which is valid for the present discussion is the difference in Spanish between selectional properties of commissive verbs, like *prometer* ('to promise), and volitional verbs, like *querer* ('to want'), which on the surface look similar; see (1.141) and (1.142) (from Majías-Bikandi, 1994, p. 897):

- (1.141) *Quiero que María venga mañana.* SUBJUNCTIVE COMPLEMENT
 'I want Maria to come tomorrow.' (translation from Spanish – MO)
 (1.142) *Prometo que iré a trabajar mañana.* INDICATIVE COMPLEMENT
 'I promise that I will go to work tomorrow.' (translation from Spanish – MO)

According to Majías-Bikandi (1994, p. 897), the complement proposition in (1.142) is asserted in the same way as "a simple sentence in the future tense," i.e., the speaker intends to make a claim about the future and assumes some authority or control over the future. On the other hand, in (1.141) the speaker has no control over Mary's behavior and can only express a wish about tomorrow. Still, Majías-Bikandi (1994) does not explicitly state in what sense his mental space theory account explains the difference between (1.141) and (1.142). It seems that the lexical meaning of *prometer* ('to promise'), which suggests the speaker's – and the matrix subject in this case – control over the future, is a prompt for the configuration of mental spaces in which the speaker's mental space R(s) serves as a parent space relative to

which the embedded proposition is evaluated. To put it differently, the speaker in (1.142) asserts the embedded proposition by indicating that he or she has the control over the future event and hence the proposition belongs to his or her view of the reality.

Dam Jensen (2011) also refers to mental space theory to account for the distribution of indicative and subjunctive complements in Spanish. Similarly to Majías-Bikandi (1994), Dam Jensen (2011, p. 60) rejects the distribution account based on assertion and non-assertion understood in the sense of truth-conditional semantics and assumed that “meaning is constructed mentally by interlocutors on the basis of information from linguistic expressions in combination with information from context.” What follows is her view on the category of mood: “the meaning of mood is established in an interpretive process on the basis of information from the modal morphemes and the context in which they occur” (Dam Jensen (2011, p. 57). More precisely, Dam Jensen (2011, p. 61) draws on Majías-Bikandi’s proposals and treats mood as a marker whose role is to control the flow of information between spaces. Then she attributes the following instructional values to the indicative and the subjunctive (cited literally from Dam Jensen, 2011, p. 61):

- “Indicative: Locate the situation created by the verb phrase relative to reality space.
- Subjunctive: Do not locate the situation created by the verb relative to reality space.”

In her account reality space is understood as a “speakers’ mental representation of reality,” which refers to speakers’ knowledge of the world (Dam Jensen, 2011, p. 61). As a result, if an utterance is interpreted relative to reality space, there is a mental connection between a reality space and an utterance situation; the role of the indicative then is to establish this very connection (*ibidem*).

In practice, in Dam Jensen’s (2011) account the interpretation of an embedded proposition depends on the mood value, which serves as an interpretive instruction. This process can be illustrated by the verb *creer* ‘to think/to believe’ and its selection properties in connection with the matrix negation; consider (1.143)–(1.145) (from Dam Jensen, 2011, p. 63):

(1.143) *Javier creía que estaba*_(ind) *en casa Carmen.* (Spanish)

‘Javier thought that Carmen was at home.’

(1.144) *Javier no creía que estuviera*_(sbjv) *en casa Carmen.*

‘Javier did not think that Carmen was at home.’

(1.145) *Javier no creía que estaba*_(ind) *en casa Carmen.*

‘Javier did not think that Carmen was at home.’

As Dam Jensen (2011, p. 63) noted, *creer* exhibits an unstable behavior with respect to selectional properties: when unnegated it selects for the indicative (1.143); when negated, it can select for the subjunctive (1.144) and the indicative (1.144). As a result, different mood values allow for different interpretations: the indicative in (1.143) locates the embedded proposition relative to reality space and thus it assumed to be true by the speaker; the subjunctive in (1.144) shows that the speaker does not believe in the embedded proposition; in (1.145) the embedded proposition is considered factual, but the matrix negation shows that the speaker did not believe it in the past (*ibidem*). However, it must be noted at this point that Dam Jensen’s (2011) account is to some extent circular: on the one hand, the appearance of

indicative or subjunctive morphology gives instructions whether or not a proposition should be located relative to reality space, and, on the other hand, specific space configurations are properties that differentiate between the indicative and the subjunctive.

Another problem that Dam Jensen (2011) points out is the case of double selection of some Spanish predicates as illustrated by (1.146a) and (1.146b):

- (1.146) a. *Dice que vienen*_(ind). (Spanish)
'He says that they will come.'
b. *Dice que vengan*_(sbjv).
'He says that they must come.'

As shown in (1.146), the verb *decir* ('to say') can select for both the indicative complement (1.146a) with a reporting interpretation and the subjunctive complement (1.146b) with a volitional interpretation (Dam Jensen, 2011, p. 58). According to Dam Jensen (*ibidem*), this shows that "mood in Spanish seems to be subject to (semantic) government in some cases and to speakers' selection in others."

Overall, Dam Jensen (2011) provides an instructional definition of the indicative and the subjunctive based on the instructional values of both moods that guide the dynamic process of meaning construction. She concedes however that her distinction is sketched on a high level of abstractness as according to her "the meaning of a grammatical item is always the same", i.e., "grammatical items provide univocal and constant information as an input to the interpretive process of the addressee" (Dam Jensen, 2011, pp. 65, 66). Therefore, the indicative/subjunctive distinction based on instructional values, on the one hand, must be univocal so that the indicative and the subjunctive have their unique interpretive values, but, on the other hand, it needs to be general in order to account for a variety of indicative/subjunctive phenomena. What is also significant is that Dam Jensen (2011, p. 66) concludes that the instructional meaning of the subjunctive is more general than that of the indicative and that the interpretation of the subjunctive requires more contextual clues. In this sense, the subjunctive can be seen as the negative counterpart of the indicative:

"[...] embedded clauses in the subjunctive can be subordinate to expressions which generate a greater variety of meaning than the indicative: the subjunctive can be used in both factual and non-factual contexts. To account for this general meaning, its instructional value is formulated as the "negative" counterpart of the indicative. In order to decide the exact shape of the situation described, it is necessary to appeal to context. It must therefore be **the indicative which is the marked form and the subjunctive which is unmarked** [...]" (bold – MO)

In this sense, the subjunctive is depicted as a default mood used to show that an utterance situation is not interpreted relative to reality space.

1.3.2.3 Interim conclusions

At this point, it is necessary to draw some parallels between Majías-Bikandi's (1994) and Dam Jensen's (2011) accounts. First of all, they both assumed the usage-based view of language characteristic of Cognitive Linguistics and the unitary perspective on semantics and pragmatics, which together participate in the dynamic process of meaning construction.

Second, according to both studies, the indicative/subjunctive distinction is rooted in the speaker's intention to either indicate that an embedded proposition belongs to some individual's mental space (Majías-Bikandi, 1994) or give instruction whether or not an embedded proposition should be evaluated relative to reality space (Dam Jensen, 2011). Finally, as following mental space theory, both accounts rejected the understanding of the indicative/subjunctive distinction on the basis of the notion of assertion defined in truth-conditional terms.

Still, what constitutes a slight difference between the discussed studies is that Majías-Bikandi (1994) assumes a clearly dichotomous view of the indicative/subjunctive distinction in which the indicative is the mood of assertion and the subjunctive is the mood of non-assertion (assertion being defined as a relation between mental spaces). In contrast, in Dam Jensen's (2011) view, the indicative and the subjunctive are not treated as equal counterparts; the subjunctive is seen as a default mood (unmarked) and the indicative is a special (marked) mood with the instructional clue to evaluate a proposition relative to reality space.

Finally, it is not clear how Majías-Bikandi (1994) and Dam Jensen (2011) would explain the fact that some predicates can select only for the indicative or only for the subjunctive. Therefore, there must be a part of lexical meaning that blocks certain choices irrespective of the speaker's intention. At this point, it is also essential to return to Lunn's (1989) prototype of assertability (see Section 1.3.2.1). Recall that Lunn (1989) assumed a scalar approach to assertability showing different degrees of assertability for the indicative, subjunctive and conditional. Lunn's (1989) account seems promising with respect to explaining the phenomenon of double selection, i.e., predicates shifting between the indicative and the subjunctive. It may be the case the less prototypical members of the prototype of assertability are prone to alternate between mood values. As such, Lunn's (1989) study may be seen as complementary to Majías-Bikandi's (1994) and Dam Jensen's (2011) ideas.

1.4 Conclusions: Form, meaning and use

The literature review in the present chapter allowed a detailed cross-linguistic comparison between the indicative and the subjunctive, including their typological status as well as form, type, use and distribution. Furthermore, at the beginning of this chapter I offered a definition of mood, stressing that this category involves grammatical encoding of modality. Therefore, to characterize the indicative/subjunctive distinction, one needs to analyze formal exponents of both values and include the perspective of their placement within a complex sentence. The results of this comparison are shown in Table 6.

On the predicate and sentence level, the first observation one may have based on Table 6 is the very nature of the indicative and the subjunctive. That is, the indicative seems a solid linguistic object that can be used independently in root context with an independent temporal interpretation to express assertions. On the other hand, one must notice the unstable nature of the subjunctive, which is dependent on its selectors or licensors and defective in the sense of temporal interpretation. Secondly, the indicative–subjunctive opposition appears very imbalanced since the subjunctive simply covers the whole variety of non-indicative meanings and uses. The facts in Table 6 can be used as a diagnostic tool for the subjunctive in Polish and English. As already mentioned, scholarly traditions differ to great extent with respect to

mood system descriptions. Therefore, these cross-linguistic observations can give intralinguistic insights into grammar of languages in which there is no agreement on the modal status of some structures.

Table 6. Typological characteristic of the indicative/subjunctive distinction

Feature	Indicative	Subjunctive
<i>Typological category</i>	Realis	Irrealis
<i>Modality</i>	Declarative (non-modal)	Propositional, event
<i>Markedness</i>	Unmarked	Marked
<i>Form</i>	Verbal paradigm, complementizer	Verbal paradigm, complementizer, particle
<i>Type</i>	Not applicable	Intensional, polarity
<i>Distribution</i>	Root contexts, matrix and subordinate clauses	Predominantly subordinate clauses (adverbial clauses, relative clauses and lexically selected complement clauses)
<i>Use</i>	Assertive	Propositional/epistemic (speculative, reported, negative, interrogative, presupposed, future, conditional, indefinite) Event/deontic (directive, purposive, timitive, volitive, optative, resultative, jussive)
<i>Selector</i>	Veridical verbs	Nonveridical verbs
<i>Tense</i>	Absolute/independent	Defective/dependent (sequence of tense)
<i>Domain</i>	Opaque	Transparent

Source: own review based on the literature cited in the chapter.

On the sentence level, one can pinpoint several attributes, which distinguish between the choice of the indicative and the choice of subjunctive:

- assertion: according to Terrell and Hooper (1974), if a complement is asserted, it is marked as the indicative; if it is presupposed or neither asserted nor presupposed, it is realized as the subjunctive;
- discourse center: according to Lavandera (1983), speakers use the indicative to foreground an issue and place it in the discourse center; on the other hand, the subjunctive is used for issues that cannot remain unmentioned, but still are considered marginal. Similarly, Majías-Bikandi (1998) shows that old information is marked with the subjunctive so as to remove it from the discourse focus.
- relevance: according to Wilson and Sperber (1993), mood is a form of procedural encoding used to limit inferential process and constrain interpretation. Jary (2002) specifies that the indicative encoding signals that a sentence is relevant on its own and can bring cognitive effects.

The aforementioned attributes of mood can be summed up in the featural characteristic of the indicative and the subjunctive in Table 7.

Table 7. Featural characteristics of the indicative and the subjunctive

Attribute	Indicative	Subjunctive
Assertion	+	–
Discourse center	+	–
Relevance	+	–

Source: own work based on Terrell and Hooper (1974); Lavandera (1983); Majías-Bikandi (1998); Wilson and Sperber (1993); Jary (2002).

The reviewed properties of the subjunctive on the sentence level can be verified by means of several linguistic tests. The connection between assertion and the indicative can be grasped due to the negation test, that is, if matrix predicates under negation change the truth value of an embedded clause, then they are assertive and as such should select for an indicative complement (Terrell and Hooper, 1974). On the other hand, predicates with presupposed complements are acceptable in Spanish with the phrase *el hecho de* ‘the fact that’ (*ibidem*); it remains to be seen if such a test works in other languages (with the same or equivalent phrase). The correlation between the subjunctive and the old information can be tested with the use of indefinites and intensifiers (*tan/tanto/a* Spanish equivalents to ‘so’) (Majías-Bikandi, 1998). Specifically, subjunctive clauses in Spanish – as carriers of old information – sound awkward with indefinite phrases, which are supposed to introduce new discourse referents. In contrast, the intensifier *tan* is not compatible with indicative complements since they introduce new information and *tan* has an anaphoric nature (*ibidem*). Yet another test is connected with the use of parenthetical verbs. According to Jary (2002), subjunctive-selecting predicates in Spanish cannot have the parenthetical reading, which is due to the subjunctive being not “relevant in its own right” (*ibidem*). All those linguistic tests may be language-specific, but still one needs to apply them to other languages because they pertain to more general properties of the subjunctive.

The sentence level observations are also vital in the context of double selection or so-called “areas of instability.” Already Terrell and Hooper (1974) point out that presupposed predicates in Spanish are not stable with respect to their selectional properties, that is, mental predicates that select for the indicative instead of the subjunctive and comment predicates which select for the subjunctive, but still some users complement them with indicative clauses. Terrell and Hooper (1974) also show predicates which systematically select for both complements with a change in meaning. Such alternations include the following pairs of predicates: report/imperative, report/comment, assertion/doubt, report/assertion, comment/imperative and doubt/imperative. In this context, pragmatic accounts can explain both erratic alternation and systematic alternations as they treat mood values not as reflexes of matrix predicates but rather elements of “matrix-subordinate compounds” (Jary, 2002) in which a mood value functions as a procedural encoding or an illocutionary-force indicator which picks an appropriate interpretation of the main clause predicate. Needless to say, such double selection phenomena are expected to exist in Polish and English.

Finally, one needs to address the issue of markedness since in this respect there are significant difference between morphosyntactic and pragmatic accounts. As already mentioned, in typology it is the indicative that is considered unmarked and the subjunctive that is seen as marked (Greenberg, 1966 after Croft, 1990). This follows from several

linguistic criteria, such as the number of morphemes, the number of distinct inflectional forms and the number of grammatical contexts (*ibidem*). In contrast, Siegel (2009) and Dam Jensen (2011) suggest that the subjunctive is an unmarked default option which is applied whenever the marked indicative is ruled out. Still, typological findings exclude such a possibility since this would mean that the indicative across languages should have more morphemes and more inflectional forms than the subjunctive and should appear in fewer grammatical contexts than the subjunctive, which is not the case. Moreover, Quer (2009) shows that the subjunctive is meaningful and contributes to the interpretation of a sentence. It seems that Siegel's and Dam Jensen's proposals stem from a different understanding of the term 'markedness.'

In the next chapters I will focus on Polish and English data, describing mood systems in these languages. Based on descriptive grammars, I will pinpoint structures which may constitute subjunctive realization in Polish and English and use the criteria presented in this chapter to verify their subjunctivehood.

CHAPTER 2

SUBJUNCTIVE IN THE MOOD SYSTEM OF POLISH

The aim of the present chapter is to analyze the mood system of Polish and identify structures that correspond to the typological category of the subjunctive extensively described in the previous chapter. I start with a purely descriptive presentation of the mood system in Polish based on the structuralist accounts of Polish linguists (see Section 2.1.1). Then I show that *żeby*-clauses, problematic for traditional-grammar descriptions, fulfill a number of subjunctive criteria (see Sections 2.1.2–2.1.7). My diagnostic is divided into three levels of analysis, which cover aspects of meaning and form. First, I consider the semantic level and discuss the issues of *żeby*-clauses' selectors, subjects' reference within complex sentences with *żeby*-clauses and their temporal properties (see Section 2.2). Second, I move from the sentence level to the utterance level to have a broader picture of the meaning of *żeby*-clauses and discuss pragmatic properties, such as aspects of assertion, discourse strategies and relevance of information (see Section 2.3). In this part I present the results of my corpus study of predicates selecting for *że-* and *żeby*-clause. Finally, I scrutinize the morphosyntactic aspects of *żeby*-clauses with a special focus on long-distance phenomena (see Section 2.4). At this point, I show the outcomes of my grammaticality judgement study conducted to verify morphosyntactic differences between *że-* and *żeby*-clauses. The chapter ends with the summary of subjunctive *żeby*-clauses' properties as contrasted with indicative *że*-clauses.

2.1 Mood system in Polish²⁸

This section provides a traditional-grammar account of the mood system in Polish. I start with mood values attested in Polish and move to the descriptive problem with *żeby*-clauses. Further, I provide a detailed picture of *żeby*-clauses, including their distribution, functions, composition and development.

2.1.1 Traditional grammar mood values

According to traditional Polish grammars, there are three mood values in Polish: the indicative (*tryb oznajmujący/orzekający*), the conditional/subjunctive (*tryb przypuszczający/warunkowy*), the imperative (*tryb rozkazujący*) (see Nagórko, 2007, pp. 103–104; Bańko, 2012a, pp. 159–162; an example paradigm presented in Table 8). This division is based primarily on semantic criteria related to modality, that is, the speaker's attitude towards a proposition, and secondarily on syntactic criteria related to verb requirements, that is, constraints on verb types which can be used in a clause with a specific mood value (Nagórko, 2007, p. 102; Bańko, 2012a, p. 159). The indicative in Polish is connected with assertion and as such it is used to convey statements whose truth value is guaranteed by the speaker (Nagórko, 2007, p. 103). Indicative sentences are marked for tense: present, past or future; consider (2.1)–(2.3):

²⁸ Some parts of this section are based on my earlier article; see Orszulak (2016a). I provide in-text references to this article in relevant places.

- (2.1) *Dzisiaj cały dzień sprzątam mieszkanie.*
 today whole day clean.PRS.1SG flat
 ‘All day today I am cleaning my flat.’
- (2.2) *Spotkaliśmy się wczoraj ze znajomymi.*
 meet.PST.PTCP.1PL REFL yesterday with friends
 ‘We met our friends yesterday.’
- (2.3) *Jutro pojedziemy²⁹ na wycieczkę.*
 tomorrow go.FUT.1PL on trip
 ‘Tomorrow we will go on a trip.’

As visible in (2.1)–(2.3), the propositions are characterized for absolute tense and as such compatible with present-, past- and future-time expressions, e.g., *dzisiaj* ‘today,’ *wczoraj* ‘yesterday’ and *jutro* ‘tomorrow’. Marginally, the indicative can be used to express requests; see (2.4) (from Bańko, 2012a, p. 162):

- (2.4) *Pan podpisze, tutaj, panie dyrektorze.*
 sir sign.PRS.PFV.3SG here sir director
 ‘Mr Director, sign here.’

The conditional/subjunctive is used to describe possible and unreal situations (Nagórko, 2007, p. 104). The formal marker of this mood value is the agglutinative particle *by*, which can be adjoined to a verb, adjoined to a complementizer (more in Section 2.1.2) or it can move around a clause (Nagórko, 2007, p. 104; Migdalski, 2016, p. 168). Bańko (2012a, p. 161) differentiates between two forms of the conditional/subjunctive: the potential conditional (*tryb warunkowy potencjalny*) and the unreal conditional (*tryb warunkowy nierzeczywisty*); compare (2.5) and (2.6) (*ibidem*):

- (2.5) *Gdy-by³⁰ mnie zaprosili, to by-m przyszedł.*
 if-COND/SBJV me invite.PST.PTCP.VIR thus COND/SBJV-1SG come.PST.PTCP.M
 ‘If they invited me, I would come.’
- (2.6) *Gdy-by mnie zaprosili, to był-by-m przyszedł.*
 if-COND/SBJV me invite.PST.PTCP.VIR thus be.PST.PTCP.M-COND/SBJV-1SG
 come.PST.PTCP.M
 ‘If they had invited me, I would have come.’

Example (2.5) illustrates the potential conditional, which includes the form of the past tense verb (*l*-participle³¹) and the particle *by*, referring to event possible in the present or in the

²⁹ The form *pojedziemy* ‘we will go’ is morphologically present, expressing the perfective aspect. However, it has a future reference and for simplicity I mark it as FUT. Therefore, I will mark non-past (perfective) and present (imperfective) forms (see Table 8) as FUT if they have a future reference.

³⁰ According to the rules of Polish orthography, the word *gdyby* is written together; however, I used the convention with a hyphen to highlight the conditional/subjunctive *by* under discussion. In general, the particle *by* is written together, i.e., as one word without spaces, with verb forms marked for person, complementizers and other particles (see Karpowicz, 2012, pp. 97–98).

³¹ It is disputable if *l*-participle is indeed originally past since according to Migdalski (2006, p. 33) it has no temporal meaning, but rather a resultative interpretation. In contrast, Fisiak et al. (1978) and Tajsner (1999) argue that *l*-participle is specified for past tense. In the present study I treat *l*-participle synchronically as past

future (Zawisławska, 2006c, p. 281; Nagórko, 2007, p. 104). On the other hand, the sentence in (2.6) shows the unreal conditional with the complex periphrastic form, known as the pluperfect, referring to events not realized in the past in the sense of missed opportunities (*ibidem*). In the conditional sentences of the type presented in (2.5) and (2.6), the conditional/subjunctive particle *by* is attached to the complementizer and cannot move within the clause.³² However, outside such contexts, as already mentioned, the particle *by* can move; see (2.7):

- (2.7) a. *Kupili-by-śmy / By-śmy kupili*
 buy.PST.PTCP.VIR-COND/SBJV-1PL COND/SBJV-1PL buy.PST.PTCP.VIR
najnowszą wersję tego oprogramowania, ale nie mamy pieniędzy.
 newest version this software but NEG have.PRS.1PL money
 ‘We would buy the newest version of this software, but we don’t have money.’
- b. **Gdy mnie zaprosili-by,*
 if-COND/SBJV me invite.PST.PTCP.VIR-COND/SBJV
to był-by-m przyszedł.
 thus be.PST.PTCP.M-COND/SBJV-1SG come.PST.PTCP.M
 ‘If they had invited me, I would have come.’

As shown in (2.7a), the particle *by* can be adjoined to the verb together with the person-number ending or appear autonomously from the verb together with inflectional endings.³³ In contrast, in (2.7b) with the complementizer *gdy* the particle *by* cannot be attached to the verb (also compare with the grammatical version in (2.6)).

Apart from conditional and hypothetical sentences, the conditional can also be used to express polite requests; see (2.8) (from Bańko, 2012a, p. 162):

- (2.8) *Nie poszedł-by-ś na spacer?*
 NEG go.PST.PTCP.M-COND/SBJV-2SG for walk
 ‘Would you like to go for a walk?’

Lastly, the imperative is used to express wishes, requests and orders (Nagórko, 2007, p. 103). The main form of the imperative is the second person singular or plural of the verb, which is usually perfective in not negated clauses and imperfective in negated clauses (Nagórko, 2007, p. 103; Bańko, 2012a, p. 160); cf. (2.9) and (2.10) (from Bańko, 2012a, p. 160):

since in root contexts it has past reference if it is not combined with other auxiliaries (like the conditional/subjunctive *by* or the future auxiliary).

³² Note that this restriction is applied only to the antecedent clause within a conditional sentence, where one can find the complex complementizer *gdyby* (if-COND/SBJV), whereas in the main clause the particle *by* can move outside the second position in a clause (Tomaszewicz, 2012 after Migdalski, 2016, p. 169). For instance:

- (i) *Gdy-by-m chciał, to by-m kupił ten samochód.*
 if-COND/SBJV-1SG want.PST.PTCP.M thus COND-SBJV-1SG buy.PST.PTCP.M this car
 ‘If I wanted, I would buy this car.’
- (ii) *Gdy-by-m chciał, to kupił-by-m ten samochód.*
 if-COND/SBJV-1SG want.PST.PTCP.M thus buy.PST.PTCP.M-COND/SBJV-1SG this car.
 ‘If I wanted, I would buy this car.’

³³ The particle *by* is adjoined to *l*-participle together with the person-number ending. Gender, however, is always expressed on the participle: forms with *-l* and *-le* for singular masculine, *-la* for singular feminine, *-ło* for singular neuter, *-li* for plural virile, and *-ly* for plural non-virile (Sadowska, 2012, p. 393). Consider also examples in Table 8.

Table 8. The Polish verb paradigm

THE INDICATIVE					
Non-past (perfective)* Singular 1. <i>znam</i> 2. <i>znasz</i> 3. <i>zna</i> Plural 1. <i>znamy</i> 2. <i>znacie</i> 3. <i>znają</i>			Present (imperfective)* Singular 1. <i>znaję</i> 2. <i>znajesz</i> 3. <i>znaje</i> Plural 1. <i>znajemy</i> 2. <i>znajecie</i> 3. <i>znają</i>		
Future Singular 1. <i>będę znawać // znawał, -a, -o</i> 2. <i>będiesz znawać // znawał, -a, -o</i> 3. <i>będzie znawać // znawał, -a, -o</i> Plural 1. <i>będziemy znawać // znawali, -ły</i> 2. <i>będziecie znawać // znawali, -ły</i> 3. <i>będą znawać // znawali, -ły</i>					
Past					
Singular					
Perfective			Imperfective		
Masculine 1. <i>znałem</i> 2. <i>znałeś</i> 3. <i>znał</i>	Feminine 1. <i>znałam</i> 2. <i>znałaś</i> 3. <i>znała</i>	Neuter 1. <i>(znałom)**</i> 2. <i>(znałoś)</i> 3. <i>znało</i>	Masculine 1. <i>znawałem</i> 2. <i>znawałeś</i> 3. <i>znawał</i>	Feminine 1. <i>znawałam</i> 2. <i>znawałaś</i> 3. <i>znawała</i>	Neuter 1. <i>(znawałom)</i> 2. <i>(znawałoś)</i> 3. <i>znawało</i>
Plural					
Perfective			Imperfective		
Virile 1. <i>znaliśmy</i> 2. <i>znaliście</i> 3. <i>znali</i>	Non-virile 1. <i>znaliśmy</i> 2. <i>znaliście</i> 3. <i>znali</i>		Virile 1. <i>znawaliśmy</i> 2. <i>znawaliście</i> 3. <i>znawali</i>	Non-virile 1. <i>znawaliśmy</i> 2. <i>znawaliście</i> 3. <i>znawali</i>	
THE CONDITIONAL/SUBJUNCTIVE					
Potential					
Singular					
Perfective			Imperfective		
Masculine 1. <i>znałbym</i> 2. <i>znałbyś</i> 3. <i>znałby</i>	Feminine 1. <i>znałabym</i> 2. <i>znałabyś</i> 3. <i>znałaby</i>	Neuter 1. <i>(znałobym)</i> 2. <i>(znałobyś)</i> 3. <i>znałoby</i>	Masculine 1. <i>znawałbym</i> 2. <i>znawałbyś</i> 3. <i>znawałby</i>	Feminine 1. <i>znawałabym</i> 2. <i>znawałabyś</i> 3. <i>znawałaby</i>	Neuter 1. <i>(znawałobym)</i> 2. <i>(znawałobyś)</i> 3. <i>znawałoby</i>
Plural					
Perfective			Imperfective		
Virile 1. <i>znalibyśmy</i> 2. <i>znalibyście</i> 3. <i>znaliby</i>	Non-virile 1. <i>znalibyśmy</i> 2. <i>znalibyście</i> 3. <i>znaliby</i>		Virile 1. <i>znawalibyśmy</i> 2. <i>znawalibyście</i> 3. <i>znawaliby</i>	Non-virile 1. <i>znawalibyśmy</i> 2. <i>znawalibyście</i> 3. <i>znawaliby</i>	
Unreal					
Singular					
Perfective			Imperfective		
Masculine 1. <i>byłbym znał</i> 2. <i>byłbyś znał</i> 3. <i>byłby znał</i>	Feminine 1. <i>byłabym znała</i> 2. <i>byłabyś znała</i> 3. <i>byłaby znała</i>	Neuter 1. <i>(byłobym znało)</i> 2. <i>(byłobyś znało)</i> 3. <i>byłoby znało</i>	Masculine 1. <i>byłbym znawał</i> 2. <i>byłbyś znawał</i> 3. <i>byłby znawał</i>	Feminine 1. <i>byłabym znawała</i> 2. <i>byłabyś znawała</i> 3. <i>byłaby znawała</i>	Neuter 1. <i>(byłobym znawało)</i> 2. <i>(byłobyś znawało)</i> 3. <i>byłoby znawało</i>
Plural					
Perfective			Imperfective		
Virile 1. <i>bylibyśmy poznali</i> 2. <i>bylibyście poznali</i> 3. <i>byliby poznali</i>	Non-virile 1. <i>bylibyśmy poznali</i> 2. <i>bylibyście poznali</i> 3. <i>byliby poznali</i>		Virile 1. <i>bylibyśmy poznawali</i> 2. <i>bylibyście poznawali</i> 3. <i>byliby poznawali</i>	Non-virile 1. <i>bylibyśmy poznawali</i> 2. <i>bylibyście poznawali</i> 3. <i>byliby poznawali</i>	
THE IMPERATIVE					
Perfective			Imperfective		
Singular 2. <i>poznaj</i>		Plural 1. <i>poznajmy</i> 2. <i>poznajcie</i>	Singular 2. <i>poznawaj</i>		Plural 1. <i>poznawajmy</i> 2. <i>poznawajcie</i>

* Non-past and present tense forms can also be used as a so-called future simple tense; then what is presented as future tense in this table would be called future complex tense (see Tokarski, 1973/2001, pp. 181, 204). According to Laskowski (1984b, pp. 128–129), the present tense covers forms which denote actions at the moment of speaking or habitual actions, whereas the non-past tense includes forms primarily used with future reference. ** Forms in brackets are potential, but rarely used in Polish.

Source: based on Laskowski (1984b, pp. 175–176).

- (2.9) *Przynieś wody!*
 bring.PFV.2SG water.GEN
 ‘Bring some water!’
- (2.10) *Nie przynoś wody!*
 neg bring.IPFV.2SG water.GEN
 ‘Don’t bring any water!’

The difference in aspect presented in (2.9) and (2.10) comes from the difference in intention: in (2.9) the speaker is interested in the result, and thus the perfective form, whereas in (2.10) the speaker is interested in prevention, compatible with the imperfective form (*ibidem*).

In a minor way, in the imperative sense one can use the first person singular verb and the third person singular verb with the particle *niech*; see (2.11) and (2.12) (from Bańko, 2012a, p. 160):

- (2.11) *Prędko, niech siostra zawoła lekarza!*
 quickly PART sister call.PST.PTCP.3SG doctor.
 ‘Sister quickly, call a doctor!’
- (2.12) *Chwileczkę, niech się zastanowię.*
 moment PART REFL think.1SG.PFV
 ‘Just a moment, let me think.’

On the formal level, moods in Polish have their specific inflectional forms which are both synthetic and analytical (Laskowski, 1984b, p. 175). The full paradigm of the Polish verb is presented in Table 8 on the basis of the verb *poznać* ‘get to know’.

Among analytical forms we can include pluperfect forms,³⁴ future-tense forms and conditional/subjunctive forms; the remaining forms are synthetic, i.e., including cumulative expressions, that is, markers expressing several grammatical values (Laskowski, 1984b, p. 184). It should also be clarified that as analytical Laskowski (1984b) actually classifies both agglutinative forms, such as past-tense forms and potential-conditional/subjunctive forms based on *l*-participle, as well as analytical, i.e., complex multi-word forms, such as future-tense forms composed of the verb *być* ‘to be’ and infinitive or *l*-participle (see Tokarski, 1973/2001, pp. 178–180).

On the general level, the Polish mood system has a clear tripartite structure divided into the indicative, the conditional/subjunctive and the imperative. The indicative is a modally unmarked mood with deictic temporal interpretation; whereas the conditional/subjunctive and the imperative are modally marked: the first expressing epistemic modality and the latter expressing deontic modality. However, the expression of modality in Polish is not only limited to morphosyntactic means since there are also lexical exponents, such as adverbs *chyba* ‘perhaps’ or *z pewnością* ‘for sure,’ and prosodic exponents, e.g., specific intonational patterns for orders (see Laskowski, 1984a, p. 132).

³⁴ Mind that alternative views exist in the literature. Borsley and Rivero (1994) propose that Polish past tense forms are in fact combinations of a past participle and a perfect auxiliary, created by means of syntactic incorporations. See also Witkoś (1998) and Migdalski (2006).

2.1.2 Problem of *żeby*-clauses

The systematic description of mood in Polish presented in the previous section encounters a problem with the classification of sentences introduced by a complementizer with the conditional/subjunctive particle *by*; see (2.13) (from Orszulak, 2016a, p. 2):

- (2.13) *Moja żona chce, że-by nasze dzieci*
 my wife want.PRS.3SG.F that-COND/SBJV our children
skończyły studia.
 complete.PST.PTCP.PL.NONVIR studies
 ‘My wife wants our children to complete their studies.’

As shown in (2.13), the particle *by* is attached to the complementizer *że* creating the complex complementizer *żeby*, which is different from other conditional/subjunctive contexts, where the particle *by* is adjoined to the verb or can appear separated from the verb; compare (2.13) with (2.7). What is important, in (2.13) the particle *by* is not only adjoined to the complementizer, and not to the verb, but also it is immovable; see (2.14) (from Orszulak, 2016a, p. 2):

- (2.14) a. **Moja żona chce, że nasze dzieci*
 my wife want.PRS.3SG that our children
skończyły-by studia.
 complete.PST.PTCP.PL. NONVIR-COND/SBJV studies
 Intended meaning: ‘My wife wants our children to complete their studies.’
- b. **Moja żona chce, że nasze dzieci by*
 my wife want.PRS.3SG that our children COND/SBJV
skończyły studia.
 complete.PST.PTCP.PL.NONVIR studiem
 Intended meaning: ‘My wife wants our children to complete their studies.’

The cases with the particle *by* immovable at the complementizer concern complement clauses and adverbial clauses introduced by *żeby* and its variants, such as *aby* and *by*, conditional clauses introduced by *gdyby* (marginally by *choćby* and *jakby*), questions introduced by *czyżby* and optative/imperative clauses introduced for example by *niechby* and *żeby* (Nagórko, 2012, p. 150). In the literature on the subject such cases pose a theoretical problem as they go across the traditional mood description in Polish. Some linguists still classify such sentences as conditional/subjunctive since they are modally marked and use past-tense verbs without past reference to convey modal distance and as such they can be treated as contextual variants of the conditional/subjunctive (Tokarski, 1973/2001, p. 202; Laskowski, 1984a, p. 135). In contrast, based on the structural segmentation criteria, other linguists label the clauses with the particle *by* adjoined to the complementizer as the indicative, whose meaning – past-tense interpretation – is neutralized by the complex complementizer *żeby*, which should be treated as an indivisible semi-lexical exponent of modal meaning (Puzinina, 1971, p. 136; the same view is shared by Nagórko, 2007, p. 104 and Bańko, 2012a, p. 162). Yet another approach to this issue is represented by Szupryczyńska (2006, p. 342), who claims that the clauses under discussion are neutral with respect to both tense and mood and their temporal and modal interpretation results from the properties of the whole construction in which they are used.

All those solutions have their problems. First, the conditional/subjunctive view at *żeby*-clauses has a problem with the synchronic analysis of *żeby*, which at present is rather seen as one indivisible unit by Polish native speakers (Puzynina, 1971, p. 135). Second, the indicative view would suggest a temporal interpretation resulting from the use of past-tense forms, which is not the case (Szupryczyńska, 2006, p. 337). Finally, the claim that *żeby*-clauses have no tense or mood values is problematic as it puts such clauses outside the mood system of Polish. The theoretical problems discussed here also translate into practical ones since, according to Gaszyńska-Magiera (1998 after Orszulak, 2016a, p. 9), there are a lot prescriptive inconsistencies in the textbooks for learning Polish as a foreign language. Therefore, in the present chapter I will try to solve at least part of the problems, showing that *żeby*-clauses can be seen as the realization of the subjunctive.

2.1.3 Distribution of *żeby*-clauses

The problem with *żeby*-clauses sketched in the previous section is rather acute as such clauses are far from being marginal in Polish. Firstly, they can be found in two major contexts: complement clauses (*zdania dopełniowe*), which are propositional complements to *verba sentiendi et dicendi*, and subject clauses (*zdania podmiotowe*), which are selected by verbs without prototypical subjects (Pisarkowa, 1972, p. 185; after Orszulak, 2016a, p. 3); consider (2.15) and (2.16) (from Nagórko, 2007, pp. 306, 308 after Orszulak, 2016a, p. 3)

(2.15) *Radził, że-by-m przyznał się do winy.*
 advise.PST.PTCP.3SG.M that-COND/SBJV-1SG plead.PST.PTCP.SG.M REFL to guilt
 ‘He advised me to plead guilty.’

(2.16) *Nie wypada, że-by-ś palił przy rodzicach.*
 NEG be.good.manners.PRS.3SG that-COND/SBJV-2SG smoke.PST.PTCP.SG.M
 next.to parents
 ‘It is not good manners for you to smoke when your parents are around.’

It must be noted, however, that in the contexts illustrated in (2.15) and (2.16) one can find other complementizers. According to Pisarkowa (1972, p. 185 after Orszulak, 2016a, pp. 3–4), this depends on a selecting verb since there are verbs selecting *żeby*-clauses, e.g., *brać* (‘to beg’), *chcieć* (‘to want’), *kazać* (‘to tell’), *pragnąć* (‘to desire’), *rozkazać* (‘to order’), *radzić* (‘to advise’), *wzywać* (‘to summon’), *zabiegać* (‘to strive’), *zachęcać* (‘to encourage’), *zezwałać* (‘to permit’), *zmuszać* (‘to force’), *zakazać* (‘to prohibit’), *żądać* (‘to demand’), *żebrać* (‘to plead’); verbs selecting clauses introduced by *żeby* and *czy* ‘if’, e.g., *uważać* (‘to mind’), *troszczyć się* (‘take care’) and verbs selecting *żeby*, *czy* and *że*, e.g., *mówić* (‘to say’), *pamiętać* (‘to remember’). Consider the following examples: (from Orszulak, 2016a, p. 4):

(2.17) *Błagał, że-by żona do niego wróciła.*
 beg.PST.PTCP.3SG.M that-COND/SBJV wife to him
 come.back.PST.PTCP.SG.F
 ‘He begged his wife to come back to him.’

- (2.18) **Błagał*, *że* *żona* *do niego* *wróciła*.
 beg.PST.PTCP.3SG.M that wife to him come.back.PST.PTCP.3SG.F
 Intended meaning: ‘He begged his wife to come back to him.’
- (2.19) *Troszczyła* *się*, *że-by* *wszyscy* *goście*
 take.care.PST.PTCP.3SG.F REFL that-COND/SBJV all guests
mieli *miejsca siedzące*.
 have.PST.PTCP.PL.VIR seats
 ‘She took care of the sufficient number of seats for all the guests.’
- (2.20) *Troszczyła* *się*, *czy nie zabraknie* *miejsc siedzących*
 take.care.PST.PTCP.3SG.F REFL if NEG lack.3SG.PRS seats
dla *wszystkich gości*.
 for all guests
 ‘She took care of the sufficient number of seats for all the guests.’
- (2.21) *Pamiętaj*, *że-by* *dzieci* *wzięły* *jutro*
 remember.IMP that-COND/SBJV children take.PST.PTCP.PL.NONVIR tomorrow
książki.
 books
 ‘Remember that children should take their books tomorrow.’
- (2.22) *Nie pamiętam*, *czy* *o tym wcześniej* *wspomniałem*.
 NEG remember.PRS.1SG if about it earlier mention.PST.PTCP.1SG.M
 ‘I can’t remember if I mentioned that earlier.’
- (2.23) *Pamiętam*, *że* *kiedyś* *najlepszy chleb* *sprzedawali* *na rynku*.
 remember.PRS.1SG that in.the.past best bread sell.PST.PTCP.3PL.VIR on market
 ‘I remember that in the past the best bread was sold on the market square.’

As visible in (2.17) and (2.18), *blagać* ‘to beg’ is compatible with *żeby*, but not with *że*. The next case of *troszczyć się* ‘take care’ shown in (2.19) and (2.20) is less restrictive as this verb is compatible with *żeby* and *czy*. Lastly, *pamiętać* ‘to remember’ has the broadest selection – it is compatible with *żeby* (see 2.21), *czy* (see 2.22) and *że* (see 2.23).

Yet another context for *żeby*-clauses is the one of negation, that is, verbs that typically select for the indicative complement introduced by *że* when negated can change into *żeby* selectors; cf. examples (2.24), (2.25) and (2.26) (from Orszulak, 2016a, p. 5):

- (2.24) *Wierzę*, *że/*żeby* *nasz zespół* *wygra*
 believe.PRS.1SG that/*that-COND/SBJV our team win.PRS.PFV.3SG
konkurs.
 competition
 ‘I believe that our team will win the competition.’
- (2.25) *Nie wierzę*, *że* *nasz zespół* *wygra* *konkurs*.
 NEG believe.PRS.1SG that our team win.PRS.PFV.3SG competition
 ‘I don’t believe that our team will win the competition.’
- (2.26) *Nie wierzę*, *że-by* *nasz zespół* *wygrał* *konkurs*.
 NEG believe.PRS.1SG that-COND/SBJV our team win.PST.PTCP.SG.M competition
 ‘I don’t believe that our team could win the competition.’

In (2.24) *wierzyć* ‘to believe’ is not negated and as such it can select only for a clause introduced by *że* ‘that’. In contrast, (2.25) and (2.26) show *wierzyć* ‘to believe’ in the negation context in which it can select for both *że-* and *żeby-* clause with a slight difference in meaning: the event described in the *żeby-* clause in (2.26) is less probable. The emergence of *żeby-* clause in (2.26) can be treated as an instance of polarity subjunctive, that is, the type of subjunctive triggered by another element, most commonly – matrix negation (see Stowell, 1993).

Finally, *żeby-* clauses can also be found in three less canonical contexts. First, *żeby* – together with its variant forms *aby* and *by* – is used to introduce purpose clauses (Nagórko, 2007, p. 312 after Orszulak, 2016a, p. 5); consider (2.27) (from Orszulak, 2016a, p. 5):

- (2.27) *Zapłaciłem bratu za kurs niemieckiego, że-by*
 pay.PST.PTCP.1SG.M brother.DAT for course German that-COND/SBJV
znalazł pracę w Niemczech.
 find.PST.PTCP.SG.M job in Germany
 ‘I paid for my brother’s German course so that he could find a job in Germany.’

It must be noted that the sentence in (2.27) is different from examples such as (2.17) and (2.19) since in (2.27) the use of *żeby-* clause is not connected with selectional properties of the matrix predicate. The second, definitely marginal, context is the use of *żeby* to introduce a relative clause as a variant of a relative pronoun (Nagórko, 2007, p. 307 after Orszulak, 2016a, p. 5); see (2.28) (from Orszulak, 2016a, p. 5):

- (2.28) *Najchętniej kupił-by-m mieszkanie, że-by*
 preferably buy.PST.PTCP.M-COND/SBJV-1SG flat that-COND/SBJV
pomieszcilo wszystkie moje książki.
 accommodate.PST.PTCP.SG.N all my books
 ‘Preferably, I would buy a flat that would accommodate all my books.’

Nonetheless, such a use of *żeby-* clause is marginal in Polish and more frequently the message in (2.28) would be conveyed by a relative clause starting with a typical relative pronoun and containing a verb with the conditional/subjunctive marker *by*; cf. (2.29) (from Orszulak, 2016a, p. 6):

- (2.29) *Najchętniej kupił-by-m mieszkanie, które*
 preferably buy.PST.PTCP.M-COND/SBJV-1SG flat that
pomieszcilo-by wszystkie moje książki.
 accommodate.PST.PTCP.SG.N-COND/SBJV all my books
 ‘Preferably, I would buy a flat that would accommodate all my books.’

The last use of *żeby-* clauses is connected with optative sentences in which *żeby* emerges in a matrix clause (Tomaszewicz, 2009, p. 231 after Orszulak, 2016a, p. 6); see (2.30) (based on Gębka-Wolak, 2010, p. 38 after Orszulak, 2016a, p. 6):

- (2.30) *Że-by // o-by // by nasze dzieci zdrowo*
 that-COND/SBJV // PART-COND/SBJV // COND/SBJV our children healthily
się chowały!
 REFL grow.PST.PTCP.PL.NONVIR
 ‘May our children thrive!’

Sentence in (2.30) shows the only context in which *żeby* appears unembedded and according to Gębka-Wolak (2010, p. 38 after Orszulak, 2016a, p. 6), it serves here as a mood operator marking the sentence as conditional/subjunctive. Alternatively, such examples may also be treated as elliptical structures, that is, the matrix clause with a verb explicitly expressing a wish, like *We wish*, *We desire* or *We want*, is omitted as the context of the situation is evident.

At this juncture, a note of comment is necessary to capture the difference between *żeby* in complement clauses and *żeby* in the remaining contexts. First, the use of *żeby* in purpose clauses and relative clauses is not imposed by the requirements of a matrix predicate but rather *żeby* in such contexts functions as a variant complementizer possible to be freely replaced by another variant: in purpose clauses by *aby* or *by* and in relative clauses by *który*. Second, *żeby* does not exclusively introduce subject clauses as the majority of them is actually introduced by the indicative complementizer *że*, e.g., predicates *wiadomo, że* ‘it is known that,’ *to dobrze, że* ‘it is good that,’ *zdarza się, że* ‘it happens that’ (see Nagórko, 2007, pp. 105–106). The case shown in (2.16) with the predicate *nie wypada* ‘it is not good manners’ is rather similar in meaning to verbs typically selecting *żeby*-complements. The only difference is that *nie wypada* does not have a prototypical subject, but the volitional/directive meaning makes it similar to *chcieć* ‘to want’ since it expresses the following message: I do not want you to do that because it is not good manners. Therefore, it seems that the core context of *żeby*-clauses is the one of complements to volitional/directive predicates for which *żeby* (or one of its variants) is obligatory. Marginally, *żeby* can appear in other irrealis contexts, usually as a variant complementizer: purpose clauses (variant to *by* and *aby*), relative clauses with conditional meaning (variant to *który*) and optatives (variant to *by* and *oby*).

2.1.4 Functions of *żeby*-clauses

Referring to Palmer’s (2001) description of subjunctive functions cross-linguistically, one can pinpoint the following functions of Polish *żeby*-clauses; first, with respect to event modality, which includes deontic modality:³⁵

– directive: used to express weak obligation

- (2.31) *Monsignore Rigaud sugerował, że-by list*
 Monsignore Rigaud suggest.PST.PTCP.3SG.M that-COND/SBJV letter
był szczegółowy.
 be.PST.PTCP.SG.M detailed
 ‘Monsignore Rigaud suggested that the letter should be detailed.’
 (NKJP, Tadeusz Breza, 1960, *Urząd*)

– purposive: used to indicate purpose or result (resultative)

³⁵ Recall from Section 1.1.2 that Palmer (2001, p. 70) includes both dynamic and deontic modality under ‘event modality’.

(2.32) *Tatuś wyszedł z domu jeszcze rano, że-by*
 daddy leave.PST.PTCP.3SG.M from home still morning that-COND/SBJV
kupić gipsowego baranka na stół wielkanocny.
 buy.INF plaster lamb for table Easter
 ‘My daddy left home early in the morning to buy a plaster lamb for our Easter table.’
 (NKJP, Sławomir Mrozek, 1965, *Opowiadania 1960–1965*)

– optative: used to express wishes

(2.33) *Młodym życzę, że-by też mieli*
 the.young. wish.PRS.1SG that-COND/SBJV also have.PST.PTCP.PL.VIR
tyle pasji, co on.
 as.much passion as he
 ‘I wish the young to have as much passion as he has.’
 (NKJP, Marta Eichler, 2010, *Gazeta Pomorska*)

– timitive: used to express fears

(2.34) *Obawiamy się, żeby sobie czegoś nie zrobił.*
 be.afraid.PRS.3PL REFL that-COND/SBJV REFL something NEG do.PST.PTCP.SG.M
 ‘We’re afraid that he might hurt himself.’
 (NKJP, Stanisław Lem, 1961, *Pamiętnik znaleziony w wannie*)

– jussive: used to indicate orders/commands

(2.35) *Pan dyrektor kazał, że-by pani zaraz*
 Sir director tell.PST.PTCP.3SG.M that-COND/SBJV Madam right.away
jechała do teatru.
 go.PST.PTCP.SG.F to theatre
 ‘The director told you to go to the theatre right away, Madam.’
 (NKJP, Tadeusz Dołęga Mostowicz, 1939, *Złota Maską*)

Second, in regard to propositional modality, that is, epistemic and evidential modality,³⁶ the use of *żeby*-clauses is mainly restricted to the negative one, i.e., in the context of matrix negation; consider (2.36):

(2.36) *Nie wierzę, że-by on potrafił podać*
 neg believe.PRS.1SG that-COND/SBJV he be.able.PST.PTCP.SG.M give.INF
choć jeden racjonalny argument.
 just one rational argument
 ‘I don’t believe that he would be able to give one valid reason.’
 (NKJP, Kinga Dunin, 1998, *Tabu*)

However, it must be noted that the negative use is limited to a specific group of verbs, usually assertive predicates, whose negation entails lack of the speaker’s or the subject’s commitment to a proposition. Other epistemic uses with *żeby*-clauses are not attested in Polish, but the conditional/subjunctive particle *by* itself can appear in conditional and speculative contexts.

³⁶ Recall from Section 1.1.2 that Palmer (2001, p. 70) under ‘propositional modality’ includes event modality and evidential modality.

2.1.5 Composition of *żeby*-clauses

The distributional and functional picture must be supplemented with an analysis of formal properties of *żeby*-clauses and of the complementizer *żeby* as a subordinator. As already mentioned, *żeby*-clauses are introduced by the complementizer *żeby*, which diachronically is a complex complementizer composed of the indicative complementizer *że* (equivalent to English *that*) and the conditional/subjunctive particle/marker *by* (Puzynina, 1971, p. 135; Sadowska, 2012, p. 404). However, from the synchronic perspective, *żeby* can be treated as one item, which is not seen by contemporary Polish native speakers as a complex of the indicative complementizer and the conditional/subjunctive marker (Szupryczyńska, 2006, p. 336). Therefore, synchronically *by* in *żeby* is not an inflectional morpheme, but a part of lexicalized complementizer to which person-number endings can agglutinate; see (2.37) (from Sadowska, 2012, p. 455 after Orszulak, 2016a, p. 3):

(2.37) <i>żeby-m</i>	‘that I would’	(1SG)
<i>żeby-ś</i>	‘that you would’	(2SG)
<i>żeby-Ø</i>	‘that he, that she, that it, that they would’	(3SG/PL)
<i>żeby-śmy</i>	‘that we would’	(1PL)
<i>żeby-ście</i>	‘that you would’	(2PL)

The person-number endings shown in (37) cannot be separated from *żeby* and expressed on the verb in the embedded clause. In this way, *żeby* is similar to another complementizer *gdyby*, which is used in conditional sentences (see example (2.5) and (2.6)). *Gdyby* also contains the conditional/subjunctive particle *by* and obligatorily carries person-number endings (see the examples in footnote 32). Nonetheless, as spotted by Szupryczyńska (2006, pp. 339–340), *gdyby* can appear in both potential conditional and unreal conditional sentences, that is, with past-tense forms and pluperfect forms; cf. (2.5) and (2.6). In contrast, *żeby*-clauses as complement clauses to certain predicates are not compatible with pluperfect; consider (2.38) and (2.39) (from Szupryczyńska, 2006, p. 340):

(2.38) * <i>Chciałem,</i>	<i>że-by-ście</i>	<i>byli</i>	<i>wiedzieli.</i>
want.PST.PTCP.1SG.M	that-COND/SBJV-2PL	be.PST.PTCP.VIR.PL	know.PST.PTCP.VIR.PL
Intended meaning: ‘I wanted you to know about it.’			
(2.39) ? <i>Chciałem,</i>	<i>że-by-ście</i>	<i>byli</i>	<i>wiedzieli,</i>
want.PST.PTCP.1SG.M	that-COND/SBJV-2PL	be.PST.PTCP.VIR.PL	know.PST.PTCP.VIR.PL
<i>zanim</i>	<i>wyjedziecie.</i>		
before	leave.PRS.IPFV.2PL		

As shown in (2.38) and (2.39), the use of *żeby*-clauses selected by *chcieć* ‘to want’ with pluperfect verb forms gives degraded results; although Szupryczyńska (2006, p. 340) states that adding an adverbial time clause can improve such sentences (see (2.39)).

Another important note about the complementizer *żeby* concerns its variants. *Żeby* has variants morphologically connected with the indicative *że*, such as *ażeby* and *izby*, as well as variants derived from other base forms, such *aby*, *by* and *coby*. According to Tomaszewicz (2009, p. 222 after Orszulak, 2016a, p. 3), the forms differ in stylistic effects: *aby* and *by* are more formal, *izby* and *ażeby* are archaic and *coby* is colloquial; as well as in contextual preferences: for example, *coby* sounds good for purpose clauses but not for complement

separate groups of entities for each clause. I will return to the problem of subject reference and control phenomena in further discussion.

At this juncture, a short note should also be made about the connection between the infinitive and the conditional/subjunctive mood in Polish. Infinitival forms are found in many irrealis contexts in Polish, for example, hypothetical or optative sentences; cf. (2.44) and (2.45) (from Gębka-Wolak, 2010, p. 29):

(2.44) *Cieżko by znaleźć sponsora.*
 be.difficult COND/SBJV find.INF sponsor
 ‘It would be difficult to find a sponsor.’

(2.45) *Odpocząć by sobie wreszcie!*
 rest.INF COND/SBJV REFL at last
 ‘I would rest at last.’

In (2.44) and (2.45) we can see a sequence of the infinitive + *by*, where the particle *by* should appear in the vicinity of the infinitive; preceding the infinitive or following it (*ibidem*). Still, this does not mean that in Polish the infinitive has a mood value, that is, the infinitive inflects for mood. In Gębka-Wolak’s opinion, such sequences should be treated as constructions with two separate lexemes, where the particle *by* serves as a mood operator (Gębka-Wolak, 2010, p. 37). This shows that in Polish the infinitive can appear as part of modal constructions,³⁹ which justifies its presence in *żeby*-clauses. A similar line of reasoning is followed by Topolińska (2010, p. 303), who treats the infinitive in *żeby*-clauses as a positional variant of the subjunctive understood by her as a construction found mainly in subordinate clauses complementing certain predicates, whose function is to express counterfactual meaning. Such a coincidence of the subjunctive and the infinitive is found in many Balkan and Slavic languages (*ibidem*).

2.1.6 Development of *żeby*-clauses in Polish

A diachronic review of *żeby*-clauses in Polish needs to start with the origins of the conditional/subjunctive in Polish. Polish modal structures were directly taken from the Proto-Slavic language, whose conditional/subjunctive mood had a two-part structure based on the active past participle II (*participium praeteriti activi secundum*) and the auxiliary *byti* (Długosz-Kurczabowa and Dubisz, 2006, p. 315). It should be noted that *l*-participle in Old Church Slavonic was used with the finite form of the auxiliary verb ‘to be’ as an element of compound tenses (Migdalski, 2006, p. 30). As such *l*-participle emerged in the contexts of relative tense interpretation, i.e., interpretation of temporality from the speaker’s perspective (Kowalska, 1976, p. 20 after Migdalski, 2006, p. 30). In the Old Polish Period (or even earlier) this conditional/subjunctive structure was modified: the participle remained, but the

³⁹ Not in all modal construction because it is impossible to use the infinitive (with any finite form) in conditional sentences in Polish; see (v) (from Gębka-Wolak, 2010, p. 35):

(v) **Jeśli-by trzymać się litery prawa, wszystkie spółki węglowe postawić by w stan upadłości.*
 if-COND/SBJV stick.INF REFL letter law all company coal
 put.INF COND/SBJV in state bankruptcy

Intended meaning: ‘If one were to act in accordance with the letter of law, all coal companies should declare bankruptcy.’

auxiliary *byti* was replaced by the aorist form of the verb *być* ‘to be’ perhaps due to similar paradigms of both forms (*ibidem*); consider Table 9.

Table 9. Paradigms for Proto-Slavic *byti* and Old Polish *być*

Number	Proto-Slavic conditional/subjunctive	Old Polish aorist
Singular	1. * <i>bimb</i> 2. * <i>bi</i> 3. * <i>bi</i>	1. <i>bych</i> 2. <i>by</i> 3. <i>by</i>
Plural	1. * <i>bimĭ</i> 2. * <i>biste</i> 3. * <i>bĭ</i>	1. <i>bychom</i> 2. <i>byście</i> 3. <i>bychą</i>

Source: Długosz-Kurczabowa and Dubisz (2006, p. 315).

In Table 9 one can find the form *by*, which in Modern Polish functions as the conditional/subjunctive particle. Before that happened, a lot of changes occurred starting in the 15th century, when the aorist forms of *być* became similar to the agglutinative past forms of *być*: 1SG *bych* → *bym*, 2SG *by* → *byś*, 1PL *bychom* → *byśmy*, 3PL *bychą* → *by* (*ibidem*). At the same time (in the Old Polish Period), the aorist disappeared from Polish and its forms started to act as functional elements (*ibidem*). Furthermore, the system of conjunctions also underwent numerous modifications because of the homonymy of conjunctions, whose functions were blurred.⁴⁰ The repertoire of Polish conjunctions was revitalized by introducing new particles or combining new particles with existing conjunctions (Pisarkowa, 1984, p. 237). In this way, the 3SG aorist form *by*, which lost its connection with the verbal paradigm, became a conditional/subjunctive particle used at the beginning of a clause, e.g., in simple sentence optatives, and then a regular complementizer in complex sentences joined earlier without any complementizer (Pisarkowa, 1984, pp. 204, 239). The process of creating new conjunctions continued throughout the Middle Polish Period, i.e., from 16th to 18th century (Długosz-Kurczabowa and Dubisz, 2006, p. 455).

Furthermore, it should be noted that *by* as a complementizer was also used to introduce purpose clauses and in this context the form with particle *by* (alone or combined with a complementizer in *żeby* or *aby*) and *l*-participle competed with another form used to express purpose: simple clause with the infinitive (without any form of *by*), which derived from the Latin *supinum* construction (Pisarkowa, 1984, p. 239). The competition between those two forms started in 15th century and continued until 19th century, when they contaminated and became variants: for subject coreference – *by* and the infinitive form, and for different subjects – *by* and *l*-participle (Pisarkowa, 1984, p. 240). In this way, in Modern Polish *żeby*-clauses we have several verb forms available.

Finally, the selection of *żeby*-clause verb forms is also supplemented by *-no/-to* constructions which derive from Proto-Slavic passive past participles, which could be still found in Old Polish in the 14th–16th century (Długosz-Kurczabowa and Dubisz, 2006, p. 321). In the 17th century nominal forms of passive past participles for masculine and

⁴⁰ For instance, in the Old Polish conjunction *jeśli* ‘if’ was used to introduce complement clauses, time clauses and conditional clauses (Długosz-Kurczabowa and Dubisz, 2006, p. 454).

feminine were decaying and the remaining neutral forms were turning into active impersonal verbal forms now known as *-no/-to* constructions (*ibidem*). As Pisarkowa (1984, p. 42) notes, the 17th was a transitory period, when neutral passive past participle forms functioned as predicatives used in combination with the linking verb *było* ‘it was,’ in phrases like *było napisano* ‘it was written.’ Later the linking verb was lost and the participle forms in questions lost their adjectival character and became verbal forms (*ibidem*).

2.1.7 *Żeby*-clauses as the subjunctive: Preliminary observations

As sketched in this introductory section, *żeby*-clauses stand out in the mood system of Polish as they defy a unified qualification as indicatives or subjunctives. Moreover, a *żeby*-clause is a linguistic unit of great complexity due to the nature of the complementizer *żeby* and the internal structure of the clause itself, which contains three different forms of verbs (*l*-participle, infinitive, *-no/-to* constructions), which contribute in different ways to sentence interpretation (subject coreference). The picture of *żeby*-clauses is additionally marred by their distribution, i.e., *żeby*-clauses surface in four seemingly unrelated contexts: complement clauses, subject clauses, purpose clauses (as a variant complementizer to *aby* and *by*) and relative clauses (as a marginal variant relative complementizer). Nonetheless, as already stated, the core context of *żeby*-clause is complement clause introduced by a specific type of matrix predicates. In these contexts *żeby*-clauses bear resemblance to subjunctives found in other languages: they emerge as subordinate clauses, selected by volitional/directive predicates, are used as expressions of deontic modality, seem temporary defective and also surface under negation. All these observations are preliminary at this point and will be developed in the subsequent sections devoted to semantic and pragmatic as well as morphosyntactic aspects of *żeby*-clauses.

2.2 *Żeby*-clauses as the subjunctive on the semantic level

The present section is devoted to the subjunctive status of *żeby*-clauses on the semantic level. It provides semantic evidence that *żeby*-clauses should be treated as subjunctive clauses based on semantic properties of selecting predicates, temporal interpretation of *żeby*-complements as well as referential relationships between the matrix subject and the subordinate-clause subject.

2.2.1 *Żeby*-clauses and the notion of veridicality

As already stressed in the first chapter of the present work, the nature of a matrix predicate is a crucial factor in the indicative/subjunctive distinction. The prediction at this point is that if *żeby*-clauses are subjunctive clauses, they should surface in nonveridical contexts (see Section 1.2.2.1). The first context that should be then analyzed is the complement clause to nonveridical predicates. Therefore, it is important to relate Giannakidou’s notion of (non)veridicality to the predicates that in Polish select for *żeby*-complements. Her classification of Greek verbs (see Table 4) can be easily filled in with examples of Polish verbs.⁴¹ The results of such a transposition are presented in Table 10.

⁴¹ A similar translation of Giannakidou’s verbs was done by Mazurkiewicz (2012). In contrast to her discussion, my overview will be supplemented with examples from Polish corpora.

Table 10. Supposed mood choice in Polish based on the veridicality criterion

Veridical verbs/indicative complement	Nonveridical verbs/subjunctive complement
<p>ASSERTIVES <i>mówić</i> ‘to say’; <i>czytać</i> ‘to read’; <i>twierdzić</i> ‘to claim’</p> <p>FICTION VERBS <i>marzyć</i> ‘to dream’; <i>wyobrażać sobie</i> ‘to imagine’</p> <p>EPISTEMICS <i>wierzyć</i> ‘to believe’; <i>myśleć</i> ‘to think’</p> <p>FACTIVE VERBS <i>być zadowolonym</i> ‘to be glad’; <i>wiedzieć</i> ‘to know’; <i>żałować</i> ‘to regret’</p> <p>SEMIFACTIVES <i>odkrywać</i> ‘to discover’; <i>pamiętać</i> ‘to remember’</p>	<p>VOLITIONALS <i>chcieć</i> ‘to want’; <i>mieć nadzieję</i> ‘to hope’; <i>planować</i> ‘to plan’</p> <p>DIRECTIVES <i>rozkazywać</i> ‘to order’; <i>radzić</i> ‘to advise’; <i>sugerować</i> ‘to suggest’</p> <p>MODALS <i>musieć</i> ‘must’; <i>móc</i> ‘may’</p> <p>PERMISSIVES <i>pozwalać</i> ‘to allow’; <i>zakazywać</i> ‘to forbid’</p> <p>NEGATIVE <i>uniknąć</i> ‘to avoid’; <i>odmawiać</i> ‘to refuse’</p>

Source: based on Giannakidou (2009, pp. 1887–1888).

At face value, Polish equivalents of Greek verbs seem to follow the veridicality criterion and one may find numerous examples of veridical verbs selecting for the indicative and nonveridical verbs selecting for the subjunctive in Polish corpora. Consider the following examples from the National Corpus of Polish (NKJP) for veridical verbs:

ASSERTIVES

- (2.46) *W ogóle ludzie lubili mówić, że mam*
in general people like.PST.PTCP.3PL.VIR say.INF that have.PRS.1SG
nieznośny charakter, że trudno dojść ze mną do porozumienia.
unbearable character that is.difficult come.INF with me to agreement
‘In general, people liked to say that I had an unbearable character and that it was difficult to reach an agreement with me.’

(NKJP, Stanisław Dygat, 1946, *Jeziro Bodeńskie*)

- (2.47) *Czytałam, że w Republice Środkowoafrykańskiej również*
read.PST.PTCP.1SG.F that in republic South.African also
źle się dzieje.
badly REFL happen.PRS.3SG

‘I read that bad things happen also in the Republic of South Africa.’

(NKJP, Tomasz Mirkowicz, 1999, *Pielgrzymka do Ziemi Świętej Egiptu*)

- (2.48) *Twierdził, że na początek wystarczy*
claim.PST.PTCP.3SG.M that for beginning is.enough
pięćdziesiąt słów po dziesięć koron.
fifty words for ten crowns

‘He claimed that for the beginning it is enough to write 50 words for 10 crowns.’

(NKJP, Bronisław Świdorski, 1998, *Słowa obcego*)

FICTION VERBS

- (2.49) *Marzy,* *że* *kiedyś* *obie* *dziewczynki* *się* *poznają.*
 dream.PRS.3SG that one.day both girls REFL meet.FUT.3PL
 ‘He or she dreams that one day both girls will meet.’

(NKJP, Iwona Aleksandrowska, 2006, *Dwie Marysie*, *Super Express*)

- (2.50) *Mąż* *Agnieszki* *wyobraża* *sobie, że*
 husband Agnieszka.GEN imagine.PRS.3SG REFL that
ona jest *raczej hostessą* *niż* *panią do towarzystwa.*
 she be.PRS.3SG rather hostess.INS than escort.INS

‘Agnieszka’s husband imagines that she is rather a hostess than an escort.’

(NKJP, Dariusz Zaborek; Paweł Goźliński, 1998, *Daj mi raj, mały jak wypłata*, *Gazeta Wyborcza*)

EPISTEMICS

- (2.51) *Przyjaciół* *wierzy,* *że* *praca pana* *uleczy.*
 friend believe.PRS.3SG that work sir heal.FUT.3SG
 ‘A friend believes that work will heal you.’

(NKJP, Marek Krajewski, 2003, *Koniec świata w Breslau*)

- (2.52) *Myszę,* *że Karolina zmarła* *w* *Nowym Targu*
 think.PRS.1SG that Karolina die.PST.PTCP.3SG.F in Nowy Targ
w późnych *latach 70.*
 in late years 70s

‘I think that Karolina died in Nowy Targ in the late 70s.’

(NKJP, Poszukuję rodziny, 1999, *Tygodnik Podhalański*)

FACTIVE VERBS

- (2.53) *Gospodarz* *jest* *zadowolony,* *że* *odpowiedziała* *mu*
 host.NOM.N.SG be.PRS.3SG glad.NOM.N.SG that repy.PST.PTCP.3SG.F him
po niemiecku.
 in German

‘The host is glad that she replied to him in German.’

(NKJP, Małgorzata Szejnert, 2007, *Czarny ogród*)

- (2.54) *Z* *drugiej* *strony dobrze* *wiedział,* *że* *placz*
 with another side well know.PST.PTCP.3SG.M that crying
niczego *nie rozwiązuje* *i* *nie prowadzi* *donikąd.*
 nothing NEG solve.PRS.3SG and NEG lead.PRS.3SG nowhere
 ‘On the other hand, he knew perfectly that crying would not solve anything and would not lead anywhere.’

(NKJP, Bronisław Świdorski, 1998, *Słowa obcego*)

- (2.55) *Wszyscy żalowali,* *że ten* *się* *wtedy nie utopił.*
 all regret.PST.PTCP.3PL.VIR that that.one REFL then NEG drown.PST.PTCP.3SG.M
 ‘Everyone regretted that he hadn’t drowned then.’

(NKJP, Wiesław Dymny, 1997, *Opowiadania zwykłe*)

SEMIFACTIVES

- (2.56) *Julia odkrywa, że z tym żyją wszyscy.*
 Julia find.out.PRS.3SG that with this live.PRS.3PL all
 ‘Julia finds out that everyone lives with it.’
 (NKJP, Tadeusz Sobolweski, 1993, *Ze śmiercią w tle, Gazeta Wyborcza*)
- (2.57) *Pamięta, że wypił parę łyków*
 remember.PRS.3SG that take.PST.PTCP.3SG.M a.few sips
i zaraz zrobiło mu się słabo.
 and immediately.after do.PST.PTCP.3SG.N him REFL faint
 ‘He remembers that he took a few sips and immediately after felt faint.’
 (NKJP, Stanisław Maj, 1999, *Trafiony w sedno, Detektyw*)

As visible in (2.46)–(2.57), veridical verbs in Polish select for indicative complements introduced by *że* and their propositional complements cannot be introduced by *żeby*. Nonetheless, Polish allows for systematic alternations between the indicative and the subjunctive, especially in the case of *mówić* ‘to say,’ which can alternate between assertive and directive interpretation (see Mazurkiewicz, 2012, p. 26); cf. (2.58) and (2.59):

- (2.58) *Mówicie, że żyjemy w wolnym kraju*
 say.PRS.2PL that live.PRS.1PL in free country
i każdy się może napić, ile chce.
 and everyone REFL be.able.PRS.3SG drink.INF how.much want.PRS.3SG
 ‘You say that we live in a free country and everyone can drink as much as they want.’
 (NKJP, Mariusz Cieślik, 2004, *Śmieszni kochankowie*)
- (2.59) *Mówiłam, że-by z tym weselem do wiosny poczekać.*
 say.PST.PTCP.1SG.F that-COND/SBJV with this wedding until spring wait.INF
 ‘I said that we should wait until spring with this wedding.’
 (NKJP, Ewa Nowacka, 1993, *Emilia z kwiatem lilii leśnej*)

Examples (2.58) and (2.59) show that *mówić* ‘to say’ can have two meanings analogous to the difference between *to tell sb that* and *tell sb to* in English. Similar alternations can be noted for *pamiętać* ‘to remember,’ which can be interpreted as *remember doing* (veridical meaning) or *remember to do* (nonveridical meaning, see (2.60) and compare with (2.57)), and *marzyć* ‘to dream,’ which can be understood as *dream that* (veridical) or *wish that* (nonveridical, see (2.61) and compare with (2.49)). This pattern is also attested in other languages, such as Greek or Spanish (see Mazurkiewicz, 2012, pp. 26–27 for examples).

- (2.60) *Pamiętaj, że-by spełnić warunki określone przez komisję spółdzielni.*
 remeber.IMP that-COND/SBJV fulfill.INF conditions defined by committee cooperative
 ‘Remember to meet the conditions imposed by the cooperative committee.’
 (NKJP, Krzysztof J. Szmidt, 1994, *Elementarz twórczego życia czyli O sposobach twórczego myślenia i działania*)

- (2.61) *Mąż tylko marzy, żeby dzieci zabrać na wakacje*
 husband only wish.PRS.3SG that-COND/SBJV children take.INF on holiday
i pokazać im Amerykę.
 and show.INF them America
 ‘My husband only wishes to take the children on holiday and show America to them.’
 (NKJP, Beata Zalot, 1999, *Ja udawałam zakonnice, mąż kleryka*, *Tygodnik Podhalański*)

It should also be noted that the already discussed problem for Giannakidou’s approach with factives and emotive factives (see Section 1.2.2.1) does not arise in Polish, in which emotive factives select for the indicative in line with Giannakidou’s distinction (see also Mazurkiewicz, 2012, pp. 33–36); consider (2.62) (from Mazurkiewicz, 2012, p. 34):

- (2.62) *Zaskoczyło mnie, że tak szybko przyszli/*
 PRO surprise.PST.PTCP.3SG.N me that so fast come.PST.PTCP.3.PL.VIR
**że-by tak szybko przyszli*
 that-COND/SBJV so fast come.PST.PTCP.VIR.PL
 ‘It surprised me that they came so quickly.’

As shown in (2.62), the emotive factive *zaskoczyć* ‘to surprise’ selects for the indicative and is ungrammatical with a subjunctive clause introduced by *żeby*.

The group of nonveridical verbs in Polish, however, forms a less clear picture; see the following examples from NKJP:

VOLITIONALS

- (2.63) *Chciał-by-m, że-by agencja pomagała*
 want.PST.PTCP-COND/SBJV-1SG that-COND/SBJV agency help.PST.PTCP.SG.F
małym i średnim przedsiębiorstwom.
 small and medium enterprises
 ‘I want the agency to help small and medium enterprises.’
 (NKJP, Krzysztof Orłowski, *Supermarket z firmami Jak zarabiać na ratowaniu przedsiębiorstw przed bankructwem?*, *Wprost*)
- (2.64) *Mam nadzieję, że jeszcze nas odwiedzisz.*
 have.PRS.1SG hope that once.again us visit.FUT.2SG
 ‘I hope that you will visit us once again.’
 (NKJP, Mariusz Cieślik, 2004, *Śmieszni kochankowie*)
- (2.65) *Planujemy, że-by z akcji dożywiania mogło*
 plan.PRS.1PL that-COND/SBJV from action feeding be.ABLE.PST.PTCP.SG.N
skorzystać około 200 uczniów.
 take.advantage.INF around 200 pupils
 ‘We are planning to extend the extra meals campaign to about 200 pupils.’
 (NKJP, *Chcą nakarmić więcej dzieci*, 2003, *Express Ilustrowany*)

- (2.66) *Planowałam, że odpocznę na leżaczku*
 plan.PST.PTCP.1SG.F that rest.FUT.1SG on sunbed
i troszkę się opalę.
 and a.little REFL sunbathe.FUT.1SG
 ‘I was planning to rest on a sunbed and sunbathe a little bit.’
 (NKJP, Niektórzy to mają przerąbane, 2006, *Super Express*)

DIRECTIVES

- (2.67) *Niech pan rozkaże, żeby dali mi coś na ząb.*
 PART sir order.FUT.3SG że-COND/SBJV give.PST.PTCP.PL.VIR me sth for tooth
 ‘Sir, order them to give me a bite to eat.’
 (NKJP, Mirosław M. Bujko, 2008, *Wyspy szerszenia*)
- (2.68) *Eksperci radzą, żeby polować na promocje.*
 experts advise.PRS.3PL that-COND/SBJV hunt.INF on bargains
 ‘Experts advise to look for bargains.’
 (NKJP, Piotr Stasiak, 2004, *Rusz po fundusz, Polityka*)
- (2.69) *Sugerował, żeby część potrzebnego im gazu kupowali sami za granicą.*
 suggest.PST.PTCP.3SG.M that-COND/SBJV part necessary.GEN them gas.GEN
 buy.PST.PTCP.PL.VIR on.their.own abroad
 ‘He suggested that they buy abroad part of the gas the need.’
 (NKJP, Adam Grzeszak, 2005, *Noga na gaz, Polityka*)
- (2.70) *Już to pytanie sugeruje, że efekty były zaskakujące.*
 in.fact this question suggest.PRS.3SG that effects be.PST.PTCP.3PL.NONVIR surprising
 ‘This question in fact suggests that the effects have been surprising.’
 (NKJP, Henryka Bochniarz, Jacek Santorski, 2003, *Bądź sobą i wygraj: 10 odpowiedzi dla aktywnej kobiety*)

MODALS

- (2.71) *Wszystkie próby zawodnik musi odbyć*
 all trial.runs contestant must.PRS.3SG carry.out
na tym samym koniu w ciągu trzech kolejnych dni.
 on this same horse in course three consecutive days
 ‘Contestants must have all their trial runs on the same horse in three consecutive days.’
 (NKJP, Wojtek Tworek, 2003, *Elementarz obserwatora WKKW, EKO-U Nas,*)
- (2.72) *Pani to się może wydawać dziwne,*
 madame this REFL may.PRS.3SG seem.INF strange
ale z nim poszło prościutko!
 but with him go.PST.PTCP.3SG.N easily
 ‘It may seem strange to you, but it went like clockwork with him.’
 (NKJP, Andrzej Szczypiorski, 1993, *Początek*)

PERMISSIVES

- (2.73) *Pozwala, że-by dni mijały jałowo*
 let.PRS.3SG that-COND/SBJV days go.by.PST.PTCP.PL.NONVIR unproductively
i nie martwi się niczym z wyjątkiem
 and NEG worry.PRS.3SG REFL nothing.INS apart from
przepychanek o wpływy w kierownictwie ruchu.
 rough.and.tumble about influence in management movement
 ‘He or she lets days go by unproductively and does not worry about anything apart from the rough and tumble about influence in the movement management.’
 (NKJP, Wojciech Jagielski, 1997, Kongo, *Gazeta Wyborcza*)
- (2.74) *Surma pozwala się prowadzić, chyba nie bardzo świadomy,*
 Surma let.PRS.3SG REFL lead.INF possibly NEG much aware
co się właściwie dzieje.
 what REFL actually happen.PRS.3SG
 ‘Surma let them lead him, rather unaware of what is actually going on.’
 (NKJP, Teresa Bojarska, 1996, *Świtanie przemijanie*)
- (2.75) *Przepisy o ochronie przyrody wyraźnie zakazują*
 regulations about protection environment clearly disallow.PRS.3PL
stosowania urządzeń narażających życie zwierząt.
 using machines jeopardizing life animals
 ‘Environment protection regulations clearly disallow using machines that may jeopardize animals’ lives.’
 (NKJP, Pod napięciem, 2006, *Tygodnik Regionalny “Gazeta Częstochowska”*)

NEGATIVES

- (2.76) *Nawet w serwisach informacyjnych nie unika się*
 even in bulletins news NEG avoid.PRS.3SG REFL
pokazywania drastycznych scen.
 showing explicit scenes
 ‘Even in news bulletins they don’t avoid showing explicit footage.’
 (NKJP, Anna Stępień, 2005, *Bójmy się telemoka, Tygodnik Regionalny “Gazeta Częstochowska”*)
- (2.77) *Ale przecież inni krytycy nie odmawiają recenzowania filmu “Pan Tadeusz”.*
 but after.all other critics NEG refuse.PRS.3PL reviewing film “Pan Tadeusz”
 ‘But after all other critics don’t refuse to review the film “Pan Tadeusz”.’
 (NKJP, Zygmunt Kałużyński, Tomasz Raczek, 1999, *Perły do lamusa, Wprost*)

In the nonveridical group there are verbs which follow Giannakidou’s classification and select for *żeby*-clauses and are incompatible with indicative complements introduced with *że*, e.g., *chcieć* ‘to want’ (2.63), *rozkazywać* ‘to order’ (2.67), *radzić* ‘to advise’ (2.68) and *pozwalać* ‘to allow’ (2.73), which also selects for an infinitive (2.74). Another subset comprises verbs which do not select for indicative or subjunctive complements; these are mainly negatives, such as *unikać* ‘to avoid’ (2.76), *odmawiać* ‘to refuse’ (2.77), permissives, such as *zakazywać* ‘to forbid’ (2.75), which select for gerund complements, and modals, such as *musieć* ‘must’ and *móc* ‘may’, which select for infinitival complements (2.71) and (2.72) (see also

Mazurkiewicz, 2012, p. 31). Another case is exemplified by *sugerować* ‘to suggest,’ which selects for the subjunctive in nonveridical contexts (used as a directive, see (2.69)) and for the indicative in veridical contexts (as an assertive, see (2.70)) with a distribution similar to *mówić* ‘to say.’ However, the most problematic case is the one of *mieć nadzieję* ‘to hope,’ which in Polish can only select for the indicative clause introduced by *że* (see (2.64); consider also Mazurkiewicz, 2012, p. 31).

As already shown, nonveridical verbs in Polish do not fit into Giannakidou’s classification so neatly. Therefore, one may doubt if veridicality is a factor playing a role in the distribution of indicative and subjunctive complements in Polish. Nonetheless, Mazurkiewicz (2012, p. 54) proposes to weaken Giannakidou’s thesis, claiming that “nonveridicality is a necessary yet non-sufficient property to account for Polish subjunctive mood.” As a consequence, nonveridicality plays a role in subjunctive selection in Polish in the sense that Polish subjunctives do not surface outside nonveridical contexts, but nonveridical contexts do not always trigger the subjunctive, e.g., the case of *mieć nadzieję* ‘to hope’ (*ibidem*). Still, Mazurkiewicz (2012, p. 55) stresses that ‘to hope’ exhibits a similar behavior in other languages, such as Spanish, Italian and French. This can be explained by the peculiar semantics of *mieć nadzieję* ‘to hope’ in Polish, which involves a future result being compatible with the speaker’s belief (Mazurkiewicz, 2012, p. 56 based on Schlenker, 2005, p. 294). Therefore, the special behavior of *mieć nadzieję* ‘to hope’ may be due to some Polish idiosyncrasies connected with the very form of this verb, which is rather a verb-noun compound literally translated as ‘to have hope.’

Another nonveridical context in which *żeby*-clauses emerge is the one of matrix clause negation, identified in the literature on the subjunctive as polarity subjunctive. Such contexts are nonveridical by definition (see Mazurkiewicz, 2012, p. 52). In Polish, *żeby*-clauses can surface when a matrix predicate is negated and such a pattern is productive with epistemic verbs; see (2.78) and (2.79):

- (2.78) a. *Nie wierzę, że-by ktokolwiek*
 NEG believe.PRS.1SG that-COND/SBJV anyone
mógł *mnie jeszcze kochać.*
 be.able.PST.PTCP.SG.M me someday love.INF
 ‘I don’t believe that someone would be able to love me someday.’
 (NKJP, Anna Bojarska, Maria Bojarska, 1996, *Siostry B., Twój Styl*)
- b. *Nie wierzę, że ktokolwiek mógł*
 neg believe.PRS.1SG that anyone be.able.PST.PTCP.3SG.M
mnie jeszcze kochać.
 me someday love.INF
 ‘I don’t believe that someone could love me then.’
- (2.79) a. *Nigdy jednak nie myślałem, że-by*
 never however NEG think.PST.PTCP.1SG.M that-COND/SBJV
być po drugiej stronie.
 be.INF on other side
 ‘However, I have never thought of being on the other side.’
 (NKJP, Joanna Podgórska, 2006, *Cztery życia, cztery Polski, Polityka*)

- b. *Nigdy jednak nie myślałem, że*
 never however NEG think.PST.PTCP.1SG.M that
byłem po drugiej stronie.
 be.PST.PTCP.1SG.M on other side
 ‘However, I have never thought that I was on the other side.’

Still, it is possible to replace *żeby* in (2.78a) and (2.79a) with *że* and the sentences, cf. (2.78b) and (2.79b), would be grammatical, though having a different interpretation. In the versions with *żeby* the embedded clause event is interpreted as following the matrix event, whereas in the *że* versions the embedded event has a past interpretation, i.e., the matrix subject seems to reflect on his or her past experience. In contrast, there are veridical verbs that do not change their complementation patterns in negative contexts. This is the case of emotive factives, which unequivocally block *żeby*-clauses in both assertive and negative contexts (Mazurkiewicz, 2012, p. 47); consider (2.80):

- (2.80) a. *Amerykanie nie żałowali, że mają go u*
 Americans NEG regret.PST.PTCP.3PL.VIR that have.PRS.3PL him at
siebie i mogą mieć na oku.
 REFL and can.PRS.3PL have.INF on eye
 ‘The Americans have never regretted having him at their place and keeping an eye on him.’
 (NKJP, Tomasz Mirkowicz, 1999, *Pielgrzymka do Ziemi Świętej Egiptu*)
- b. **Amerykanie nie żałowali, żeby*
 Americans NEG regret.PST.PTCP.3PL.VIR that-COND/SBJV
mieli go u siebie i mogli
 have.PST.PTCP.PL.VIR him at REFL and can.PST.PTCP.PL.VIR
mieć na oku.
 have.INF on eye
 Intended meaning: ‘The Americans have never regretted that they will have him at their place and keep an eye on him.’

Still, the presence of an indicative complement in (2.80a) seems to stem from the nature of emotive-factives, which “presuppose the truth of their complement, and express some emotion/evaluation on the part of the subject towards this presupposed proposition” (Siegel, 2009, p. 1860). Therefore, the matrix subject in (2.80) does not deny the fact presented in the embedded clause, but rather it disbelieves their emotional reaction. What follows is the selection of the indicative complement as the context is in fact veridical.

Yet there remain two more contexts which Giannakidou (2010) considers nonveridical: adjunct clauses introduced by *before* and relative clauses. As far as the first context is concerned, *żeby*-clauses cannot be part of clauses introduced by *zanim* ‘before’ because of structural reasons: *zanim* ‘before’ occupies the complementizer position and thus *żeby* is disallowed. Therefore, this test is inapplicable to the Polish data. In the case of relative clause, as already shown, *żeby* can introduce a relative clause as a variant relative pronoun (see (2.28)). What is important, Mazurkiewicz (2012) shows that in Polish relative clauses with the conditional/subjunctive marker *by* depend on the type of NP that is modified; consider (2.81) (from Mazurkiewicz, 2012, p. 45):

- (2.81) a. **Chcę poznać tego człowieka, który by*
 want.PRS.1SG meet.INF this man who COND/SBJV
miał drogi samochód.
 have.PST.PTCP.SG.M expensive car
 Intended meaning: ‘I want to meet the man, who has an expensive car.’
- b. *Chcę poznać człowieka, który by*
 want.PRS.SG meet.INF man who COND/SBJV
miał drogi samochód.
 have.PST.PTCP.SG.M expensive car
 ‘I want to meet a man, who has an expensive car.’

In (2.81a) the particle *by* is incompatible with the definite phrase *tego człowieka* ‘this man’ since if the conditional/subjunctive is used to modify an NP, the existence of this NP is not certain: The reading in such a case is *de dicto* (attributive) (in contrast to a *de re* reading (specific, referential) imposed by the demonstrative determiner) (Mazurkiewicz, 2012, p. 43 based on Giannakidou, 1998, 2009). According to Giannakidou (2011 after Mazurkiewicz, 2012, pp. 44), nonveridical contexts are non-existential and thus if we agree that subjunctive relatives have a non-existential interpretation, we can call such uses nonveridical. Coming back to example (2.28), one can definitely get a non-existential interpretation in which the existence of a flat that would accommodate all the books of the matrix subject is not presupposed.

As shown in this section, *żeby*-clauses in Polish surface in nonveridical contexts, which is an argument for considering them as subjunctive. Polish generally follows Giannakidou’s distinctions and veridical verbs select for *że*-clauses (indicative complements), whereas nonveridical verbs select for *żeby*-clauses (subjunctive complements). There are instances of double selection but this always entails a change in meaning from veridical (with the indicative) to nonveridical (with subjunctive), e.g., *mówić* ‘to say’ or *sugerować* ‘to suggest’. The only problem is the verb *mieć nadzieję* ‘to hope,’ which selects for the indicative although, according to Giannakidou’s definition, it is nonveridical. Therefore, Mazurkiewicz (2012) proposes that nonveridicality is a necessary but not always sufficient factor that can trigger the subjunctive in Polish. Furthermore, *żeby*-clauses appear in other nonveridical contexts: negative contexts (as polarity subjunctive), except for emotive factives, and relative clauses with non-existential interpretation. In general, one may claim, based on the arguments presented in this section, that the mood distribution in Polish follows veridical/nonveridical distinction.

2.2.2 Temporal interpretation

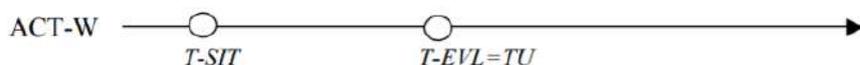
Temporal properties have been a key aspect distinguishing between the indicative and the subjunctive at least since Piccolo (1984), who noticed that subjunctives are temporally defective not having an independent temporal interpretation (after Quer, 1998, p. 8). A similar line of reasoning is followed by Mezhevich (2006) in her study on the tense system in Russian. Mezhevich (2006) proposes to treat the category of mood as “a dyadic predicate,” which serves to relate two times (or timelines): the utterance time and the evaluation time understood as “time relative to which the situation described by the utterance is evaluated”

(Mezhevich, 2006, p. 119 after Orszulak, 2016a, p. 10).⁴² In her terms, the deficiency of the subjunctive stems from its inability to relate the situation to the utterance time, which is a property of irrealis moods (Mezhevich, 2006, p. 124). To illustrate that, she provides a pair of examples; see (2.82) (from Mezhevich, 2006, p. 125 after Orszulak, 2016a, p. 10):

- (2.82) a. *I had a car.*
 b. *I wish I had a car.*

The sentence in (2.82a) receives the past interpretation because the event is interpreted as prior to the utterance time (Orszulak, 2016a, p. 10). In (2.82b), the event of having a car is placed on a different timeline than the utterance and hence, according to Mezhevich (2006, p. 125), no past interpretation arises as we do not interpret the propositional contents relatively to the utterance time. Her analysis is illustrated in Figure 4.

Realis: I had a car.



Irrealis: (i) I wish I had a car.
 (ii) I wish I had had a car (when I was a student).

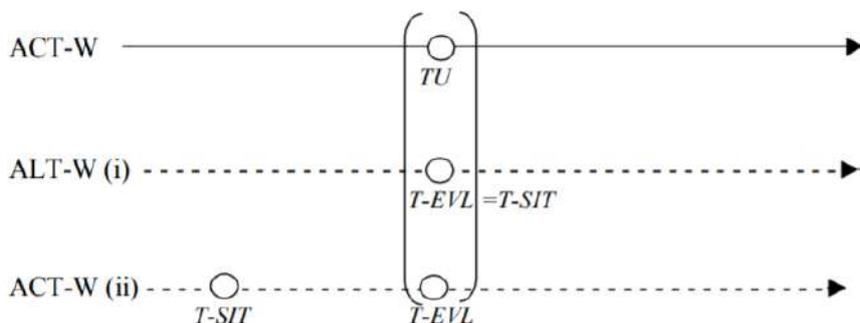


Figure 4. The dyadic-predicate account
 Source: reproduced from Mezhevich (2006, p. 125).

Figure 4 shows how Mezhevich (2006, pp. 124–125) analyzes the interpretation of a realis sentence and an irrealis sentence. For the realis sentences the time of situation (*T-SIT*) is evaluated on the same time line as the utterance time (*TU*), that is, the actual world. In this way the utterance time (*TU*) is the evaluation time (*T-EVL*). In the irrealis case, the utterance time (*TU*) is still located on the time line in the actual world, but the time of situation (*T-SIT*) is placed on a different timeline in an alternative world. Here, the time of situation is the evaluation time (*T-EVL*). The difference formulated by Mezhevich (2006) is also visible in the already mentioned data from Catalan (see Section 1.2.2.2), in which

⁴² It must be noted that the proposal in Mezhevich (2006) bears resemblance to Iatridou’s (2000) account in which she considered mood as a dyadic predicate relating two types of worlds: topic worlds (“the worlds that we are talking about”) and actual worlds (“the worlds that for all we know are the worlds of the speaker”) (see Orszulak, 2016a, p. 10).

subjunctive complements exhibit sequence of tense phenomena (Picallo, 1984 after Quer, 1998, pp. 7–8).

As far as Polish is concerned, *żeby*-clauses exhibit *l*-participles, which are morphologically past and outside the subjunctive context receive the past interpretation⁴³; consider (2.83) and (2.84) (from Orszulak, 2016a, pp. 10–11):

- (2.83) *Mówi, że brat kupił nowy samochód*
 say.PRS.3SG that brother buy.PST.PTCP.3SG.M new car
*w tamtym tygodniu/ *w następnym tygodniu.*
 in last week in next week
 ‘He says that his brother bought a car last week/*next week.’
- (2.84) *Mówi, że-by brat kupił nowy*
 say.PRS.3SG that-COND/SBJV brother buy.PST.PTCP.SG.M new
*samochód *w tamtym tygodniu/ w następnym tygodniu.*
 car in last week in next week
 ‘He tells his brother to buy a new car *last week/next week.’

As shown in (2.83), the indicative complement with an *l*-participle is not compatible with the future tense adverbial *w następnym tygodniu* ‘next week’ as the event described therein must refer to the past. In contrast, the subjunctive complement in (2.84) is ungrammatical with the past tense adverbial *w tamtym tygodniu* ‘last week’ since the *l*-participle in the subjunctive context is void of its past interpretation. Similar phenomena are observed in Russian by Mezhevich (2006, p. 148), who claims that “embedded subjunctives typically denote a hypothetical situation in the future relative to the matrix event” (after Orszulak, 2016a, p. 11).

What is also important and must be stressed at this point is that *-no/-to* constructions, another verb form licit in subjunctive clauses, exhibit an analogous behaviour to *l*-participles: in indicative clauses they receive an absolute past interpretation, whereas in subjunctive ones they are interpreted relatively to the matrix event, cf. (2.85) and (2.86) (from Orszulak, 2016a, p. 11):

- (2.85) *W dawnych czasach/ *obecnie/ *w przyszłości budowano domy z drewna.*
 in old times at.present in future build.NO/TO houses of wood
 ‘In the past/*at present/*in the future houses were made of wood.’
- (2.86) *Mieszkańcy chcą, że-by wybudowano szkołę*
 residents want.PRS.3PL that-COND/SBJV build.NO/TO school
**w tamtym roku/ w następnym roku.*
 in last year in next year
 ‘The residents want the school to be built *last year/next year.’

Example (2.85) shows that the *-no/-to* form is only grammatical with the past tense adverbial *w dawnych czasach* ‘in the past,’ whereas the present tense adverbial *obecnie* ‘at present’ and the future tense adverbial *w przyszłości* ‘in the future’ are excluded. In contrast, the embedded

⁴³ In compound future tense constructions in Polish *l*-participles serve as complements of the future auxiliary on par with the infinitive. This is an argument for treating *l*-participles as unmarked for tense (see Błaszczak and Domke, 2020, who also provide experimental evidence in favour of this claim).

event in (2.86) is interpreted relative to the matrix event marked as present and thus the past interpretation of the *-no/-to* form is not available. As already noted in the first chapter, morphologically past forms which lose their past interpretations are attested in many languages in irrealis contexts and known as fake past. Therefore, the interpretation of *l*-participles and *-no/-to* constructions in *żeby*-clauses follows the cross-linguistic pattern of the subjunctive accompanied by the past morphology devoid of its past interpretation (see Iatridou, 2000). Such a phenomenon is explained by the dyadic-predicate account of Mezhevich (2006, p. 125), who stipulates that “[a] clause can have a temporal interpretation only if it describes a situation whose time is located on the same time line as the utterance time” (after Orszulak, 2016a, p. 12). What follows is the deictic past tense interpretation for *l*-participles and *-no/-to* constructions in the indicative clauses introduced by *że* and their relative (to the matrix event) interpretation in the subjunctive clauses introduced by *żeby*.

The discussed deficiency in terms the lack of absolute tense interpretation bears resemblance to the properties of infinitives. According to Wurmbrand (2007), a notable property of infinitives is that they are tenseless, devoid of their own temporal denotation; cf. (2.87) and (2.88) (from Wurmbrand, 2007, p. 409 after Orszulak, 2016a, p. 12):

(2.87) *Leo decided a week ago that he will go to the party (*yesterday).*

(2.88) *Leo decided a week ago to go to the party yesterday.*

In (2.87) one can see that the embedded event with the finite future form has an absolute interpretation with respect to the utterance and as such is incompatible with the past tense adverbial *yesterday*. In contrast, in sentence (2.88) – with the embedded infinitive – the past tense adverbial *yesterday* is licit since the only requirement for the embedded event is to follow the matrix one, which itself took place in the past. An analogous contrast is also found in Polish; compare (2.89) and (2.90) (from Orszulak, 2016a, p. 12):

(2.89) *Marek powiedział tydzień temu, że jutro/ *wczoraj*
 Mark say.PST.PTCP.3SG.M week ago that tomorrow/ yesterday
będzie kupował nowy samochód.
 be.PRS.PFV.3SG buy.PST.PTCP.IPFV.SG.M new car
 ‘Mark said a week ago that tomorrow/*yesterday he would buy a new car.’

(2.90) *Marek powiedział tydzień temu, że-by jutro/*
 Mark say.PST.PTCP.3SG.M week ago that-COND/SBJV tomorrow
wczoraj kupić nowy samochód.
 yesterday buy.INF new car
 ‘Mark told us a week ago to buy a new car tomorrow/yesterday.’

Similarly to the English pair in (2.87) and (2.88), example (2.89) shows an embedded clause with a finite future construction (compound future),⁴⁴ which receives an absolute future interpretation excluding the past tense adverbial *wczoraj* ‘yesterday’; whereas example (2.90) exhibits an embedded infinitive whose only requirement is to be interpreted after the matrix event and thus the possibility of using past tense and future tense adverbials opens up; i.e., the

⁴⁴ In Polish there are two constructions that can express future time: the simple future construction with a perfective verb and the compound future construction with an imperfective verb (see Sadowska, 2012, pp. 398ff after Orszulak, 2016a, p. 12). For more details see Błaszczak et al. (2014).

embedded event needs to take place later than a week ago, which can still be the past (Orszulak, 2016a, p. 12).

So far, we have seen that the clauses introduced by *żeby* lack an absolute temporal interpretation with respect to the utterance time.⁴⁵ What is common for all the verb forms available in *żeby*-clauses is their ability to lose independent temporal interpretation, that is, past forms, like *l*-participle and *-no/-to* constructions in Polish, cross-linguistically tend to lose their past interpretation in irrealis contexts (fake past phenomena⁴⁶) and infinitives are considered tenseless. Therefore, the discussed temporal interpretation of *żeby*-clauses is a powerful argument in favour of treating such clauses as subjunctive. Furthermore, there is a systematic difference between *że*-clauses (the indicative) and *żeby*-clauses (the subjunctive) in terms of temporal interpretation: the former have an absolute interpretation (with respect to the utterance time), whereas the latter exhibit a relative interpretation (with respect to the matrix event), which comes down to the embedded event following the matrix event. As Pisarkowa (1975, p. 148) notices, it is said that Polish follows no *consecution temporum* rules, especially in the case of *verba dicendi, sentiendi et declarandi*, such as *mówić* ‘to say,’ *wiedzieć* ‘to know’ or *słyszeć* ‘to hear,’ which select for *że*-complements and allow nine temporal sequences: a present matrix clause can be combined with a present, past or future embedded clause; a past matrix clause can be combined with a present, past or future embedded clause; and a future matrix clause can be combined with a present, past or future embedded clause. Still, these patterns may be limited in the case of verbs whose meaning involves some temporal constraints, e.g., *obietcywać* ‘to promise’, which selects for a clause introduced by *że*, but requires that an embedded event should follow the matrix one (*ibidem*). At this point, a question arises whether the postulated temporal properties are connected with a specific mood value or a specific predicate (problem already noted by Suñer and Padilla-Rivera, 1985, see Section 1.2.2.2). It must be noted though that in Polish the lexical meaning of a verb can work only in one direction: it can restrict existing temporal combinations in complex sentences with *że*, but it cannot open up new temporal combinations for complex sentences with *żeby*. In other words, an embedded event introduced by *żeby* should follow the matrix event irrespective of the lexical properties the matrix predicate; compare (2.91), (2.92) and (2.93):

- (2.91) *Karolina mówi, że Jacek zrobił to wczoraj.*
 Karolina say.PRS.3SG that Jacek do.PST.PTCP.3SG.M it yesterday
 ‘Karolina says that Jack did it yesterday.’
- (2.92) **Karolina obiecuje, że Jacek zrobił to wczoraj.*
 Karolina promise.PRS.3SG that Jacek do.PST.PTCP.3SG.M it yesterday
 Intended meaning: ‘Karolina promises that Jack did it yesterday.’
- (2.93) **Karolina pamięta, że-by Jacek to zrobił wczoraj.*
 Karolina remember.PRS.3SG that-COND/SBJV Jacek it do.PST.PTCP.SG.M yesterday
 Intended meaning: ‘Karolina remembers that Jack did it yesterday.’

⁴⁵ See Orszulak (2016a) for analogies between Polish *żeby* and the Greek subjunctive particle *na*, based on Giannakidou’s (2009) pronominal analysis of tense in Greek clauses. In short, Greek particles *na* and *tha*, similarly to Polish *żeby*, introduce verbs which have a relative future interpretation.

⁴⁶ In the Polish literature, one may come across the term ‘quasi-past’ used by Świdziński (1989) in the sense of fake past.

The sentences above show temporal restrictions of complements selected by present tense verbs. In (2.91) the reported predicate *mówić* ‘to say’ does not lexically restrict the sequence present–past. In contrast, example (2.92) shows the verb *obiecować* ‘to promise,’ which refers to actions/events that will follow the act of promising and as such lexically restricts the possibility of past reference (mind that both predicates select for the indicative). A different situation is illustrated by sentence (2.93) in which the matrix verb *pamiętać* ‘to remember’ allows past reference as such, i.e., one can remember what he or she did in the past, but in combination with *żeby* any past reference is blocked. In this way the lexical meaning of *pamiętać* ‘to remember’ does not open a new temporal sequence for the proposition introduced by *żeby*.

Finally, it must be noted that the above comments do not concern polarity subjunctive contexts, which cross-linguistically, as already mentioned in the first chapter, do not share such temporal restrictions as intensional subjunctive contexts (see Suñer and Padilla-Rivera, 1985; Quer, 1998). The same holds for Polish; consider examples (2.94)–(2.96) (from Pisarkowa, 1972, p. 187):

- (2.94) *Nie wierzę, że-by Helena mogła zapomnieć Parysa.*
 NEG believe.PRS.1SG that-COND/SBJV Helena forget.PST.PTCP.SG.F
 forget.INF Parys
 ‘I don’t believe that Helena could forget Parys.’
- (2.95) *Nie przypuszczam, że-by rzeczywiście kłamała.*
 NEG suppose.PRS.1SG that-COND/SBJV actually lie.PST.PTCP.SG.F
 ‘I don’t suppose that she could actually lie.’
- (2.96) *Nie sądzę, że-by się o to gniewał.*
 NEG think.PRS.1SG that-COND/SBJV REFL about it be.angry.PST.PTCP.SG.M
 ‘I don’t think he could be angry about it.’

The examples in (2.94)–(2.96) present verbs *wierzyć* ‘to believe,’ *przypuszczać* ‘to suppose,’ *sądzić* ‘to think that,’ which under negation select for *żeby*-clauses, but outside the negation context they opt for the indicative *że*-clauses (Pisarkowa, 1972, p. 187). The Polish polarity subjunctives in (2.94)–(2.96) in fact can exhibit opposite temporal relations when compared to their intensional subjunctive counterpart discussed in this section. Specifically, to my mind, all the embedded events in (2.94)–(2.96) can precede the matrix events and actually can have an absolute past interpretation. However, it is also possible to understand them in a different way, that is, with the embedded events referring to the present or the future. According to Pisarkowa (1972, pp. 187–188), the use of *żeby* in sentences like (2.94)–(2.96) serves a modal function of distancing the speaker from the propositional content of the embedded clause. Thus, in this sense Polish fits into the cross-linguistic picture of difference between the intensional and the polarity subjunctive, whose modal and temporal properties differ significantly.

2.2.3 Subjects coreference

As already mentioned in Chapter 1, the property that often coincides with the presence of subjunctive is disjoint reference between the matrix subject and the embedded subject, known

as obviation effects. Such phenomena are also visible in Polish; compare (2.97) and (2.98) (from Orszulak, 2016a, p. 15):⁴⁷

(2.97) *Piotr_i chciał, że-by pro*_{i/j} wyszedł*
 Peter want.PST.PTCP.3SG.M that-COND/SBJV pro leave.PST.PTCP.SG.M
z pokoju.
 from room
 ‘Peter wanted him to leave the room.’

(2.98) *Piotr_i powiedział, że pro_{i/j} wyszedł z pokoju.*
 Peter say.PST.PTCP.3SG.M that pro leave.PST.PTCP.3SG.M from room
 ‘Peter said that he left the room.’

As shown in (2.97), the subject in the clause introduced by *żeby* cannot refer to the matrix subject although the inflectional values on the matrix predicate and in the embedded clause are exactly the same: past participle, 3rd person singular, masculine. In contrast, the embedded indicative clause introduced by *że* in (2.98) allows two possibilities: joint and disjoint reference. In line with binding theory, the matrix subject and the subject in the *żeby*-clause are within the same binding domain, which preclude coreference (Büring, 2005). Next, if the null subject in a *żeby*-clause cannot refer to the matrix subject, then the reflexive pronoun *sobie* in a *żeby*-clause also cannot be coindexed with the subject in the main clause; consider (2.99) and (2.100) (from Orszulak, 2016a, p. 16):

(2.99) *Piotr_i chciał, że-by pro_j ogolił sobie*_{i/j} głowę.*
 Peter want.PST.PTCP.3SG.M that-COND/SBJV pro shave.PST.PTCP.SG.M REFL
 head
 ‘Peter wanted him to shave his head.’

(2.100) *Piotr_i powiedział, że pro_{i/j} ogolił sobie_{i/j} głowę.*
 Peter say.PST.PTCP.3SG.M that pro shave.PST.PTCP.3SG.M REFL head
 ‘Peter said that he shaved his head.’

The data in (2.99) and (2.100) confirm the contrast between *żeby*- and *że*-clauses with respect to reflexive pronouns: in the first context the coreference between the reflexive *sobie* and the matrix subject is excluded, but possible in the second context with the *że*-clause provided that *pro* is coindexed with the matrix subject (*ibidem*).

Furthermore, obviation effects seem weaker in the case of infinitives; consider (2.101) (from Orszulak, 2016a, p. 16):

(2.101) *Piotr_i chciał, że-by PRO_{i+j} wyjść*
 Peter want.PST.PTCP.3SG.M that-COND/SBJV PRO leave.INF
z pokoju.
 from room
 ‘Peter wanted us (including himself) to leave the room.’

⁴⁷ I follow Bondaruk’s (2004, pp. 200–202) analysis of the subjects in *żeby*-clauses and assume that finite *żeby*-clauses with an *l*-participle have an overt subject or the covert *pro* subject and non-finite *żeby*-clauses include PRO subject. For *żeby*-clauses with the *-no/-to* constructions I assume the PRO_{arb} subject, following Lavine (2005) and Ruda (2014).

In (2.101) the subject of the embedded infinitival clause is unspecified as it can include the matrix subject, but only as part of a larger group; the possibility of Peter being the only subject in the subordinate clause is blocked. A similar effect is present in the embedded clauses with *-no/-to* constructions; see (2.102):

- (2.102) *Obywatele pragną, że-by PRO_{arb} naprawiono*
citizens wish.PRS.3PL that-COND/SBJV PRO_{arb} repair.NO/TO
szużbę zdrowia.
service health
‘Citizens wish that the health care system were repaired.’

The sentence in (2.102) is special in two ways: first, it is different from the version with *żeby* and *l*-participle (2.97) since it blocks subjects coreference, i.e., the arbitrary subject in the embedded clause is not the same as the group in the matrix clause, and, second, it deviates from the version with the infinitive (2.101) for the citizens in the matrix clause cannot be even part of the arbitrary subject in the subordinate clause. In this way, Polish contributes to a complicated picture of the subjunctive, which – even within a single language – does not hold the same property across different contexts.

Yet another pattern that Polish is expected to follow is the lack of obviation effects in the case of polarity subjunctive; consider (2.103) and (2.104):

- (2.103) *Piotr_i nie wierzy, żeby pro_{ij} tak wcześnie*
Peter NEG believe.PRS.3SG that pro so early
wyszedł z przyjęcia.
leave.PST.PTCP.SG.M from party
‘Peter doesn’t believe that he could leave the party that early.’

- (2.104) *Mieszkańcy nie sądzą, żeby PRO_{arb} naprawiono*
tenants NEG think that-COND/SBJV PRO_{arb} fix.NO/TO
dach w tydzień.
roof in week
‘The tenants don’t think that the roof could be fixed in a week.’

Interestingly, the sentence in (2.103) matches the expectations based on other languages, that is, for the polarity subjunctive contexts coreference is not blocked: it is possible that someone told Peter that he had left early but Peter’s feeling about this matter is different. In comparison, the context in (2.104) with the *-no/-to* constructions shows no difference: for both the intensional subjunctive and the polarity subjunctive the coreference is blocked, i.e., in (2.104) the tenants are not the ones who are supposed to fix the roof.

Moreover, Quer (2006, pp. 663–664) mentions other contexts where disjoint reference is not forced: embedded clause with a modal, embedded clause with focus on a subject, matrix or embedded clause with a passive subject, coordinated complements, complement clause with the perfective aspect; consider respective Polish equivalent sentences in (2.105)–(2.109):

subjunctive clauses. Furthermore, I have demonstrated that *że-* and *żeby-*clauses differ in terms of temporal interpretation: the first having an absolute interpretation (with respect to the utterance time), the latter having a relative interpretation (with respect to the matrix event). The lack of a deictic temporal interpretation combined with the presence of past forms devoid of their past interpretation and tenseless infinitives constitute yet another evidence for the subjunctivehood of *żeby-*clauses. Finally, I have analyzed the relationships between the subjects within a complex sentence, stating that intensional *żeby-*clauses exhibit obviation effects found in subjunctive structures cross-linguistically. Still, it must be noted that joint or disjoint reference is influenced by other factors, also in Polish, and should be treated with reservation as a test for the subjunctive status. In the next section, I will continue analyzing the meaning of *żeby-*clauses, but I will move my discussion from the sentence level to the utterance level, focusing on the pragmatic properties of the clauses under discussion.

2.3 *Żeby*-clauses as the subjunctive on the pragmatic level

The present section is devoted to the pragmatic properties of *że-* and *żeby-*clauses and the influence that the mood selection in Polish can have on the information status in discourse. I start with the corpus research on indicative and subjunctive selectors in Polish to see whether Terrell and Hooper's (1974) generalization about assertion/non-assertion can explain Polish mood distribution. Then I analyze various characteristics of information conveyed by *że-* and *żeby-*clauses, such as truth value, news value, the speaker's commitment to the truth of a proposition and the speaker's control over an event.

2.3.1 Subjunctive selectors in Polish: A corpus data overview

As a starting point for the corpus research on Polish subjunctive I have chosen Terrell and Hooper's (1974) classification of predicates based on the notion of assertion (see more in Section 1.3.1.1). Their work on the mood system of Spanish is one of the first attempts to account for the indicative/subjunctive contrast in complement selection from the semantic/pragmatic perspective. Terrell and Hooper (1974) treat the mood selection as a message, intensionally conveyed by the speaker, about the truth of an embedded proposition. Consequently, sentential complements are divided into three groups: (1) asserted, (2) presupposed, where assertion and presupposition are mutually exclusive, and (3) neither asserted nor presupposed (Terrell and Hooper, 1974, p. 486). Furthermore, Terrell and Hooper, 1974, pp. 486–490) split matrix predicated into six classes: (1) assertive matrices, (2) reported matrices, which select for asserted complements, (3) mental act matrices, (4) comment matrices, selecting for presupposed complements, (5) doubt matrices and (6) imperative matrices, which select for neither asserted nor presupposed complements (see Section 1.3.1.1 for a more detailed account of those groups). Then, they generalize about the data from Spanish and conclude that assertion is connected with the indicative, while non-assertion with the subjunctive (Terrell and Hooper, 1974, p. 487). What follows is that the predicates from the first and the second group should select for indicative complements, whereas the remaining groups should select for subjunctive complements. This generalization is corroborated by the data from Spanish with a notable exception of mental act predicates, selecting for indicative complements, which Terrell and Hooper (1974) call an “area of instability.”

The aim of the present corpus research at this juncture is to find out if the notion of assertion is a factor influencing the choice of a sentential complement in Polish. In other words, assuming that Terrell and Hooper's (1974) generalization is of a universal nature, I expect that the contrast between indicative and subjunctive complements will follow the asserted/non-asserted distinction. Specifically, the prediction is that in Polish predicates classified as asserted, in line with Terrell and Hooper's (1974) criteria, should select for *że*-clauses (indicative complements), whereas predicates classified as presupposed or as neither asserted nor presupposed should select for *żeby*-clauses (subjunctive complements). This prediction will be verified based on frequency data taken from a corpus of Polish.

2.3.1.1 Methods and materials

To relate Terrell and Hooper's (1974) classification to Polish, I analyze corpus data taken from the National Corpus of Polish (henceforth referred to as NKJP, see more in Przepiórkowski et al., 2012).⁴⁸ NKJP is the biggest annotated collection of Polish language data, which was compiled from the resources of the Institute of Computer Science of the Polish Academy of Sciences, PWN Polish Language Corpus and PELCRA Corpus (Lewandowska-Tomaszczyk et al., 2012, p. 8). NKJP draws on a variety of text types, from fiction and non-fiction texts through academic and press texts to spoken conversation and media texts taken from various media, such as books, press, the Internet or manuscripts (Górski and Łaziński, 2012, pp. 15–16).

In the preliminary stage, I prepared a list of verbs that can be treated as equivalents to Terrell and Hooper's (1974) examples. I directly translated their examples, but also based on their definitions of predicate types (see Section 1.3.1.1), I came up with additional verbs fulfilling their criteria. Finally, I consulted dictionaries of synonyms (Bańko (Ed.), 2013; Cienkowski, 1999) to expand my list. The complete list can be found in Table 11. It must be noted that Table 11 includes original Terrell and Hooper's (1974) classification with definitions and examples repeated for convenience. I also added information about selectional properties in the first column: indicative types are marked with light grey, whereas subjunctive types with dark grey. Mind that mental act matrices do not follow Terrell and Hooper's generalization and as such are grey-shaded.

Table 11. Polish verbs in Terrell and Hooper's (1974) classification

		Predicate type	Spanish examples	Polish
Indicative	Asserted	Assertive matrices express strong or weak belief of the speaker or the matrix subject	<i>creer</i> 'to believe' <i>pensar</i> 'to think' <i>es seguro</i> 'it is sure' <i>es verdad</i> 'it's true' <i>me parece</i> 'it seems to me'	<i>wierzyć</i> 'to believe' <i>mieć</i> 'to believe' <i>ufać</i> 'to trust' <i>myśleć</i> 'to think' <i>uważać</i> 'to think' <i>sądzić</i> 'to think' <i>twierdzić</i> 'to claim' <i>utrzymywać</i> 'to claim' <i>domniemywać</i> 'to surmise' <i>podejrzewać</i> 'to suspect' <i>przeczuwać</i> 'to sense' <i>przypuszczać</i> 'to suppose'

⁴⁸ Available at <http://nkjp.pl/>.

	Predicate type	Spanish examples	Polish	
Subjunctive			<p><i>wydawać się</i> 'to seem to sb' <i>zdawać się</i> 'to seem' <i>mieć pewność</i> 'to be sure' <i>mieć przekonanie</i> 'to be sure' <i>być pewnym</i> 'to be sure' <i>być prawdą</i> 'to be true'</p>	
		<p>Reported matrices describe the manner of conveying asserted information</p>	<p><i>decir</i> 'to say' <i>leer</i> 'to read' <i>contestar</i> 'to answer' <i>contar</i> 'to tell'</p>	<p><i>mówić</i> 'to say' <i>powiedzieć</i> 'to tell' <i>opowiadać</i> 'to tell' <i>odpowiadać</i> 'to answer' <i>gadać</i> 'to gab' <i>przeczytać</i> 'to read' <i>krzyczeć</i> 'to shout' <i>wrzeszczeć</i> 'to yell' <i>szeptać</i> 'to whisper' <i>cedzić</i> 'to drawl' <i>mamrotać</i> 'to mumble'</p>
	Presupposed	<p>Mental act matrices* describe a mental act fulfilled with respect to a proposition</p>	<p><i>dares cuenta</i> 'to realize' <i>aprender</i> 'to learn' <i>tomar en consideration</i> 'take into account'</p>	<p><i>uświadamiać sobie</i> 'to realize' <i>zdawać sobie sprawę</i> 'to realize' <i>uzmysławiać sobie</i> 'to realize' <i>nauczyć się</i> 'to learn' <i>zapamiętać</i> 'to remember' <i>zapomnieć</i> 'to forget' <i>przypomnieć sobie</i> 'to remember' <i>brać pod uwagę</i> 'to take into account'</p>
		<p>Comment matrices comment upon embedded propositions or to show that the matrix subject is psychologically affected by an embedded proposition</p>	<p><i>es una lástima</i> 'it's a shame' <i>es bueno</i> 'it's good' <i>es malo</i> 'it's bad' <i>es interesante</i> 'it's interesting' <i>es maravilloso</i> 'it's marvellous' <i>me alegre</i> 'I'm happy'</p>	<p><i>cieszyć się</i> 'to be happy' <i>radować się</i> 'to be happy' <i>szkoda</i> 'to be a shame' <i>przykro</i> 'to be a pity' <i>dobrze</i> 'to be good' <i>źle</i> 'to be bad' <i>wspaniale</i> 'to be marvellous' <i>ciekawe</i> 'to be interesting'</p>
	Neither asserted nor presupposed	<p>Doubt matrices used to express doubt about the validity of a proposition</p>	<p><i>dudar</i> 'to doubt' <i>negar</i> 'to deny' <i>no parecer</i> 'it doesn't seem' <i>no creer</i> 'not believe'</p>	<p><i>wątpić</i> 'to doubt' <i>kwestionować</i> 'to question' <i>zaprzeczać</i> 'to deny' <i>nie zanosić się</i> 'to not seem' <i>nie dowierzać</i> 'to not believe'</p>
		<p>Imperative matrices used to qualify an imperative</p>	<p><i>querer</i> 'to want' <i>preferir</i> 'to prefer' <i>aconsejar</i> 'to advise' <i>permitir</i> 'to permit' <i>ser necesario</i> 'to be necessary'</p>	<p><i>chcieć</i> 'to want' <i>pragnąć</i> 'to desire' <i>kazać</i> 'to order' <i>zlecić</i> 'to commission' <i>żądać</i> 'to demand' <i>domagać się</i> 'to demand' <i>dopominać się</i> 'to claim' <i>życzyć sobie</i> 'to wish' <i>radzić</i> 'to advise' <i>sugerować</i> 'to suggest' <i>woleć</i> 'to prefer' <i>preferować</i> 'to prefer'</p>

* Mental act matrices in Spanish do not follow Terrell and Hooper's (1974) generalization.

The specific method of analysis is based on descriptive statistics and comparison of frequency counts of specific base forms and their combinations with complementizers (McEnery and Hardie, 2014, p. 49). All the Polish words from Table 11 underwent a frequency check in NKJP. Specifically, I used PELCRA search engine,⁴⁹ which allows searching words with their inflectional forms and provides detailed frequency data also with respect to texts types and media through which texts were published (see Peżik, 2012). My search procedure included the following steps: (1) frequency count of the base form of a verb from Table 11 together with its inflectional forms (example query: ‘wierzyć**’); (2) frequency count of the base form of a verb from Table 11 together with its inflectional forms in combination with the indicative complementizer *że* (example query: ‘wierzyć** że’); (3) frequency count of the base form a verb from Table 11 together with its inflectional forms in combination with the variant indicative complementizer *iż* (example query: ‘wierzyć** iż’); (4) frequency count of the base form of a verb from Table 11 together with its inflectional forms in combination with the subjunctive complementizer *żeby* (example query: ‘wierzyć** żeby’); (5) frequency count of the base form of a verb from Table 11 together with its inflectional forms in combination with the variant subjunctive complementizers *ażeby*, *aby* or *by* (example query: ‘wierzyć** aby’). For all the searches described in the aforementioned procedure I used the following PELCRA settings: full corpus search, all types of texts, all types of media.

At this point, a brief comment on the formulation of corpus queries is necessary. I concede that the queries used in this study are phrased in a very simple way and aimed at finding not grammatical constructions, but rather strings of words with the sequence: verb plus complementizer. Still, such phrasing is applied on purpose to receive the broadest possible results. As broad searches very often lack precision (see Górski, 2012, pp. 293–294), in the next section, apart from showing gathered frequency data, I will also elaborate on occurrences that defy main patterns.

2.3.1.2 Results and discussion

Table 12 presents the frequency data obtained from NKJP. Column A includes matrix types taken from Terrell and Hooper (1974), i.e., predicate types. Column B shows the numbering of lines applied here for convenience; each line is devoted to a different predicate. Columns from D to J present frequency data for each predicate: frequency of the base form of a predicate (column D), frequency of the base form with the indicative complementizer *że* (column E), frequency of the base form with the variant indicative complementizer *iż* (column F), frequency of the base form with the subjunctive complementizer *żeby* (column G), frequency of the base form with variant subjunctive complementizers *ażeby*, *aby* and *by* (columns H–J). Each line presents two values calculated automatically by PELCRA search engine: the number of occurrences of a given string in the corpus and normalized frequency per one million words (see McEnery and Hardie, 2014, pp. 49–50). The higher these values are, the more frequent a given string is. The highest value for each line in columns E–J is marked in bold. Finally, I compared the number of occurrences with the indicative complementizers (columns E–F) to the number of occurrences with the subjunctive

⁴⁹ Available at <http://www.nkjp.uni.lodz.pl/>.

complementizers. If the indicative value is higher, a predicate selects for the indicative complement and is light-grey-shaded, but when the subjunctive count is higher, a predicate selects for the subjunctive complement and is dark-grey-shaded. Predicates which are marked with neither light grey nor dark grey give inconclusive results, that is, the number of occurrences with a given string is too low to formulate a generalization and such a frequency count may be simply accidental.

A general observation which can be made based on Table 12 is that the Polish predicates under scrutiny predominantly select⁵⁰ for *że*-clauses (indicative complements). This is true for assertive (lines 1–18) and reported predicates (lines 19–29), which in Polish follow Terrell and Hooper’s (1974) generalization and select for the indicative. Furthermore, Polish mental act predicates (lines 30–37) behave similarly to their Spanish equivalents also selecting for the indicative, which is at odds with the discussed generalization.

Table 12. Frequency of Polish predicates based on Terrell and Hooper’s (1974) classification

Matrix type	Line	Predicate	Base form	INDICATIVE		SUBJUNCTIVE			
				Że-clause	Iż-clause	Żeby-clause	Ażeby-clause	Aby-clause	By-clause
A	B	C	D	E	F	G	H	I	J
Assertive	1	<i>mniemać</i> ‘to believe’	25,006 16.409	8,860 5.814	443 0.291	13 0.009	0	9 0.006	15 0.01
	2	<i>wierzyć</i> ‘to believe’	241,194 158.274	65,367 42.895	2,091 1.372	1,252 0.822	11 0.007	847 0.556	1,583 1.039
	3	<i>ufać</i> ‘to trust’	26,259 17.231	2,974 1.952	134 0.088	7 0.005	0	11 0.007	12 0.008
	4	<i>myśleć</i> ‘to think’	773,642 507.673	265,830 174.441	2,244 1.473	1,984 1.302	21 0.014	1,116 0.732	1,583 1.039
	5	<i>sądzić</i> ‘to think’	193,322 126.86	86,720 56.907	2,896 1.9	5,637 3.699	53 0.035	4,078 2.676	4,874 3.198
	6	<i>uważać</i> ‘to think’	554,028 363.559	265,215 174.037	8,249 5.413	3,533 2.318	18 0.012	2,167 1.422	2,547 1.671
	7	<i>twierdzić</i> ‘to claim’	400,144 262.579	195,266 128.136	7,751 5.086	81 0.053	3 0.002	73 0.048	103 0.068
	8	<i>utrzymywać</i> ‘to claim’	120,172 78.858	16,288 10.688	657 0.431	8 0.005	0	15 0.01	27 0.018
	9	<i>domniemywać</i> ‘to surmise’	3,812 2.501	1,946 1.277	167 0.11	2 0.001	0	1 0.001	1 0.001
	10	<i>podejrzewać</i> ‘to suspect’	56,294 36.941	24,765 16.251	705 0.463	160 0.105	0	84 0.055	114 0.075
	11	<i>przeczuwać</i> ‘to sense’	4,546 2.983	1,350 0.886	37 0.024	0 0	0	1 0.001	0 0
	12	<i>przypuszczać</i> ‘to suppose’	49,683 32.603	30,790 20.205	1,125 0.738	617 0.405	9 0.006	739 0.485	943 0.619
	13	<i>wydawać się</i> ‘to seem’	186,242 122.214	67,397 44.227	2,130 1.398	175 0.115	9 0.006	424 0.278	475 0.312
	14	<i>zdawać się</i> ‘to seem’	59,692 39.171	14,058 9.225	175 0.115	5 0.003	0	5 0.003	4 0.003
	15	<i>mieć pewność</i> ‘to be sure’	10,688 7.014	8,157 5.353	239 0.157	6 0.004	1 0.001	2 0.001	2 0.001
	16	<i>mieć przekonanie</i> ‘to be sure’	968 0.635	701 0.46	32 0.021	0 0	0	0 0	0 0
	17	<i>być pewnym</i> ‘to be sure’	90,836 59.608	25,423 16.683	460 0.302	22 0.014	0	26 0.017	10 0.007
	18	<i>być prawdą</i> ‘to be true’	26,953 17.687	4,206 2.76	216 0.142	15 0.01	0	18 0.012	17 0.011
Reported	19	<i>mówić</i> ‘to say’	1,956,970 1,284.186	191,834 125.884	5,380 3.53	2,927 1.921	20 0.013	731 0.48	1,115 0.732
	20	<i>powiedzieć</i> ‘to tell’	1,263,556 829.16	246,958 162.057	5,616 3.685	3,334 2.188	21 0.014	683 0.448	1,110 0.728
	21	<i>opowiadać</i> ‘to tell’	234,480 153.868	8,024 5.265	138 0.091	56 0.037	1 0.001	29 0.019	67 0.044

⁵⁰ Mind that I am discussing frequency data here and by “select” I mean “more frequently select.”

Matrix type	Line	Predicate	Base form	INDICATIVE		SUBJUNCTIVE			
				Że-clause	Iż-clause	Żeby-clause	Ażeby-clause	Aby-clause	By-clause
A	B	C	D	E	F	G	H	I	J
	22	<i>odpowiadać</i> 'to answer'	235,555 154.574	8,254 5,416	205 0.135	99 0.065	0 0	50 0.033	117 0.077
	23	<i>gadać</i> 'to gab'	49,577 32.533	1,392 0,913	17 0.011	91 0.06	0 0	26 0.017	38 0.025
	24	<i>przeczytać</i> 'to read'	137,862 90.467	3,882 2,547	184 0.121	183 0.12	1 0.001	77 0.051	70 0.046
	25	<i>krzyczeć</i> 'to shout'	42,647 27.985	3,459 2,27	45 0.03	375 0.246	0 0	91 0.06	160 0.105
	26	<i>wrzeszczeć</i> 'to yell'	8,226 5.398	387 0,254	4 0.003	113 0.074	0 0	8 0.005	10 0.007
	27	<i>szeptać</i> 'to whisper'	9,444 6.197	472 0,31	17 0.011	15 0.01	0 0	5 0.003	7 0.05
	28	<i>cedzić</i> 'to drawl'	883 0.579	1 0.001	0 0	0 0	0 0	1 0.001	0 0
	29	<i>mamrotać</i> 'to mumble'	1,901 1.247	46 0.03	2 0.001	0 0	0 0	0 0	2 0.001
	Mental act	30	<i>uświadamić sobie</i> 'to realize'	4,856 3.187	2,266 1,487	54 0.035	0 0	0 0	3 0.002
31		<i>zdawać sobie sprawę</i> 'to realize'	59,105 38.785	28,264 18,547	991 0.65	4 0.003	0 0	4 0.003	3 0.002
32		<i>uzmysławić sobie</i> 'to realize'	165 0.108	73 0.048	5 0.003	0 0	0 0	0 0	0 0
33		<i>nauczyć się</i> 'to learn'	42,009 27.567	1,007 0,661	12 0.008	56 0.037	0 0	6 0.004	11 0.007
34		<i>zapamiętać</i> 'to remember'	30,548 20.046	1,237 0,812	29 0.019	39 0.026	0 0	16 0.01	37 0.024
35		<i>zapomnieć</i> 'to forget'	141,748 93.017	7,541 4,948	251 0.165	93 0.061	1 0.001	65 0.043	122 0.08
36		<i>przypomnieć sobie</i> 'to remember'	24,178 15.866	3,534 2,319	67 0.044	7 0.005	0 0	9 0.006	4 0.003
37		<i>brać pod uwagę</i> 'to take into account'	55,388 36.346	4,963 3,257	257 0.169	11 0.007	0 0	13 0.009	13 0.009
Comment	38	<i>cieszyć się</i> 'to be happy'	167,326 109.801	41,804 27,432	371 0.243	1 0.001	0 0	0 0	1 0.001
	39	<i>radować się</i> 'to be happy'	3,595 2.359	130 0.085	11 0.007	0 0	0 0	0 0	0 0
	40	<i>szkoda</i> 'to be a shame'	107,408 70.482	36,558 23,99	311 0.204	360 0.236	0 0	95 0.062	1,015 0.666
	41	<i>przykro</i> 'to be a pity'	23,798 15.617	5,251 3,446	108 0.071	15 0.01	0 0	3 0.002	47 0.031
	42	<i>dobrze</i> 'to be good'	608,302 399.175	38,830 25,481	709 0.465	996 0.654	10 0.007	867 0.569	6,778 4.448
	43	<i>źle</i> 'to be bad'	133,866 87.844	1,833 1,203	37 0.024	604 0.396	1 0.001	62 0.041	589 0.387
	44	<i>wspaniale</i> 'to be marvellous'	18,784 12.326	453 0,297	3 0.002	9 0.006	1 0.001	3 0.002	35 0.023
	45	<i>ciekawe</i> 'to be interesting'	128,354 84.227	6,066 3,981	49 0.032	26 0.017	0 0	26 0.017	100 0.066
Doubt	46	<i>wątpić</i> 'to doubt'	45,245 29.69	3,535 2,32	161 0.106	1,263 0.829	12 0.008	886 0.581	1,398 0.917
	47	<i>kwestionować</i> 'to question'	23,820 15.631	498 0,327	22 0.014	5 0.003	0 0	0 0	8 0.005
	48	<i>zaprzeczać</i> 'to deny'	29,288 19.219	3,957 2,597	131 0.086	73 0.048	2 0.001	193 0.127	813 0.533
	49	<i>nie zanosić się</i> 'to not seem'	1,821 1.195	47 0.031	1 0.001	63 0.041	0 0	96 0.063	110 0.072
	50	<i>nie dowierzać</i> 'to not believe'	2,157 1.415	257 0,169	12 0.008	1 0.001	0 0	1 0.001	15 0.01
Imperative	51	<i>chcieć</i> 'to want'	1,748,842 1,147.61	3,551 2.33	63 0.041	39,041 25,619	352 0.231	37,629 24.693	34,429 22.593
	52	<i>pragnąć</i> 'to desire'	105,206 69.037	83 0.054	11 0.007	877 0.575	48 0.031	2,178 1,429	2,164 1.42
	53	<i>kazać</i> 'to order'	90,175 59.174	159 0.104	5 0.003	108 0.071	1 0.001	78 0.051	185 0.121
	54	<i>zlecić</i> 'to commission'	8,499 5.577	1 0.001	0 0	3 0.002	0 0	4 0.003	5 0.003
	55	<i>żądać</i> 'to demand'	91,840 60.266	74 0.049	4 0.003	529 0.347	69 0.045	1,721 1.129	2,394 1,571

Matrix type	Line	Predicate	Base form	INDICATIVE		SUBJUNCTIVE			
				Że-clause	Iż-clause	Żeby-clause	Ażeby-clause	Aby-clause	By-clause
A	B	C	D	E	F	G	H	I	J
	56	<i>domagać się</i> 'to demand'	76,611 50.273	12 0.008	0 0	550 0.361	26 0.016	1,898 1.245	2,669 1.751
	57	<i>dopominać się</i> 'to claim'	2,374 1.558	2 0.001	0 0	20 0.013	0 0	28 0.018	44 0.029
	58	<i>życzyć sobie</i> 'to wish'	10,930 7.172	10 0.007	0 0	743 0.488	11 0.008	1,155 0.758	919 0.603
	59	<i>radzić</i> 'to advise'	97,634 64.069	207 0.136	4 0.003	627 0.411	2 0.001	874 0.574	1,528 1.003
	60	<i>sugerować</i> 'to suggest'	69,608 45.678	22,360 14.673	1,551 1.018	550 0.361	11 0.007	762 0.5	1,074 0.705
	61	<i>woleć</i> 'to prefer'	260,627 171.026	372 0.244	17 0.011	4,704 3.087	31 0.02	2,611 1.713	2,370 1.555
	62	<i>preferować</i> 'to prefer'	20,149 13.222	4 0.003	0 0	3 0.002	0 0	6 0.004	5 0.003

Source: taken from the automatic frequency count in PELCRA search engine.

In the remaining groups Polish data diverge from the Spanish ones. First, comment predicates (lines 38–45) in Polish select for indicative complements, although, as presupposed, they should select for the subjunctive. Second, the third group of predicates, neither asserted nor presupposed, in Polish follows two different directions: doubt predicates (lines 46–50) select for the indicative in contrast to the Spanish data, whereas imperative predicates (lines 51–62) select for the subjunctive and as such conform to the Spanish data, but with an important exception of *sugerować* 'to suggest' (line 60), which selects for the indicative.

That general picture shown in Table 12 must be supplemented with more detailed comments concerning each group of predicates. As already mentioned, assertive predicates in Polish more frequently select for the indicative; however, there are frequent occurrences of subjunctive selection combined with negation, especially in the case of *wierzyć* 'to believe' (line 2) and *sądzić* 'to think' (line 5); consider the following examples:

(2.110) *Nie wierzę, że-by na serio mogła pomyśleć,*
 NEG believe.PRS.1SG. that-SBJV seriously could.PST.PTCP.SG.F think.INF
że będę jej utrudniać granie.
 that.IND be.FUT.1SG her make.harder.INF playing
 'I don't believe that she could seriously think that I will make playing harder for her.'
 (NKJP, Sławomir Mizerski, 2004, *Dwie na huśtawce, Polityka*)

(2.111) *Nie sądzę, że-by dla matki, która była*
 NEG think.PRS.1SG that-SBJV for a mother who be.PST.PTCP.3SG.F
pedagogiem, było to mile.
 pedagogue.INS be.PST.PTCP.SG.N it nice
 'I don't think that for a mother, who was a pedagogue, it was nice.'
 (NKJP, Jerzy Kubrak, 1998, *Gramy w sklepie, Super Express*)

As visible in (2.110) and (2.111), the presence of negation triggers the subjunctive and such examples constitute the major part of occurrences of these predicates with the subjunctive. Other verbs that select for the subjunctive in the negative context, although with fewer occurrences found in the corpus, include *podejrzewać* 'to suspect' (line 10) and *wydawać się*

‘to seem’ (line 13). A similar case can be noticed for the verb *przypuszczać* ‘to suppose’ (line 12), which selects for the indicative but in combination with negation or *trudno* ‘(it is) difficult,’ which also conveys a negative meaning, selection may change into the subjunctive; see (2.112):

- (2.112) *Trudno przypuszczać, że-by te dwa dominujące*
 difficult suppose.INF that-COND/SBJV these two dominate.PRS.PTCP
w naszej ekstraklasie zespoły nie walczyły o złoto.
 in our extraclass teams NEG fight.PST.PTCP.PL.NONVIR for gold
 ‘It is difficult to suppose that these two teams dominating in our league wouldn’t fight for the gold medal.’
 (NKJP, Bogdan Przybyło, 2007, *Zakończyły na pierwszym, Gazeta Krakowska*)

Another verb that generally selects for the indicative, but exhibits a lot of instances with the subjunctive in Table 12 is *myśleć* ‘to think’ (line 4). However, in this case, due to the query phrasing,⁵¹ PELCRA results include examples with the noun *myśl* ‘thought,’ which is responsible for many occurrences with the subjunctive; see (2.113):

- (2.113) *Tam powstała myśl, że-by zrobić z tego*
 there emerge.PST.PTCP.3SG.F thought that-COND/SBJV create.INF out.of this
normalne pismo poświęcone kulturze.
 normal magazine dedicated culture
 ‘An idea emerged there to create out of it a normal magazine devoted to culture’
 (NKJP, Helena Zaworska, 1997, *Dobrze, że żyłem, Gazeta Wyborcza*)

The last point in the class of assertive predicates must be made with respect to the verb *uważać* (line 6), which in Polish has two different meanings: ‘to think,’ i.e., ‘to have a particular opinion,’ or ‘to mind,’ i.e., ‘be careful’; cf. (2.114) and (2.115):

- (2.114) *Uważałem, że blokowanie środka miasta to kompletny absurd.*
 think.PST.PTCP.1SG.M that blocking center city it complete absurd
 ‘I thought that blocking the city centre was completely absurd.’
 (NKJP, Adam Michnik, Józef Tischner, Jacek Żakowski, 1995, *Między Panem a Plebanem*)

- (2.115) *Trzeba uważać, że-by się nie utopić.*
 is.needed be.careful.INF that-COND/SBJV REFL NEG drown.INF
 ‘One needs to be careful not to drown.’
 (NKJP, Hanna Samson, 2000, *Pułapka na motyla*)

As visible in (2.114) and (2.115), *uważać* in the sense of ‘to think’ selects for the indicative, whereas in the sense of ‘to mind’ it opts for the subjunctive. What is interesting is that the instances meaning ‘to mind’ often include negation, such as in (2.115).

The next group of reported predicates mainly selects for the indicative except for very rare verbs, such *cedzić* ‘to drawl’ (line 28) and *mamrotać* ‘to mumble’ (line 29) for which there are too few examples to make a generalization. Still, in this group one can find

⁵¹ The imperative of *myśleć* ‘to think’ and the noun *myśl* ‘thought’ have the same form and that is why the results are distorted.

interesting instances of polysemous words, which – depending on their meaning – select for either the indicative or the subjunctive; consider (2.116) and (2.117):

(2.116) *Zawsze mówię, że w kategoriach życia ziemskiego*
 always say.PRS.1SG that in categories life earthy
jestem człowiekiem szczęśliwym.
 be.PRS.1SG man.INS happy.INS

‘I always say that from the worldly perspective I’m a happy man.’

(NKJP, Barbara Ziembicka, 1998, *Najprostszą drogą: rozmowy za artystami*)

(2.117) *Mówiłam, że-by tego nie robił,*
 tell.PST.PTCP.3SG.F that-COND/SBJV this NEG do.PST.PTCP.SG.M
bo oni mogą strzelać.
 because they can shoot.INF

‘I told him not to do it as they might shoot.’

(NKJP, Jurek Jurecki, 1996, *Bałam się o męża, Tygodnik Podhalański*)

Example (2.116) illustrates the use of the verb *mówić* (line 19) in the sense of ‘to say that’ in which it selects for the indicative; however, *mówić* in the sense of ‘to tell somebody to do something’ selects for the subjunctive. Such selectional shifts between the reported reading and the imperative reading are also found in the case of *powiedzieć* ‘to tell’ (line 20), *krzyczeć* ‘to shout’ (line 25) and *wrzeszczeć* ‘to yell’ (line 26).

In the group of mental act matrices, which in Polish more frequently select for the indicative, there are two notable instances. Although the verbs *zapamiętać* ‘to remember’ (line 34) and *zapomnieć* ‘to forget’ (line 35) generally opt for the indicative, I also found occurrences with the subjunctive, which have futurative meaning. This contrast resembles the one found in English between ‘remember doing’ and ‘remember to do’ as well as ‘forget doing’ and ‘forget to do’; cf. (2.118) and (2.119):

(2.118) a. *Goście zapamiętali, że cały czas siedział*
 guests remember.PST.PTCP.3PL.VIR that all time sit.PST.PTCP.3SG.M
przy stoliku z premierem i ambasadorem Rosji.
 at table with prime.minister and ambassador Russia
 ‘The guests remembered him sitting all the time at the table with the prime minister and the ambassador.’

(NKJP, Joanna Solska, 2003, *Dom po zachodzie słońca, Polityka*)

b. *Zapamiętam, że-by nie dawać mojemu dziecku.*
 remember.FUT that-COND/SBJV NEG give.INF my child
zabawek do szkoły
 toys to school

‘I will remember not to give my child toys to bring them to school.’

(NKJP, Radosław Figura, 2006, *Magda M*)

- (2.119) a. *Zapomniałeś, że w czasie okupacji*
 forget.PST.PTCP.2SG.M that in time occupation
siedziałem we Lwowie ze znanym włamywaczem.
 sit.PST.PTCP.1SG.M in Lviv with well-known burglar
 ‘You forgot serving a sentence during the occupation period in Lviv with
 a well-known burglar.’
 (NKJP, Zygmunt Zeydler-Zborowski, 1958, *Czarny mercedes*)
- b. *Zapomniano, żeby pobrać ślady z włosów i*
 forget.NO/TO that-COND/SBJV take.INF sample from hair and
odzieży.
 clothes
 ‘They forgot to take samples from hair and clothes.’
 (NKJP, Dowody indolencji, 2001, *Dziennik Zachodni*)

Still, examples like (2.118b) and (2.119b) are very rare in the corpus and one can also express the futurative meaning by means of the indicative; see (2.120)

- (2.120) *Duszpasterz pewnie sobie zapomniał, że*
 priest perhaps REFL forget.PST.PTCP.3SG.M that
miał do Bir przyjechać.
 be.supposed.PST.PTCP.3SG.M to Bir come.INF
 ‘The priest might have forgotten that he was supposed to come to Bir.’
 (NKJP, Wiesław Dymny, 1997, *Opowiadania zwykłe*)

What must be noted about example (2.120) is that the embedded clause contains a modal verb *mieć* ‘be supposed to do,’ which is very often the case when the verbs *pamiętać* ‘to remember’ and *zapomnieć* ‘to forget’ select for the indicative whilst keeping their futurative reading.

Further on, the group of comment predicates behaves similarly to the mental act group more frequently opting for the indicative. Nonetheless, as visible in Table 12, the predicates *szkoda* ‘to be a shame’ (line 40) and *dobrze* ‘to be good’ (line 42) exhibit a lot of occurrences with the subjunctive. In the first case *szkoda* ‘to be a shame’ selects for the subjunctive under an optative reading; consider (2.121):

- (2.121) *Szkoda, by takie rzeczy lądowały.*
 is.shame COND/SBJV such stuff land.PST.PTCP.PL.NONVIR
po prostu na śmietnikach
 simply on rubbish.dump
 ‘It’s a shame that such stuff is simply thrown away.’
 (NKJP, Tak spełniają się marzenia, 2000, *Dziennik Bałtycki*)

What is interesting is that in this optative reading *szkoda* ‘to be a shame’ generally selects for a subjunctive complement introduced by the variant complementizer *by*, which is a kind of idiomatic feature. Then, the instances of *dobrze* ‘to be good’ with the subjunctive are connected with the use of *żeby* to introduce subject clauses; consider (2.122):

(2.122) *Dobrze by było, że-by te dwie komisje
 good COND/SBJV be.PST.PTCP.SG.N that-COND/SBJV these two committees
 rzeczywiście zajęły się tymi ustawami.
 for.real deal.PST.PTCP.PL.NONVIR REFL these.INS bills.INS*
 ‘It would be good for these two committees to deal with these bills for real.’
 (NKJP, Kancelaria Sejmu Rzeczypospolitej Polskiej, 2004)

Such instances with subject clauses introduced by the complementizer *żeby* are also noted for the predicate *szkoda* ‘to be a shame.’

Finally, we arrive at the two groups of predicates which are neither asserted nor presupposed. The first group of doubt predicates selects more frequently for the indicative apart from *nie zanosić się* ‘to not seem’ (line 49), which has too few occurrences with sentential complements in the corpus to draw any conclusion. The most interesting case in this group is the verb *wątpić* ‘to doubt’ (line 46), which opts for the indicative, but also appears almost as frequently with the subjunctive as with the indicative (compare the results from columns E–F with those from columns G–J). However, a closer look at the corpus data shows that the indicative selection co-occurs with the presence of negation; see (2.123):

(2.123) *Dziś nikt nie wątpi, że ekrany przegrywają z papierem,
 today no-one NEG doubt.PRS.3SG that screens lose.PRS.3PL with paper
 gdy idzie o komfort czytania.
 when go.PRS.3SG about comfort reading*
 ‘No one doubts today that screens lose to paper in terms of reading comfort.’
 (NKJP, Tomasz Bienias, 1999, Microsoft i literki, *Gazeta Wyborcza*)

On the other hand, in a non-negation context *wątpić* ‘to doubt’ selects for the subjunctive; consider (2.124):

(2.124) *Wątpię, że-by po tych zmianach kopalnia
 doubt.PRS.1SG that-COND/SBJV after these changes mine
 zaczęła lepiej funkcjonować.
 start.PST.PTCP.SG.F better function.INF*
 ‘I doubt that after those changes the mine will function in a better way.’
 (NKJP, Podziemia pod kontrolą państwa, 2007, *Gazeta Krakowska*)

Mind that the role of negation in (2.123) is the opposite to the one in the case of the discussed assertive predicates: for assertive predicates negation triggered the subjunctive, whereas for doubt predicates it triggers the indicative.

The last group, imperative predicates, predominantly selects for the subjunctive with a noteworthy exception of *sugerować* ‘to suggest’ (line 60), which selects for the indicative; see (2.125):

(2.125) *Juliusz Kleiner sugerował, że Słowacki tekst ukończył:*
 Juliusz Kleiner suggest.PST.PTCP.3SG.M that Słowacki text finish.PST.PTCP.3SG.M
oddał go bowiem do poprawek znajomemu Francuzowi.
 submit.PST.PTCP.3SG.M it since to corrections acquaintance.DAT Frenchman.DAT
 ‘Juliusz Kleiner hinted that Słowacki finished his text as he submitted it for correction
 to a French acquaintance.’
 (NKJP, Alina Kowalczykova, 1997, *Dramat i teatr romantyczny*)

It must be noted that the examples like (2.125) do not have an imperative reading, but rather a reported reading in which *sugerować* ‘to suggest’ introduces an idea. In contrast, in the corpus one can find instances with imperative reading which are introduced by the variant subjunctive complementizer *by*; cf. (2.126):

(2.126) *Część rajców miejskich sugeruje, by urząd miejski*
 part councillors municipal suggest.PRS.3SG COND/SBJV office municipal
pozwał parlament do sądu.
 sue.PST.PTCP.SG.M parliament to court
 ‘Some city councillors suggest that the municipal office should sue the parliament.’
 (NKJP, 2005, *Rządowy dług, Gazeta Krakowska*)

Nonetheless, the instances such as in (2.126) are far less frequent than those with the indicative.

The last comment must be made about the verb *chcieć* ‘to want’ (line 51), which is cross-linguistically a typical subjunctive selector. In Polish *chcieć* ‘to want’ more frequently selects for the subjunctive, but it is surprising to discover quite numerous instances with the indicative; consider (2.127):

(2.127) *Traf chciał, że umieszczono nas*
 twist.of.fate want.PST.PTCP.3SG.M that place.NO/TO us
na sąsiednich łóżkach.
 on neighbouring beds
 ‘By a strange twist of fate we were placed on the neighbouring beds.’
 (NKJP, 1999, *Najtrwalsza okazała się nasza przyjaźń, Życie na gorąco*)

The occurrences with the indicative often include fixed phrases, such as *traf chciał* ‘by a strange twist of fate’ or *pech chciał* ‘unfortunately’ and must be treated as idiomatic.

To conclude, Terrell and Hooper’s (1974) generalization (refer to Table 11) does not explain the distribution of *że*- and *żeby*-clauses in Polish. The majority of predicates select for *że*-clauses (indicative complements) even if they are presupposed (mental act and comment predicates) or neither presupposed nor asserted (doubt predicates). The only group that consistently selects for *żeby*-clauses (subjunctive complements) is the one of imperative predicates, excluding the verb *sugerować* ‘to suggest,’ which in Polish is often used in the reported sense. Nonetheless, Terrell and Hooper’s (1974) observations can be used to explain mood shifts accompanying meaning shifts, e.g., the shift from reported to imperative meaning or negating assertive predicates. Therefore, in the next section I will consider other pragmatic factors which can exert an influence on the selectional properties of Polish predicates.

2.3.2 Discourse status of *żeby*-clauses

In the literature on Romance languages one can find proposals to associate mood values with the status of information. Recall from Section 1.3.1.3 that according to Majías-Bikandi (1998) the subjunctive is used when information is either old or untrue and the indicative is applied for high informational value, that is, asserted new information. Nonetheless, the tests used to confirm Majías-Bikandi's (1998) generalization do not work for Polish. First, indefinite phrases should be illicit with subjunctive complements because of the clash between a new discourse referent embodied by an indefinite and a subjunctive clause meant to convey old information. Therefore, we expect *żeby*-clauses to be incompatible with indefinites; cf. (2.128) and (2.129):

(2.128) *Uważam, że mój syn powinien znaleźć jakąś dziewczynę.*
 think.PRS.1SG that my son should.PRS.3SG find.INF some girlfriend
 'I think that my son should find a girlfriend.'

(2.129) *Pragnę, że-by mój syn znalazł jakąś dziewczynę.*
 desire.PRS.1SG that-COND/SBJV my son find.PST.PTCP.SG.M some girlfriend
 'I desire that my son should find a girlfriend.'

As visible in (2.128) and (2.129), the indefinite phrase *jakąś dziewczyna* 'some girl' can be used both in *że-* and *żeby*-clauses. Similar results appear after another test connected with the use of the intensifier *tak* 'so'; cf. (2.130) and (2.131):

(2.130) *Nie sądzę, że jest tak zimno.*
 NEG think.PRS.1SG that be.PRS.3SG so cold
 'I don't think it's so cold.'

(2.131) *Chciał-by-m, że-by nie było tak zimno.*
 want.PST.PTCP.M-COND/SBJV-1SG that-COND/SBJV NEG be.PST.PTCP.SG.N so cold
 'I don't want it to be so cold.'

Examples (2.130) and (2.131) show that the intensifier *tak* 'so' can be both used with *że-* and *żeby*-clauses, whereas the expectation is that it should be licit, due to its anaphoric nature (see Section 1.3.1.3), only with old information, that is, *żeby*-clause.

Yet another discourse property of the subjunctive is to signal relevance of information and thus act as procedural encoding. As described in the first chapter, in Spanish the predicates that select for the subjunctive – in contrast to those selecting for the indicative – do not have a parenthetical reading since subjunctivized information is not relevant on its own (Jary, 2002). Transposing this test to Polish data, one can see that the verbs that select for *że-* clauses can have a parenthetical use; see (2.132)–(2.135):

(2.132) *Marta nie zda egzaminu, myślę.*
 Marta NEG pass.FUT.3SG exam think.PRS.1SG
 'Marta won't pass the exam, I think.'

(2.133) *To musi się udać, mamy przekonanie.*
 this must.PRS.3SG REFL succeed.INF have.PRS.1PL conviction
 'This must succeed, we're sure.'

- (2.134) *Nic o tym nie wiem, odpowiedział.*
 nothing about it NEG know.PRS.1SG answer.PST.PTCP.3SG.M
 ‘I don’t know anything about it, he answered.’
- (2.135) *Trzeba wymienić podłogi, uświadomiła sobie.*
 is.needed change.INF floors realize.PST.PTCP.3SG.F REFL
 ‘It’s necessary to change the floor into new one, she realized.’

Examples (2.132)–(2.135) show typical *że*-selectors in Polish: *myśleć* ‘to think’ and *mieć przekonanie* ‘to be sure’ (assertive predicates), *odpowiadać* ‘to answer’ (reported predicate) and *uświadamiać sobie* ‘to realize’ (mental act predicate). Nonetheless, the parenthetical use is constrained by other factors since not all *że*-selectors can appear in such context; cf. examples (2.136) and (2.137):

- (2.136)**Zdał wreszcie egzamin magisterski, cieszyliśmy się.*
 pass.PST.PTCP.3SG.M finally exam master be.happy.PST.PTCP.1PL REFL
 Intended meaning: ‘We were happy that he has finally passed his master’s exam.’
- (2.137)**Znalazła pracę, nie dowierzam.*
 find.PST.PTCP.3SG.F job NEG believe.PRS.1SG
 Intended meaning: ‘I don’t believe she has found a job.’

As visible in (2.136) and (2.137), comment (*cieszyć się* ‘to be happy’) and doubt predicates (*nie dowierzać* ‘to not believe’) in Polish are not licit in the parenthetical context. The first instance is excluded by the factivity factor, whereas the second by the lack of the speaker’s commitment to the truth of the host sentence (Jagięła, 2015, p. 181). Factivity is an important factor in the use of parentheticals because factive verbs are presuppositional and do not contribute to the informational common ground, failing to meet the relevance condition, which excludes example (2.136) (Jagięła, 2015, p. 192). The sentence in (2.137) is excluded because of the lexical content of the verb, which precludes the speaker’s commitment to the truth of the host sentence.

Another constraint is that parenthetical sentences should be finite and not infinitival, gerundial or subjunctive (Grimshaw, 2011 after Jagięła, 2015, p. 193). Taking this factor into account, we expect *żeby*-selectors to be illicit in the parenthetical context; consider examples (2.138) and (2.139):

- (2.138)**Wybrała na wakację Turcję, radziłem.*
 choose.PST.PTCP.3SG.F on holiday Turkey advise.PST.PTCP.1SG.M
 Intended meaning: ‘I advised her to choose Turkey for holiday.’
- (2.139)**Córka się usamodzielniała, chcemy.*
 daughter REFL be.independent.PST.PTCP.3SG.F want.PRS.1PL
 Intended meaning: ‘We want our daughter to be independent.’

As expected, the imperative predicates *radzić* ‘to advise’ and *chcieć* ‘to want’ are not grammatical in the parenthetical context. According to Jagięła (2015, p. 194), only finite indicative clauses are marked for mood in the sense they provide mood-related instructions that guide the interpretation of a host sentence. In this way, the indicative mood manifests the propositional attitude of belief, guiding the hearer’s interpretation (*ibidem*). Nonetheless, it should be noticed that in Polish the indicative is not enough to make such sentences licit as

some *że*-clauses (selected by comment and doubt matrices), as already shown, do not form grammatical parentheticals.

2.3.3 Cognitive perspective on *żeby*-clauses

In Section 1.3.2.1 I presented various aspects of Cognitive Linguistics theory that have been already applied to account for the indicative/subjunctive distinction. One of them is prototype theory used by Lunn (1989) to describe mood distribution in Spanish. She devises prototype of assertability, whose central member is information both new and true, whereas its marginal members lack at least one of these attributes, i.e., they are either old or untrue. In her reasoning, central members are realized via the indicative, whereas the marginal ones via the subjunctive. Nonetheless, her account, working for the Spanish data, does not rely describe mood distribution in Polish. Central members of the prototype in Polish are conveyed by *że*-clauses, e.g., complements to assertive predicates, like *myśleć*, *sądzić*, *uważać* ‘to think,’ or to reported predicates, like *powiedzieć* ‘to say’; see (2.140) and (2.141):

(2.140) *Sądził, że najgorsze ma już za sobą.*
 think.PST.PTCP.3SG.M that the.worst have.PRS.3SG already behind REFL
 ‘He thought that the worst had been already behind him.’
 (NKJP, Bronisław Świdorski, 1997, *Słowa obcego*)

(2.141) *Profesor Zarzycki od razu powiedział, że podejmie się operacji.*
 profesor Zarzycki right away say.PST.PTCP.3SG.M that take.on.FUT.3SG
 REFL surgery.
 ‘Professor Zarzycki said right away that he would take on surgery.’
 (NKJP, Grażyna Mróz, 1999, *Nadzieja na normalne życie, Tygodnik Podhalański*)

Problems with Lunn’s (1989) account start when one wants to describe the distribution of *żeby*-clauses in Polish. In line with Lunn (1989), we expect *żeby*-clauses to emerge in the contexts where information is either old or untrue. With respect to the news value, in Polish mental act predicates and comment predicates, which are presupposed, select for *że*-complements although they do not bring any new information; consider (2.142) and (2.143):

(2.142) *Człowiek zapomniał, że żyje na planecie owadów.*
 man forget.PST.PTCP.3SG.M that live.PRS.3SG on planet insects
 ‘Man has forgotten that they live on the insects’ planet.’
 (NKJP, 2002, *Strażacy kontra szerszenie, Polityka*)

(2.143) *Szkoda, że ceną za to jest powszechny brak poszanowania prawa.*
 be.a.shame that price.INS for it be.PRS.3SG common
 lack respect.GEN law.GEN
 ‘It’s a shame that the common lack of respect for the law is the price for it.’
 (NKJP, Bartłomiej Leśniewski, Jacek Szczęsny, 1997, *Bez cła, Wprost*)

Examples (2.142) and (2.143) show, respectively, the mental act predicate *zapomnieć* ‘to forget’ and the comment matrix *szkoda* ‘to be a shame,’ which select for *że*-clauses. In terms of truth value, Polish complements also defy Lunn’s generalization. In Polish doubt

predicates, which convey the lack of the speaker's commitment to the truth of an embedded proposition, select for *że*-clauses; cf. (2.144) with the doubt predicate *wątpić* 'to doubt':

- (2.144) *Wątpię, że były jakiegokolwiek szanse utrzymania*
 doubt.PRS.1SG that be.PST.PTCP.3PL.NONVIR whatever chances keeping
St. Vith na dłuższą metę [...].
 St. Vith in long run
 'I doubt if there were any chances of keeping St. Vith in the long run.'
 (NKJP, 2008, *Bitwa o St. Vith*, forum.historia.org.pl)

On the other hand, imperative predicates, which give information about a desirable state of affairs whose truth-value cannot be guaranteed by the speaker, do follow Lunn's account and select for *żeby*-clauses; consider the imperative predicate *domagać się* 'to demand' in (2.145):

- (2.145) *Domagałem się, że-by mi wyjawiono sekret.*
 demand.PST.PTCP.1SG.M REFL that-COND/SBJV me reveal.NO/TO secret
 'I demanded that the secret be revealed to me.'
 (NKJP, Stanisław Mrozek, 1975, *Jak zostałem filmowcem*)

As shown in the above examples, the prototype of assertability does not account for the mood distribution in Polish as the information of low news value (mental act predicates and comment predicates) is conveyed in *że*-clauses (the indicative), whereas the information of a low truth value can be expressed by both *że*-clauses (doubt predicates) and *żeby*-clauses (imperative predicates). Therefore, it may seem reasonable to modify the notion of assertion and use the definition based on mental space theory.

Recall that Majías-Bikandi (1994), drawing on mental space theory, formulates an intention-based definition of assertion in which a proposition is asserted when the speaker wants to indicate that it belongs to some individual's view of the reality.⁵² In the same way mood is treated by Dam Jensen (2011), who sees the use of the indicative or the subjunctive as an instruction to locate an event relative to the reality space. Such a perspective can explain the use of *że*-clauses (indicative) with mental act predicates and comment predicates. In (2.142) the speaker signals that people include the fact of living on the planet of insects in their view of reality, although they can act as if they forgot about it. Similarly, in (2.143) the speaker perceives the lack of respect for the law as part of his reality and comments on it. Nonetheless, it is difficult to apply this line of reasoning to example (2.144). In this sentence, the matrix subject denies the embedded event, and thus explicitly indicates that the embedded event does not belong to his or her reality view. Still, the embedded event is realized via the indicative *że*-clause.

The category of doubt predicates in Polish seems even more complicated when one wants to analyze the selectional properties of the verb *wątpić* 'to doubt'; compare the examples in (2.146):

⁵² A similar account of the indicative/subjunctive distinction can be found in Góralczyk (2009), who claims that *żeby*-clauses express propositions which are not part of the speaker's or the subject's reality.

- (2.146) a. *Nikt nie wątpi, że jest pan
no-one NEG doubt.PRS.3SG that be.PRS.3SG sir
świetnym zegarmistrzem.
great.INS clocksmith.INS*
'No-one doubts that you're a great clocksmith Sir.'
(NKJP, Aleksander Minkowski, 1972, *Szaleństwo Majki Skowron*)
- b. *Wątpię, że-by porzuciła
doubt.PRS.1SG that-COND/SBJV leave.PST.PTCP.SG.F
to wszystko dla kariery urzędniczej.
this all for career clerk*
'I doubt she would leave all this for a clerk career.'
(NKJP, 1996, O profesor Łętowskiej mówią znani prawnicy, *Gazeta Wyborcza*)

In example (2.146a) we can see the verb *wątpić* 'to doubt' selecting for *że*-clause but under negation, which is in line with the aforementioned theories that the indicative is used to signal that the eventuality is part of the individual's reality – no-one doubts whether the man is a good clocksmith; in other words, everyone believes that the man is a good clocksmith. In contrast, sentence (2.146b) shows that the not negated verb *wątpić* 'to doubt' selects for *żeby*-clause and in this way it shows the lack of the speaker's commitment, i.e., the embedded event is not part of their reality; in other words, the speaker does not believe that the man is a good clocksmith. However, such explanations fail when one needs to account for the cases in which the verb *wątpić* 'to doubt' selects for *że*-clause outside the context of negation; cf. (2.147):

- (2.147) *Rzecz w tym jednak, że są uzasadnione powody,
thing in this though that be.PRS.3PL legitimate reasons
by wątpić, że tak było w istocie.
to doubt.INF that this.way be.NO/TO indeed*
'The thing is though that there are good reasons to doubt that it happened like that indeed.'
(NKJO, Dawid Warszawski, 1992, *Ojciec i córka*, *Gazeta Wyborcza*)

According to Góralczyk (2009, p. 125 based on Wierzbicka, 1988), the verb *wątpić* 'to doubt' – similarly to *martwić się* 'to be worried' and *decydować* 'to decide' – can select for both *że*- and *żeby*-clauses but with a difference in control that the speaker or the subject has over the embedded proposition. If they see the event as uncontrollable or unpredictable, they signal it by selecting *żeby*-clause, that is, the subjunctive. The factor of prediction/control can also be used to account for the selection in the case of other doubt predicates; consider (2.148):

- (2.148) *Ministerstwo Finansów zaprzecza, że takie plany istniały [...].
ministry finances.GEN deny.PRS.3SG that such plans exist.PST.PTCP.3SG.NONVIR*
'Ministry of Finance denies that such plans have ever existed.'
(NKJO, Jaka jest dzisiaj rola ministerstwa kultury?, 1999, *Gazeta Wyborcza*)

The verb *zaprzeczać* 'to deny' selects for *że*-clause to indicate that the speaker/subject has control over the knowledge about the embedded proposition.

In sum, we have gone through various pragmatic factors that may influence mood selections in Polish. We have shown that Lunn's (1989) generalizations on news value and truth value do not account for the Polish data. Then we have referred to the notion of assertion modified on the grounds of mental space theory, that is, a proposition is asserted when the speaker or the subject intends to show that this proposition is part of their view of reality. Still, the assertion understood in this way fails to account for the selectional properties of some doubt predicates. Therefore, we have delved into one more factor, that is, prediction/control that the speaker or the subject may have over an embedded proposition.

2.3.4 Interim conclusions

So far I have looked into *że-* and *żeby-*clauses from the usage-based perspective, treating mood values as a signal that guides utterance interpretation. I started with Terrell and Hooper's (1974) generalization that the indicative is associated with assertion, whereas the subjunctive with non-assertion. My corpus research revealed that in the majority non-asserted predicates in Polish select for *że-*clauses (indicative complement), which is at odds with and Terrell and Hooper's (1974) generalization. Next, I analyzed the discourse status of *że-* and *żeby-*clauses and showed that the contrast between these two types of clauses is not used in Polish to mark relevance of information, understood as new information contributing to the common ground. Then, I considered other pragmatic factors, such as truth value and news value, which also did not succeed in explaining mood distribution in Polish. Finally, I applied the notion of assertion based on mental space theory, which explained some of the problematic Polish cases. However, one more factor needed to be taken into account, that is, the speaker's or the subject's prediction/control over a proposition, to explain the properties of doubt predicates.

Considering all the results of this pragmatic look on *że-* and *żeby-*clauses, one needs to ponder whether the subjunctive is a phenomenon which can be defined on the pragmatic level. In other words, a question should be asked if the indicative/subjunctive distinction has a universal pragmatic load that guides utterance interpretation, or – alternatively – mood values may contribute to understanding utterances in a language-specific way. If the first option were the case, the distribution of *że-* and *żeby-*clauses should follow assertion/non-assertion distinction for the indicative and the subjunctive, respectively, as well as other factors, such truth value or information value. As already shown, this is not so. Therefore, a conclusion could be drawn, based on pragmatic factors, that in Polish the contrast between *że-* and *żeby-*clauses is not the one between the indicative and the subjunctive under their pragmatically (discourse) oriented definitions. Another possible explanation is that the category of mood is a phenomenon ascribed to the sentence level and connected strictly with properties of the matrix predicates. In this sense, one can speak about universal properties of moods in terms of semantics and morphosyntax, but not in the sense of pragmatics. In the next section, I will return to the sentence level and show that *że-* and *żeby-*clauses differ morphosyntactically and that these differences stem from the indicative and subjunctive status.

2.4 *Żeby*-clauses as the subjunctive on the morphosyntactic level

In this section I show that *żeby*-clauses exhibit subjunctive properties connected with so-called domain transparency. First, based on a literature review, I demonstrate morphosyntactic differences between three types of complements in Polish: *że*-clauses, *żeby*-clauses and infinitives, stressing the problem of conflicting judgements among researchers. Second, I present results of my grammaticality judgement study, proving that there is a discernable difference in the way the discussed complement types are assessed by Polish native speakers. Finally, I discuss the derivation of *żeby* as a complex complementizer and show factors that may influence the inconsistent properties of *żeby*-clauses in terms of transparency.

2.4.1 Picture of long-distance phenomena in Polish

Long-distance phenomena in Polish exhibit considerable complexities and they differ not only with respect to the complement type, but also, within a particular complement type, they do not have a uniform behaviour. It appears that it is wh-movement that poses the greatest problems in the account of Polish long-distance phenomena since researchers differ in their assessment and analysis of Polish data. As far as the indicative mood is concerned, the extraction of wh-pronouns out of tensed indicative complements (introduced by *że*) in Polish leads to ungrammatical results (Witkoś, 1995); see (2.149) (from Orszulak, 2016b, p. 108):

(2.149) **Co Maria wie, że Piotr zrobił źle?*
what Mary know.PRS.3SG that Peter do.PST.PTCP.3SG.M wrong
Intended meaning: ‘What does Mary know that Peter did wrong?’

Still, the results of such an operation are less degraded if we use so-called ‘bridge verbs,’ e.g., *mówić* ‘to speak’ and *powiedzieć* ‘to say’, which – according to Cichocki (1983) and Zabrocki (1989) – allow an extraction; see (2.150) (from Witkoś, 1995, p. 229 after Orszulak, 2016b, p. 108):

(2.150) ?*Co Janek powiedział, że studenci czytają?*
what John say.PST.PTCP.3SG.M that students read.PRS.3PL
‘What did John say that the students read?’

Indeed, the sentence in (2.150) sounds better than the one in (2.149), but this may be due to parsing, i.e., in the case of bridge verbs it is easier to integrate *co* ‘what’ as an argument of the matrix predicate, which gives the illusion of correctness. This is even more so if we consider extractions with bridge verbs with other types of extracted phrase; cf. (2.151) (from Orszulak, 2016b, p. 108)

(2.151) ?*Dokąd Janek powiedział, że studenci uciekli?*
whereto John say.PST.PTCP.3SG.M that students flee.PST.PTCP.3PL.VIR
‘Where did John say that the students fled?’

Since in (2.151) *dokąd* ‘whither, whereto’ cannot serve as the argument of *powiedzieć* ‘to say’, the question in (2.151) sounds far worse than the one in (2.150). It seems then that the acceptability of extraction in such a case is connected with the type of wh-phrase rather than a verb (Orszulak, 2016b, p. 108).

In the case of *żeby*-clauses extraction facts are becoming even more complicated. According to Willim (1989, p. 112), such an extraction in Polish is exhibited by those verbs which also select for infinitives; consider (2.152)–(2.157) (from Orszulak, 2016b, p. 109):

- (2.152) *Maria chce kupić nową pralkę.*
 Mary want.PRS.3SG buy.INF new washing machine
 ‘Mary wants to buy a new washing machine.’
- (2.153) *Maria chce, że-by-śmy kupili nową pralkę.*
 Mary want.PRS.3SG that-SBJV/COND-1PL buy.PST.PTCP. PL.VIR
 new washing.machine
 ‘Mary wants us to buy a new washing machine.’
- (2.154)**Maria żąda kupić nową pralkę.*
 Mary demand.PRS.3SG buy.INF new washing.machine
 Intended meaning: ‘Mary demands to buy a new washing machine.’
- (2.155) *Maria żąda, że-by-śmy kupili nową pralkę.*
 Mary demand.PRS.3SG that-SBJV/COND-1PL buy.PST.PTCP.PL.VIR
 new washing.machine
 ‘Mary demands that we buy a new washing machine.’
- (2.156) *Co Maria chce, że-by-śmy kupili?*
 what Mary want.PRS.3SG that-SBJV/COND-1PL buy.PST.PTCP.PL.VIR
 ‘What does Mary want us to buy?’
- (2.157)**Co Maria żąda, że-by-śmy kupili?*
 what Mary demand.PRS.3SG that-SBJV/COND-1PL buy.PST.PTCP.PL.VIR
 Intended meaning: ‘What does Mary demand that we buy?’

As visible in (2.152) and (2.153) *chcieć* ‘to want’ can select for both *żeby*-clause and an infinitival clause and thus the extraction out of the *żeby*-clause selected for by *chcieć* ‘to want’ is better than the one out of the *żeby*-clause selected for by *żądać* ‘to demand,’ which itself does not select for an infinitive (2.154). Nonetheless, even in the case of the *żeby*-clause introduced by *chcieć* ‘to want’ the extraction may be degraded when multiple wh-phrases are moved; see (2.158) (from Rudin, 1988, p. 454 after Orszulak, 2016b, p. 109):

- (2.158)²*Co komu Maria chce, że-by Janek kupił?*
 what to.whom Mary want.PRS.3SG that-SBJV/COND John buy.PST.PTCP.SG.M
 ‘What does Mary want John to buy for whom?’

Although the question in (2.158) is degraded for Rudin (1988), some researchers, e.g., Dornisch (1998) and Citko (1998), consider it acceptable.

Another limitation for wh-extractions out of *żeby*-clauses is the extraction site, that is, the position from which a wh-phrase is moved. The problematic extraction site is the subject position; see (2.159) (from Witkoś 1995, p. 227 after Orszulak, 2016b, p. 110):

(2.159)**Kto Iwona chce, że-by się natychmiast*
 who Yvonne want.PRS.3SG that-SBJV/COND REFL immediately
widział z *dyrektorem?*
 see.PST.PTCP.SG.M with manager
 Intended meaning: ‘Who does Yvonne want to see the manager immediately?’

However, the assessments of sentences like in (2.159) are conflicting. Tajsner (1989) and Witkoś (1995) rule them out, whereas for Kardela (1986) and Citko (2014) they are acceptable.

Finally, Polish allows long-distance wh-extraction out of infinitival clauses even in the case of multiple wh-phrases; cf. (2.160) (from Orszulak, 2016b, p. 110):

(2.160) *Co komu Maria chce kupić?*
 what to.whom Mary want.PRS.3SG buy.INF
 ‘What does Mary want to buy for whom?’

The discussed complex picture of long-distance wh-extractions in Polish is summarized in Table 13.

Table 13. Long-distance wh-extraction possibilities in Polish

Extraction site	Polish data
Infinitival complement	Grammatical
<i>Żeby</i> -clause selected by a verb that also selects for a bare infinitive	Grammatical
<i>Żeby</i> -clause selected by a verb that does not select for a bare infinitive	Ungrammatical
Subject position in the <i>żeby</i> -clause selected by a verb that also selects for a bare infinitive	Conflicting judgements
<i>Że</i> -clause selected by a bridge verb	Degraded
<i>Że</i> -clause	Ungrammatical

Source: modified version of a similar table from Orszulak (2016b, p. 110).

Other contexts in Polish connected with the supposed syntactic transparency of subjunctive clauses entail clitic climbing, negative pronouns licensing and the so-called “Genitive of Negation.” As far as clitics are concerned, Polish does not allow movement of object pronouns out of finite clauses; see (2.161) and (2.162) (from Witkoś, 1995, p. 245 after Orszulak, 2016a, p. 18):

(2.161)**Maria go chciała, że-by Jan uderzył.*
 Mary him want.PST.PTCP.3SG.F that-COND/SBJV John hit.PST.PTCP.SG.M
 Intended meaning: ‘Mary wanted John to hit him.’

(2.162)**Maria go powiedziała, że Jan uderzył.*
 Mary him say.PST.PTCP.3SG.F that John hit.PST.PTCP.3SG.M
 Intended meaning: ‘Mary said that John hit him.’

As shown in (2.161) and (2.162), the masculine object pronoun *go* ‘him’ can be moved from neither the *żeby*-clause nor the *że*-clause. Mind that in the case of wh-pronouns in some contexts the movement is actually possible and, as Witkoś (1995, p. 245) suggests, the difference in extraction possibilities between wh-movement and clitic climbing in Polish can stem from two different types of movement: wh-movement and NP movement. It must be

noted, however, that in the case of infinitival complements both long-distance wh-extractions and clitic climbing are possible; consider (2.163) and (2.164):

- (2.163) *Gdzie Maria chciała spędzić wakacje?*
 where Mary want.PST.PTCP.3SG.F spend.INF holidays.
 ‘Where did Mary want to spend her holiday?’
- (2.164) *Maria go chciała zaprosić na przyjęcie.*
 Mary him want.PST.PTCP.3SG.F invite.INF for party
 ‘Mary wanted to invite him to the party.’

The last two transclausal contexts that should be discussed here are not connected with movement, but rather with a licensing relation which involves negation. First, negative pronouns in Polish need to be present in a negative context and must be licensed locally by a clausemate negation, i.e., not by negation in a higher clause (see Błaszczak, 2005); compare (2.165) and (2.166):

- (2.165)**Maria kupiła nic.*
 Mary buy.PST.PTCP.3SG.F nothing.ACC
 Intended meaning: ‘Mary didn’t buy anything.’
- (2.166) *Maria nie kupiła niczego.*
 Mary NEG buy.PST.PTCP.3SG.F nothing.GEN
 ‘Mary didn’t buy anything.’

The sentences in (2.165) and (2.166) show that a negative pronoun *nic* ‘nothing’ cannot be used in a sentence without negation, which serves a licenser and a trigger of the Genitive of Negation. In Polish transitive verbs assign the accusative case to their direct objects, but under negation the case of a direct object changes to the genitive (see also Witkoś, 1998; 2003; Przepiórkowski 1999; Błaszczak 2001a, b; 2007). If we assume *żeby*-clauses to be transparent because of their supposed subjunctivehood, we expect that *żeby*-clauses form one local domain with matrix clauses and thus negative pronouns should be licensed by a higher (matrix-clause) negation. Furthermore, *żeby*-clauses should contrast with *że*-clauses, which – as indicative – should serve as a boundary for the higher clause licensing of negative pronouns. Still, in terms of negative pronouns both *że*- and *żeby*-clauses exhibit the same behaviour; compare (2.167) and (2.168) (from Orszulak, 2016a, p. 17):

- (2.167)**Maria nie chciała, że-by kupiła niczego.*
 Mary NEG want.PST.PTCP.3SG.F that-COND/SBJV buy.PST.PTCP.SG.F nothing.GEN
 Intended meaning: ‘Mary didn’t want her to buy anything.’
- (2.168) **Maria nie powiedziała, że kupiła niczego.*
 Mary NEG say.PST.PTCP.3SG.F that buy.PST.PTCP.3SG.F nothing.GEN
 Intended meaning: ‘Mary didn’t say that she bought anything.’

As visible in (2.167) and (2.168), the matrix negation can license the negative pronoun *niczego* ‘nothing’ neither in the *żeby*-clause nor in the *że*-clause. In comparison, a negative pronoun in an infinitive clause can be licensed by a matrix negation; consider (2.169):

(2.169) *Maria nie chciała kupić niczego.*
 Mary NEG want.PST.PTCP.3SG.F buy.INF nothing.GEN
 ‘Mary didn’t want to buy anything.’

An analogous behaviour is repeated in the case of the already mentioned Genitive of Negation, that is, the genitive case which is assigned to a nominal complement of a transitive verb when such a verb is negated locally, while outside negative contexts transitive verbs assign the accusative case (Witkoś, 1995, p. 246); cf. (2.170):

(2.170) *Maria nie wybrała *nic/ niczego.*
 Mary NEG chose.PST.PTCP.3SG.F nothing.ACC/ nothing.GEN
 ‘Mary didn’t choose anything.’

Again, if subjunctives are transparent domains cross-linguistically, we expect the Genitive of Negation to appear in *żeby*-clauses, but not in *że*-clauses. Nonetheless, in Polish, the Genitive of Negation cannot be assigned by a matrix clause negation to a complement in either *że*- or *żeby*-clauses; see (2.171) and (2.172) (from Orszulak, 2016a, p. 17):

(2.171) *Maria nie chce, że-by Jan kupił nowego samochodu/ nowy samochód.*
 Mary NEG want.PRS.3SG that-COND/SBJV John buy.PST.PTCP.SG.M
 new.GEN car.GEN new.ACC car.ACC
 ‘Mary doesn’t want John to buy a new car.’

(2.172) *Maria nie powiedziała, że Jan kupił nowego samochodu/ nowy samochód.*
 Mary NEG say.PST.PTCP.3SG.F that John buy.PST.PTCP.3SG.M
 new.GEN car.GEN/ new.ACC car.ACC
 ‘Mary didn’t say that John bought a new car.’

Że- and *żeby*-clauses differ here from infinitival clauses, which require the Genitive of Negation in the same context; cf. (2.173):

(2.173) *Jan nie chce kupić nowego samochodu/*nowy samochód.*
 John NEG want.PRS.3SG buy.INF new.GEN car.GEN new.ACC car.ACC
 ‘John doesn’t want to buy a new car.’

To sum up the discussion in the present section, three types of complements analyzed here – infinitival clauses, *że*-clauses and *żeby*-clauses – exhibit different behaviours with respect to different syntactic operations/relations. Infinitival complements in Polish have the most consistent properties as they allow *wh*-extractions and clitic climbing as well as long-distance licensing of negative pronouns and assignment of the Genitive of Negation. In contrast to transparent infinitives, indicative *że*-clauses constitute a strong barrier to all transclausal operations/relations; however, with one exception of *wh*-extraction out of a complement to bridge verbs. Finally, *żeby*-clauses can be situated in-between infinitives and *że*-clauses in terms of syntactic transparency. They allow some *wh*-extractions, especially out of clauses selected by a verb that also selects for a bare infinitive, but disallow other *wh*-extractions, i.e., multiple *wh*-extraction and extraction out of the subject position; furthermore, they disallow clitic climbing as well as they block relations necessary to license

negative pronouns and assign the Genitive of Negation. Therefore, one may doubt if *żeby*-clauses are in fact transparent domains different from *że*-clauses since the transparency contexts of *żeby*-clauses are very limited and as such they may result from factors other than subjunctivehood. All these reservations about the actual difference between *że*- and *żeby*-clauses in terms of transparency are addressed in the next section.

2.4.2 Long-distance phenomena in Polish: A grammaticality judgement study

The inconsistencies in the Polish extraction facts together with conflicting judgements of linguists described in the previous section need a more systematic collection of data from Polish. To the best of my knowledge, research studies on long-distance phenomena in Polish so far have been based on introspection, i.e., linguists' individual judgements, which to a large extent, should be right, but still they may be blurred by a long exposition and gradual habituation to the examined data. Therefore, I decided to conduct a grammaticality judgement study to see how Polish native speakers assess specific long-distance operations/relations and check if there is really a difference in the grammaticality between different complement types. The design and results of the study are described in the subsequent sections.

2.4.2.1 Methods

To assess the limits of various long-distance phenomena in Polish, I use a grammaticality judgement task, that is, a task in which subjects are asked to read isolated or contextualized sentences and provide their judgement “on the potential grammar underlying the sentence, not on the meaning *per se*⁵³” (Blume and Lust, 2017, p. 155). In such a task informants are known to possess a tacit knowledge of their own language, which can be used to provide further insights into grammatical constraints in a given language (Blume and Lust, 2017, pp. 156, 158). In my survey I assume a gradient view of grammaticality according to which sentences are not equally grammatical or ungrammatical since speakers are not homogenous in their judgements and exhibit a great deal of intraspeaker and interspeaker variation (Tremblay, 2005, pp. 130–132). Therefore, I apply a five-point scale on which subjects can assess sentences, from 1, which means “totally incorrect,” to 5, which means “perfectly correct”. The intermediate levels in my scale are left without a comment, i.e., only the extremes have a label, so as not to complicate the assessment process. Therefore, my scale is a Likert-type scale – a popular psychometric scale used in questionnaires (see Allen and Seaman, 2007). Another assumption that I follow in the survey is to present the sentences in isolation⁵⁴ in order to, first, avoid any bias that my made-up contexts may provide and, second, make the informants focus on the structural properties of the assessed sentences, not on their meaning in a given context (see Tremblay, 2005, pp. 137–138). Finally, so as to make the data collection process more rigorous, I frame the questionnaire following many principles of experimental design, which are described in the next section (see Tremblay, 2005, pp. 138–141).

⁵³ Meaning can be assessed in a so-called “truth-value judgement task,” in which informants evaluate potential meanings of sentences under analysis (Blume and Lust, 2017, p. 156).

⁵⁴ Mind that there are varied views on the role of context in such surveys; for a review see Schütze (2016, pp. 148–157).

2.4.2.2 Materials and design

The sentences included in the grammatical judgement questionnaire were created by me on the basis of the literature on the long-distance phenomena reviewed in the previous sections. Based on the factors influencing long-distance phenomena in Polish found in the literature, I pointed out 18 conditions, which may influence the judgement of a long-distance phenomenon:

1. Wh-extraction from the object position in the *że*-clause complement, for example:
**Czego Joanna myśli, że jej mąż się boi <czego>?*
what.GEN Joanna think.PRS.3SG that her husband REFL be.afraid.PRS.3SG what.GEN
Intended meaning: ‘What does Joanna think that her husband is afraid of?’
2. Wh-extraction from the object position in the *żeby*-clause complement, for example:
?Co Piotr pragnie, że-by-m mu powiedział <co>?
what.ACC Piotr desire.PRS.3SG that-SBJV/COND-1SG him
tell.PST.PTCP.SG.M what.ACC
Intended meaning: ‘What does Piotr want me to tell him?’
3. Wh-extraction from the object position in the infinitive complement, for example:
Co nasza sąsiadka chce pożyczyć <co>?
what.ACC our neighbor want.PRS.3SG borrow.INF what.ACC
‘What does our neighbor want to borrow?’
4. Wh-extraction from the subject position in the *że*-clause complement, for example:
**Kto Tomasz wierzy, że <kto> ukradł ten samochód?*
who.NOM Tomasz believe.PRS.3SG that who.NOM steal.PST.PTCP.3SG.M
that car
Intended meaning: ‘Who does Tomasz believe has stolen his car?’
5. Wh-extraction from the subject position in the *żeby*-clause complement, for example:
**Kto Dorota żąda, że-by <kto> przestał kłamać?*
who.NOM Dorota demand.PRS.3SG that-SBJV/COND who.NOM stop.PST.PTCP.SG.M
lie.INF
Intended meaning: ‘Who does Dorota demand should stop lying?’
6. Wh-extraction from the subject position in the infinitive complement (not applicable to Polish);
7. Wh-extraction from the adverbial position in the *że*-clause complement, for example:
**Kiedy Daniel wierzy, że mamy sprzedać nasz dom <when>?*
when Daniel believe.PRS.3SG that be.supposed.PRS.1PL sell.INF
our house when
Intended meaning: ‘When does Daniel believe we should sell our house?’

8. Wh-extraction from the adverbial position in the *żeby*-clause complement, for example:
?Dokąd *nasza solenizantka woli,* *że-by* *jej* *przyjaciele*
 whereto our birthday.girl prefer.PRS.3SG that-SBJV/COND her friends
z nią poszli *<dokąd>?*
 with her go.PST.PTCP.PL.VIR whereto
 Intended meaning: ‘Where does our birthday girl prefer her friends to go?’
9. Wh-extraction from the adverbial position in the infinitive complement, for example:
Gdzie *nasza sąsiadka chce* *pożyczyć* *pieniądze* *<gdzie>?*
 where our neighbor want.PRS.3SG borrow.INF money where
 ‘Where does our neighbor want to borrow money?’
10. Clitic climbing from the *że*-clause complement, for example:
**Twój tato* *mu* *twierdzi,* *że* *nie* *powinniśmy* *sprzedawać*
 your dad he.DAT claim.PRS.3SG that NEG should.PRS.1PL sell.INF
<mu> *samochodu.*
 he.DAT car.
 Intended meaning: ‘Your dad claims that we shouldn’t sell the car to him.’
11. Clitic climbing from the *żeby*-clause complement, for example:
?Tomasz *mu* *pragnie,* *że-by-m* *powiedział*
 Tomasz he.DAT desire.PRS.3SG that-SBJV/COND-1SG tell.PST.PTCP.SG.M
<mu> *prawdę.*
 he.DAT truth
 Intended meaning: ‘Tomasz wants me to tell him the truth.’
12. Clitic climbing from the infinitive complement, for example:
Jacek *mi* *woli* *powiedzieć* *<mi>* *prawdę.*
 Jacek I.DAT prefer.PRS.3SG tell.INF I.DAT truth
 ‘Jacek prefers to tell me the truth.’
13. Negative pronouns licensing in the *że*-clause complement, for example:
**Joanna* *nie* *myśli,* *że* *sklep jej* *niczego* *zaoferuje.*
 Joanna NEG think.PRS.3SG that shop to.her nothing offer.FUT.3SG
 Intended meaning: ‘Joanna doesn’t think the shop will sell her anything.’
14. Negative pronouns licensing in the *żeby*-clause complement, for example:
**Krzysztof* *nie* *pragnie,* *że-by-m* *nikomu* *o tym*
 Krzysztof NEG desire.PRS.3SG that-SBJV/COND-1SG no.one about.it
powiedział.
 tell.PST.PTCP.SG.M
 Intended meaning: ‘Krzysztof doesn’t want me to tell anybody about it.’
15. Negative pronouns licensing in the infinitive complement, for example:
Twój tata *nie* *radzi* *wybierać* *żadnego* *samochodu.*
 your dad NEG recommend.PRS.3SG choose.INF neither car
 ‘Your dad doesn’t recommend choosing any car.’

16. Genitive of Negation in the *że*-clause complement, for example:

**Piotr nie wierzy, że uda nam się*
 Piotr NEG believe.PRS.3SG that be.possible.FUT.3SG for.us REFL
sprzedać tego samochodu.
 sell.INF this.GEN car.GEN

Intended meaning: ‘Piotr doesn’t believe that it will be possible for us to sell this car.’

17. Genitive of Negation in the *żeby*-clause complement, for example:

**Piotr nie pragnie, że-by-mu opowiedział*
 Piotr NEG desire that-SBJV-1SG him tell.PST.PTCP.SG.M
tej plotki.
 this.GEN gossip.GEN

Intended meaning: ‘Piotr doesn’t want me to tell him about this gossip.’

18. Genitive of Negation in the infinitive complement, for example:

Piotr nie karze dzisiaj oglądać tego filmu.
 Piotr NEG order.PRS.3SG today watch.INF this.GEN movie.GEN

‘Piotr doesn’t tell us to watch this movie today.’

The total number of the conditions was created in the following procedure: first, I decided on the six main instances of long-distance phenomena in Polish, that is, wh-extraction from the object position, wh-extraction from the subject position, wh-extraction from the adverbial position, clitic climbing, negative pronouns licensing and genitive of negation; second, I assumed three different contexts in which those phenomena may have a different grammaticality status: the *że*-clause complement (supposed indicative), the *żeby*-clause complement (supposed subjunctive) and infinitive complement. As a consequence, I created 153 sentences, nine for each of the 18 conditions, excluding condition 6, wh-extraction from the subject position in the infinitive complement, because in Polish there is no overt subject to extract from such a position (all the sentences can be found in Appendix 1).

Experimental sentences must also be complemented by filler sentences, so-called distracters, so that informants would not become aware of the point of the survey (Tremblay, 2005, p. 138). The number of the fillers should be at least equal to the number of the target sentences and thus I created 153 filler sentences. The next step was to balance fillers in terms of the type of sentence: there were 72 experimental questions, 27 experimental affirmative sentences and 54 negative sentences for which I made up 72 filler questions, 27 filler affirmatives and 54 negative fillers. The complete experiment design is sketched in Figure 5.

Finally, target sentences should be balanced with filler sentences in terms of grammaticality, otherwise too many grammatical fillers could influence the subject to assess more sentences as grammatical or abundance of severely degraded fillers may cause slightly degraded targets to look grammatical (see Schütze, 2016, pp. 154–155). Since some target sentences that I used in the survey can be assessed, based on the literature as well as on my own introspection, as degraded and not definitely ungrammatical, it was a challenge to create equivalent degraded filler sentences.

Target sentences	Filler sentences
<p>Potentially ungrammatical = 81</p> <p>36 questions 9 affirmatives 36 negatives</p>	<p>Ungrammatical = 81</p> <p>36 questions 9 affirmatives 36 negatives</p>
<p>Potentially degraded = 27</p> <p>18 questions 9 affirmatives</p>	<p>Degraded = 27</p> <p>18 questions 9 affirmatives</p>
<p>Potentially grammatical = 45</p> <p>18 questions 9 affirmatives 18 negatives</p>	<p>Grammatical = 45</p> <p>18 questions 9 affirmatives 18 negatives</p>

Figure 5. Design of grammaticality judgement study on Polish
Source: own elaboration.

To create such distracters, I followed a distinction present in the Polish prescriptive grammar into the model norm (*norma wzorcowa*), that is, rigorous forms of language taught at school and used by educated people also in professional written texts, and the usage norm (*norma użytkowa*), that is, forms of language accepted in everyday communication, which nevertheless may deviate from the model norm (see Markowski, 2005, pp. 32–37). Therefore, I assumed that sentences acceptable neither with respect to the model norm nor the usage norm can be qualified as ungrammatical; for instance:

(2.174)**Kto przypuszczasz, że nas jutro odwiedzi?*
 who suppose.PRS.2SG that us tomorrow visit.FUT.3SG
 Intended meaning: ‘Who do you think will visit us tomorrow?’

The sentence in (2.174) is ungrammatical because in Polish one cannot move a wh-pronoun from the subject position over the indicative-clause boundary and such a structure is even unacceptable on the level of the usage norm. In contrast, one can invent sentences which deviate from the model norm but are still acceptable on the usage level; such sentences very often involve slight phraseology deformations; for example:

(2.175)[?]*Czy te informacje o rozwodzie są wysrane z palców?*
 if these information.PL about divorce be.PRS.3PL sucked out of fingers
 Intended meaning: ‘Is this information about the divorce trumped-up?’

In (2.175) the idiom *wyssane z palca* ‘trumped-up’ (literally: ‘sucked out of a finger’) is modified: the singular form of *palec* is replaced with the plural form, but such a sentence still

preserves its idiomatic meaning, but may sound awkward (see Markowski, 2005, pp. 237–242). In this way, I created a set of degraded sentences, which were at odds with the model norm, but still could be used by native speakers of Polish in everyday communication.

Yet another aspect taken into account is connected with parsing, i.e., unintended reading which can arise due to structural relatedness of words (Schütze, 2016, p. 157). As an illustration consider the following pair of sentences in Polish:

(2.176) *Co Joanna myśli, że jej mąż kupił?*
 what.ACC Joanna think.PRS.3SG that her husband buy.PST.PTCP.3SG.M
 ‘What does Joanna think her husband bought?’

(2.177) *Czego Joanna myśli, że jej mąż się boi?*
 what.GEN Joanna think.PRS.3SG that her husband REFL be.afraid.PRS.3SG
 ‘What does Joanna think her husband is afraid of?’

In (2.176) the accusative form of the wh-phrase *co* ‘what’ can be a potential complement to both the matrix predicate and the embedded predicate and under the first reading the sentence seems grammatical, but under the second reading (as an argument of the embedded predicate) it is usually taken to be ungrammatical. Another problem is that the linking with the matrix predicate is forced by parsing strategies; specifically, by the minimal attachment principle according to which there is a preference for linking elements in close relation at the early stage of processing (see Frazier and Clifton, 1996). To solve such problems, one needs to create sentences avoiding structural ambiguities, such as the one in (2.177), where the genitive form of the wh-phrase *czego* cannot be an argument for the matrix predicate. Nonetheless, it must be noted that it is very difficult to predict all the readings that informants may arrive at and there is always a risk that the some of their judgements will be inconsistent because of processing reasons.

The final aspect considered in the present questionnaire is connected with fatigue, which makes participants frustrated, inattentive and inconsiderate of their judgements (Schütze, 2016, p. 189). Therefore, the total number of 306 complicated complex sentences (153 experimental sentences plus 153 filler sentences; see Figure 5), which I created, could not be used in one survey. Consequently, I divided the questionnaire into three versions (A, B and C), which gave 102 sentences per version, but due to software limitations I could only present 100 sentences in a version and two fillers from each version were discarded (thus finally each version had 51 target sentences and 49 fillers, keeping the proportions from Figure 5). As a result, each version comprised randomized 100 sentences (different experimental sentences and filler sentences for each version), which was easier to go through for the informants. To randomize my sentences I used a free tool, which automatically randomized the sentences (available at <https://www.random.org/lists/>). Next this automatic randomizing was reviewed manually to avoid the placement of similar sentences next to one another, e.g., questions starting with the same wh-pronoun. Lastly, I emailed the informants a link to the online version of the survey; each version was sent to a different group of people, that is, no participant saw more than one version of the questionnaire (16 people responded to version A, 13 people responded to version B and 17 people responded to version C, in total – 46 subjects).

2.4.2.3 Participants

As many as 46 native speakers of Polish took part in the survey. They were all students of Wrocław University, at that time doing undergraduate programmes in the following fields: biology, microbiology, geology, mathematics, computer science and psychology. With respect to age (19–22), literacy and education level, they were a homogenous group. It must be noted that none of the informants had a background or academic training in linguistics and it is very important for me to collect naïve judgements and not theory-grounded assessments of linguists, which can differ from non-linguists' ones (see Schütze, 2016, pp. 112–120).

2.4.2.4 Results and discussion

The results obtained in the discussed survey are presented in Table 14, which comprises judgement means for all the conditions together with the means of particular sentences.

Table 14. Results of the grammatical judgement study

Condition/Sentence	Mean
1) Wh-extraction from the object position in the <i>że</i>-clause complement	2.13
A. Czego Joanna myśli, że jej mąż się boi?	2.31
A. Co Piotr wierzy, że uda nam się sprzedać?	1.85
A. Czego twój tato twierdzi, że nie powinniśmy zrobić?	2.92
B. Czyją walizkę powiedzieli, że kurier zgubił?	2.38
B. Czego Kasia odpowiedziała, że masz zażądać?	2.25
B. Czego przeczytałeś, że nie wolno ci jeść?	2.88
C. Czyje uświadomiłeś sobie, że są dziś imieniny?	1.65
C. Czego Krzysztof zapamiętał, że mamy nie przynosić?	1.94
C. Co Kasia wątpi, że jej sąsiedzi posiadają?	1.41
2) Wh-extraction from the object position in the <i>żeby</i>-clause complement	3.33
A. Czego mama chce, żebyśmy poszukali w sklepie?	3.92
A. Co Piotr pragnie, żebym mu powiedział?	4.00
A. Czego Kasia żąda, żebyś mi nie mówił?	3.54
B. Czyje dokumenty domagacie się, żebym oddał?	3.25
B. Czego życzysz sobie, żebym nie robił?	3.63
B. Czego rodzice radzą, żebyś pilnowała?	3.50
C. Czego nasza solenizantka woli, żebyśmy nie kupowali?	3.59
C. Co Joanna marzy, żeby mąż jej podarował?	2.41
C. Czyje zadanie nauczyciel nakazuje, żebyś pomógł poprawić?	2.59
3) Wh-extraction from the object position in the infinitive complement	4.19
A. Co nasza sąsiadka chce pożyczyć?	4.92
A. Czyją książkę Karolina pragnie przeczytać?	4.54
A. Czego twój tata radzi nam nie wybierać?	4.31
B. Czyje filmy wolisz dzisiaj oglądać?	4.00
B. Co nasz kierownik nakazuje zamontować?	4.19
B. Co Kasia lubi nosić na specjalne okazje?	4.63
C. Czego twoja nauczycielka umie wymagać?	2.24
C. Czyje sprawozdanie potrzebujesz przeczytać?	4.53
C. Czego Marta musi unikać?	4.76

Condition/Sentence	Mean
4) Wh-extraction from the subject position in the <i>że</i>-clause complement	1.56
A. Kto Julia myśli, że spotkał jej męża w sklepie?	1.08
A. Kto Tomasz wierzy, że ukradł ten samochód?	1.46
A. Kto twój tato twierdzi, że sprowokował bójkę?	2.23
B. Kto powiedzieli, że zgubił naszą walizkę?	1.69
B. Kto Magda odpowiedziała, że napisał tę książkę?	1.81
B. Kto przeczytałeś, że nie może jeść słodczy?	2.31
C. Kto uświadomiłeś sobie, że ma dziś imieniny?	1.47
C. Kto Piotr zapamiętał, że nic mu nie przyniósł?	1.18
C. Kto Kasia wątpi, że posiadają duży dom?	1.18
5) Wh-extraction from the subject position in the <i>żeby</i>-clause complement	1.75
A. Kto mama chce, żeby zrobił zakupy?	2.08
A. Kto Jacek pragnie, żeby powiedział mu prawdę?	1.46
A. Kto Dorota żąda, żeby przestał kłamać?	1.00
B. Kto domagacie się, żeby oddał dokumenty?	1.69
B. Kto życzysz sobie, żeby poprowadził ceremonię?	2.56
B. Kto rodzice radzą, żeby wybrał nazwę restauracji?	1.81
C. Kto nasza solenizantka woli, żeby nie przychodził na przyjęcie?	1.82
C. Kto Joanna marzy, żeby podarował jej naszyjnik?	1.76
C. Kto nauczyciel nakazuje, żeby musiał poprawić sprawdzian?	1.71
7) Wh-extraction from the adverbial position in the <i>że</i>-clause complement	2.62
A. Gdzie Daria myśli, że oferują lepsze pieczywo?	3.46
A. Kiedy Daniel wierzy, że mamy sprzedać nasz dom?	2.23
A. Kiedy twój tato twierdzi, że powinniśmy zrobić remont?	3.31
B. Jak powiedzieli, że kurier zgubił nasze dokumenty?	2.88
B. Gdzie Kasia odpowiedziała, że można obejrzeć ten film?	3.25
B. Dlaczego przeczytałeś, że nie wolno jeść tłustych potraw?	3.31
C. Dokąd uświadomiłeś sobie, że oni mogli pojechać?	1.94
C. Skąd Tomasz zapamiętał, że trzeba to przywieźć?	2.41
C. Jak Martyna wątpi, że jej brat gra w piłkę?	1.47
8) Wh-extraction from the adverbial position in the <i>żeby</i>-clause complement	3.38
A. Gdzie mama chce, żebyśmy kupili świeże warzywa?	4.23
A. Dlaczego Piotr pragnie, żebyś mu powiedział prawdę?	4.15
A. Kiedy Kasia żąda, żebyśmy odpowiedzieli na jej list?	2.77
B. Jak domagacie się, żeby Piotr oddał pożyczkę?	3.94
B. Gdzie życzysz sobie, żebym zorganizował przyjęcie?	3.88
B. Kiedy rodzice radzą, żebyś zaczęła się uczyć?	3.31
C. Dokąd nasza solenizantka woli, żeby jej przyjaciele z nią poszli?	2.76
C. W jaki sposób Joanna marzy, żeby Piotr jej się oświadczył?	3.18
C. Jak nauczyciel nakazuje, żeby uczniowie napisali wypracowanie?	2.76
9) Wh-extraction from the adverbial position in the infinitive complement	3.92
A. Gdzie nasza sąsiadka chce pożyczyć pieniądze?	4.00
A. Dlaczego Ewa pragnie przeczytać jego nową powieść?	4.85
A. Kiedy twój tata radzi nam nie kupować mieszkania?	3.15
B. Jak Wiktor woli dzisiaj przygotować kurczaka?	3.88
B. Gdzie nasz kierownik nakazuje zamontować te pułki?	3.38
B. Kiedy Kasia lubi nosić swoją nową garsonkę?	4.25

Condition/Sentence	Mean
C. W jaki sposób twoja nauczycielka umie wytłumaczyć te zadania?	4.12
C. Jak potrzebujesz wydrukować to sprawozdanie?	3.00
C. Skąd Marta musi sprowadzić te leki?	4.82
10) Clitic climbing from the <i>że</i>-clause complement	1.54
A. Joanna go myśli, że trzeba zaprosić na obiad.	1.77
A. Jego Tomasz wierzy, że powinieneś przeprosić.	2.08
A. Twój tato mu twierdzi, że nie powinniśmy sprzedawać samochodu.	1.54
B. Koledzy ją powiedzieli, że widzieli na lotnisku.	1.50
B. Kasia go odpowiedziała, że każdy polubi.	1.19
B. Jego przeczytałeś, że nie powinniśmy wybierać na burmistrza.	1.63
C. Jego uświadomiłeś sobie, że są dziś imieniny.	1.47
C. Piotr im zapamiętał, że mamy nie przynosić nowych ubrań.	1.53
C. Jego Marta wątpi, że jej sąsiedzi unikają.	1.47
11) Clitic climbing from the <i>żeby</i>-clause complement	2.09
A. Jemu mama chce, żebyśmy kupili nową kurtkę.	2.00
A. Tomasz mu pragnie, żebym powiedział prawdę.	1.38
A. Julia mi żąda, żebyś nic nie mówił.	1.85
B. Jego domagamy się, żebyś wybrał na opiekuna.	2.19
B. Ją życzę sobie, żebyście przeprosili.	3.19
B. Rodzice ich radzą, żeby Piotr pilnował.	1.50
C. Nasza solenizantka im woli, żeby nie dziękować za prezent.	1.65
C. Kasia ich marzy, żeby spotkać na wakacjach.	1.18
C. Jego nauczyciel nakazuje, żeby przeprosić.	3.71
12) Clitic climbing from the infinitive complement	3.04
A. Jemu nasza przyjaciółka chce pożyczyć pieniądze.	3.54
A. Dorota im pragnie przeczytać bajkę.	3.31
A. Twój tata go radzi nie wybierać do zarządu.	2.15
B. Jacek mi woli powiedzieć prawdę.	3.25
B. Nasz kierownik ich nakazuje zwolnić.	2.94
B. Magda mu lubi kupować prezenty.	3.31
C. Twoja nauczycielka jej umie wytłumaczyć wszystkie zadania.	2.24
C. Jego potrzebujesz wynająć do tej pracy.	3.00
C. Marta ją musi poznać.	3.76
13) Negative pronouns licensing in the <i>że</i>-clause complement	1.61
A. Joanna nie myśli, że sklep jej niczego zaoferuje.	1.23
A. Piotr nie wierzy, że uda nam się nikomu sprzedać tego samochodu.	1.54
A. Twój tato nie twierdzi, że nikt powinien przychodzić na spotkanie.	1.77
B. Nie powiedzieli nam, że kurier zgubił żadnej walizki.	1.50
B. Kasia nie odpowiedziała, że niczego masz przeczytać.	1.38
B. Wujek nie przeczytał, że żadnych słodyczy wolno mu jeść.	1.56
C. Nie uświadomiłem sobie, że nikt pamięta o moich imieninach.	1.88
C. Tomasz nie zapamiętał, że mamy niczego przynosić.	1.94
C. Kasia nie wątpi, że jej sąsiedzi z nikim się spotykają.	1.88
14) Negative pronouns licensing in the <i>żeby</i>-clause complement	1.51
A. Mama nie chce, żebyśmy niczego kupowali w sklepie.	1.69
A. Krzysztof nie pragnie, żebym nikomu o tym powiedział.	1.69
A. Kasia nie żąda, żebyś o żadnej wyprawie mówił.	1.92

Condition/Sentence	Mean
B. Nie domagamy się, żebyście nikomu oddawali tych dokumentów.	1.56
B. Nie życzę sobie, żebyś nigdy tego robił.	2.06
B. Rodzice nie radzą, żebyś żadnej sukienki wybrała.	1.38
C. Nasza solenizantka nie karze, żeby on jej nic kupował.	1.35
C. Joanna nie marzy, żeby mąż jej podarował żadnych kwiatów.	1.12
C. Nauczyciel nie nakazuje, żebyśmy żadnych zadań poprawiali.	1.47
15) Negative pronouns licensing in the infinitive complement	3.48
A. Nasza sąsiadka nie chce niczego pożyczać.	4.85
A. Julia nie pragnie przeczytać żadnej książki.	3.23
A. Twój tato nie radzi wybierać żadnego samochodu.	2.38
B. Piotr nie karze dzisiaj nikogo spotykać.	1.69
B. Nasz kierownik nie nakazuje niczego montować.	3.56
B. Kasia nie lubi nosić żadnych sukienek na specjalne okazje.	3.94
C. Twoja nauczycielka nie umie od nikogo wymagać.	3.53
C. Nie potrzebujemy przeczytać niczyich sprawozdań.	3.53
C. Marta nie musi nikogo unikać.	4.71
16) Genitive of Negation in the że-clause complement	1.68
A. Magda nie myśli, że sklep jej zaoferuje nowych kolczyków.	1.54
A. Piotr nie wierzy, że uda nam się sprzedać tego samochodu.	2.23
A. Twój tato nie twierdzi, że powinniśmy oglądać tego programu.	2.00
B. Nie powiedzieli, że kurier znalazł naszej przesyłki.	1.50
B. Kasia nie odpowiedziała, że masz przeczytać tej książki.	1.50
B. Nie przeczytałem, że wolno ci jeść surowych pomidorów.	1.56
C. Nie uświadomiłeś sobie, że zamknąłem zamka do drzwi.	1.35
C. Piotr nie zapamiętał, że mamy przynosić kwiatów.	1.71
C. Kasia nie wątpi, że jej sąsiedzi posiadają nowego samochodu.	2.06
17) Genitive of Negation in the żeby-clause complement	2.24
A. Mama nie chce, żebyśmy kupili nowej kuchenki w sklepie.	2.15
A. Piotr nie pragnie, żebym mu opowiedział tej plotki.	2.62
A. Kasia nie żąda, żebyś brał tej bluzy.	1.54
B. Nie domagamy się, żebyś oddał tych dokumentów.	2.00
B. Nie życzę sobie, żebyście oglądali tego filmu.	2.06
B. Rodzice nie radzą, żebyś wybierała tego chłopaka.	3.00
C. Nasza solenizantka nie woli, żebyśmy dla niej kupowali kwiatów.	1.82
C. Joanna nie marzy, żeby mąż jej podarował pierścionka.	1.53
C. Nauczyciel nie nakazuje, żebyś poprawił zadania.	3.53
18) Genitive of Negation in the infinitive complement	3.86
A. Nasza sąsiadka nie chce pożyczyć naszych nart.	3.46
A. Joanna nie pragnie przeczytać tej książki.	4.31
A. Twój tato nie radzi nam wybierać tego komputera.	3.54
B. Piotr nie karze dzisiaj oglądać tego filmu.	3.00
B. Nasz kierownik nie nakazuje zamontować tej półki.	3.31
B. Kasia nie lubi nosić tej garsonki na specjalne okazje.	4.00
C. Twoja nauczycielka nie umie prowadzić zajęć.	4.82
C. Nie potrzebujesz przeczytać mojego raportu.	3.41
C. Marta nie musi unikać tłustych potraw.	5.00

Version A = 13 informants, version B = 16 informants, version C = 17 informants.

As visible in Table 14, there are notable differences between mood values in the discussed grammatical contexts. Specifically, for the *wh*-movement constructions the greatest differences can be spotted for the extraction out of the object position, which for the *že*-clause complement is evaluated at 2.13, for the *žeby*-clause complement at 3.33 and for the infinitive complement at 4.19. Slightly smaller differences can be noted for the extraction out of the adverbial position, that is, for the *že*-clause complement – 2.62, for the *žeby*-clause complement – 3.38 and for the infinitive complement – 3.92. Crucially, no great difference can be found in the case of the extraction out of the subject position, i.e., the *že*-clause complement is assessed at 1.56, whereas for the *žeby*-clause complement at 1.75. Another movement context – clitic climbing – receives similar judgements: the result for the *že*-clause complement is 1.54, for the *žeby*-clause complement 2.09 and for the infinitive complement 3.04.

The gradation found in the movement contexts, that is, the movement out of the infinitive is assessed better than the movement out of the subjunctive, which itself is assessed better than the movement out of the indicative, is broken in the context of negative pronouns licensing. Here the licensing in the *že*-clause complement is evaluated slightly better than the licensing in the *žeby*-clause complement: 1.61 and 1.51, respectively. Still, the licensing in the infinitive complement is ranked far better – 3.48. Another syntactic context, distinct from overt movement, brings different results. Specifically, the Genitive of Negation triggering in the *že*-clause complement is ranked the worst (1.68), whereas in the infinitive complement it is ranked the best (3.86) with the *žeby*-clause complement assessed in-between (2.24). Therefore, we can observe that two similar, at least at face value, syntactic relations, i.e., negative pronouns and the Genitive of Negation, are evaluated in two different ways – the Genitive of Negation following the pattern of *wh*-movement constructions.

It is also interesting to compare the same mood values across the tested contexts. First, the *že*-clause complement is evaluated best in the context of *wh*-extraction from the adverbial position (mean score: 2.62) and *wh*-extraction from the object position (mean score: 2.13), whereas in other contexts it is assessed below 2.00. Second, the *žeby*-clause ranks best in the context of *wh*-extraction from the adverbial position (mean score: 3.38) and *wh*-extraction from the object position (mean score: 3.33), but it is assessed worst in the context of negative pronouns licensing (mean score: 1.51) and *wh*-extraction from the subject position (mean score: 1.75). Third, the infinitive is evaluated best in the context of *wh*-extraction from the object position (mean score: 4.19) and worst in the context of clitic climbing (mean score: 3.04). Such differences across grammatical contexts clearly suggest that mood is not the only factor contributing to the grammaticality of the discussed sentences. The observation that the extraction from the adverbial position ranks best for two types of complements may be explained in two ways. First, it is easier to integrate an adverbial with an incoming syntactic structure and therefore some participants might have understood the adverbials as elements modifying the matrix clause, though I tried to avoid ambiguities in my study. Therefore, here the factor is not the extraction site, but the fact that at the beginning of an analyzed sentence a participant encounters an adverbial *wh*-phrase that he or she intuitively integrates with the immediate syntactic structure, i.e., the elements of the matrix clause, so as to reduce the processing effort. Such a phenomenon is well-known in psycholinguistics as the minimal attachment principle (see Frazier and Clifton, 1996). In this sense, it is easier to integrate

phrases like *when* or *where* with any matrix predicate in comparison to *what* or *who*, which can be incompatible with the argument structure of some verbs. Second, there are asymmetries between adverbials (non-arguments) and arguments in terms of movement. For example, the presence of a high adverbial can improve an extraction of a subject over *that*-complementizer in English (see Den Dikken, 2018, p. 254). On the other hand, while adverbials are more prone to be extracted, the movement of subjects has far more limitations, e.g., the so-called That Trace Effect in English, which describes a phenomenon in which the presence of an overt complementizer blocks the long-distance extraction of a subject; similar effects also being found for Polish (see Witkoś, 1995, p. 230; 2004, pp. 215–219). The extraction of subjects is also less acceptable in our results, where such sentences were assessed very low: 1.56 for the *że*-clause and 1.75 for the *żeby*-clause. In sum, the obtained results might have been influenced by processing factors (the performance level), e.g., minimal attachment, and the syntactic factors (the competence level), that is, difference in extraction sites and types of extracted material, e.g., a difference between an adverbial phrase and a noun phrase extracted from the subject position.

Finally, the aforementioned results for experimental sentences should be compared with the results of control items, that is, filler sentences, grammatical, ungrammatical and degraded, which serve as a benchmark for grammaticality comparison. The means of control sentences are presented in Table 15 (see Appendix 2 for the complete results of the control sentences).

Based on the results from Table 15, we can observe that wh-extractions from the *że*-clause complement score results similar to control ungrammatical questions: 1.56, 2.13, 2.62 in the experimental conditions compared to 1.62 for ungrammatical questions in the control condition. Further, wh-extractions from the *żeby*-clause complement come close to the results of control degraded questions: 3.33 and 3.38 in the experimental conditions compared to 3.33 for degraded questions in the control condition (apart from the extraction from the subject position with the result at 1.75). Next, wh-extractions from the infinitive complement achieve lower results than control grammatical questions, but they are still better than control degraded questions: 3.92 (adverbial position) and 4.19 (object position) in the experimental conditions compared to 4.73 for grammatical questions in the control condition (and 3.33 for degraded questions in the control condition).

Table 15. Results of control sentences

Control condition/Filler sentence	Mean
Grammatical questions	4.73
Grammatical affirmatives	4.73
Grammatical negatives	4.58
Ungrammatical questions	1.62
Ungrammatical affirmatives	1.93
Ungrammatical negatives	2.08
Degraded affirmatives	3.25
Degraded questions	3.33

As far as clitic climbing is concerned, experimental sentences for the *że*-clause complement and the *żeby*-clause complement score similar results to control ungrammatical

affirmatives: 1.54 and 2.09 in the experimental conditions respectively compared to 1.93 for ungrammatical affirmatives in the control condition. Clitic climbing from the infinitive complement receives similar judgements to control degraded affirmatives: 3.04 compared to 3.25, respectively. Lastly, the control conditions included two negative contexts: ungrammatical negatives (2.08) and grammatical negatives (4.58),⁵⁵ which create a scale to compare negative pronouns licensing and the Genitive of Negation. Specifically, negative pronouns licensing in the *że*-clause complement and in the *żeby*-clause complement have similar judgements to control ungrammatical negatives: 1.61 and 1.51 in the experimental conditions compared to 2.08 for ungrammatical negatives in the control condition. The result of negative pronouns licensing in infinitival clauses, that is, 3.48, can be compared to the results of degraded control sentences, which means that the combination of negation with a clause boundary, even infinitival, causes some processing problems. Further, the Genitive of Negation in the *że*-clause complement and in the *żeby*-clause complement is assessed at the similar level to control ungrammatical negatives: 1.68 and 2.24 in the experimental conditions compared to 2.08 for ungrammatical negatives in the control condition. On the other hand, the Genitive of Negation in the infinitive complement comes close to the result of control grammatical negatives: 3.86 in the experimental condition compared to 4.58 for grammatical negatives in the control condition, which is still better than degraded controls.

To conclude, the results the grammatical judgement study show that there is a discernable difference between the *że*-complement and the *żeby*-complement in terms of grammaticality of discussed syntactic operations. This means that the indicative/subjunctive distinction in Polish is indeed reflected in the transparency of complement clauses of various types. Recall from Section 2.4.1 that the literature review on the long-distance phenomena in Polish provided inconsistent results (largely due to conflicting judgements), whereas the results of the conducted grammaticality judgement study show that on a regular basis *że*- and *żeby*-clauses differ with respect to long-distance phenomena across almost all contexts (except for the extraction out of the subject position and negative pronouns licensing). If this is so, then *żeby*-clauses exhibit transparency effects characteristic for subjunctive clauses cross-linguistically. Still, based on the present study, one must note that transparency here must be understood in a relative sense as being more transparent than the indicative, but – importantly – without being completely transparent. In other words, *żeby*-clauses give less degraded results in the contexts of long-distance phenomena than *że*-clauses, which is a strong argument in favour of their subjunctivehood.

2.4.3 The origins of *żeby* in the syntactic structure

Finally, some remarks must be made with respect to the way the complementizer *żeby* originates in the structure of a Polish sentence. Although this aspect is not directly connected with the definitional criteria of the subjunctive, it has an impact on the understanding of the long-distance phenomena described in the previous sections. Linguists generally agree that *żeby* is a complex complementizer, which is not base-generated but rather constructed during a derivation (see Borsley and Rivero, 1994; Szczegielniak, 1999; Bondaruk, 2004; Migdalski

⁵⁵ No degraded negative sentences were included in the control group since there were no degraded negatives among target sentences. Mind that the group of fillers was designed so that it mirrored the group of target sentences.

2006). Therefore, an actual debate is how *żeby* is derived and where *że* and *by* are located in the structure. One of the early analyses by Borsley and Rivero (1994) assumes that *by* in Polish is located in I⁰ (the head of Inflection Phrase) and a verb may optionally incorporate to *by* and thus Polish hypothetical sentences have two structural options: unincorporated and incorporated (after Bondaruk, 2004, pp. 194–195); see (2.178) and (2.179):

(2.178) *Marek by wyjechał za granicę.*
 Mark COND/SBJV go.PST.PTCP.SG.M abroad
 ‘Mark would go abroad’

(2.179) *Marek wyjechał-by za granicę.*
 Mark go.PST.PTCP.SG.M-COND/SBJV abroad
 ‘Mark would go abroad’

In example (2.178) the lexical verb is not incorporated to *by* and hence the order *by* plus the main verb; the incorporated version is presented in (2.179). Recall that in the case of *żeby*-clauses the particle *by* must be adjoined to *że* and cannot be at the main verb. In line with Borsley and Rivero (1994), for *żeby*-clauses *by* needs to move to *że* in C⁰ to satisfy the selectional requirement of the matrix predicate and this movement precludes any verb incorporation (after Bondaruk, 2004, p. 196). Nonetheless, Bondaruk (2004, pp. 196–200) enlists problems of Borsley and Rivero’s (1994) analysis, the majority of which refers to the relation of *żeby* with other complementizers; consider (2.180), (2.181) and (2.182) (from Bondaruk, 2004, pp. 197–198)

(2.180) a. *Marek zastanawiał się, czy by-m*
 Mark wonder.PST.PTCP.3SG.M REFL whether COND/SBJV-1SG
nie poszedł do domu.
 NEG go.PST.PTCP.SG.M to home
 ‘Mark wondered if I wouldn’t go home.’

b. *Marek zastanawiał się, czy nie*
 Mark wonder.PST.PTCP.3SG.M REFL whether NEG
poszedł-by-m do domu.
 go.PST.PTCP.SG.M-COND/SBJV-1SG to home
 ‘Mark wondered if I wouldn’t go home.’

(2.181) a. *Jeśli-by-m miał dużo czasu,*
 if-COND/SBJV-1SG have.PST.PTCP.SG.M a.lot.of time
czytał-by-m książki.
 read.PST.PTCP.SG.M-COND/SBJV-1SG books
 ‘If I had a lot of time, I would read books.’

b. *Jeśli miał-by-m dużo czasu,*
 if have.PST.PTCP.SG.M-COND/SBJV-1SG a.lot.of time
czytał-by-m książki.
 read.PST.PTCP.SG.M-COND/SBJV-1SG books
 ‘If I had a lot of time, I would read books.’

(2.182) a. *Marek chce, byś poszedł do domu.*
 Mark want.PRS.3SG COND/SBJV-2SG go.PST.PTCP.SG.M to home
 ‘Mark wants you to go home.’

- b. *Marek chce, poszedłbyś do domu.
 Mark want.PRS.3SG go.PST.PTCP.SG.M-COND/SBJV-2SG to home
 ‘Mark wants you to go home.’

The sentences in (2.180) and (2.181) show that other complementizers, *czy* ‘whether’ and *jeśli* ‘if,’ do not require the adjacency of *by* and thus one would need to distinguish between complementizers that trigger movement and those which do not. Lastly, in (2.182) there is no overt complementizer and the particle *by* still needs to move to the left of the embedded clause (*ibidem*).

In yet another analysis, Migdalski (2006, p. 254) proposes that the particle *by*, the conditional auxiliary enclitic in his terms, is merged into Mood Phrase and then it left-adjoins to the perfect auxiliary in Tense Phrase, that is, to the person-number ending. Furthermore, Migdalski (2006, p. 255) also points out that the whole complex containing *by* and the perfect auxiliary needs to move further to Complementizer Phrase in the case of subjunctive complements, i.e., *żeby*-clauses, to satisfy a modal feature located in the clause left-periphery; see Figure 6 for illustration.

The very movement of the conditional-person-number complex is visible when the position of the particle *by* is compared in indicative and subjunctive clauses; compare (2.183)–(2.185) from (Migdalski, 2006, pp. 255–256):

- (2.183) *Powiedział, że to zrobili-by-śmy.*
 say.PST.PTCP.3SG.M that it do.PST.PTCP.PL.VIR-COND/SBJV-1PL
 ‘He said we would do it.’
- (2.184) *Powiedział, że by-śmy to zrobili.*
 say.PST.PTCP.3SG.M that COND/SBJV-1PL it do.PST.PTCP.VIR.PL
 ‘He said we would do it.’
- (2.185) **Powiedział, że to zrobili-by-śmy.*
 say.PST.PTCP.3SG that it do.PST.PTCP.PL.VIR-COND/SBJV-1PL
 Intended meaning: ‘He told/asked us to do it.’

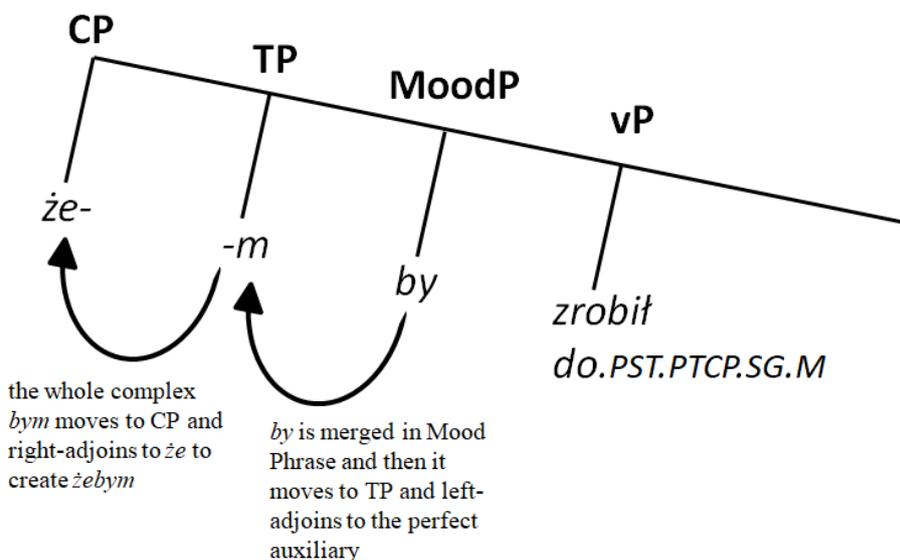


Figure 6. Derivation of the complex complementizer *żeby*
 Source: own elaboration based on Migdalski (2006).

The sentences in (2.183) and (2.184) show indicative *że*-clauses expressing modal/hypothetical meaning and under such a reading the particle *by* together with person-number endings cannot be attached to the complementizer *że*. In contrast, in (2.185) under the subjunctive/volitional reading the compound *byśmy* cannot stay at the verb, which is explained by Migdalski's (2006) feature account. Moreover, Migdalski (2006, p. 256) shows, following Bański (2000), that in sentences such as (2.184) the complementizer *że* and the auxiliary compound *byśmy* are separated not only because of spelling rules, but also in the underlying sentence structure; see (2.186)–(2.188) (from Migdalski, 2006, pp. 256, 258):

(2.186) *Powiedział, że my by-śmy to zrobili*
 say.PST.PTCP.3SG that we COND/SBJV-1PL it do.PST.PTCP.PL.VIR
 'He said we would do it.'

(2.187) *Powiedział, że jutro by-śmy im*
 say.PST.PTCP.3SG.M that tomorrow COND/SBJV-1PL them.DAT
tę książkę pożyczili.
 this book lend.PST.PTCP.PL.VIR
 'He said that tomorrow we would lend this book to them.'

(2.188) *Powiedział, że tę książkę by-śmy im*
 say.PST.PTCP.3SG.M that this book COND/SBJV-1PL them.DAT
wtedy pożyczili.
 then lend.PST.PTCP.PL.VIR
 "He said that we would lend this book to them then"

As visible in (2.186), under the indicative reading, it is possible to insert an overt subject, which proves that in such sentences the auxiliary compound *byśmy* is not attached to the complementizer *że* and does not rise as high as to CP. Such an observation is also strengthened by examples in which *że* and *byśmy* are separated by adverbs (2.187) or topicalized objects (2.188). Under the subjunctive/volitional reading, the complementizer *że* and the conditional-perfect compound cannot be separated; cf. (2.189)–(2.190) (from Migdalski, 2006, pp. 258):

(2.189) *Powiedział, że- (*jutro) -by-śmy im*
 say.PST.PTCP.3SG.M that- tomorrow -COND/SBJV-1PL them.DAT
jutro tę książkę pożyczili.
 tomorrow this book lend.PST.PTCP.PL.VIR
 'He said that we should lend this book to them tomorrow.'

(2.190) *Powiedział, że- (*wy)-by-ście wy im*
 say.PST.PTCP.3SG.M that you.PL-COND/SBJV.2PL you.PL them.DAT
tę książkę pożyczili.
 this book lend.PST.PTCP.PL.VIR
 'He said that you should lend this book to them tomorrow.'

As visible in (2.189) and (2.190) in subjunctive clauses *że* and *byśmy/byście* cannot be separated by either an adverb or an overt subject. Therefore, the above-discussed examples show that the indicative clauses with the particle *by* and the subjunctive clauses with the particle *by* are interpretationally and structurally different.

Migdalski's (2006) analysis can be supplemented with observations on the intervention effects in the clauses where the particle *by* is immobile at the complementizer. Specifically, Tomaszewicz (2012, p. 275) proposes that in such clauses *by* must move to C⁰ because of the operator movement to Spec-CP and the requirement that "the head position of the specifier occupied by the operator be filled." Tomaszewicz (2012, p. 276) also shows this operator movement in Polish results in blocking Main Clause Phenomena, such as contrastive *to*-topicalization, long extraction of adjuncts and speaker-oriented adverbs. In her account, based on Haegeman (2003; 2007) as well as Bhatt and Pancheva (2006), she claims that *if*- and *when*-clauses are derived via the movement of the clause-typing operator to the left-periphery, which blocks other movements, such as topicalization and speaker-oriented adverbs. For Polish Tomaszewicz (2012) compares conditional clauses of two types: hypothetical indicative conditionals and hypothetical counterfactual conditionals, noticing that they differ with respect to the position of the particle *by*; compare (2.191) and (2.192) (from Tomaszewicz, 2012, pp. 263, 264):

(2.191) *Skoro/jeśli by Janek (by) kupił(by) Jaguara,*
 since/if COND/SBJV John COND/SBJV buy.PST.PTCP.3SG.M-COND/SBJV Jaguar
to by nim jeździł do pracy.
 then COND/SBJV it drive.PST.PTCP.SG.M to work
 'If Janek bought a Jaguar, he would drive it to work.'

(2.192) *Gdy-by Janek (*by) kupił(*by) Jaguara,*
 if-COND/SBJV John COND/SBJV buy.PST.PTCP.SG.M-COND/SBJV Jaguar
to by Marek (by) jeździł do pracy.
 then COND/SBJV Marek COND/SBJV drive.PST.PTCP.SG.M to work
 'If Janek bought a Jaguar, Marek would drive it to work.'

The difference between (2.191) and (2.192) is visible in the antecedent clause: in the hypothetical indicative conditional in (2.191) the particle *by* can move around the clause and does not need to stick to the second position, whereas for the hypothetical counterfactual conditional version (2.192) *by* needs to stay at the complementizer. Those different positions of the particle *by* are reflected in the possibilities of Main Clause phenomena in the respective types of conditional sentences; compare (2.193) with (2.194), (2.195) with (2.196) and (2.197) with (2.198) (from Tomaszewicz, 2012, pp. 268, 269, 270):

(2.193) *Skoro/jeśli listy to Maria wysyłała, a paczki to Anna...*
 since letters to Maria send.PST.PTCP.3SG.F and packets to Anna
 'As for the letters, given that Maria sent them to Janek, and Anna sent the packets...'

(2.194) *Gdy-by-ś mejla (*to) napisał (a nie list)*
 if-COND/SBJV-2SG mail to write.PST.PTCP.SG.M and not a letter
 'As for an email, if you wrote it, but not a letter...'

(2.195) *Skoro podstępem Janek stwierdził, że nie zwyciężymy, to zrobimy, jak nam każe.*
 since by.deception Janek contend.PST.PTCP.3SG.M that NEG
 win.FUT.2PL then let's.do how us orders
 'Since Janek condended that we will not win by deception, let's do what he says.'

- (2.196)* *Gdyby podstępem Janek stwierdził, że nie zwyciężymy, to zrobimy, jak nam każe.*
 if-COND/SBJV by.deception Janek contend.PST.PTCP.SG.M that NEG
 win.FUT.2PL then let's.do how us orders.PRS.3SG
 Intended meaning: 'If Janek contended by deception that we will not win, let's do what he says.'
- (2.197) *Skoro Janek na szczęście by mnie nie spotkał...*
 since Janek on luck COND/SBJV me NEG meet.PST.PTCP.SG.M
 'Given that Janek, luckily, would have not met me.'
- (2.198) *Janek by zblądził, gdy-by na szczęście mnie nie spotkał.*
 Janek COND/SBJV get.lost.PST.PTCP.SG.M if-COND/SBJV on luck
 me NEG meet.PST.PTCP.SG.M
 'Janek would have lost his way, but luckily (for him) he met me.'

In examples (2.193) and (2.194) the particle *to*, which in Polish is a contrastive topic marker, follows a topicalized item (Tomaszewicz, 2012, p. 266). Tomaszewicz (*ibidem*) assumes that *to* is placed in a functional head above TP and that the topicalized element must move to the specifier of this head. Nonetheless, such a movement is blocked in the hypothetical conditional with *gdyby* in (2.194) because of the operator movement. Similarly, the operator movement for *gdyby* blocks long-distance extraction adjuncts in (2.196), where the adverb *podstępem* 'by deception' can only refer to the verb of saying yielding a rather unacceptable interpretation. In (2.198) the hypothetical conditional cannot have the speaker-oriented interpretation of the adverb *na szczęście* 'luckily,' but such an interpretation is possible for the indicative conditional in (2.197). For Tomaszewicz (2012) all the presented restrictions are connected with the operator movement in hypothetical conditionals and the requirement that the head should be filled by the particle *by*, which is reflected in its second position in a clause.

The hypothetical conditional *gdyby* at surface seems similar to *żeby* since the particle *by* is immobile at the complementizer. Therefore, if *żeby* and *gdyby* are alike, we expect restrictions in Main Clause Phenomena in sentences with *żeby*-clauses, but not in the ones with *że*-clauses; cf. examples (2.199)–(2.204) (based on Tomaszewicz's (2012) examples):

- (2.199) *Piotr stwierdził, że listy to Maria wysłała, a paczki to Julia.*
 Piotr state.PST.PTCP.3SG.M that letters to.TOP Maria send.PST.PTCP.3SG.F
 and parcels to.TOP Julia
 'Piotr stated that the letters had been sent by Maria and the parcels by Julia.'
- (2.200) *Piotr chciał, że-by listy to Maria wysłała, a paczki to Julia.*
 Piotr want.PST.PTCP.3SG.M that-COND/SBJV letters to.TOP Maria
 send.PST.PTCP.SG.F and parcels to.TOP Julia
 'Piotr wanted Maria to send the letters and Julia to send the parcels.'

- (2.201) [?]*Piotr podstępem stwierdził, że nasza drużyna zwyciężyła.*
 Piotr by.deception state.PST.PTCP.3SG.M that our team win.PST.PTCP.3SG.F
 Intended meaning: ‘Piotr stated that our team had won by deception.’
- (2.202) [?]*Piotr podstępem chciał, żeby nasza drużyna zwyciężyła.*
 Piotr by.deception want.PST.PTCP.3SG.M that-COND/SBJV our team win.PST.PTCP.SG.F
 Intended meaning: ‘Piotr wanted our team to win by deception.’
- (2.203) *Przyznała się, że, na szczęście, Piotr ją spotkał.*
 say.PST.PTCP.3SG.F REFL that luckily Piotr her meet.PST.PTCP.3SG.M
 ‘Luckily, she admitted that Peter had met her.’
- (2.204) [?]*Chciała, żeby, na szczęście, Piotr ją spotkał.*
 want.PST.PTCP.3SG.F that-COND/SBJV luckily Piotr her meet.PST.PTCP.SG.M
 Intended interpretation: ‘Luckily, she wanted Peter to meet her.’

The data from Polish presented above seem inconclusive. For both *że* and *żeby*-clauses *to*-topicalization is possible (compare (2.199) and (2.200)). Slight differences appear only in the case of adjunct extraction and speaker-oriented adverbs interpretation. Examples (2.201) and (2.202) are difficult to assess since the adverb *podstępem* ‘by deception’ can be interpreted as modifying the embedded action or the matrix one, although in (2.202) the stronger meaning seems to be that Peter used deception to make embedded subjects do something. As far as speaker-oriented adverbs are concerned, a speaker-oriented interpretation is found only in the case of *że*-clause in (2.203), whereas *żeby*-clause in (2.204) looks at least degraded.

So far, I have shown that *żeby* is a complex complementizer formed via the movement of the whole conditional-person-number complex to the head of Complementizer Phrase in several stages: first the movement of *by* from Mood Phrase to Tense Phrase (left-adjunction to the perfect auxiliary) and then the movement of the whole complex to Complementizer Phrase (Migdalski, 2006). This movement is a reflex of the operator movement to Spec-CP, analogous to the one found in *gdyby*-clauses, and the requirement that C^0 be filled with the particle *by*. The evidence for this movement is constituted by intervention effects, that is, restrictions on Main Clause Phenomena (Tomaszewicz, 2012) in *gdyby*-clauses (but less evident in the context of *żeby*-clauses). Finally, one more observation should be mentioned at this point. Namely, Migdalski (2016) notices a broader cross-linguistic phenomenon of operator cliticization. Specifically, he mentions “Force-related” cliticization in North Slavic languages and Old Slavic understood as encliticization of an auxiliary on the complementizer to mark a non-indicative, modal meaning, such as hypothetical, counterfactual, potential or optative (Migdalski, 2016, p. 171). Therefore, the inseparability of *że* and *by* in *żeby* and *gdy* and *by* in *gdyby* neatly fits into the picture of non-indicative clause-typing.

2.4.4 Interim conclusions

In the morphosyntactic picture shown in the present section one can see systematic differences between *że* and *żeby*-clauses in Polish. In terms of transclausal operations *że*-clauses serve as a strong barrier, disallowing long-distance wh-extractions, clitic climbing, Genitive of Negation and negative pronouns licensing. The opposite end of the spectrum is

occupied by infinitives, which are fully transparent, allowing for all the aforementioned relations. *Żeby*-clauses exhibit transparency effects – though inconsistent and context-dependent – characteristic for subjunctive clauses, that is, they are assessed better than *że*-clauses across almost all long-distance contexts (with the exception of subject extraction and negative pronouns licensing). The conducted grammatical judgement study showed that *żeby*-clauses give less degraded results when compared to *że*-clauses, which proves that in Polish the indicative/subjunctive distinction is reflected in transparency properties of *że*- and *żeby*-clauses. Still, a reservation must be expressed at this point as the transparency of *żeby*-clauses is limited by numerous factors, for instance, extraction site, such as the subject position which seems to block movement possibilities. What also plays an important role is the way the complementizer *żeby* is derived, namely, by the movement of the particle *by* to the head of Complementizer Phrase (as a reflex of the operator movement) to type a non-indicative clause (“force-related cliticization”). As demonstrated, such a movement may bring intervention effects, additionally restricting transparency effects of *żeby*-clauses.

Taking into account the minimalist syntactic theory, one can fit the erratic behaviour of *żeby*-clauses with respect to long-distance operations into a broader picture. Although a detailed syntactic analysis of the derivational aspects of embedded clauses in Polish is beyond the scope of the present study, the status of CP as a dynamic category should be mentioned at this juncture (see Citko, 2014). Since Chomsky (1986) and Manzini (1992) tense has been seen as a factor restricting wh-movement (so-called “tense-island” effects). Such ideas reverberate in phase theory⁵⁶ in which phasehood may depend on properties of tense, e.g., a complete or a defective version of C⁰ proposed by Gallego (2007). In short, Gallego (2007, p. 6) proposes a defective version of C⁰ for subjunctive clauses, which gives two crucial properties: weak left peripheral activity and high connectivity effects. For him, the properties of T and C are closely connected since “T is parasitic on C” (Gallego, 2007, p. 2). Therefore, based on temporal properties of *żeby*-clauses described in the previous sections, tense is yet another factor – apart from already-mentioned extraction sites and intervention effects – affecting the behaviour of *żeby*-clauses. Still, all these aspects would require a separate research study limited to one syntactic model.

2.5 Chapter conclusions

The focus of the present chapter was to present various arguments in favour of treating *żeby*-clauses as subjunctive clauses. I have started with the general description of the mood system in Polish and showed that *żeby*-clauses defy a unified account in Polish descriptive grammar. However, their surface properties, that is, subordinate-clause context, selection by volitional predicates, temporal defectiveness and emerging under negation, point to their subjunctivehood. Further, I have analyzed *żeby*-clauses on three different levels, semantic, pragmatic and morphosyntactic, always putting them in contrast with indicative *że*-clauses. On the semantic and morphosyntactic level, *żeby*-clauses fulfill a number of subjunctive criteria, that is, they surface in nonveridical contexts (complements to nonveridical predicates, polarity subjunctive environment and relative clauses with non-existential interpretation),

⁵⁶ Consider also the ideas presented in Den Dikken (2007, “phase extension”), Gallego (2010, “phase sliding”) and Bošković (2014, “contextual phase”).

have a relative temporal interpretation (with respect to the matrix event) and exhibit obviation effects (disjoint reference) as well as transparency effects (in almost all long-distance contexts). Nonetheless, on the pragmatic level, *żeby*-clauses do not follow patterns described for subjunctives in other languages, i.e., they do not systematically mark information with regard to its relevance in terms of truth value or news value and are selected only by a limited set of non-asserted predicates (imperative predicates). Still, the common pragmatic feature of *żeby*-clauses is the lack of commitment to the truth of a proposition and the lack of the speaker's or the subject's control over a proposition.

The discussion in the present chapter has also shown a systematic contrast between *że*- and *żeby*-clauses that can be recognized as the contrast between the indicative and the subjunctive. On the semantic level, I have demonstrated that the mood distribution in Polish follows veridical/nonveridical distinction and, specifically, veridical verbs select for *że*-clauses (indicative complements), while nonveridical verbs select for *żeby*-clauses (subjunctive complements), only with minor exceptions. On the morphosyntactic level, I have presented a systematic difference between *że*- and *żeby*-clauses with respect to transclausal operations, that is, *że*-clauses constitute a strong barrier, whereas *żeby*-clauses are more transparent and give less degraded results. However, on the pragmatic level, the contrast between *że*- and *żeby*-clauses does not follow the expected contrast between assertion and non-assertion, new and old information, relevant and non-relevant utterance, spotted in other subjunctive languages. The differences between *że*- and *żeby*-clauses are shown in Table 16.

Table 16. Indicative/subjunctive distinction in Polish

Feature	<i>Że</i> -clauses (indicative)	<i>Żeby</i> -clauses (subjunctive)
<i>Modality</i>	Declarative (non-modal)	Mainly event (deontic), propositional (under negation)
<i>Type</i>	Not applicable	Intensional, polarity
<i>Distribution</i>	Root contexts, matrix and subordinate clauses	Predominantly subordinate clauses, matrix clause in the optative use
<i>Use</i>	Assertive	Event/deontic (directive, purposive, timitive, volitive, optative, resultative, jussive) Propositional/epistemic (negative)
<i>Selector</i>	Veridical verbs	Nonveridical verbs
<i>Tense</i>	Absolute/independent	Defective/dependent (sequence of tense)
<i>Domain</i>	Opaque	Transparent

Source: own review.

Finally, the search for subjunctive properties of *żeby*-clauses has revealed two major problems with subjunctive criteria. The first main problem is the lack of the unified behaviour of the subjunctive in a given language and thus one set of diagnostics can work only in a part of contexts. For instance, *żeby*-clauses are more transparent than *że*-clause in the majority of long-distance contexts, but not in the case of the extraction from the subject position and negative pronouns licensing. The second problem, which actually seems a reflex of the first one, is that there are language-internal factors that can distort subjunctive diagnostics. As an illustration, for some idiomatic reasons, the nonveridical predicate *mieć nadzieję* 'to hope' selects for indicative *że*-clause. Another, much graver, example illustrating the

abovementioned problem is the one of discourse strategies to show the relevance of information. As shown in Section 2.3, in this respect Polish does not follow the patterns described for Romance languages.

In the next chapter I will apply the same set of theoretical tools to analyze the mood system in English and diagnose structures that correspond to the cross-linguistic category of the subjunctive.

CHAPTER 3

SUBJUNCTIVE IN THE MOOD SYSTEM OF ENGLISH

In the present chapter I discuss the mood system of English and pinpoint English structures that match the typological category of the subjunctive described in the first chapter. The subjunctive has constituted a challenge for any description of the English grammar. As Cannon (1959, p. 11) remarked, “the person who would attempt to define the subjunctive mood wholly notional or in formal terms is on the horns of a dilemma, for the mood fully resists definition if either of these approaches is used to the exclusion of the other.” According to Palmer (1987, p. 46 after Aarts, 2012, p. 1), “the notion of a subjunctive mood is a simple transfer from Latin and has no place in English grammar.” A similar view is also shared by Fowler (1965, pp. 595–598 after Aarts, 2012, p. 3): “owing to the capricious influence of the much analyzed classical moods upon the less studied native, it probably never would have been possible to draw up a satisfactory table of the English subjunctive uses.” Bearing in mind these opinions, I start with a thorough description of the mood system in English, including especially the characteristics of the so-called present and past subjunctives. Based on traditional grammars, I propose that the mandative subjunctive selected by suasive verbs fulfills cross-linguistic subjunctive criteria. Then I analyze the mandative subjunctive on the semantic level, including aspects of veridicality, temporal interpretation and subject coreference. Next I move to the pragmatic analysis to have a deeper insight into the meaning of the selected mandative subjunctive and consider corpus data to see if there is any connection between mood values in English and the notion of assertion. Finally, I focus on the form of the selected mandative subjunctive and look into morphosyntactic features of subjunctive clauses in relation to movement restrictions. In this part I present the results of my grammaticality judgement study conducted on a group of native speakers of American English. The chapter finishes with the summary of the properties of the mandative subjunctive on the three levels of analysis: semantic, pragmatic and morphosyntactic.

3.1 The mood system in English

In this section, I will review previous accounts of the subjunctive mood in English to arrive at the portrayal of this category and its place in the grammar of Present-Day English. The section is organized as follows. First, I discuss the traditional classification into three moods in English: indicative, subjunctive and imperative; also reflecting on the problem of scarce inflection and verb form syncretism. Second, I move to a detailed description of the English subjunctives, which will include both formal (inflectional exponents) and notional (semantics of non-factuality) characterization. Next, I discuss the use of the subjunctive and the contexts in which the subjunctive can be replaced by other forms (e.g., an analytic construction with modals). Finally, I review development and variation of the subjunctive mood, with a special emphasis on differences between British English and American English.

3.1.1 Traditional-grammar perspective

A traditional-grammar presentation of the category of mood in Modern English needs a narrower definition of mood as “the grammatical coding of modal meaning in verb inflections” (Depraetere and Reed, 2006, p. 270). The delimitation of the concept of mood is necessary in English, in which modal meanings are conveyed by inflectional items (the category of mood in the verb inflection, however limited it is) and non-inflectional items (separate function and content words) (*ibidem*). The latter group comprises the whole battery of modal auxiliaries (central modals, like *can* and *should*, and peripheral, like *dare*, *need* and *ought to*), periphrastic constructions (e.g., *be bound to*, *be about to*) and adverbs (e.g., *possibly*) (Depraetere and Reed, 2006, pp. 270, 272). Therefore, here I focus primarily on the inflectional mood as one of the ways of expressing semantic modality.

Traditional grammars distinguish between three moods of finite verbs in English: indicative, subjunctive and imperative (Jespersen, 1972, pp. 293–295; Quirk et al., 1985, p. 149; Brinton, 2000, p. 115; Depraetere and Reed, 2006, p. 270). This threefold distinction is based on functions that an utterance or a speech act is meant to perform. Thus, the indicative is an unmarked mood used for factual predications (Quirk et al., 1985, p. 149) or “factual assertions” (Huddleston, 1984, p. 78). It is only an indicative verb form that can occur as the main verb of a simple sentence, which Huddleston (1984, p. 80) calls a “kernel clause”; see (3.1) for illustration (from Huddleston, 1984, p. 80):

- (3.1) a. *He took offence.*
b. *I take French lessons.*
c. *They take advantage of you.*

A kernel clause is “a form which is maximally basic, one which does not belong to marked term in any system” (Huddleston, 1984, p. 12).⁵⁷ For instance, in his terms a positive sentence is a kernel clause, whereas a negative sentence is a non-kernel clause. Similarly, an interrogative clause is a derivative of a kernel declarative clause (Huddleston, 1984, p. 12).

The indicative mood also encompasses interrogative, exclamatives and embedded clauses introduced by some conjunctions (e.g., *because*, *since*, *before*, *after*); consider the following examples (from Huddleston, 1984, p. 80):

- (3.2) a. *Who takes sugar?*
b. *What a long time he took!*
c. *I'll help myself before she takes them away.*

The subjunctive mood, on par with the imperative, is considered to be marked (Quirk et al., 1985: 149). Its primary function is to express non-factual meanings, associated mainly with wishes and recommendations (Jespersen, 1972, p. 293; Huddleston, 1984, p. 78; Quirk et al., 1985, p. 149). Traditionally the subjunctive is divided into present subjunctive, with the base form of the verb for all persons, and past subjunctive, which can be distinguished from the past indicative by the first and third person singular form of the verb *to be* (Depraetere and Reed, 2006, p. 270);⁵⁸ see (3.3) for examples (from Huddleston, 1984, p. 80; Quirk et al., 1985, p. 156):

⁵⁷ See Section 3.1.2.1.2 for examples of formulaic subjunctive, which are similar to kernel clauses.

⁵⁸ See Section 3.1.2 for a detailed account of the form and distribution of the English subjunctive.

Huddleston’s proposal is based purely on the differences between morphological forms; thus, for example, the imperative, the present subjunctive and the infinitive have the same verb form for all verbs and as such can be conflated into one “base form” category (Huddleston, 1984, p. 82). His paradigm actually cuts across the traditional one with subjunctive mood being distributed to the “past tense” and “base form” categories. Having discarded traditional categories, Huddleston (1984, p. 164) proposes an analytic mood system for Modern English. For him, modality belongs to the semantic sphere (not represented in inflection) and VPs can be classified as modal or non-modal based on the modal auxiliaries that they exhibit (*ibidem*).

In the present work, I will follow the traditional paradigm and distinction into three moods. Although Huddleston’s criticism of the syncretism of the traditional paradigm is justified, the English subjunctive still has its distinct forms (however limited they may be) and uses associated with specific syntactic (mainly subordinate clauses) and pragmatic contexts (directive speech acts), which are described in detail in the next section.

3.1.2 Subjunctive as a mood of English

Grammarians differentiate between two forms of the English subjunctive: *the present subjunctive* and *the past subjunctive* (Huddleston, 1984, p. 80; Quirk et al., 1985, p. 155; Thomson and Martinet, 2000, p. 253). This terminology is misleading since it presupposes a non-existent time reference opposition between these two forms. As will be discussed more extensively in the following sections, the terms *present* and *past subjunctive* refer solely to the verb form and not to the location of an event in time (Depraetere and Reed, 2006, p. 271).

3.1.2.1 The present subjunctive

The form of the present subjunctive is the base form of the verb for all the persons. The only difference between the subjunctive and the indicative is thus visible in the 3rd person singular, where the subjunctive verb form lacks *-(e)s*. Additionally, the base form of the verb *to be* is used for all the persons in the subjunctive mood; consider examples (3.6) and (3.7) (from Quirk et. al., 1985, p. 155):

(3.6) *I insist that the Council **reconsider** its decisions.*

(3.7) *I insist that the Council’s decision(s) **be** reconsidered.*

Another difference between the indicative and the subjunctive is the presence of *do*-support. The subjunctive lexical verb is negated by means of *not*, whereas the indicative needs *do*-support; compare (3.8) and (3.9) (Quirk, 1985, p. 157, note a):

(3.8) *She insists that we **not touch** any exhibits in the room.* SUBJUNCTIVE

(3.9) *She says that people **do not usually touch** any exhibits in the room.* INDICATIVE

The present subjunctive can be further subdivided into the mandative and formulaic subjunctive (distinction after Quirk et al., 1985, pp. 155, 839), which are thoroughly discussed in the next sections.

3.1.2.1.1 The mandative subjunctive

The mandative subjunctive can be found in subordinate *that*-clauses provided they are introduced by “an expression of demand, recommendation, proposal, resolution, intention, etc.” (Quirk et al., 1985, p. 156). Such expressions may be realized by means of superordinate verbs, adjectives and nouns, consider (3.10) (from Quirk et al., 1985, p. 156):

- (3.10) a. *They **recommend** that this tax be abolished.*
 b. *It is **appropriate** that this tax be abolished.*
 c. *We were faced with the **demand** that this tax be abolished.*

Quirk et al. (1985, p. 1180) call the verbs of the *recommend* type SUASIVE VERBS, which “imply intentions to bring about some change in the future, whether or not these are verbally formulated as commands, suggestions, etc.” Suasive verbs can also be followed by a *that*-clause containing the so-called “putative *should*,” which will be discussed in Section 3.1.4.1, devoted to the alternatives to the subjunctive. Suasive verbs should be distinguished from FACTUAL VERBS, e.g., *claim*, complemented by a *that*-clause with an indicative verb; EMOTIVE VERBS, e.g., *regret*, followed by a *that*-clause with an indicative verb or the putative *should*; and HYPOTHESIS VERBS, e.g. *wish*, which take the past subjunctive as a complement (Quirk et al., 1985, p. 1180). The classes of verbs which take a *that*-clause as a complement are summarized in Table 18.

Table 18. *That*-clause complementation in English

Verb class	Verb in <i>that</i> -clause
FACTUAL	Indicative verb
SUASIVE	Mandative subjunctive verb* Putative <i>should</i>
EMOTIVE	Indicative verb Putative <i>should</i>
HYPOTHESIS	Hypothetical past Past subjunctive

* In British English an indicative verb is more common as an alternative to the mandative subjunctive.

Source: Quirk et al. (1985, p. 1180).

The mandative subjunctive exhibits no tense backshifting, so there is no change in the verb form irrespective of the matrix verb being present or past; see (3.11) (from Quirk et al., 1985, p. 156):

- (3.11) *The committee proposes / proposed that Mr Day be elected.*

Apart from suasive verbs, subjunctive *that*-clauses can follow adjectives that express some kind of “modality or volition” (Quirk et al., 1985, p. 1224), e.g., *essential*, *obligatory*, *necessary*. Also in this context the subjunctive is interchangeable with the putative *should*; see (3.12) (from Quirk et al., 1985, p. 1224):

- (3.12) *It is essential that the ban **should be lifted/be lifted** tomorrow.⁵⁹*

⁵⁹ Quirk et al. (1985, p. 1224) provide a third possibility with the indicative verb form:

(vi) *?It is essential that the ban is lifted tomorrow.*

However, they mark it with a question mark, which means that this is a marginal form.

Subjunctive *that*-clauses also follow certain nouns usually derived from suasive verbs, e.g., *suggestion* from *suggest* or *recommendation* from *recommend*; consider (3.13) (from Quirk et al., 1985, p. 1262):

- (3.13) a. *There was a recommendation that she be promoted.*
 b. *The suggestion came from the chairman that the new rule be adopted.*

The contexts with a subjunctive *that*-clause complement are summarized in Table 19.

Table 19. Contexts that require a subjunctive *that*-clause complement in English*

Verbs	Adjectives	Nouns
<i>agree, allow, arrange, ask, beg, command, concede, decide, decree, demand, desire, determine, enjoin, ensure, entreat, grant, insist, instruct, intend, keen, move, ordain, order, pledge, pray, prefer, pronounce, propose, recommend, request, require, resolve, rule, stipulate, suggest, urge, vote</i>	<i>apparent, certain, clear, evident, implicit, indubitable, likely, obvious, plain, possible, true, unlikely, untrue, well-known</i>	<i>advice, decision, recommendation, requirement, resolution, suggestion</i>

* Mind that for the verb and adjectives contexts the putative *should* and – marginally – the indicative verb are also possible. For the noun context, the putative *should* is an alternative to the mandative subjunctive.

Source: Quirk et al. (1985, pp. 1182, 1224, 1262); Brinton (2000, p. 116); Swan (2009, p. 559).

Apart from *that*-clauses, the mandative subjunctive is present in adverbial clauses of conditional, concessive and purpose character; cf. (3.14)–(3.16) (examples from Quirk et al., 1985, p. 1012):

- (3.14) CONDITIONAL *If any person **be** found guilty, he shall have the right to appeal.*
 (3.15) CONCESSIVE *Though he **be** the President himself, he shall hear us.*
 (3.16) PURPOSE *They removed the prisoner in order that he **not disturb** the proceeding any further.*

Concessive clauses with subjunctive verb forms are introduced by *though*, *even though*, *even if* and *whatever* (Quirk et al., 1985, pp. 1012–1013; Swan, 2009, p. 302).

The mandative subjunctive is also used in negative purpose clauses with *lest*, which can be paraphrased as “so that ... not” (Swan 2009, p. 302); consider (3.17) (from Swan, 2009, p. 302):

- (3.17) *The government must act, lest the problem of child poverty **grow** worse.*

Finally, there is one more marginal context of the present subjunctive *come* used initially and without a subordinator in temporal clauses; consider (3.18) (from Quirk et al., 1985, p. 1014):

- (3.18) ***Come winter**, we'll have to pay a good deal more for vegetables and fruit.*
 (= when winters comes...)

To sum up, the distribution of the mandative subjunctive is limited to subordinate *that*-clause complements of suasive verbs and certain types of nouns and adjectives as well as to

adverbial clauses that express condition, concession or purpose. Furthermore, this type of the present subjunctive lacks subject–verb agreement (instead the base form is used for all the persons) and backshifting of tense.

3.1.2.1.2 The formulaic subjunctive

In contrast to the mandative subjunctive, the formulaic subjunctive can be found in independent clauses which have the form of fixed expressions with the base form of the verb (Quirk et al., 1985, p. 157); consider the examples in (3.19) (from Quirk et al., 1985, p. 157):

- (3.19) a. *Come what may, we will go ahead with our plan.*
b. *God save the Queen!*
c. *Suffice it to say that we won.*
d. *Heaven forbid that I should let my own parents suffer.*

Quirk et al. (1985, p. 839) also use the term “optative subjunctive” to stress the function of expressing wishes by means of such fixed phrases. They also differentiate between formulaic/optative subjunctives with and without subject–verb inversion; see (3.20) and (3.21) (from Quirk et al., 1985, p. 839; Quirk and Greenbaum, 1973, p. 204):

(3.20) WITH INVERSION *Far be it from me to spoil the fun.*
 Long live the Republic!
 So be it.

(3.21) WITHOUT INVERSION *The Lord forbid!*
 Heaven help us!
 The devil take you.

Quirk et al. (1985, p. 158) also describe the formulaic subjunctive as “formal and rather old fashioned in style.”

3.1.2.2 The past subjunctive

The past subjunctive can only be distinguished from the past indicative in the case of the first and the third person forms of the verb *to be*; consider (3.22) and (3.23) (from Quirk et al., 1985, p. 1013):

(3.22) *If only I **were** not so serious.*

(3.23) *I wish she **were** not married.*

The past subjunctive is used in hypothetical and counterfactual contexts (Depraetere and Reed, 2006, p. 271); particularly in adverbial clauses introduced by *if*, *as if*, *as though* and *though*, as well as nominal clauses introduced by hypothesis verbs, such as *wish*, *suppose* and *would rather* (see Table 18; Quirk et al., 1985, p. 158). For instance, see (3.24) (examples from Quirk et al., 1985, pp. 158, 1183):

(3.24) ADVERBIAL CLAUSE

*If I **were** rich, I would buy you anything you wanted.*

*Tim always speaks quietly on the phone, as though he **were** telling a secret.*

(3.25) NOMINAL CLAUSE⁶⁰

*I wish the journey **were** over.*

*Just suppose everyone **were** to give up smoking and drinking.*

*Many residents would rather that the bus service **were** subsidized.*

Marginally the past subjunctive may be found in main clauses as an equivalent to *would*; see (3.26) (from Huddleston and Pullum, 2002, p. 86):

(3.26) [?]*Such a move **were** ill-advised.* (= would be ill-advised)

However, Huddleston and Pullum (2002, p. 86) remark that the sentence in (3.26) is “archaic, reflecting a stage of the language before a modal auxiliary was required in the main clause of an explicit or implicit remote conditional.” Huddleston and Pullum (2002, p. 87) also point to some extended uses of the subjunctive *were* in contexts which are similar to irrealis; consider (3.27) (from Huddleston and Pullum, 2002, p. 87):

(3.27) a. [?]*She phoned to ascertain whether he **were** dining at the Club.*

b. [?]*He looked at me as if he suspected I **were** cheating on him.*

This use of the past subjunctive is considered incorrect and it stems from the willingness of some speakers to be “hypercorrect” and use *were* instead of *was* in irrealis and other neighbouring contexts⁶¹ (Huddleston and Pullum, 2002, p. 87).

What provokes major controversy in the literature on the grammar of Modern English is the treatment of the past subjunctive *were* as a separate mood. As already mentioned in Section 3.1.1, the distinction into the indicative and the subjunctive in English leads to a great amount of verb form syncretism in the English verb paradigm. The status of the past subjunctive is even more dubious as this form is limited only to one verb – *to be*. The first problem here is the question of how to treat past forms of verbs other than *to be* in the contexts where the past subjunctive *were* emerges; compare (3.28) and (3.29):

(3.28) *I wish the exam **were** easier.*

(3.29) *I wish I had more time to prepare for the exam today.*

In (3.28) and (3.29) the verbs *to be* and *to have* can be found in analogous contexts; however, in some traditional grammars *were* in (3.28) is treated as the past subjunctive and *had* in (3.29) – as the hypothetical past indicative (distinction found in Quirk et al., 1985, p. 158).

As discussed in Section 3.1.1, Huddleston (1984, p. 83) proposed to conflate the past indicative and the past subjunctive into one category of “past tense.” This idea is developed in Huddleston and Pullum (2002, p. 88), who claim that “irrealis *were* is an unstable remnant of an earlier system – a system which has otherwise been replaced by one in which the preterite has expanded its use in such a way that it now serves to express modal remoteness as well as past time.” The conclusion is therefore that, according to Huddleston and Pullum (2002), the distinction into preterite and irrealis (or the past subjunctive and the past indicative in Quirk et

⁶⁰ Nominal clauses are close to noun phrases in the sense that they can function, for example, as a subject or a direct object. The category of nominal clauses encompasses *that*-clauses, *wh*-interrogative clauses, *yes-no* interrogative clauses, nominal relative clauses, *to*-infinitive nominal clauses, nominal *-ing* clauses as well as bare infinitive and verbless clauses. Defined after Quirk and Greenbaum (1973, pp. 316–322).

⁶¹ Quirk et al. (1985, p. 158, note b) call such extended uses “pseudo-subjunctive.”

al.'s terms) is no longer present in Modern English, apart from the fossilized *were* for the first and third person singular, still being slowly replaced by more informal *was*.

The second major problem with the past subjunctive is its contrast to the present subjunctive. As already pointed out, there is no temporal contrast between the present subjunctive and the past subjunctive, though the names suggest otherwise. Furthermore, the contexts in which these two forms emerge hardly ever overlap and thus it is difficult to speak about any type of contrast at all. Still, Huddleston and Pullum (2002, p. 87) managed to propose a kind of minimal pair:

- (3.30) a. *If that be so, the plan will have to be revised.*
b. *If that were so, the plan would have to be revised.*

According to Huddleston and Pullum (2002, p. 87), the difference between the sentences in (3.30) lies in modality: *that* in (3.30b) is less probable than in (3.30a).

As argued earlier in this chapter, I will follow the traditional tripartite mood system in English, with the distinction into indicative, subjunctive and imperative. There are also arguments in the literature for keeping the past indicative and the past subjunctive apart, which is the context of *It's time that*, in which the past subjunctive *were* cannot replace the past indicative *was*; see (3.31) (from Quirk et al., 1985, p. 1013, note b):

- (3.31) *It's time I was / *were in bed.*

The sentence in (3.31) can be classified as counterfactual, expressing a wish for a desired state of being in bed. Still, the counterfactual meaning is only expressed by means of the past tense and the subjunctive is blocked. Granted, this may be a matter of usage solidified in the prescriptive tradition, since neither Quirk et al. (1985) nor other grammar textbooks (e.g., Thomson and Martinet, 2000, p. 254) provide any explanation for the past indicative *was* in such structures.

3.1.3 A terminological comment on the subjunctive/conditional distinction

At this juncture, I need to further comment on the use of the past subjunctive in conditional sentences. The problematic issue is whether *were* in *if*-clauses could be classified as a separate conditional mood that should not be treated on par with the subjunctive mood. In other words, if this were so, we would have the subjunctive mood limited to the mandative subjunctive and the conditional mood equated with the past subjunctive. Such a solution may be promising because, as already noted, there is no temporal contrast between the present and the past subjunctive and their contexts almost never overlap.

First, as already discussed in Section 3.1.1, according to traditional grammars there exist three moods of finite verbs in English: indicative, subjunctive and imperative. The indicative mood is the unmarked one used for factual sentences, whereas the subjunctive and the imperative are marked ones used for non-factual meanings. This division is also supported by inflectional properties – the subjunctive and the imperative have their distinct verb forms. Therefore, if we treated the past subjunctive as the conditional mood and the mandative subjunctive as the subjunctive mood, then we would arrive at three marked moods in English, which express non-factual meanings: subjunctive, conditional and imperative. Such proliferation of non-factual moods would be difficult to justify since the past subjunctive *were*

can be found not only in conditional sentences, but also in other non-factual/hypothetical contexts; compare (3.32) with (3.33) and (3.34) (from Leech, 1971, p. 112):

(3.32) *It would be laughable if Septimus were in love.*

(3.33) *Suppose/imagine you and I were to find ourselves on a desert island.*

(3.34) *I wish I were young again.*

According to the distinction under discussion, (3.32) would be different from (3.33) and (3.34) only because of the context of a conditional sentence. This is then not a satisfactory basis for distinguishing a separate conditional mood.

Yet another terminological problem found in the literature is the use of the term ‘conditional mood’ for the modal constructions found in the main clause of a conditional sentence (apodosis). Such a term is used by Fisiak et al. (1978, p. 119), who distinguished between two types of the conditional mood; see (3.35)

(3.35) Conditional I: *should/would* + infinitive (*he would die if...*)

Conditional II: *should/would* + perfect infinitive (*he would have died if...*)

The conditional mood in Fisiak et al.’s terms is used for “unreal conditions” in which “the meaning of the conditional clause is that the event described in this clause is not true” (Fisiak et al., 1978, p. 121). Unreal conditions may be about a present event, which is “contrary to assumption,” (Conditional I) and about a past event, which is “contrary to fact” (Conditional II) (*ibidem*). Distinctions offered by Fisiak et al. (1978) are similar to those found in Thomson and Martinet (2000, pp. 196–197), who – however – spoke not about the conditional mood but about “conditional tenses.” They distinguished between the present conditional tense (equivalent to Fisiak et al.’s Conditional I) and the perfect conditional sentence (equivalent to Fisiak et al.’s Conditional II).

Using the term ‘conditional mood’ for modal constructions in the main clause of a conditional sentence adds further complication to the mood system of English. First of all, according to Fisiak et al.’s definition not all conditional sentences exhibit the conditional mood, e.g., conditional sentences that express real conditions (from Fisiak et al., 1978, p. 121):

(3.36) a. *If Jane goes to school every day, she has little time for babysitting.*

PRESENT TIME REFERENCE

b. *If Jane goes to school every day next year, she will have little time for babysitting.* FUTURE TIME REFERENCE

Therefore, the conditional mood understood as such would be limited only to a subclass of conditional sentences. Second, in the present work I treat mood as an inflectional category, which in English competes with non-inflectional modal elements (modal verbs, periphrastic constructions and adverbs) in the expression of modal meaning.

There is also one interesting phenomenon that should be mentioned in this discussion. Namely, Leech et al. (2009, p. 65) observed that in American English some speakers in *if*-clauses replace the past subjunctive *were* with *would*; consider (3.37) (from Leech et al., 2009, p. 65):

- (3.37) a. *And if everybody **would** be nice we wouldn't need policemen.*
 b. *If Oprah Winfrey **would** be my teacher, I'll listen to her you know.*
 c. *If that **would** be a good alternative, I would have to bill at that point.*

Leech et al. (2009, p. 66) conceded that such replacements occur in the informal spoken language and are not very frequent. Nonetheless, *would* in *if*-clauses shows the rivalry between the inflectional mood and other modal non-inflectional elements, like modal verbs in this case. This is yet another argument for keeping the inflectional mood and modal verbs apart as two separate ways of expressing modality.

To conclude on this terminological issue, for English I will use the three-part distinction into indicative, subjunctive and imperative. As a conditional sentence, I will understand variety of conditional structures, expressing condition–consequence relation, which can include the subjunctive mood in the *if*-clause (protasis) and modal construction in the main clause (apodosis).

3.1.4 Alternatives to the subjunctive

The discussion of the form and distribution of the English subjunctive cannot be complete without a review of the forms with which the subjunctive alternates. The system of expressing modal meanings in English is still in a state of flux, in which indicative forms and modal auxiliaries are displacing subjunctives.

3.1.4.1 The present subjunctive

Mandative subjunctive verbs in complement clauses to suasive verbs can be replaced by the putative *should* or the indicative, especially in British English; consider (3.38) (from Quirk et al., 1985, p. 157):

- (3.38) *The employees have demanded that the manager **resign** / **should resign** / **resigns**.*

Also for specific verbs an alternative to the mandative subjunctive may be the object with an infinitival construction; see (3.39) (from Quirk et al., 1985, p. 157):

- (3.39) a. *We ask that the Governor **be** circumspect.*
 b. *We ask the Governor **to be** circumspect.*

In a similar way, subjunctive *that*-clauses as complements to certain modal/volitional adjectives (see Section 3.1.2.1.1) can also be replaced by the putative *should* or marginally by an indicative verb; consider (3.40) (from Quirk et al., 1985, p. 1224):

- (3.40) *It is essential that the ban **be lifted** / **should be lifted** / **?is lifted** tomorrow.*

Subjunctive *that*-clauses which follow nouns derived from suasive verbs may alternate with the putative *should*, but not with indicative verbs; cf. (3.41) (from Quirk et al., 1985, p. 1262):

- (3.41) *There was a recommendation that she **be** promoted / **should be** promoted / ***is** promoted.*

The mandative subjunctive can be found in adverbial clauses expressing concession and purpose, in which it can be interchanged with *may* and *might*; cf. (3.42) (from Quirk et al., 1985, p. 1013, note c):

- (3.42) a. *Poor though you **might** be, you cannot live all your life on charity.*
b. *Let us fight on, that the light of justice and freedom **may** not die in our land.*
c. *Whatever **may** be the justification for their actions, we cannot tolerate such disloyalty.*

Still, Quirk et al. (1985, p. 1013, note c) point out subtle interpretational differences between the subjunctive and modal verb versions. For example, the string *Whatever be the justification* presupposes that a justification exists, whereas in the version with *may* in (3.42c) it is possible that no justification exists.

As far as the formulaic subjunctive is concerned, it is difficult to speak of alternatives as these are basically fixed, fossilized structures. Nonetheless, on the functional level, to express wishes or blessings, optative/formulaic subjunctives can be replaced with *may* + subject + predication; for example (from Quirk et al. 1985, p. 839):

- (3.43) *May the best win!*
May all your troubles be small!
May you always be happy!

3.1.4.2 The past subjunctive

The past subjunctive *were* for the first and third person singular alternates with *was*, which has been considered a less formal variant competing with *were* for 300–400 years (Quirk et al., 1985, p. 158; Huddleston and Pullum, 2002, p. 86, fn. 7); see (3.44) (from Quirk et al. 1985, p. 1013):

- (3.44) *If only I were / was not so nervous.*

However, there are fixed phrases with *were*, which are not prone to alternate, e.g., *as it were* (“so to speak”) and *If I were you* (Quirk et al., 1985, p. 158, note a). *Were* also cannot be replaced by *was* in inverted conditionals; see (3.45) (from Huddleston and Pullum, 2002, p. 86, fn. 7):

- (3.45) *I would certainly join them, were I not working on a project of my own.*

Moreover, the present indicative can be an alternative to the past subjunctive *were* after *as if* and *as though* as well as *suppose* and *imagine*; consider (3.46) (from Quirk et al., 1985, p. 1013):

- (3.46) a. *The stuffed dog barks as if it is a real one.*
b. *Suppose he is lost, what would you do?*

All the alternatives to the present and past subjunctive attested in the literature are summarized in Table 20.

Table 20. Alternatives to the English subjunctive

Subjunctive	Alternative
<i>Present subjunctive</i>	
Mandative subjunctive	<ul style="list-style-type: none"> • Indicative verb: after suasive verbs, modal/volitional adjectives • Putative <i>should</i>: after suasive verbs, modal/volitional adjectives and nouns derived from suasive verbs • <i>May/might</i>: in adverbial clauses expressing concession and purpose • Infinitive: certain suasive verbs, e.g. <i>ask</i>
Formulaic subjunctive	<ul style="list-style-type: none"> • <i>May</i>: utterance of an optative character
<i>Past subjunctive</i>	
<i>Were</i>	<ul style="list-style-type: none"> • <i>Was</i>: informal variant, apart from fixed phrases with <i>were</i> • Indicative verb: after <i>as if</i>, <i>as though</i>, <i>suppose</i> and <i>imagine</i>

Source: own elaboration based on the literature discussed in Section 3.1.4.

After discussing subjunctive alternatives, in the next section I move to the development of the subjunctive mood in English, which will give a wider perspective to the existing state of subjunctive structures.

3.1.5 Development and variation of the subjunctive mood

This section is devoted to the development of the subjunctive mood in the English language and its status in Present-Day English, with a primary focus on differences between British English and American English. Such background is necessary to understand the present mood system in English and the relations between the subjunctive and its alternatives. The discussion of the alternatives to the subjunctive needs to be rooted in a wider perspective of the differences between British English (BrE) and American English (AmE) as well as contexts and registers in which specific types of subjunctives are used in these varieties.

3.1.5.1 The subjunctive mood in Old English (450–1100), Middle English (1100–1500) and Modern English (1500–1800)⁶²

The subjunctive mood was used rather extensively in Old English in comparison to Modern English (Pyles, 1964, p. 132) and since the Old English Period we have observed its steady decline (Kovács, 2010, p. 57). In Old English there existed three moods with distinct morphological forms: indicative, subjunctive and imperative (Reszkiewicz, 1971, p. 42). The paradigm is presented in Table 21. As visible in Table 21, Old English exhibited present and past subjunctive, though with limited inflection as there was only number distinction but no person distinctions (Aarts, 2012, p. 2). The paradigm for the verb *to be* was far more complex; see Table 22.

⁶² Chronological divisions after Fisiak (2005, p. 24).

Table 21. Old English paradigm for the verb *stelan* ‘steal’

		Present		
		Indicative	Subjunctive	Imperative
1Sg		iċ stele	iċ stæle	stel!
2Sg		þu stelst	þu stele	
3Sg		he stelð	he stele	
Plural		hī stelað	hī stelen	stelað!
		Past		
		Indicative	Subjunctive	Imperative
1Sg		iċ stæl	iċ stæle	
2Sg		þu stæle	þu stæle	
3Sg		he stæl	he stæle	
Plural		hī stælon	hī stælon	
Infinitive		stelan		
Present Participle		stelend		
Past Participle		ġestolen		

Source: Hogg, 1992, p. 150 (reproduced from Kovács, 2010, p. 60).

Table 22. The paradigms for the verb *to be* in Old English

	Present				Past	
	Indicative		Subjunctive		Indicative	Subjunctive
	s-root	b-root	s-root	b-root	w-root only	
1Sg	eom	bēo	sīe	bēo	wæs	wære
2Sg	eart	bist	sīe	bēo	wære	wære
3Sg	is	biþ sīe	bēo	wæs	wære	wære
Plural	sindon/sint/ earon	bēoþ	sīen	bēon	wæron	wæren

Source: Lass, 2006, p. 58 (reproduced from Aarts, 2012, p. 2).

According to Kovács (2010, p. 60), in Old English “the subjunctive was used to cast some doubt on the truth of the proposition or to express unreality, potentiality, exhortation, wishes, desires, requests, commands, prohibitions, obligation, hypotheses and conjectures.” It was used both in main and subordinate clauses (*ibidem*). Apart from modal meanings, the subjunctive mood then was also used in reported speech, clauses of comparison and concessive clauses (Kovács, 2010, pp. 60–62). As far as register is concerned, the subjunctive mood was typical for “monastic and legal regulations; charms, medical prescriptions, and similar generalized instructions” (Kovács, 2010, p. 62). The uses of subjunctive are shown in the following examples: wish (3.47), reported speech (3.48), hortative (3.49) (examples from Kovács, 2010, pp. 60–62):

(3.47) *Forðy ic wolde ðætte hie ealneg æt ðære stowe wære.*

‘Therefore I wanted them always to be there.’

(3.48) *Wulfstan sæde þæt he gefore of Hæðum, þæt*

‘Wulfstan said that he went from Hedeby that.’

(3.49) *God us gerihlæce.*

‘May God correct us.’

The Middle English Period brought up developments in the paradigm of the verb connected with phonetic changes and leveling of various verb forms (Fisiak, 2004, p. 85). Due to the simplification of inflectional endings, the differences between the imperative singular and the present subjunctive of weak verbs were lost and also the differences between the indicative and the subjunctive forms became smaller (Kovács, 2010, p. 62). The main changes, as described by Kovács (2010, p. 62) were the following:

“In the present tense indicative only the second and the third-person singular were distinctive, while in the past tense of strong verbs only the first and third person were distinctive, and of the weak verbs only the second-person singular. In the present subjunctive both weak and strong verbs had only two inflections, *-e* in the singular and *-en* in the plural, just like in the subjunctive past where strong verbs had the *-en* inflections in all the persons singular and plural and weak verbs had the *e*-inflection in the singular and *-en* in the plural in both the present and the past tense.”

The paradigm of the verb *to be* was also much simplified: in the late 14th century the present subjunctive form was *be* in the singular and *be(n)* in the plural and the past subjunctive was *were* in the singular and *were(n)* in the plural (Kovács, 2010, p. 63).

What was also novel in Middle English was the development of periphrastic constructions with such modals as *sholde*, *shal*, *wil*, *may*, *can*, which outnumbered the subjunctive forms towards the end of the period (Kovács, 2010, p. 63). According to Fischer (1992, p. 362 after Kovács, 2010, p. 63), “the gradual erosion of verbal inflections made it necessary to replace the subjunctive by something more transparent.” Another novelty that limited the use of the subjunctive mood was the emergence of so-called modal preterite in the following contexts: after conjunctions, such as *if* or *as if*, modal adverbs, like *perhaps*, and in clauses selected by non-factual verbs, e.g., *desire* and *hope* (Kovács, 2010, p. 64). This modal preterite was actually the past tense of the indicative used not to denote temporal distance but as a modal marker for irrealis contexts (*ibidem*). In Late Middle English the subjunctive started to be replaced by the indicative on a more regular basis (Kikusawa, 2017, p. 34), especially in the context of concessive clauses and clauses of comparison (Kovács, 2010, p. 65).

In Modern English the subjunctive mood continued to decline, becoming replaced by periphrastic constructions and the indicative (Kikusawa, 2017, p. 35). In Early Modern English it was still frequent in *if*-clauses (Barber, 1997, p. 173 after Kikusawa, 2017, p. 36). However, according to the corpus research conducted by Fillbrandt (2006, p. 145), since the Early Modern English Period, the mandative subjunctive experienced a frequency loss, whereas modal constructions remained stable and the indicative alternative gained in frequency.

In the next section, I will present the position of the subjunctive mood in Present-Day English and discuss the phenomenon of the revival of the mandative subjunctive.

3.1.5.2 Present-Day English: Contexts, registers and varieties of English

First of all, it is a well-known observation that the present subjunctive is more frequently used in American English than in British English (Cannon, 1959, p. 17; Leech, 1971, p. 106; Lawendowski and Pankhurst, 1975, p. 63; Quirk et al., 1985, p. 157; Johansson and Norheim, 1988, p. 27). However, the usage frequency of the present subjunctive in BrE and AmE is in a state of flux as the recent studies show (see Leech et al., 2009). It must also be noted that

what attracts major attention of researchers is the development of the mandative subjunctive, which can be productively used with suasive expressions, rather than of fossilized phrases described as the formulaic subjunctive.⁶³

Leech et al. (2009) compared the use of the mandative subjunctive in BrE and AmE in 1960s and 1990s, based on two groups of corpora: the Lancaster–Oslo/Bergen corpus (LOB, BrE, 1961) and the Freiburg–Lancaster–Oslo/Bergen corpus (FLOB, BrE, 1991) as well as the Brown corpus (Brown, AmE, 1961) and the Freiburg–Brown corpus (Frown, AmE, 1992).⁶⁴ The objective was to compare the use of the mandative subjunctive and the use of the variant periphrastic construction with *should* (see Section 3.1.4 for the presentations of variants). Leech et al. (2009, p. 54) observed that the use of the mandative subjunctive, against the *should* variant, has been far more frequent in AmE than in BrE – no change between the 1960s and the 1990s (cf. Figure 7). In the course of thirty years the use of the mandative subjunctive in AmE has maintained almost the same level of frequency: 85.9% (1960s) and 90.3% (1990s) (*ibidem*). The difference that the researchers noticed is a marked rise in the use of the mandative subjunctive in BrE – from 12.6% in the 1960s to 38.3% in the 1990s – which was accompanied by a decrease in the use of the periphrastic construction with *should* (Leech et al., 2009, p. 54). Still, Leech et al. (2009) did not explicitly comment on the reason for the increasing popularity of the mandative subjunctive in BrE. This phenomenon, however, has been ascribed to the influence of AmE, for instance by Övergaard (1995, after Klein, 2009, p. 32).⁶⁵

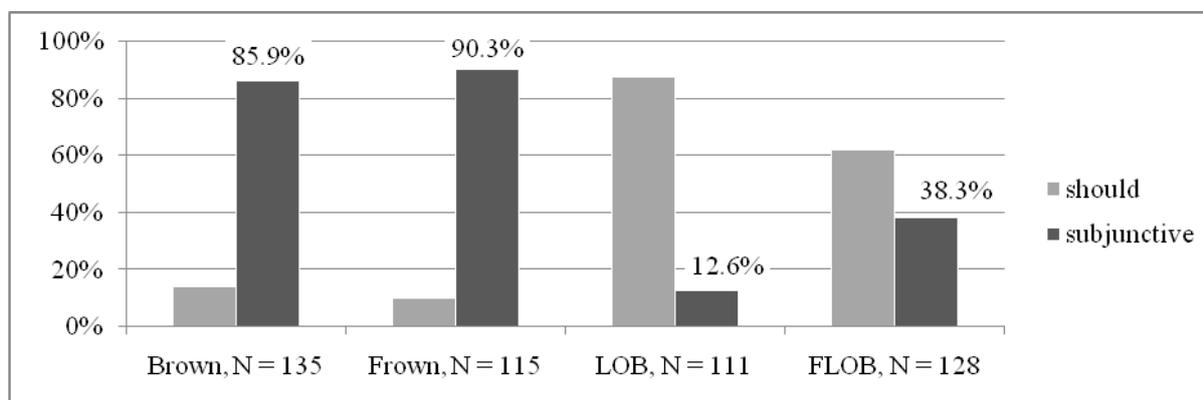


Figure 7. *Should*-periphrasis vs. mandative subjunctive in written AmE and BrE

Note: Leech et al. (2009, p. 53) noted that “figures for LOB and Brown are from Johansson and Norheim (1988, p. 29).” **American English:** 1960s (Brown); 1990s (Frown); **British English:** 1960s (LOB), 1990s (FLOB).

Source: reproduced from Leech et al. (2009, p. 53).

As already mentioned in Section 3.1.4.1, the mandative subjunctive can also alternate with the indicative in BrE. According to Leech et al. (2009, p. 57), “the indicative after

⁶³ Johansson and Norheim (1988, p. 31), after surveying Brown (AmE) and LOB (BrE) corpora, concluded that the formulaic subjunctive is rare in both of them.

⁶⁴ Leech et al. (2009, p. 54) excluded from their statistics non-distinct forms which are ambiguous between indicative and subjunctive, e.g., *It is important that they leave on time*.

⁶⁵ Interestingly, as early as in the 1930s, Bevier (1931, p. 207), pointed out the opposite direction of influence: “During the twentieth century, grammar books, basing their observations on British usage, commented on the passing subjunctive, and one well known writer makes mention of the «lost subjunctive».” This shows that mutual influences between BrE and AmE are difficult to disentangle.

suasive expressions is indeed a syntactic Britishism” since they found only one such instance in AmE corpora (after surveying Brown, Frown and the Longman Corpus of Spoken American Language). However, the indicative alternative is sensitive to the spoken/written distinction: “In spoken English, the indicative is used much more frequently than the subjunctive, whereas in written BrE, it is the least frequent alternative” (Leech et al., 2009, p. 56). Klein (2009, p. 35), based on Diachronic Corpus of Present-Day Spoken English, pointed out that – interestingly – in spoken BrE it is the indicative variant that serves as the most frequent substitute for the mandative subjunctive and not the periphrastic construction with *should*.

There is yet another difference between BrE and AmE which concerns the so-called negative subjunctive. Corpus research conducted by Johansson and Norheim (1988) confirmed that such constructions are characteristic of AmE; consider (3.50) from Brown corpus (after Johansson and Norheim, 1988, p. 30):

(3.50) *The council advised the governor that large supermarkets, factory outlets and department stores **not be allowed** to do business on Sunday.*

Johansson and Norheim (1988, pp. 30–31) also noted the negative subjunctive is most often featured in formal contexts together with the passive voice, which can be treated as additional indication of formality.

As far as register variation in BrE and AmE is concerned, Leech et al. (2009) tried to review the status of the mandative subjunctive traditionally seen as “formal and rather legalistic in style” (Quirk et al., 1985, p. 157) and “found most often in language of a legal register” (Lawendowski and Pankhurst, 1975, p. 63). Leech et al. (2009, pp. 58–59) observed that the mandative subjunctive has undergone the process of colloquialization in BrE, which is evidenced by a growing number of active subjunctives as opposed to passive ones (42–44) and *that*-omission in mandative contexts; consider the following examples (from Leech et al., 2009, pp. 59–60):

- (3.51) *Gilbert insisted that we **provide** coffee for all the people.* ACTIVE
 (3.52) *Conditions have dictated that operations **be scaled down**.* PASSIVE
 (3.53) *The political parties are now disintegrating into ethnic or other groups that rightly **demand [ø] they no longer be mulcted** by a graft from the centre.* THAT-OMISSION

According to Leech et al. (2009, p. 59), the divergence from the passive to the active voice and the omission of the subordinating conjunction illustrate the transition of the mandative subjunctive from the strictly formal register to a more colloquial one, related to the spoken variety. Nonetheless, in terms of absolute frequency, they stress that “[...] the mandative subjunctive is vastly more common in writing than in speech” and still it can be seen as “[...] a feature of written English” (Leech et al., 2009, p. 61).

Leech et al. (2009, pp. 61–67) also conducted a similar comparative corpus research with respect to the past subjunctive. They again compared BrE and AmE corpora from the 1960s and 1990s to see the proportions between the past subjunctive *were* and the past indicative *was* in hypothetical contexts (see Figure 8 for their results).⁶⁶ As far as AmE is

⁶⁶ Leech et al. (2009, p. 63) searched the contexts with the following conjunctions: *if, as if, as though, and even if*. They also removed from the results sentences with plural subjects and singular *you*.

concerned, Leech et al. (2009, p. 64) did not notice any change between the 1960s and the 1990s: the past subjunctive *were* still has been the dominant variant over the past indicative *was* (73.4% in the 1960s and 73.7% in the 1990s). In contrast, the analyzed corpus data showed a different tendency in BrE. Namely, Leech et al. (2009, p. 64) observed a decrease in the use of the past subjunctive *were* in the analyzed period: from 63.3% to 51.9% (see Figure 8 in which the results for BrE and AmE corpora are compared).⁶⁷

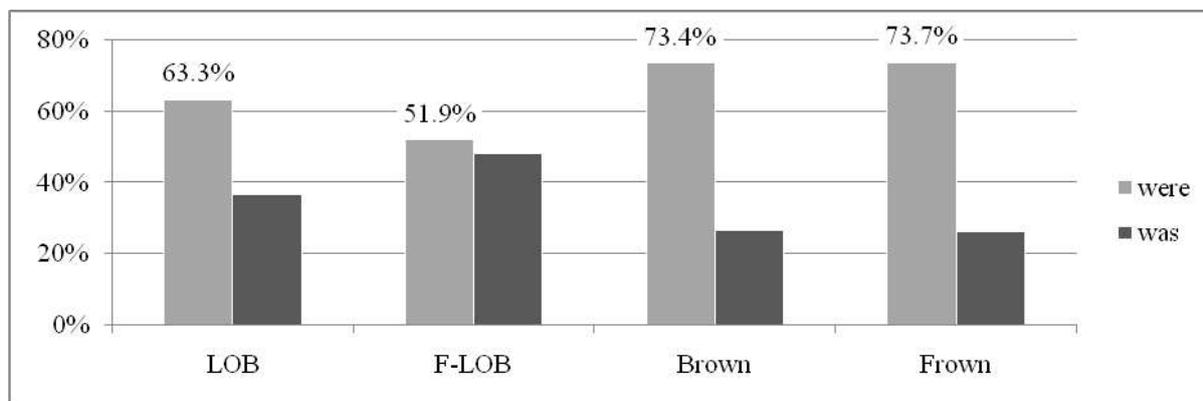


Figure 8. Subjunctive *were* vs. indicative *was* in hypothetical/unreal conditional constructions
 Note: **American English:** 1960s (Brown); 1990s (Frown); **British English:** 1960s (LOB), 1990s (FLOB).
 Source: reproduced from Leech et al. (2009, p. 64).

In Leech et al.'s view (2009, p. 68), the loss of the past subjunctive has slackened in AmE due to “the American conservatism” and a very strong prescriptive tradition in the USA. This is additionally corroborated by a hypercorrect use of the past subjunctive in *if*-clauses which are not hypothetical (Leech et al., 2009, p. 69, fn. 30).⁶⁸ They also remarked that the frequent use of the mandative subjunctive in AmE might be seen as support for the *were*-subjunctive (Leech et al., 2009, p. 68). In contrast, BrE has seen a deeper recession of the past subjunctive, which – as already mentioned – has been accompanied by the increase in the use of the mandative subjunctive. The fact that in BrE the use of one type of subjunctive has been on the increase and of the other has been dropping seems at least puzzling. Peters (1998, p. 99 after Leech et al., 2009, p. 67) mentioned the problem of the redundancy of the past subjunctive in hypothetical contexts in which there appears syncretism of verb forms for plural subjects. Still, this explanation is not very convincing as the same problem of syncretism can be found in the case of the mandative subjunctive and the mandative subjunctive is not decreasing in use.

To sum up, according to the research studies discussed in the present section, the mandative subjunctive and the past subjunctive have been following different paths of

⁶⁷ In the survey carried twenty years earlier, Johansson and Norheim (1988, p. 34), based on LOB and Brown corpora did not spot any difference between BrE and AmE when it comes to the use of the past subjunctive *were*: “The *were*-subjunctive is used to much the same extent in the two corpora. In both corpora the *were*-subjunctive is distinctly preferred to indicative *was* in hypothetical-conditional clauses and clauses introduced by *as if* and *as though*.” This additionally shows that the described changes in BrE are of recent character.

⁶⁸ An account of this phenomenon can be found in Ryan (1961), who disapproved the use of the past subjunctive *were* in non-hypothetical contexts, such as indirect questions: “I was a bit ashamed, of course, to ask people if my generator were gone [...]” (quote from Henry Miller’s *The Air-Conditioned Nightmare*, given by Ryan, 1961, p. 50).

development. The use of the mandative subjunctive has risen in BrE and remained stable in AmE. The revival of the mandative subjunctive in BrE has co-occurred with a decreasing frequency of the alternative *should*-periphrasis, which – especially in spoken contexts – has also been losing ground to the indicative variant. Moreover, the mandative subjunctive, though still belonging to the written sphere, has undergone the processes of colloquialization in BrE. In contrast, the use of the past subjunctive *were*, against the indicative *was*, has declined in BrE, but remained on the stable level in AmE. Therefore, AmE seems to be more conservative with respect to the use of the discussed subjunctives, whose usage frequency has not changed in the last thirty years. BrE, on the other hand, has experienced transitions into two opposite directions: the increase in the use of the mandative subjunctive and the decrease in the use of the past subjunctive *were*. Undoubtedly, the split observed in BrE deserves further research as well as closer observation of mutual influence between British and American variety in the area of subjunctive contexts.

3.1.6 Subjunctive in English: Preliminary observations

As outlined in this section, the term *subjunctive* in English is used in a number of disparate constructions. First, in the case of the present subjunctive we have special verb forms in embedded clauses motivated by the content of the matrix clause: suasive verbs as well as semantically related adjectives or nominal phrases. Nonetheless, qualified as the same group, there is another use of the present subjunctive, that is, the one in purpose, concessive and conditional clauses, which is not governed by any linguistic element present in the main clause. Lastly, the so-called present subjunctive also comprises the formulaic subjunctive, which is rather an unproductive set of remnant phrases. Out of these three subtypes of the present subjunctive only the mandatory subjunctive selected by suasive phrases seems to fulfill subjunctive criteria described in the first chapter since it emerges in subordinate clauses, is selected by matrix predicates of volitional and directive nature and is realized by special verb forms. Therefore, based on typological criteria, the mandatory subjunctive in purpose, concessive and conditional clauses should be excluded due to the lack of predicate selection. The fact that subjunctive forms emerge in these contexts seems a remnant of the Old English subjunctive, which – as an inflectional mood – covered numerous irrealis contexts, which in the development of English were only partially replaced by the indicative, e.g., comparison clauses (see Section 3.1.5.1). Finally, the formulaic subjunctive also cannot be qualified as the subjunctive since it does not represent any productive inflectional pattern, but a set of phrases.

With respect to the past subjunctive, one needs to stress that this form is limited to one verb only. Therefore, it cannot be treated as a mood value at all (see the definition in the first chapter – Section 1.1.1) since the inflectional pattern is not productive and cannot be applied to other verbs. Nonetheless, some past subjunctives meet the selection criterion, i.e., they are selected by optative and hypothetical verbs, such as *wish*, *suppose* or *imagine*. This complicated picture may stem from the overlap between two diachronic processes: first, the decomposition of the Old English verb paradigm and, second, the emergence of the modal preterite. Therefore, the selected past subjunctive is not a subjunctive in the typological sense, but rather the use of the modal preterite in a subjunctive context. This is clearer when one considers the use of the modal preterite in the constructions with *wish* in which it is possible

to have a temporal opposition by using the so-called Past Simple for present events and Past Perfect for past events. Such a pattern is productive and can be applied to any verb embedded in this construction. The only similarity to the present subjunctive is the same form for the first and the third person singular in more formal, written context, but only for the verb *to be*.

In sum, based on the discussion above, the selected mandatory subjunctive in English bears the strongest resemblance to subjunctives found in other languages: subordinate clause context, selection by volitional/directive predicates, special inflectional form as well as temporal defectiveness (no tense backshifting). These preliminary observations will be developed in subsequent sections devoted to semantic, pragmatic and morphosyntactic properties.

3.2 Selected mandatory subjunctive on the semantic level

In this section I demonstrate that the selected mandative subjunctive shares numerous semantic characteristics with the typological category of the subjunctive. I ponder over semantic properties of subjunctive-selecting predicates in English, using the notion of veridicality, then temporal properties of subjunctive clauses as compared to indicative ones (the contrast between absolute tense and relative tense) and, finally, the problem of coreference between the matrix subject and the embedded subject in a subjunctive clause (so-called obviation effects).

3.2.1 Selected mandatory subjunctive and the notion of veridicality

As emphasized numerous times in the present study, the nature of a selecting predicate is a crucial subjunctive diagnostic. In Section 3.1.2.1.1 I showed that the main context for the selected mandative subjunctive comprises the subordinate clause selected by suasive verbs (e.g., *to insist*), predicates composed of copular verbs and nouns derived from suasive verbs (e.g., *there is a recommendation*) as well as copular verbs and adjectives denoting volition (e.g., *to be essential*). Therefore, as in the case of Polish, one needs to relate the notion of suasion to the major subjunctive diagnostic, that is, sensitivity to the veridical/nonveridical criterion. In Table 23 I repeat for convenience Giannakidou's (2009) classification of verbs into veridical and nonveridical groups with English examples.

Table 23. Supposed mood choice in English based on the veridicality criterion

Veridical verbs/indicative complement	Nonveridical verbs/subjunctive complement
ASSERTIVES <i>to say, to read, to claim</i>	VOLITIONALS <i>to want, to hope, to plan</i>
FICTION VERBS <i>to dream, to imagine</i>	DIRECTIVES <i>to order, to advise, to suggest</i>
EPISTEMICS <i>to believe, to think</i>	MODALS <i>must, may</i>
FACTIVE VERBS <i>to be glad, to know, to regret</i>	PERMISSIVES <i>to allow, to forbid</i>
SEMIFACTIVES <i>to discover, to remember</i>	NEGATIVE <i>to avoid, to refuse</i>

Source: based on Giannakidou (2009, pp. 1887–1888).

All the English examples of veridical verbs from Table 23 select for indicative complements, consider the following examples from the Corpus of Contemporary American English (COCA):

ASSERTIVES

- (3.54) *Apple said that a search for a new head of retail was under way and that the retail team would report directly to Mr. Cook in the meantime.*
(COCA, 2012, blog, <http://bits.blogs.nytimes.com/2012/10/29/apples-mobile-software-and-retail-chiefs-to-depart/>)
- (3.55) *I read that there was one casualty last year at a Newmont mine: a 21-year-old man who died from inhaling fumes.*
(COCA, 2012, blog, <http://seekingalpha.com/article/842041-the-state-of-the-nevada-mining-industry-an-executive-interview>)
- (3.56) *He claimed that he didn't see the victim whom he'd shot through a door.*
(COCA, 2018, magazine, Students Were Unable to Stage a Walkout Yesterday..., *Jezebel*)

FICTION VERBS

- (3.57) *As soon as I fell asleep, though, I dreamed that I was floating high in the sky above a large metropolis.*
(COCA, 2012, website, <http://www.accessstoinsight.org/lib/thai/boowa/thingsas.html>)
- (3.58) *Imagine you go on a game show and win a free car.*
(COCA, 2012, blog, <http://greatergreaterwashington.org/post/16569/harriet-tregoning-is-pro-choice-on-transportation/>)
- (3.59) *Imagine you got laid off from your job today.*
(COCA, 2012, website, <http://www.keithferrazzi.com/business-networking/do-this-in-the-next-day-week-and-month-for-a-stronger-network/>)

EPISTEMICS

- (3.60) *But he believed that deep down I was as hard and strong as I pretended.*
(COCA, 2018, fiction, George Hovis, *The Undertaker*, *The Carolina Quarterly*, Vol. 68, Issue 1)
- (3.61) *She thought that it wouldn't work with raising a family, so she became a teacher instead.*
(COCA, 2016, magazine, The Instant Gratification of Being a Surgeon, *The Atlantic*)

FACTIVE VERBS

- (3.62) *Even though the money would have been a huge blessing, Amy is glad that Keith did not go pro last June.*
(COCA, 1997, newspaper, Jennifer Frey, Van Horn's a Star Senior, And a Diaper Dandy, Too; Utah's Best Juggles Basketball, Family Life, *Washington Post*)
- (3.63) *We knew that Tesla would be an unstoppable bringer of death to incumbent carmakers.*
(COCA, 2019, magazine, *Business Insider*)

- (3.64) *Nicole's own sister regrets that the public never got to know the real Nicole.*
(COCA, 2016, TV series, *Notorious*)

SEMIFACTIVES

- (3.65) *She soon discovers that small-town living isn't as simple as she expected as she is forced to heal herself before she can make Virgin River her home.*
(COCA, 2018, magazine, Netflix Enters Romance Space With Pair of Series Pickups, *Hollywood Reporter*)
- (3.66) *He remembered that King Philip had promised to make him King of England.*
(COCA, 2012, website, The Boy Who Would Be a King, http://www.shortstoryarchive.com/s/boy_who_would_be_a_king.html)

As shown in examples (3.54)–(3.66) veridical verbs in English select for indicative complements. In the case of English, this means that the clauses selected for by veridical verbs exhibit tense backshifting, see (3.61) and (3.63), as well as *do*-support (or in more general terms the presence of an auxiliary verb), consider (3.56), with the negation by means of *do*-support, and (3.65), with the negation by means of the auxiliary *is*. Furthermore, similarly to Polish, problematic emotive factives in English, like *to regret*, select for indicative complements or gerunds, but note that nonveridical *to regret* is followed by an infinitive and such a construction has a different meaning; cf. examples (3.67) and (3.68):

- (3.67) *I don't regret selling any of them, because like most working musicians, I had to sell one to buy the next two (or pay the rent).*
(COCA, 2012, blog, <http://www.jackaboutguitars.com/soest-guitar-celebrating-40-years>)
- (3.68) *I regret to tell you that the exchange has not gone as plan.*
(COCA, 2009, film, *Double Identity*)

The sentence in (3.67) illustrates the veridical use of *to regret* with a gerund, which is comparable to the use with a *that*-clause (see (3.64)), but serves as a shorter version of expressing a proposition when the matrix and the embedded subject refer to the same entity. In (3.68) we can see the nonveridical use of *to regret* with an infinitive in which the subject indicates his or her sadness about the act of telling.

Another interesting case is the verb *to imagine*, which can be followed by the past verb form referring to the present; see (3.59) with the present time adverbial *today*. This is the case of already mentioned modal preterite used for hypothetical events. The fact that modal preterite emerges in veridical contexts, in which the subjunctive is expected to be blocked, may be an argument for treating both phenomena separately, which additionally has its diachronic justification (see Section 3.1.5.1).

The group of nonveridical verbs in English constitutes a less clear picture mainly due to the lack of a full-fledged clause complementation for some members; consider examples (3.69)–(3.88):

VOLITIONALS

- (3.69) *She wants to take her finals and get it over with and get second semester started.*
(COCA, 2019, newspaper, Social media turns up heat on leaders canceling school, *The Detroit News*)

- (3.70) *I hope that women who have never talked about it feel some relief.*
(COCA, 2018, magazine, *ôI Was Ashamedö: After Ford’s Accusation, a Generation of Holton, Vanity Fair*)
- (3.71) *Petal hoped to never meet the same fate.*
(COCA, 2019, magazine, Natasha Ramoutar, *Underneath this flesh, This Magazine*)
- (3.72) *Because on Christmas Day, I have made plans that he be taken from the jail in Banyon and hanged by the neck until he is dead.*
(COCA, 2005, movie, *The Proposition*)
- (3.73) *It had been planned that the crew replace the solar panels... as part of the regular service.*
(COCA, 1994, movie, *Destiny in Space*)
- (3.74) *She plans to give them a call next week.*
(COCA, 2019, fiction, Josh Mak, *The Handbook of Chinese Ghost Marriage, The Southern Review*)

DIRECTIVES

- (3.75) *The judge also ordered that Morris make restitution, which he did.*
(COCA, 2010, newspaper, Tom Jackman, *Immigration dispute erupts in Va. courts, Washington Post*)
- (3.76) *A US federal court has ordered the Food and Drug Administration (FDA) to finish a reviewing process started 35 years ago [...].*
(COCA, 2012, blog, <http://www.addictinginfo.org/2012/09/01/a-long-list-of-president-obamas-accomplishments-with-citations/>)
- (3.77) *A colleague advises that the issue be determined in a phone call.*
(COCA, 2017, magazine, *Emails Show USDA Staffers Discouraged From Using the Term, Slate Magazine*)
- (3.78) *Motorists are advised to slow down and increase their following distance.*
(COCA, 2019, newspaper, *More snow, plunging temperatures here to stay for most of week, Chicago Sun-Times*)
- (3.79) *Damond previously testified that he had suggested that Justine call police, whom he had viewed as “the right people” to handle her alarm about a possible assault.*
(COCA, 2019, newspaper, *In murder trial’s opening statements, differing narratives of Noor’s actions, Minneapolis Star Tribune*)

MODALS

- (3.80) *We must all help to create a sustainable economic model which renders the destruction of the forests in Brazil unnecessary.*
(COCA, 2019, magazine, *Sting Slams Brazil for Not Fighting Amazon Forest Fires, Rolling Stone*)
- (3.81) *While the film may not fit perfectly into the definition of either genre, it is highly lucrative [...].*
(COCA, 2019, magazine, *The Lion King Is Now Disney’s Highest-Grossing Animated Movie Ever, Vanity Fair*)

PERMISSIVES

- (3.82) *The Missing Types campaign allows to take a non-traditional approach and inspire individuals to roll up a sleeve [...].*
(COCA, 2019, magazine, Red Cross says only 3 percent of US population donate blood, *Fox News*)
- (3.83) *This product allows doing so with maximum ease.*
(COCA, 2019, blog, <http://www.coolbusinessideas.com/archives/arrange-in-the-way-you-want/>)
- (3.84) *La Greca allowed that in the way radio ratings are traditionally measured, Francesa is winning.*
(COCA, 2018, newspaper, Don La Greca explodes at coverage of Mike Francesa ‘crushing’ him, *New York Post*)
- (3.85) *He becomes the boastful Abraham, the Jewish trobador, who in defeat abjectly pleads for his clothes because his law forbids that he pray naked.*
(COCA, 1991, academic, Goldberg, Harriet, Women riddlers in Hispanic folklore and literature, *Hispanic Review*, Winter, Vol. 59 Issue 1, pp. 57–75)
- (3.86) *One article forbids to eat fruits and encourages to eat legumes, in low amount allows to eat whole grain and dairy.*
(COCA, 2012, website, <http://www.fourhourworkweek.com/blog/2010/09/19/paleo-diet-solution/>)

NEGATIVES

- (3.87) *This avoids creating an email trail that is easier for outsiders to intercept or trace.*
(COCA, 2012, blog, <http://www.theblaze.com/stories/what-terrorist-trick-did-petraeus-and-his-mistress-use-to-cover-email-tracks/>)
- (3.88) *He refuses to discuss his family life publicly, saying only that over [...].*
(COCA, 2018, newspaper, A Russian Master of the ‘Dark Side’ in Film, *New York Times*)

It is difficult to transpose English nonveridical verbs on the indicative/subjunctive distinction since they are in great number followed by infinitives. This is the case of the prototypical volitional verb *to want* (69), but also of many others: *to hope* (3.71), *to plan* (3.74), *to order* (3.76), *to advise* (3.78), *must* (3.80), *may* (3.81), *to allow* (3.82) and *to refuse* (3.88). Therefore, it seems that in English nonveridical contexts are natural infinitive contexts, which is additionally strengthened by veridical/nonveridical alternations, such *regret that* and *regret to do* or *tell that* and *tell to do*. At this juncture, one needs to recall Topolińska’s (2010) observation about Slavic languages, in which infinitives can be treated as positional variants of subjunctives. In this sense, we may claim that nonveridical contexts in English require complementation that is deficient as opposed to full-fledged indicative clauses with absolute tense interpretation, e.g., infinitives, gerunds or subjunctives. Nonetheless, many nonveridical predicates that select for an infinitive can also select for a *that*-clause, e.g., *to hope*, which can also be followed by an indicative clause; see (3.70). Therefore, English *to hope* behaves similarly to Polish *mieć nadzieję* and does not follow Giannakidou’s (2009) pattern. Yet another case at surface similar to *to hope* is the one of *to plan*, which can select for an infinitive or a subjunctive *that*-clause; consider (3.72) and (3.73) with subjunctive

complements without person-number inflection and tense backshifting. Similarly, *to forbid*, which typically selects for an infinitive, can be followed by the subjunctive; see (3.86) and (3.85), respectively. Other examples of this type include *to order*, compare (3.75) and (3.76), and *to advise*, compare (3.77) and (3.78). On the other hand, there are nonveridical verbs which can select only for the subjunctive, e.g., *to suggest* (3.79)⁶⁹, which is a typical subjunctive selector cross-linguistically. Finally, in the nonveridical group there are verbs selecting only for an infinitive, e.g., *to refuse* (3.88), an infinitive without *to*, e.g., *must* (3.80) and *may* (3.81), gerund, e.g., *to avoid* (3.87) or can alternate between gerund and infinitive, like *to allow*; cf. (3.82) and (3.83). Interestingly, *to allow* can marginally select for the indicative, but with a difference in meaning, that is, a change from permissive to concessive; see (3.84).

What must be stressed in the context of veridicality in English is that subjunctives do not surface in other nonveridical contexts described by Giannakidou (2009). First, there is no polarity subjunctive in English, although some predicates with a high negative load select for subjunctive complements, e.g., *to avoid*, *to refuse*, *to be unlikely* or *to be untrue*. Still, negation, even of epistemic verbs, does not trigger the subjunctive in the embedded clause. Second, adverbial clauses introduced by *before* also do not trigger the subjunctive, not even the presence of the modal preterite, which coincides with many subjunctive contexts. Third, English subjunctives also do not surface in relative clauses modifying indefinites in the scope of negation, which are typical nonveridical contexts. Therefore, it seems that, like in Polish, a nonveridical context is not enough to trigger the subjunctive in English. Still, the selected mandative subjunctive does not surface outside the nonveridical environment, which is an argument for treating this construction as subjunctive in typological terms. Therefore, nonveridicality is a necessary, but not sufficient condition for triggering the subjunctive in English. Taking into account the examples discussed in the present section, one may stipulate that the selected mandative subjunctive in English is also strongly connected with the notion of volition, both internal, i.e., stemming from the speaker, like in the case of volitional verbs, e.g., *to plan*, and external, i.e., imposed by the third party, like in the case of directive verbs, e.g., *to order*, *to advise*, *to suggest*, or permissives, e.g. *to forbid*.

3.2.2 Temporal interpretation

Selected mandatory subjunctives, as subjunctives understood in cross-linguistic terms, should exhibit distinctive temporal properties. As in the case of Polish, we expect the selected mandatory subjunctive to be temporally defective, i.e., lacking, in contrast to indicative clauses, an independent tense interpretation. However, the problem with this line of reasoning is that English exhibits sequence of tense, which entails backshifting of the tense in a clause constituting a complement to a past-tense verb of thinking and speaking (Michaelis, 2006, p. 227). In this sense, all complement clauses to such verbs have a relative tense interpretation since they refer to the time of speaking in the matrix clause; consider (3.89) (from Michaelis, 2006, p. 227):

⁶⁹ *To suggest* can also select for a gerund if another subject is not introduced in the embedded clause.

- (3.89) a. *Debra said she liked the wine.*
 b. *Debra said she had brought a bottle of wine.*
 c. *Debra said she would bring some wine.*

The sentences in (3.89) show different temporal configurations of matrix and embedded events: the embedded event simultaneous to the matrix one (3.89a), the embedded event anterior to the matrix one (3.89b) and the embedded event posterior to the matrix one (3.89c). In all three cases the point of reference for the subordinate clause is the time of the matrix event (Hornstein, 1991 after Michaelis, 2006, p. 228),⁷⁰ and that is why in the case of embedded clauses I do not use the term absolute tense interpretation in the sense of a direct deictic reference to the moment of speech. Rather in the case of the complements to past-tense matrix predicates we always speak about a relative tense interpretation, i.e., relative to the matrix event, irrespective of the mood value of a complement clause; see (3.90):

(3.90) *Our boss insisted the she stay at the office longer.*

Example (3.90) shows a dependent relation between the matrix and the embedded clause similar to (3.89), that is, the one in which the embedded event is interpreted relatively to the matrix one. The difference is however that in (3.89) indicative complements show the potential to express three temporal relations: simultaneity, anteriority and posteriority. In contrast, according to Declerck (1991, p. 8), subjunctives have only one temporal relation – the one of simultaneity. In other words, the indicative has an independent temporal interpretation with various temporal relations, while the subjunctive exhibits a dependent temporal interpretation in the sense of quasi simultaneity with the matrix event. Therefore, subjunctives are tenseless in the sense that they do not “encode information about how a situation time is related (directly or indirectly) to the temporal zero-point⁷¹” (Declerck, 2006, p. 825); cf. (91) (from Declerck, 1991, p. 8):

(3.91) *Bill suggests/suggested/will suggest/had suggested/would suggest that we leave.*

According to Declerck (1991, p. 8), the example in (3.91) shows that the subjunctive can be used with all tenses in the matrix verb because it is devoid of temporal information. The temporal interpretation of (3.89) is based on the absolute tense of the matrix verb and its relation to the moment of utterance with embedded events having their independent temporal interpretation, whereas the subjunctive coalesces with the temporal domain of the matrix verb. Although I agree with Declerck’s (1991) analysis of the temporal properties of the subjunctive, I think her notion of simultaneity needs to be more precise in the context of the subjunctive in English; cf. the examples in (3.92):

(3.92) a. *Joanne insisted that her husband bring the children back from the trip
 ?yesterday / today / tomorrow / the following day.*

⁷⁰ It is possible in English to use a present-tense verb form in a complement clause introduced by a past-tense matrix verb; cf. (vii) (from Guajardo, 2017, p. 15):

(vii) *John said that Mary is pregnant.*

The meaning of (vii) is that Mary was pregnant at the moment of John’s saying that and she is still pregnant. This known as double-access reading (*ibidem*).

⁷¹ In English temporal zero-point is the moment of utterance (Declerck, 2006, p. 820).

- b. *Joanne insists that her husband bring the children back from the trip *yesterday / today / tomorrow / the following day.*
- c. *Joanne will insist that her husband bring the children back from the trip *yesterday / *today / tomorrow / the following day.*

The set of examples in (3.92) shows three different absolute tense interpretations of the matrix verb – past, present, and future – with embedded subjunctive clauses comprising different time adverbials. My point is that the subjunctive opens up a time interval which is bounded by the matrix absolute tense at the beginning and unbounded at the end. In other words, subjunctive event must follow the matrix one in some unspecified time and that is why we cannot speak of a complete simultaneity, but rather of the simultaneity of the left edge of the time interval. What is important, a subjunctive event cannot precede the matrix one and thus, according to my informants, the use of *yesterday* in (3.92b) is blocked. Similarly, in (3.92c) the absolute future in the matrix clause enforce a future interpretation of the embedded subjunctive. Interestingly, my informants were not sure about the use of *yesterday* even in (3.92a), where – theoretically – the time interval opened by the subjunctive can overlap with the past. Practically, however, the subjunctive does not seem to be able to refer to the past. Mind that in the case of embedded indicatives the independent reference can be retained; see (3.93) and (3.94) (from Guajardo, 2017, pp. 17–18)

(3.93) *John said Luke was cooking tomorrow.*

(3.94) **John said he would come home yesterday.*

As visible in (3.93), the future-time adverbial *tomorrow* is licit as the sentence is just a reported version of the Present Continuous sentences *Luke is cooking tomorrow*, used to describe personal plans. In the same way, the past-time adverbial *yesterday* is blocked in (3.94), where the future interpretation is preserved in the embedded indicative: *John will come home*. What (3.93) and (3.94) also show is that indicative complements can behave as temporal domains independent from matrix events. The sequence of tense in (3.93) and (3.94) is a morphological phenomenon, but semantically temporal relationships remain untouched (Guajardo, 2017, p. 16). Therefore, temporal differences between the subjunctive and the indicative revolve around two issues: temporal relationships between the matrix clause and the embedded clause, i.e., subjunctive events need to follow matrix events, whereas indicative events have three possible relations (simultaneity, anteriority and posteriority), and temporal interpretation of an embedded clause event, which can be interpreted in independent terms only in the case of the indicative.

3.2.3 Subjects coreference

Subjunctive clauses are cross-linguistically characterized by obviation effects, that is, a ban on the coreference between the matrix subject and the embedded subject (see Section 1.2.2.3). English, however, marginally exhibits syntactic obviation since it belongs to the group of infinitival languages which use infinitives for both joint and disjoint reference between the matrix and the embedded subject (Cotfas, 2015, pp. 31, 41); consider (3.95) and (3.96) (from Cotfas, 2015, p. 31):

(3.95) *John_i wants PRO_{i/j*} to go.*

(3.96) *John_i wants him_{i*/j} to go.*

As visible in (3.95) the PRO subject is obligatory controlled by the matrix subject, whereas in (3.96) such a coreference is blocked (raising-to-object, see Gallego, 2010, p. 164) and both examples exhibit infinitival complements. According to Cotfas (2015, pp. 31–32), English is in this respect different from Balkan languages, which use the subjunctive for both joint and disjoint readings, as well as different from Romance languages, which apply infinitives for the joint reference and subjunctives for the disjoint one. Nonetheless, Cotfas (2015) provides examples of structures in which disjoint reference is possible in English; see (3.97)–(3.99) (from Cotfas, 2015, pp. 36, 39):

(3.97) *John_i would rather PRO_{i/j*} leave.*

(3.98) *John_i would rather he_{i*/j} didn't stay too long.*

(3.99) *He_i wishes he_{i/j} were smarter.*

Examples (3.97) and (3.98) show two possible constructions with *would rather*: one with a bare infinitive, which Cotfas (2015) calls “non-finite subjunctive,” and the other with a fully-developed sentence, named as “finite subjunctive”. They differ in referential properties as the bare infinitive version in (3.97) exhibits an obligatory subject control, whereas the full sentence version shows a disjoint reading. First of all, I disagree that the discussed examples are subjunctives because the sentence in (3.97) lacks an overt subject and the one in (3.98) shows *do*-support.⁷² Second, the referential differences stem from the peculiar nature of the construction with *would rather*, which allows both infinitival and sentential complements. Specifically, the impossibility to introduce an overt subject to the embedded clause in (3.97) makes it a natural subject-control structure. This is especially evident if we look at (3.99) with the *wish* construction, in which both possibilities are accessible (joint and disjoint readings) just because *wish* does not exhibit construction variations analogous to *would rather*. In other words, if the *wish* construction had two variations, with an infinitive and a full sentence,⁷³ then the distribution of joint and disjoint readings would be analogous to the construction with *would rather*.

Another obviation context, important for the present study, concerns the difference between different finite subordinate clauses. According to Szabolcsi (2010), English subjunctives show disjoint reference; cf. (3.100) and (3.101) (from Szabolcsi, 2010, p. 1):

(3.100) *Ed_i wanted that he_{i*/j} should visit MoMA.*

(3.101) *Ed_i knows that he_{i/j} visited MoMA.*

The difference between (3.100) and (3.101) is that the version with the indicative in (3.101) allows both readings (joint and disjoint), whereas the one with the subjunctive in (3.100) blocks any coreference. Still, as the literature on the obviation in English is scarce, I decided to consult some native speakers of English on obviation effects in subjunctive clauses; consider the following sets of sentences in (3.102) and (3.103):

⁷² As already mentioned, in British English *should* and the indicative are alternative versions of the subjunctive, but *didn't* in example (3.98) is not indicative because the sentence has a present or future interpretation. This is rather an instance of the modal preterite.

⁷³ I concede that the verb *wish* can be followed by an infinitive with *to*, but this is not a counterfactual meaning.

(3.102) Set A

*Philip suggested that **he** change his job immediately.*

*Jane desired that **she** not be in charge of marketing anymore.*

*Alexandra intends that **she** choose another dress for this event.*

*Brian insists that **he** not take part in the current project.*

(3.103) Set B

*Joanne claimed that **she** had forgotten to lock the main door.*

*Patrick explained **he** hadn't known about that incident.*

*Anne believes that **she** is the best candidate for the job.*

*Phil is glad that **he** is not responsible for the conference*

Set A contains subjunctive complements for which any coreference with the matrix subject is expected to be blocked. Set B, on the other hand, comprises indicative complements for which we expect both possibilities to be available, that is, joint and disjoint reference. According to my informants, for set A disjoint reference is preferred, but the joint one is not totally blocked. In set B both joint and disjoint reference options are equally available.

In sum, obviation effects in English are a marginal phenomenon, pertaining mainly to a small number of constructions where subject control is not possible. They often emerge in constructions in which a verb can select for both an infinitive and a finite clause. In this sense, English does behave in a similar way to Romance languages, selecting for the subjunctive to have disjoint reference (contra Cotfas, 2015). As already mentioned, a number of nonveridical verbs in English, typical subjunctive selectors, select for infinitives, e.g., *to refuse*, or for both the infinitive and the subjunctive, e.g., *to desire*, which additionally blurs any assessment of obviation effects in English. At this point, a tentative conclusion can be that English exhibits mild obviation effects, but it is difficult to treat them as a reliable diagnostic for the subjunctive since it is hard to decide if they stem from the nature of a complement (subjunctive or indicative) or from the alternations possible in a given construction (infinitival and subjunctive complements).

3.2.4 Interim conclusions

In the preceding discussion I showed that the selected mandative subjunctive shares semantic feature of the subjunctive understood cross-linguistically. First, it does not emerge outside nonveridical contexts, that is, complements to nonveridical verbs, which is a clear contrast to the English indicative selected by veridical verbs. Second, selected mandative clauses are temporally defective in the sense that they do not have an independent tense interpretation, but are temporally understood with respect to the matrix event, which should always precede the subjunctive event (dependent tense interpretation). Finally, English shows mild obviation effects, that is, preference for disjoint reading between the matrix subject and the embedded subject; however, the availability of joint and disjoint readings in English may be connected with the selectional properties of a predicate, i.e., the question whether it selects for the subjunctive only or for both the infinitive and the subjunctive.

3.3 Selected mandatory subjunctive on the pragmatic level

The aim of this section is to discuss pragmatic aspects of indicative and subjunctive complements in English. I start with Terrell and Hooper's (1974) classification of verbs to see if their generalization, formulated for the Spanish data, holds for English, that is, if the indicative/subjunctive distinction in English is determined by the assertion/non-assertion contrast. To verify this, I use data from the Corpus of Contemporary American English and analyze frequency counts of both types of complements. Next I ponder over discourse properties of indicative and subjunctive complements in English, trying to establish their role in utterance interpretation.

3.3.1 Mandative-subjunctive selectors in English: A corpus data overview

The aim of the survey is to verify whether the indicative/subjunctive distinction in English overlaps with the assertion/non-assertion contrast. I expect that if the selected mandative subjunctive in English is subjunctive in typological terms, it should emerge in non-assertion contexts along with Terrell and Hooper's (1974) generalization based on Spanish data. In other words, my expectation is that asserted predicates (assertive and reported) will select for indicative complements, whereas non-asserted predicates will select for subjunctive complements (except for mental act predicates, see Chapter 1 for details – Section 1.3.1.1).

3.3.1.1 Methods and materials

To verify Terrell and Hooper's (1974) hypothesis on the basis of English data, I scrutinize corpus data taken from The Corpus of Contemporary American English (henceforth referred to as COCA), comprising more than one billion words from the period between 1990 and 2019, taken from numerous genres, such as spoken, fiction, magazine and newspapers, TV and websites (see *COCA Corpus*, 2020). In my search, I decided to focus on the inflectional variant of the mandative subjunctive and thus I use an American corpus since the inflectional form is more frequent in American than in British English (see Section 3.1.5.2). As in the analogous research on Polish (see Chapter 2, Section 2.3.1), I start with Terrell and Hooper's (1974) classification of verbs developed for Spanish and supply English equivalents to their examples. To briefly recap, Terrell and Hooper's (1974) determined six groups of verbs: (1) assertive matrices, (2) reported matrices, selecting for asserted complements, (3) mental act matrices, (4) comment matrices, selecting for presupposed complements, (5) doubt matrices and (6) imperative matrices, selecting for neither asserted nor presupposed complements. Then, based on the data from Spanish, Terrell and Hooper (1974) generalized that the indicative is connected with assertion, whereas the subjunctive – with non-assertion. English equivalents for each group are presented in Table 24. In line with their generalization, assertive and reported predicates should select for indicative complements, whereas the remaining groups should select for the subjunctive.

Table 24. English verbs in Terrell and Hooper's (1974) classification

		Predicate type	English
Indicative	Asserted	Assertive matrices express strong or weak belief of the speaker or the matrix subject	<i>to believe</i> <i>to be sure</i> <i>to be true</i> <i>to claim</i> <i>to sense</i> <i>to suppose</i> <i>to surmise</i> <i>to suspect</i> <i>to think</i> <i>to trust</i>
		Reported matrices describe the manner of conveying asserted information	<i>to answer</i> <i>to gab</i> <i>to drawl</i> <i>to mumble</i> <i>to read</i> <i>to say</i> <i>to shout</i> <i>to tell</i> <i>to yell</i> <i>to whisper</i>
Subjunctive	Presupposed	Mental act matrices* describe a mental act fulfilled with respect to a proposition	<i>to comprehend</i> <i>to forget</i> <i>to learn</i> <i>to realize</i> <i>to remember</i> <i>to understand</i>
		Comment matrices comment upon embedded propositions or to show that the matrix subject is psychologically affected by an embedded proposition	<i>to be a pity</i> <i>to be a shame</i> <i>to be bad</i> <i>to be good</i> <i>to be interesting</i> <i>to be happy</i> <i>to be marvelous</i>
	Neither asserted nor presupposed	Doubt matrices used to express doubt about the validity of a proposition	<i>to be unlikely</i> <i>to deny</i> <i>to dispute</i> <i>to doubt</i> <i>to not believe</i> <i>to not seem</i>
		Imperative matrices used to qualify an imperative	<i>to advise</i> <i>to demand</i> <i>to desire</i> <i>to insist</i> <i>to order</i> <i>to prefer</i> <i>to suggest</i> <i>to wish</i>

* Mental act matrices in Spanish do not follow Terrell and Hooper's (1974) generalization.

The next step of my research was to check frequency counts of the predicates from Table 24 in strings of words containing a predicate (in any inflectional form), the complementizer *that* and a verb. To achieve that, each query was formulated in the following way: PREDICATE (in capitals to have all possible inflected forms) *that* * (to mark space for

any word, e.g., an embedded subject) and VERB (any verb in an embedded clause); for instance: DESIRE that * VERB, meaning that I want a string with the predicate *to desire* with all inflectional forms followed by *that* plus a word plus a verb. Then I obtained a list of results from the corpus; for example:

- a) DESIRES THAT WE WORSHIP
- b) DESIRE THAT I THINK
- c) DESIRE THAT MIGHT THREATEN
- d) DESIRES THAT ARE OPPOSED
- e) DESIRES THAT I THINK
- f) DESIRE THAT MAY EXIST
- g) DESIRE THAT LACABE LEARNED
- h) DESIRE THAT JACK KEEP
- i) DESIRE THAT IT SEEMS
- j) DESIRE THAT IT DIES
- k) DESIRE THAT SHE TAKE
- l) DESIRE THAT SHE GO

Next I analyzed each list manually, looking for examples with a third-person-singular embedded subject – in the case above that would be entries from (g) to (l). This is because the only difference between the indicative and the subjunctive is visible in the third person singular subject. For other persons a difference between the indicative and the subjunctive would be lack of tense backshifting, but I wanted to simplify the survey and omitted such cases because the examples were examined manually. Then, when an embedded verb was inflected (person-number or past-tense inflection), I classified a string as indicative complementation – here that would be entries (g), (i) and (j). When an embedded verb was not inflected (mind that I only analyzed examples with third-person singular subjects), it was qualified as subjunctive: strings (h), (k) and (l). In fact, the lists which I analyzed were much longer than the one in the example, as they comprised one hundred most frequent strings. Each string from COCA carried information about its frequency, i.e., the number of instances in different texts. For instance, the string in (a) can be found in four different texts. The obtained results are presented and discussed in the next section.

3.3.1.2 Results and discussion

Table 25 presents the frequency data obtained from COCA. Column A presents a matrix type and Column B – an English predicate under scrutiny. Column C shows the total frequency of a given string, whereas Column D frequency per 100 most frequent results. Finally, Column E presents the number of the instances with the indicative complement and Columns F – with the subjunctive complement (still per 100 most frequent results). Predicates more frequently selecting for the indicative are light-grey-shaded, while those selecting for the subjunctive are dark-grey-shaded.

Table 25. Frequency of English predicates based on Terrell and Hooper's (1974) classification

A	B	Frequency		Third-person subject	
		C	D	E	F
Matrix type	Predicate	Total	Per 100 results	Indicative	Subjunctive
Assertive	<i>to believe</i>	8,083	1348	441	0
	<i>to be sure</i>	919	298	66	0
	<i>to be true</i>	740	132	61	0
	<i>to claim</i>	3,859	409	207	0
	<i>to sense</i>	191	116	59	0
	<i>to suspect</i>	565	144	60	0
	<i>to suppose</i>	511	172	58	0
	<i>to surmise</i>	72	72	36	0
	<i>to think</i>	16,950	4559	471	0
<i>to trust</i>	329	155	43	0	
Reported	<i>to answer</i>	303	140	20	0
	<i>to gab</i>	0	0	0	0
	<i>to drawl</i>	0	0	0	0
	<i>to mumble</i>	5	5	3	0
	<i>to read</i>	718	218	36	0
	<i>to say</i>	31,123	5567	2057	0
	<i>to shout</i>	41	41	25	0
	<i>to tell</i>	1,078	320	124	0
	<i>to yell</i>	27	27	11	0
<i>to whisper</i>	53	53	20	0	
Mental act	<i>to comprehend</i>	13	13	4	0
	<i>to forget</i>	1,042	279	63	0
	<i>to learn</i>	1,620	278	104	0
	<i>to realize</i>	3,374	790	211	0
	<i>to remember</i>	2,079	449	93	0
	<i>to understand</i>	2,966	768	133	0
Comment	<i>to be a pity</i>	13	13	7	0
	<i>to be a shame</i>	68	68	30	0
	<i>to be bad</i>	13	13	2	0
	<i>to be good</i>	294	149	35	0
	<i>to be interesting</i>	344	190	48	0
	<i>to be happy</i>	261	117	36	0
	<i>to be marvelous</i>	0	0	0	0
Doubt	<i>to be unlikely</i>	86	86	38	0
	<i>to deny</i>	935	249	135	0
	<i>to dispute</i>	245	132	28	0
	<i>to doubt</i>	570	198	58	0
	<i>to not believe</i>	1,037	295	59	0
	<i>to not seem</i>	19	19	10	0
Imperative	<i>to advise</i>	243	121	12	4
	<i>to demand</i>	3,301	424	0	135
	<i>to desire</i>	204	109	0	7
	<i>to insist</i>	2,754	504	48	118
	<i>to order</i>	721	197	0	7
	<i>to prefer</i>	343	135	8	30
	<i>to recommend</i>	2,619	662	0	24
	<i>to require</i>	2,305	366	0	14
	<i>to suggest</i>	8,765	1103	18	74
	<i>to urge</i>	139	104	3	22
<i>to wish</i>	238	136	15	7	

Source: taken from the frequency count in COCA.

As visible in Table 25, the majority of the predicates under discussion select for the indicative. In line with Terrell and Hooper's (1974) generalization, assertive and reported predicates select for indicative complements since they convey assertion about the embedded event. However, the second subgroup, that is, mental act and comment predicates, which are

presupposed but not asserted, also select for the indicative, which is at odds with the discussed generalization. Lastly, the third subgroup, which is neither asserted nor presupposed, with doubt and imperative predicates, behaves twofold: doubt matrices selecting for the indicative, while imperative matrices selecting mainly for the subjunctive.

The last group of the imperative matrices is the least unified and as such requires a more elaborated comment. We can notice here expected prevalence of subjunctive complements for almost all cases. The only exceptions are the verbs *to advise* and *to wish*, which have more results with indicative complements. However, this may stem from slight differences in meaning; cf. (3.104) and (3.105)

(3.104) *As is so often the case with victims of abuse, Mark advises that he kept his shame to himself for almost 40 years.*

(COCA, 2006, spoken, Scandal on Capitol Hill, CNN)

(3.105) *Most who see a glimmer of hope for Jackson's future prosperity, and his legacy, ultimately advise that he remind the public how they came to know him and care about his foibles in the first place.*

(COCA, 2005, newspaper, Elysa Gardner, What's next, *USA Today*)

The indicative complement visible in (3.104) can be explained by the reported use of the predicate *to advise* in this sentence: the subject seems to restate what other victims said or experienced. In contrast, example (3.105) shows a clearly imperative use of *to advise* with the subjunctive: the speaker expresses his/her expectations towards Jackson. Furthermore, the data in Table 25 also show that the greater the total frequency, the stronger the tendency to use the subjunctive, which is the case of *to demand*, *to insist* and *to suggest*. It seems then that the frequency factor strengthens the use of the whole construction with the subjunctive. Such a situation can be compared to the use of irregular past forms, which stay in the language system, e.g., in English, due to their frequent use (and despite their complexity). Nonetheless, even in the group of frequently used imperative verbs, there are uses with the indicative, for instance, *to insist*; cf. (3.106) and (3.107):

(3.106) *Perhaps I should have insisted that she come back to my terminal and explain what she had just done.*

(COCA, 1993, fiction, Diane Tomczak, *A Teacher Becomes a Student Again ... And Fails*)

(3.107) *Buchanan has stoutly insisted that he wants to stay in the race through the California primary on June 2.*

(COCA, 1992, E. J. Dionne Jr., Ann Devroy, Bush Says He's "Virtually" Won Renomination, *Washington Post*)

For this pair we can again notice a difference between the imperative/deontic use in (3.106) and the reported/epistemic use in (3.107), where the matrix and the embedded subjects are the same person and the phrase "has stoutly insisted" is rather comparable to "has said in a determined way". This does not mean that there are no uses of the indicative for imperative messages since, as already noted, the indicative, mainly in spoken British English (see Leech et al., 2009, p. 56), can be treated as an alternative to the subjunctive; see (3.108):

(3.108) *The authorities insisted that we needed approval before we could repair it.*

(COCA, 1993, magazine, The predicament of Egypt's Christian minority, *Christian Century*)

The sentence in (3.108) exhibits tense backshifting and as such should be classified as indicative complementation; however, the interpretation is clearly imperative.

Finally, there are verbs, like *to wish*, which have a very low frequency in the analyzed string and exhibit shifts between the indicative and the subjunctive complement; consider (3.109) and (3.110):

(3.109) *I really wish that he get oscar for this movie.*

(COCA, 2012, website, The Best Films of 2011– Roger Ebert's Journal, http://blogs.suntimes.com/ebert/2011/12/the_best_films_of_2011.html)

(3.110) *We can only wish that it remains a road [...].*

(COCA, 1997, newspaper, Charles W. Holmes, A father's letter: Dear Katie: This is the Jerusalem you left behind, *Atlanta Journal Constitution*)

The sentences in (3.109) and (3.110) show the imperative use of *to wish*, where the speaker in the matrix sentence wants the embedded event to be true. Still, there is a difference in the complementation without any contrast in meaning. As already said, such a phenomenon can be connected with the low frequency of the discussed string – 238 for *to wish* compared to 8,765 for *to suggest*.⁷⁴ The verb *to wish* is rarely used in the strings with *that*, having the structure of the mandative subjunctive. Rather it is applied in constructions *wish* + subject + the modal preterite, where the complementizer is often omitted, to express regrets (Thomson and Martinet, 2000, p. 261), whose meaning is different from the volitional one in the mandative structures. Given that the verb *to wish* is rarely used in the mandative constructions, its association with the present subjunctive is very low, which leads to an unstable complementation pattern.

In sum, Terrell and Hooper's (1974) generalization does not account for the distribution of indicative and subjunctive complements in English (just as in the case of Polish). The vast majority of predicates under scrutiny select for the indicative irrespective of their pragmatic/discourse status. It seems that again the notions of assertion and presupposition have little explanatory power for the indicative/subjunctive distribution. English mandative subjunctive is rather connected with the notion of volition and the willingness of the matrix subject to achieve or command a particular state/event expressed in the embedded clause. In other words, the mandative subjunctive in English may be seen as a special form/construction of volitional encoding that functions on par with infinitival constructions. The fact that we have infinitives and subjunctives in English to convey volition may be connected with the phenomenon of iconicity. I specifically refer to the principle of quantity which associates more form with more meaning (*Cognitive linguistics and functionalism*, 2002, p. 77). As already mentioned, the mandative subjunctive is used in formal contexts and thus in this case additional structure provides additional stylistic load. On the other hand, the use of infinitives for volitional meanings may represent another tendency

⁷⁴ Mind that I did not include in my survey any examples with *to wish* and the modal preterite, i.e., the so-called past subjunctive, as I do not consider such examples as subjunctives understood typologically.

of a language, i.e., a strive for economy (Langendonck, 2007, p. 402). Therefore, to express volition, an English speaker can follow two paths: a more economic way with a neutral stylistic load, i.e., the infinitive, or a less economic one (a more iconic version) to load their utterance with a formal style, i.e., that is the subjunctive.

Finally, since the indicative/subjunctive distinction in English is connected with the notion of volition (and not assertion understood in truth-conditional terms), one can refer to mental space theory to describe the English data (see Fauconnier, 1994). Recall from Section 1.3.2.2 that mood in mental space theory is treated as a factor helping to build relations between mental spaces (Fauconnier, 2007). According to Majías-Bikandi (1994), the role of the indicative is to indicate that a proposition should be interpreted relative to the speaker's reality space. Therefore, we can extend Majías-Bikandi's (1994) proposal and state that the role of the subjunctive in English is to indicate that a proposition should be interpreted relative to the speaker's command space. Still, such a proposal has little explanatory power and only describes the existing distributions by means of a different set of theoretical tools. At this stage, it is difficult to imagine a pragmatic account that would explain the distribution of moods in a more cross-linguistic and universal way without dependence on the set of data only from a single language.

3.3.2 Interpretational load of the mandative subjunctive in English

In the first chapter I reviewed the literature, which stresses the role of mood in meaning construction (Lavandera, 1983; Majías-Bikandi, 1994; Gregory and Lunn, 2012; see Sections 1.3.1 and 1.3.2). All those works, based on the data from Spanish, show the use of the subjunctive as a discourse strategy signaling that information is marginal (Lavandera, 1983), old or not true (Majías-Bikandi, 1998) and unreliable (Gregory and Lunn, 2012). To the best of my knowledge, the mandative subjunctive in English does not fulfill any of those functions. For instance, Lavandera (1983) shows that in Spanish speakers can use the subjunctive to indicate that an issue is only marginal in their line of reasoning (see Section 1.3.1.2), which is often accompanied with lexical signals, such "I doubt that" or "I'm afraid that". However, the use of such phrases with the mandative subjunctive in English would be rather illicit; consider (3.111) and (3.112):

(3.111) *I doubt that she *finally sell / ?should finally sell her car.*

(3.112) *I'm afraid that he *leave / ?should leave the country sooner or later.*

Sentences like (3.111) would be complemented with a clause comprising *will* as they express a prediction (Swan, 2009, p. 150). In (3.112) it would be possible to use *should*, but the meaning would be the one of external obligation, that is, I am afraid that leaving the country is the only option for him, but I do not want him to do it. Both examples are ungrammatical with the inflectional variant of the subjunctive. Similarly, Majías-Bikandi (1998) claims that in Spanish the subjunctive can be used to mark old information, which can be shown by the use of intensifiers (see Section 1.3.1.3). His reasoning is that the subjunctive is compatible with the intensifier *tan* 'so' since it expresses old information and *tan* is anaphoric in nature. Consequently, *tan* 'so' should not be compatible with the indicative. Still, this test does not work for English; cf. (3.113) and (3.114) (based on Majías-Bikandi, 1998, p. 943):

(3.113) *I've just realized that she earns so little.*

(3.114) *She demanded that her husband not earn so little.*

As visible in (3.113) and (3.114), the use of the intensifier *so* is fine with both the indicative and the subjunctive complement. Furthermore, in the same way, Spanish comment predicates, which select for the subjunctive, cannot comprise an indefinite phrase since indefinites introduce a new discourse referent and the subjunctive is used to express old information (Majías-Bikandi, 1998, p. 942). Again, English data do not behave likewise; cf. (3.115) and (3.116) (based on Majías-Bikandi, 1998, p. 942):

(3.115) *I've realized you know a friend of mine_i. He_i is called José.*

(3.116) *I insist that she get to know a friend of mine_i. He_i is called José.*

The sentences in (3.115) and (3.116) show that in English the use of an indefinite phrase is possible with both the indicative and the subjunctive. Therefore, it seems that English, in contrast to Spanish, does not exhibit systematic differences in marking new and old information by means of indicative/subjunctive values.

The expression of information structure in English is rather connected with noncanonical syntactic constructions,⁷⁵ which primarily serve to distinguish between familiar and unfamiliar information (Birner and Ward, 2006, pp. 291–292). A good example of such a syntactically-propelled discourse strategy is the use of cleft sentences; see (3.117) (from Birner and Ward, 2006, p. 294):

(3.117) *It was a red wool sweater that I bought.*

The sentence in (3.117) presents a so-called *it*-cleft sentence in which *that*-clause expresses shared knowledge and the preceding element is the new information (*ibidem*). The repertoire of English non-canonical constructions is wider, including *wh*-clefts, gapping constructions, preposing and inversion (see Birner and Ward, 2006, pp. 295–299 for a thorough discussion with examples). What is vital in the case of these constructions is that “one can predict from the form of the construction whether it will require a given constituent to be old or new” (Birner and Ward, 2006, p. 303).

Against this background, the interpretational role of the mandative subjunctive in discourse seems limited. The morphological form of the subjunctive, however, can give interpretational clues in the case of double selection verbs; consider (3.118):

(3.118) a. *The mayor advised that he obtain a building permit for his new pub.*

b. *The mayor advised that he had obtained a building permit for his new pub.*

The pair in (3.118) illustrates the difference between two meanings of *to advise*, i.e., to tell somebody what he or she should do (the imperative use in (3.118a)) and to tell somebody about something (the reported use in (3.118b)). The contrast is reflected in morphology as the imperative *to advise* selects for the subjunctive, whereas the reported one for the indicative. Still, one must admit that such minimal pairs in English are scarce and they do not only revolve around the indicative/subjunctive distinction, but can also involve a shift from the

⁷⁵ As I focus in this section on sentence structure and its impact on utterance interpretation, I do not review any aspects of English prosody, which also can signal the status of information. For a discussion of prosodic aspects see Lee (2015).

indicative to the infinitive, for instance, the opposition between *to tell that* and *to tell somebody to do something*. Furthermore, given the shaky selectional properties of imperative verbs in English, one can come across imperative uses with the indicative, which additionally weakens the potential of the subjunctive to differentiate between utterance types.

Another pragmatic aspect of the indicative/subjunctive distinction is connected with the relevance of a proposition, that is, its ability to bring cognitive effects (Jary, 2002). To test whether a proposition is relevant, one can use the parenthetical verb test (*ibidem*); cf. (3.119) and (3.120):

- (3.119) a. *No one wanted to buy her old car, he explained.*
b. *Kate and Mary, I suppose, wouldn't join us for the trip.*
(3.120) a. **She change her job immediately, insisted John.*
b. **He move, I suggest, to another part of the city.*

The examples in (3.119) present the use of parenthetical verbs in the reported and comment sense (consider Dehé, 2014, p. 5), while those in (3.120) show that an analogous use with the imperative verbs and the subjunctive is illicit in English. According to Jary (2002), this should prove that subjunctive propositions are not relevant on their own, but his test seems inapplicable to the English data. First of all, the subjunctive in English does not surface in root contexts, apart from some formulaic uses, and thus the speaker cannot freely use the indicative/subjunctive distinction to signal the relevance of a proposition. Second, if Jary (2002) were right, this would mean that subjunctive propositions in English are presupposed, conveying mutually shared knowledge and bringing no cognitive effects (see Section 1.3.1.5). This is clearly not true if one looks at the examples with the mandative subjunctive in which the embedded clause *does* provide new information about an event over which the matrix subject wants to have his or her command. This is even more evident when one compares the use of the subjunctive with the imperative verbs with the use of the indicative with the comment predicates; cf. (3.121) and (3.122)

- (3.121) *Her boss required that she submit the report on time.*
(3.122) *Her boss was happy that she had submitted the report on time.*

As visible in (3.122), in English presupposed information is actually conveyed via the indicative complement (mind that, according to Terrell and Hooper (1974), complements to comment predicates are presupposed), while the subjunctive in (3.121) functions as a complement to a predicate which is neither asserted nor presupposed (see Terrell and Hooper, 1974). Moreover, the data from English are also at odds with another earlier account based on relevance, that is, the prototype of assertability (Lunn, 1989). Recall from Section 1.3.2.1 that the central member of Lunn's (1989) prototype is information both new and true, which should be realized via the indicative. In contrast, less assertable information, which has a low news value or a low truth value, should be conveyed by the subjunctive. Again the pair in (3.121) and (3.122) contradicts Lunn's (1989) generalization since the complement in sentence (3.122) is presupposed, and thus not new, but still this complement is the indicative. What is important, in English mental act and comment predicates, which are presupposed, i.e., conveying old/known information (see Terrell and Hooper, 1974) all select for the indicative, which additionally weakens Lunn's (1989) claim (refer to Table 25).

Finally, we need to stress that English does provide a morphological way of modal distancing from the truth of a proposition, that is, the modal preterite. Recall from Section 3.1.2.2 that the status of the past subjunctive as a separate mood is rather problematic and the past subjunctive should be interpreted as the use of the past tense to express modal remoteness (Huddleston and Pullum, 2002). In other words, English preterite has two functions: to express temporal remoteness and modal remoteness. This is visible in some constructions where English speakers overuse the past subjunctive (the so-called “pseudo-subjunctive”), for instance, as an alternative to *would* or in indirect questions (Ryan, 1961; Quirk et al., 1985; Huddleston and Pullum, 2002; see Section 3.1.2.2 for examples). Still, it is difficult to say whether this pattern will evolve in the future or this is just an accidental use stemming from the willingness of some speakers to be hypercorrect.

3.3.3 Interim conclusions

So far I have shown that the indicative/subjunctive distinction in English does not overlap with the assertion/non-assertion contrast. I applied Terrell and Hooper’s (1974) classification of verbs to English and, based on the data from the Corpus of Contemporary American English, verified their generalization about the distribution of complements. I demonstrated that almost all groups of English predicates select for the indicative irrespective of their truth-value status, i.e., whether they are asserted, presupposed or neither asserted nor presupposed. The only group of verbs that selects for subjunctive complements is the one of imperative verbs and thus it is the notion of volition, and not assertion, that can account for the indicative/subjunctive distinction in English. Furthermore, I noticed that English exhibits very few alternations between the indicative and the subjunctive, which would result in a change of meaning, e.g., from reported to imperative. Rather there are shifts between the infinitive and the subjunctive in sentences expressing volition. Such shifts can be explained by the principle of quantity, according to which more form expresses more meaning. In the case of English more elaborate subjunctive sentences additionally express formal stylistic load. Lastly, I tried to identify any discourse strategies connected with the use of subjunctive. It turned out, however, that the functions of the subjunctive in discourse are limited: it marks neither old information, nor unreliable one. Instead, English applies the non-canonical syntactic constructions to facilitate information structure and the modal preterite to express lack of commitment to a proposition. Therefore, in English, similarly to Polish, the indicative/subjunctive distinction does not contribute to utterance interpretation in the neighbouring discourse, but rather it functions as an element of sentence meaning determined by the lexical properties of matrix predicates.

3.4 Selected mandatory subjunctive on the morphosyntactic level

Having discussed the meaning side of the selected mandative subjunctive in English, one needs to analyze aspects of form which are supposed to differentiate between the indicative and the subjunctive. Therefore, in this section I investigate the properties of indicative and subjunctive complements in comparison to infinitival ones so as to see if the mandative subjunctive in English exhibits transparency effects attested for other languages. First, based on a literature review, I discuss constraints on *wh*-movement in English with a special of focus on long-distance phenomena. Second, I present the design and analyze the result of the

grammaticality judgement study conducted on a group of American native speakers and devoted to the assessment of wh-movement from different extraction sites.

3.4.1 Picture of long-distance phenomena in English

English in general allows for long-distance wh-movement out of tensed sentential complements; consider (3.123) (from Radford, 2009, p. 207):

(3.123) *What might he think that she is hiding?*

In (3.123) one can see the wh-pronoun *what* extracted out of a tensed embedded clause *that she is hiding* <*what*>. As we could see in the previous chapter, a similar sentence in Polish would be at least degraded (see Section 2.4.1). In English, however, such extractions are possible irrespective of the complement type; compare (3.124) and (3.125) with (3.123):

(3.124) *What did Mary insist that Peter should choose for a birthday present?*

(3.125) *What did Peter want to choose for a birthday present?*

As visible in (3.124) and (3.125) the long-distance extraction out of the subjunctive clause and the infinitival clause are also possible.

Nonetheless, long-distance wh-movement in English is subject to several restrictions. These restrictions are often referred to as islands, that is, “[...] structure[s] out of which no subpart can be extracted” (Radford, 2009, p. 464). In other words, elements within an island domain are stranded and as such cannot leave the “island” (Witkoś, 2004, p. 190). The constraints on wh-movement were first described by Ross (1967), who noticed a ban on extraction out of a clause dominated by a nominal phrase; see (3.126) (from Adger, 2003, p. 326):

(3.126) **Which city do you believe the claim that Philip would invade?*

In (3.126) the wh-phrase *which city* is extracted from the most embedded clause *that Philip would invade* <*which city*>, which itself is dominated, or embedded under, the noun phrase *the claim*.⁷⁶ This phenomenon is traditionally known as the Complex NP Constraint and in the minimalist theory called DP island (Adger, 2003, p. 325).

Another constraint refers to the extraction of a wh-phrase out of a clause introduced by another wh-phrase; cf. (3.127) (from Witkoś, 2004, p. 200):

(3.127) **Where did you ask John which books Bill bought?*

As shown in (3.127), under the interpretation that the question is about the place of buying books, the sentence is ungrammatical. Therefore, one cannot extract the wh-phrase *where* from the embedded sentence *which books Bill bought* <*where*>.⁷⁷ The constraint is called Wh-Island Constraint, or simply Wh-island (cf. Witkoś, 2004, p. 200; Carnie, 2006, p. 332).

What is also disallowed in English is the extraction out of a sentential subject, which is known as the Sentential Subject Constraint; cf. (3.128) (from Carnie, 2006, p. 334):

⁷⁶ In this section I omit theoretical accounts of the discussed constraints and focus purely on linguistic phenomena. In generative theory the Complex NP Constraint can be explained by the Subjacency condition (see Witkoś, 2004, pp. 198–199). Consider also Adger (2003) for a phase-based analysis of island constraints.

⁷⁷ The problem of wh-islands is connected with the Minimal Link Condition and successive cyclic movement; see more in Rizzi (1990).

(3.128) **Who was that the police would arrest a certainty?*

Example (3.128) shows the impossibility of the extraction of the wh-pronoun *who* from the sentential subject *that the police would arrest <who> a certainty*.

Similarly, coordinated structures also block wh-movement, which is labelled as the Coordinate Structure Constraint; see (3.129) (from Richards, 2014, p. 180):

(3.129) **What did you buy a book and eat?*

As visible in (3.129) the wh-pronoun *what* cannot be moved from the conjunct *eat <what>*. Nonetheless, the movement of both conjuncts is possible; cf. (3.130) (from Witkoś, 2004, p. 193):

(3.130) *I wonder which books Mary hates and Sam likes.*

The example in (3.130) differs from the one in (3.129) in the element that is moved. For (3.130) this element is the shared constituent *which books*. Such a movement is known as across-the-board movement (*ibidem*).

English also blocks extractions out of subjects and adjuncts; consider the following examples in (3.131) and (3.132) (from Witkoś, 2004, p. 205):

(3.131) **Which book did the author of meet you?*

(3.132) **Who did you meet John angry at?*

In (3.131) the wh-phrase *which book* is moved from the subject of the sentence *the author of <which book>*, which gives an ungrammatical result. Similarly, in (3.132), the extraction of *who* from the adjunct *angry at <who>* is illicit.⁷⁸

It must be noted that the movement of objects in English is also not unrestricted. Similarly to Polish, English exhibits differences between bridge and non-bridge verbs. According to Witkoś (2004, p. 194), those verbs that allow for deleting the complementizer *that* (e.g., *believe, say, claim*) give the best results when extraction of objects is considered. In contrast, verbs denoting the manner of speaking, such as *whisper* or *shout*, for which the complementizer must be present, give degraded extractions; compare (3.133) and (3.134) (from Witkoś, 2004, p. 194):

(3.133) *What did Maria say (that) the students read?*

(3.134) ?*Which hat did John whisper that Sue lost?*

The movement of *what* from the embedded clause in (3.133) (*that) the students read <what>* is perfectly possible, whereas the extraction of *which hat* from the embedded clause in (3.134) *that Sue lost <which hat>* gives degraded results.

Furthermore, the object extraction in English is also limited by the Left Branch Condition illustrated in (3.135) (from Witkoś, 2004, p. 196):

⁷⁸ See Huang (1982) for the Condition on Extraction Domains (CED). CED allows only extractions out of complements and bans extractions from specifiers and adjuncts (Radford, 2009, p. 250). In line with CED, the extraction in (3.132) is banned. Note that some authors limit adjunct islands to extraction out of adjunct clauses; see (viii) (from Adger, 2003, p. 332):

(viii) **Who had Hephaestus run away, before the executioner murdered?*

In (viii) the wh-phrase *who* is moved from the adjunct clause *before the executioner murdered <who>*.

(3.135) **Whose wife's did you see guard?*

The example in (3.135) shows that the leftmost constituent of a noun phrase <*whose wife's*> *guard* cannot be extracted, but rather the whole constituent should be moved (*ibidem*).

Finally, what is important in the context of the present discussion on subjunctivehood, Chomsky (1986) notices that wh-movement violations in English are less acceptable with tensed complements; consider (3.136)–(3.137) (from Chomsky, 1986, p. 36):

(3.136) **What did you wonder to whom John gave?*

(3.137) ?*What did you wonder to whom to give?*

Both examples show the already discussed wh-island but, according to Chomsky (1986, p. 37), the version in (3.137) with the infinitival complement *to whom to give* <*what*> is more acceptable for the speakers of English. Chomsky (1986, p. 39) also opens up a possibility of parametric variation between languages with respect to structures that may hinder movement. In this sense, English seems sensitive to the indicative-infinitive distinction, but other parameters are also possible, such as the contrast between the indicative and the subjunctive (see Gallego, 2007 for defective phases). This observation is crucial for the problem of subjunctive transparency and will be further developed in the next section.

3.4.2 Long-distance phenomena in English: A grammaticality judgement study

The aforementioned Chomsky's (1986) remark in *Barriers* that wh-violations are less acceptable in the case of tensed complements is crucial in the context of the present study. As shown in the previous chapter, in Polish mood selection had an impact on the extraction of wh-pronouns from embedded clauses and the extractions from subjunctive and infinitive clauses were assessed better than those from indicative clauses (see Section 2.4.2). Taking into account the transparency effects attested for the subjunctive (see Chapter 1, Section 1.2.2.3) and the results of the study conducted on Polish data (see Chapter 2, Section 2.4.2), we can expect that wh-movement violations in the case of selected mandative subjunctives in English should be weaker. That is, wh-movement violations in subjunctives should be more acceptable than in indicatives.

3.4.2.1 Methods

To see whether mood values influence the perception of island effects in English, I compare wh-violations in English for three types of complements: indicative, subjunctive and infinitive. Specifically, I use a grammaticality judgement task⁷⁹ to gather subjects' judgements of the structures under scrutiny. Thanks to informants' tacit knowledge of English, I can compare constraints on wh-movement from embedded clauses with different mood values. As in the experiment on the Polish data, participants are supposed to assess isolated sentences on a five-point scale, where 1 means "totally incorrect" and 5 – "fully correct" with the intermediate levels left without description. The construction of the questionnaire follows principles of experimental design and is described in the next section.

⁷⁹ More information about the method can be found in the description of the analogous research conducted on Polish data; see Chapter 2, Section 2.4.2.1.

3.4.2.2 Materials and design

Based on the literature review outlined in Section 3.4.1, at the preliminary stage I selected six islands in English, which constitute a barrier for wh-movement, and created sentences for three different morphosyntactic contexts: indicative complement, subjunctive complement and infinitive complement. In other words, each island is analyzed in three contexts, which gives 18 conditions, representing factors which may influence wh-extraction:

1. DP island with an embedded indicative complement, for example:
**Who did the evidence support the conclusion that she had murdered?*
Intended interpretation: the pronouns *who* is interpreted as an argument of the embedded verb *to murder*.
2. DP island with an embedded subjunctive complement, for example:
**At what age did the council adopt the recommendation that every child go to school?*
Intended interpretation: the adverbial phrase *at what age* is modifying the embedded verb phrase *go to school*.
3. DP island with an embedded infinitive complement, for example:
?Which building did you give the permission to enter?
Intended interpretation: the noun phrase *which building* is an argument of the infinitive *to enter*.
4. Wh-island with an embedded indicative complement, for example:
**Whose car are the police investigating where he has stolen?*
Intended interpretation: the noun phrase *which car* is an argument of the embedded verb *to steal*.
5. Wh-island with an embedded subjunctive complement, for example:
**How often did the coach suggest which exercise he repeat?*
Intended interpretation: the adverbial phrase *how often* is modifying the embedded verb *to repeat*.
6. Wh-island with an embedded infinitive complement, for example:
?Which task did the teacher remind how to do?
Intended interpretation: the noun phrase *which task* is an argument of the infinitive *to do*.
7. Sentential Subject Constraint with an embedded indicative complement, for example:
**How often is that John smokes cigarettes terrible?*
Intended interpretation: the adverbial phrase *how often* is modifying the sentential subject predicate *to smoke*.
8. Sentential Subject Constraint with an embedded subjunctive complement, for example:
**What did that every pupil not bring seem a good recommendation?*
Intended interpretation: the wh-pronoun *what* is an argument of the sentential subject predicate *to bring*.
9. Sentential Subject Constraint with an embedded infinitive complement, for example:
?How much was for your brother to pay a barrier?
Intended interpretation: the adverbial phrase *how much* is modifying the infinitive *to pay*.

10. Coordinate Structure Constraint with an embedded indicative complement, for example:
**Who did the criminal admit that he had murdered and had hidden the body of a young lady?*
 Intended interpretation: the wh-pronoun *who* is an argument of the first conjunct *to murder*.
11. Coordinate Structure Constraint with an embedded subjunctive complement, for example:
**At whom did his friend beg that he not be angry and invite Camilla to the party?*
 Intended interpretation: the phrase *at whom* is an argument of the first conjunct *to be angry*.
12. Coordinate Structure Constraint with an embedded infinitive complement, for example:
?What time did the school recommend to start classes and have lunch at 12 o'clock?
 Intended interpretation: the adverbial phrase *what time* is modifying the first conjunct *to start classes*.
13. Subject island with an embedded indicative complement, for example:
**Which diocese do you think that the bishop of is the most popular?*
 Intended interpretation: the noun phrase *which diocese* is part of the embedded subject *the bishop of*.
14. Subject island with an embedded subjunctive complement, for example:
**To which system did the IT specialist suggest that the access expire?*
 Intended interpretation: the phrase *to which system* is part of the embedded subject *the access*.
15. Subject island with an embedded infinitive complement, for example:
?Which colleague was it a mistake for the wife of not to get a divorce?
 Intended interpretation: the noun phrase *which colleague* is part of the embedded subject *the wife of*.
16. Adjunct island with an embedded indicative complement, for example:
**Which party do you think that she is going abroad after?*
 Intended interpretation: the noun phrase *which party* is part of the embedded adjunct *after?*
17. Adjunct island with an embedded subjunctive complement, for example:
**Which alcohol did the host ask that the waiter serve soft drinks after distributing?*
 Intended interpretation: the noun phrase *which alcohol* is part of the embedded adjunct *after distributing?*
18. Adjunct island with an embedded infinitive complement, for example:
?What important reasons was she trying to solve the problem because of?
 Intended interpretation: the noun phrase *what important reasons* is part of the embedded adjunct *because of*.

The total number of conditions is rather too high, especially if one takes into account the complexity of the discussed structures. Assuming that for each condition 10 sentences should be created, one will end up with 180 target sentences, which should be accompanied by the same number of filler sentences. Therefore, I consulted a native speaker of American English

to verify if any notable differences between mood values can be spotted for each condition. It turned out that conditions from 10 to 18 might be all considered ungrammatical. They encompass the following islands: Coordinate Structure Constraint, subject island and adjunct island. This is far from surprising since they all entail extraction of *wh*-phrases out of an island, over the clause boundary, but also comprise an elaborated sentence structure, which makes them additionally degraded. More specifically, there is an asymmetry between objects and other types of constituents, i.e., subjects and adjuncts, since they are not in sisterhood relation with a verbal head and as such are not extractable (Huang, 1982 after Witkoś, 2004, p. 206). In the case of Coordinate Structure Constraint, extraction of one conjunct or its part gives severely degraded results and also distorts coherence relations within a sentence (Kehler, 1996). As a consequence, I decided to analyze conditions from 1 to 9, referring to DP island, *Wh*-island and the Sentential Subject Constraint, which – according to my informant – exhibit differences in terms of grammaticality between specific moods. The reduction of conditions also limits the number of stimulus sentences and thus any possible fatigue among participants.

This general design sketched before is also supplemented with a number of additional assumptions. First of all, I decided to use only past matrix clauses introducing subjunctive complements. As already mentioned, mandative subjunctives do not trigger tense backshifting; consider (3.138):

(3.138) **Which version of the book did Jane take the advice that she rewrite?*

As visible in (3.138) the past form used in the matrix clause does not change the form of the embedded predicate, which is a vital characteristic of the subjunctive. Another one is the lack of *do*-support; see (3.139):

(3.139) **Which medicine did the doctor ensure how long he not take?*

As illustrated in (3.139) the subordinate predicate is negated just by means of *not*, without any auxiliary verb. Therefore, the use of past and negative forms allows highlighting the characteristics of the subjunctive as opposed to other mood values. Nonetheless, to avoid any possible influence of the negative form on results, the stimulus sentences for the subjunctive are balanced: half of them are non-negative and half of them are negative. What must be stressed is that for the purpose of the present study I used only the inflectional variant of the mandative subjunctive with the base form of the verb and omitted British variants with the putative *should* and the indicative (see Section 3.1.4.1). Such a decision was necessary to avoid any possible influence of the variants on the results, which could mar the final aim of the study, i.e., differences between mood values.

As far as the remaining target sentences are concerned, that is, indicative and infinitive stimuli, they are balanced in terms of tense (past/present) and negation (negative/non-negative) on a fifty-fifty basis in order to avoid any uncontrolled influence on the results. To achieve this balance, I decided to use an even number of sentences per condition, that is, twelve. This number also allows dividing the questionnaire into three versions so as to limit the number of sentences per one study, and thus limit the fatigue of participants.

All in all, I created 12 sentences for 9 conditions, which gives 108 sentences which should be supplemented with the same number of filler sentences (also called distracters) so

that participants will not be aware of the purpose of the study (see Tremblay, 2005, p. 138). But this would result in 216 sentences altogether – too many for one questionnaire study. Such a high number of complex sentences must be reduced, because of the fatigue factor (see Schütze, 2016, p. 189), and thus I divided them into three versions with 72 sentences per each. Each version comprised 36 target sentences and 36 filler sentences (the same set of filler sentences was used for each version; all the sentences can be found in Appendix 3). After consulting a native speaker of American English, I decided to classify the sentences as possibly ungrammatical, that is, indicatives and subjunctives, and possibly degraded, i.e., infinitives. Mind that in the previous section on long-distance phenomena in English we concluded, following Chomsky (1986), that extractions out of infinitival complements give better results as tense is a vital factor in movement possibilities. To achieve an equal number of potentially grammatical, degraded and ungrammatical sentences in one study, for each version I created 24 grammatical fillers and 12 degraded fillers. The final design is then 24 ungrammatical sentences (target indicative and subjunctives), 24 grammatical sentences (fillers) and 24 degraded sentences (12 infinitive stimuli and 12 fillers). Such a design (sketched in Figure 9) allows avoiding a problem in which participants assess too many degraded sentences as grammatical because of the prevalence of ungrammatical stimuli (see Schütze, 2016, pp. 154–155).

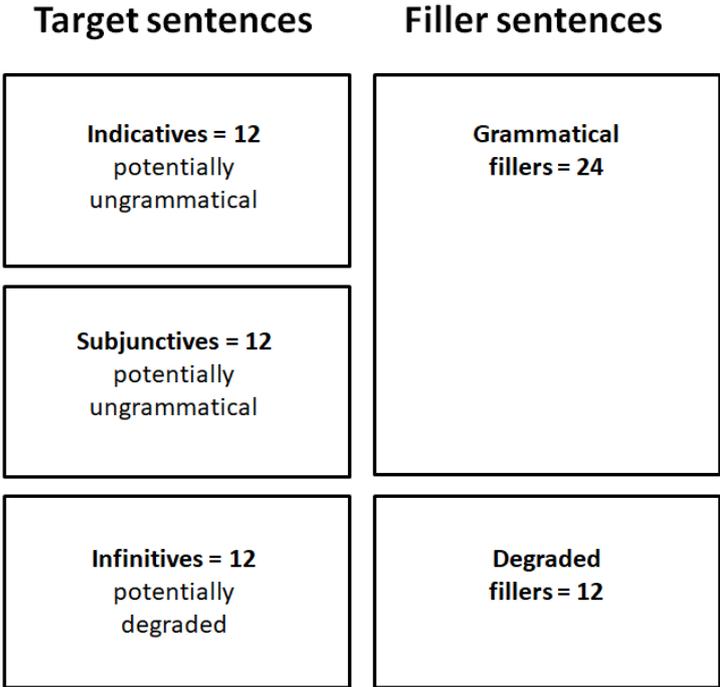


Figure 9. Design of grammaticality judgement study on English
 Source: own elaboration.

Finally, a comment must be made about the structure of the filler sentences. As grammatical distracters I used simple but elaborate questions, half non-negative and half negative. I decided not to use complex questions to avoid any influence of other types of extractions on the results. However, I created simple wh-question, whose length would be

comparable to my target sentences. As degraded fillers, I used structurally correct sentences, but with mistakes in collocations, for example:

(3.140) *Where are they going to make a cocktail party this year?*

In (3.140) the lexical mistake is to use the verb *to make* with the noun *party*. The sentence itself is structurally grammatical and comprehensible, but the preferable collocation is *to hold, throw or give a party* (Longman Dictionary of Contemporary English Online, 2020). In this way, I invented 12 degraded sentences: 6 non-negative and 6 negative.

3.4.2.3 Participants

The decision to use only the inflectional variant of the mandative subjunctive had its impact on the selection of participants. Therefore, I decided to invite only speakers of American English since this form of the subjunctive is more frequently used in American English than in British English (see Section 3.1.5.2). In this way, a risk could be avoided that British speakers would evaluate all the instances of the subjunctive as degraded or ungrammatical just because they are accustomed to the variants with the putative *should* or the indicative. Although I tried to keep the group as homogenous as possible, it was not possible to stick only to one age group because of problems with finding participants. The majority of them are students of American universities (Harvard University, The University of Chicago, Indiana University, Bloomington, Wayne State College (Nebraska), New York University, Stony Brook University, University of South California, Los Angeles), but also older adults were asked to participate – mainly employees of an American corporation whose subsidiary is located in Wrocław. Still, the group was unified with respect to literacy and education level and none of the participants had any background in linguistics. In total, 57 participants took part in the study.

3.4.2.4 Results and discussion

The results of the present survey are presented in Table 26, which shows judgement means for all the conditions together with the means of particular sentences.

Table 26. Results of the grammaticality judgement study for American English

Condition/Sentence	Mean
1) DP ISLAND – INDICATIVE	2.44
A. What did the teacher reject the argument that is bad for her pupils?	1.38
A. To which ex-boyfriend does her mother have the belief that she will eventually come back?	1.95
A. Since when do the scientists support the theory that this virus hasn't been active?	4.48
A. In what did your boss come to the conclusion that the company hadn't invested on time?	1.38
B. On which floor are the police investigating the claim that the witness found the body?	3.92
B. How did you have the idea that he stole the money?	3.92
B. What are they working on the assumption that these lizards don't eat?	1.77
B. What risk were you familiar with the argument that processed food didn't cause?	1.77
C. When does everybody hold the opinion that our house needs redecorating?	2.61
C. Who did the evidence support the conclusion that she had murdered?	2.22
C. About what did her father come to the conclusion that she wasn't lying?	3.09
C. What can you share the idea that we won't buy for Mary?	1.48

Condition/Sentence	Mean
2) DP ISLAND – SUBJUNCTIVE	2.93
A. Where did the mayor make the decision that nobody sing loudly?	3.57
A. At what age did the council adopt the recommendation that every child go to school?	3.71
A. In which room did her mother give her the advice that she not stay?	3.62
A. Who did your sister impose the requirement that her husband not dance with at the wedding party?	2.52
B. How often did the government make the recommendation that each drive change tires?	2.62
B. Which version of the book did Jane take the advice that she rewrite?	3.38
B. Which exam did they take the decision that John not retake?	1.54
B. What did the city council pass the resolution that every city-dweller not do with their gardens?	2.31
C. What time did the mayor impose the requirement that each official start work?	3.52
C. With what did the president approve the resolution that every teacher help pupils?	3.35
C. Which house did Peter reject all the suggestion that he not sell?	2.26
C. With what kind of salary did his uncle come up with the suggestion that he not find a job?	2.09
3) DP ISLAND – INFINITIVE	3.44
A. Which building did you give the permission to enter?	3.81
A. How do they have the tendency to wash their hands?	2.76
A. In what way did you reject the suggestion not to cross the border?	3.81
A. Who are they doing the preparation not to let into the country?	1.38
B. What time did Jane accept the proposal to start work?	4.54
B. What are they doing the preparation to redecorate?	2.31
B. Whose book did Camilla reject the advice not to read?	3.15
B. How often does your daughter have the tendency not to take part in her dancing classes?	3.85
C. To whom are you making the attempt to give this letter?	4.00
C. How many bottles did people have the tendency to buy?	4.43
C. Which software do you support the proposal not to install?	2.78
C. How often did she have the motivation not to smoke at home?	4.30
4) WH-ISLAND – INDICATIVE	2.33
A. How long did she ask where Martina had stayed?	2.24
A. Whose car are the police investigating where he has stolen?	1.48
A. Where did she explain why this bus hadn't stopped?	3.71
A. Which book is he clarifying where he wasn't able to borrow?	1.90
B. How many children did Jerry query which family has?	1.15
B. What will Jane explain why his son stole?	1.69
B. Which prize do you wonder in which casino you can't win?	1.23
B. With whom did your teacher wonder why you hadn't started cooperating?	3.00
C. Where will you enquire whose child has to stay?	3.22
C. What time was she asking where the guests were going to arrive?	2.74
C. Which dishwasher can your mother explain why she isn't going to buy?	2.48
C. For whom did she ask where Frank hadn't been waiting longer than an hour?	2.13
5) WH-ISLAND – SUBJUNCTIVE	1.72
A. What did her parents recommend how she do on her own?	1.48
A. What time did the teacher instruct which task he do?	1.71
A. Where did her sister suggest which café she not choose?	2.05
A. Who did your boss decide when he not employ?	1.19
B. How often did the coach suggest which exercise he repeat?	2.62
B. Which present did they decide to whom John give?	1.85

Condition/Sentence	Mean
B. For what was it obvious when she not be prepared?	1.31
B. Which medicine did the doctor ensure how long he not take?	1.54
C. What was it evident where he drink?	1.35
C. How many times did the doctor decide which pill she take?	2.74
C. Which house was it certain when his sister not sell?	1.30
C. How much did the lawyer determine in what way she not pay?	1.70
6) WH-ISLAND – INFINITIVE	2.34
A. Where can your mother decide what time to go?	1.62
A. What did her parents recommend her how to do on her own?	2.29
A. How did the colonel order which tank not to use?	3.10
A. What music does the DJ want how loud not to play at the end of the party?	1.10
B. Which task did the teacher remind how to do?	2.08
B. Where will your aunt advise how many plates to buy?	3.15
B. To whom did the lawyer propose which document not to give?	2.38
B. Which building is the city council planning not to demolish this year?	4.08
C. Whose desk did the manager instruct where to move?	2.43
C. For whom is your father planning where to wait?	2.43
C. About what does she recall who not to give information?	2.04
C. How many trees did the mayor decide where not to plant?	2.30
7) SENTENTIAL SUBJECT CONSTRAINT – INDICATIVE	1.30
A. Which exam did that she had failed disappoint her mother?	1.14
A. How often is that John smokes cigarettes terrible?	1.29
A. Who does that she didn't marry surprise you?	1.14
A. How much did that your cousin hadn't returned to you bother your wife?	1.52
B. Whose best friends is that animals are your claim?	1.15
B. What did that she had fallen ill with bother her husband?	1.23
B. What time is that children don't start their lessons ridiculous?	1.23
B. Who was that your sister hadn't divorced stupid?	1.31
C. How much was that your parents had paid for the house a fact?	1.48
C. Who does that every parent educates seem his theory?	1.09
C. Where was that Cindy didn't stay true?	1.48
C. At whom is that your mother isn't angry irrelevant?	1.43
8) SENTENTIAL SUBJECT CONSTRAINT – SUBJUNCTIVE	1.30
A. What was that she buy a requirement?	1.24
A. How much did that you father pay seem a basic requirement?	1.05
A. For what was that she not be responsible indubitable?	1.67
A. With whom was that your colleague not cooperate a requirement?	1.33
B. What time was that every child get up a suggestion?	1.69
B. When did that Philip change his job appear a helpful suggestion?	1.69
B. What did that every pupil not bring seem a good recommendation?	1.15
B. Who was that the doctor not cure of cancer unlikely?	1.23
C. What did that each citizen be in control of look a clear recommendation?	1.00
C. What did that every worker be like appear a ridiculous resolution?	1.26
C. Of what was that he not be guilty evident?	1.26
C. What was that Jane not be in charge of clear?	1.26
9) SENTENTIAL SUBJECT CONSTRAINT – INFINITIVE	1.44
A. How often is for your mother to change her job easy?	1.33

Condition/Sentence	Mean
A. What time was for each child to start their lessons difficult?	1.43
A. What does for every teenager not to be responsible for seem reasonable?	1.48
A. Where did for your boss not to keep documents seem a problem?	1.19
B. Who is for your daughter to marry important?	1.54
B. How much was for your brother to pay a barrier?	1.69
B. What is for every criminal not to plead guilty of utter nonsense?	1.46
B. How often was for your sister not to drink alcohol easy?	1.69
C. Which computer is for the manager to buy impossible?	2.00
C. Whose book did for you to read appear a problem?	1.30
C. At whom was for his sister not to be angry a fact?	1.22
C. What does for your teacher not to make seem untrue?	1.17

Version A = 21 informants, version B = 13 informants, version C = 23 informants.

The results presented in Table 26 confound my expectation that the embedded subjunctive should be more acceptable than the indicative. Across three island constructions – DP island, Wh-island and Sentential Subject Constraint – there are no systematic differences between the indicative and the subjunctive. The only contrast is found for DP island, where the indicative scores the lowest, i.e., 2.44, and the subjunctive and the infinitive are evaluated notably better: 2.93 and 3.44, respectively. What is surprising, however, is that in the case of Wh-island the indicative is assessed better than the subjunctive, that is, 2.33 compared to 1.72. In this case, even the infinitive receives judgements similar to the indicative, i.e., 2.34. Yet another picture is formed from the results for the Sentential Subject Constraint, where the indicative and the subjunctive receive the same result, that is, 1.30, and the infinitive is evaluated better at 1.44. It must be noted that infinitives have the best results across all the island constructions, which confirms Chomsky's observation mentioned earlier.

The outcomes of the discussed grammaticality judgement study are puzzling in several ways. First, the subjunctive does not seem to contribute to the transparency of a given domain in English. Apart from DP island, the subjunctive complements were not assessed better than the indicative ones. Therefore, it seems that in English the indicative/subjunctive distinction does not follow the cross-linguistic opacity/transparency contrast. Second, there are evident differences between island constructions, which can lead to a supposition that factors other than mood play a role in extraction possibilities. Specifically, it must be noted that all conditions for DP island are evaluated better than the conditions with Wh-island and the Sentential Subject Constraint. First, such an effect can be connected with the problem of parsing, that is, sentences with a distinct nominal phrase are somehow easier to be processed than those with sentential complements introduced with wh-pronouns and those with elaborated sentential subjects.

Second, the differences in assessment may be connected with sentence derivation, that is, in DP island a sentence is degraded because of the number and character of the bounding nodes a wh-phrase has to cross, whereas in Wh-island the problem is the intermediate specifier of CP, which is a landing site in the successive-cyclic movement. In current minimalist theory DP, along with CP and vP, is considered a phase, that is, a domain whose head complement is impenetrable to further syntactic operations (Radford, 2009, p. 472). In

this way, any extraction from a phrase which is a complement to D^0 , C^0 or v^0 is prohibited by the so-called Phase Impenetrability Constraint; consider (3.141) (from (Adger, 2003, p. 321).

(3.141) Phase Impenetrability Constraint (PIC)

“Feature matching reaches no further than the specifier of an embedded phase.”

PIC presented in (3.141) accounts for the impossibility of wh-movement from DPs under analysis; see (3.142):

(3.142) **How did you have* [_{DP} *the idea* [_{CP} *that he stole the money* <*how*>]] ?

As shown in (3.142) the wh-phrase <*how*> is extracted from CP embedded under DP. In line with PIC such an operation is blocked since CP is sister to D^0 and as such is invisible to further operations.⁸⁰ Nonetheless, as already mentioned, the phasehood of a given category may be disrupted by other factors, e.g., tense as in the case of defective C (Gallego, 2007). A similar line of reasoning may be applied to DP, whose definiteness has an influence on phasehood, that is, only definite DPs (with a definite article or a possessive) are phases (Radford, 2009, p. 426; see also footnote 80). However, as noticed by Davies and Dubinsky (2003), a demonstrative in DP improves movement possibilities; cf. (3.143) (from Huang, 2017, p. 8):

(3.143) *Which president did Mary tell* {*?those* / **Colbert's*} *jokes about* <*which president*>?

Therefore, analyzing such sentences, one needs to consider various factors, not only the category of an extraction site. Mind that for the present grammaticality judgement study I used only definite DPs with a definite article, but still the differences between the indicative, subjunctive and infinitive are visible. The fact the DPs with embedded indicatives were assessed as the worst may stem from the accumulation of factors, that is, a definite DP combined with a tensed, finite CP. Consequently, the acceptance for such structures was growing along the weakening of CP as a phase: the non-tensed but finite subjunctives were assessed better than the tensed and finite indicatives and the non-tensed and non-finite infinitives were assessed better than the subjunctives and far better than the indicatives.

In contrast to DP island, Wh-island originates from different derivational problems. As already mentioned, long-distance wh-movement is successive-cyclic, i.e., a wh-phrase cannot skip an intermediate specifier. However, in the case of Wh-island, this position is occupied and that is why the derivation crashes; cf. (3.144):

(3.144) *[[_{CP} *How many children did Jerry query* [_{CP} *which family* [_{TP} <*which family*> *has* <*how many children*>]]]]?

The <*how many children*> cannot be moved directly to the matrix CP since it needs to land at the intermediate landing site, that is, the specifier of the embedded CP, which is already occupied by the wh-phrase *which family*. If the intermediate position were not occupied, the

⁸⁰ Adger (2003, p. 327) also suggests that indefinite Ds can have an uninterpretable wh-feature to trigger movement to the specifier of DP; see (ix) and (x) (*ibidem*):

(ix) *How fierce a battle.*

(x) **How fierce the battle.*

Example (ix) shows that wh-movement within an indefinite DP is possible, but blocked within the definite one; cf. (x).

phrase under discussion could land there and be visible for attraction to the matrix clause (according to PIC, the specifier of a phase is visible). The different mechanisms of derivation employed for DP islands and Wh-islands may provide an explanation of why in the case of Wh-islands there are no systematic differences between the indicative, the subjunctive and the infinitive.

Yet another derivational story lies behind the derivation of the sentences degraded due to the Sentential Subject Constraint. Here the problem is that the embedded CP is merged with the adjective *obvious* and then moved to the specifier of TP, which is a non-theta position as T head does not assign any theta roles (Adger, 2003, p. 331); cf. (3.145) (from Adger, 2003, p. 327):

(3.145) **Who is that Plato loved obvious?*

The derivation of sentence (3.145) is presented in Figure 10 at the point when the subject CP is merged in the specifier of TP.

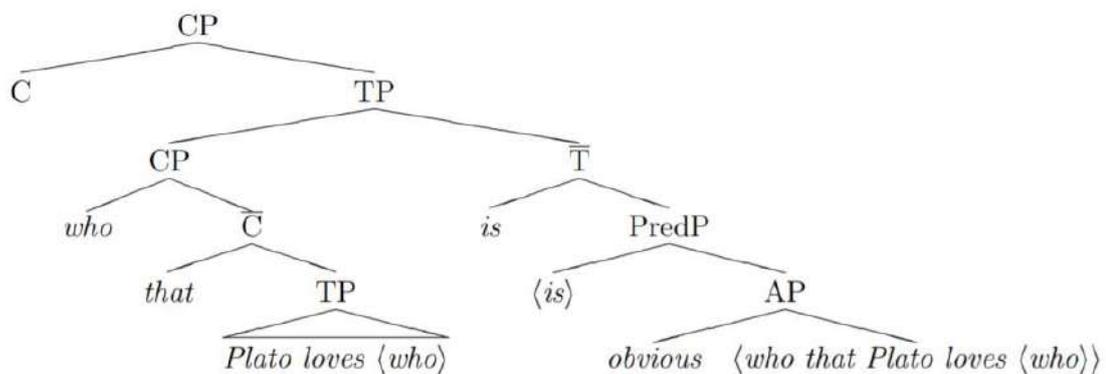


Figure 10. Sentential Subject Constraint
Source: reproduced from Adger (2003, p. 331).

The derivation of (3.145) is blocked by another constraint which differentiates between theta and non-theta positions: “The specifier of a phase is only visible to feature matching if the phase is in a position where it is selected by a theta-assigning head” (Adger, 2003, p. 331). What follows is that the wh-phrase *who* cannot leave the subject CP and the derivation crashes. As we can see, our three analyzed conditions have each different derivational mechanics, which can explain the differences in assessments.

The third aspect influencing judgements in the present study involves structural ambiguity. The lack of the expected effects can also stem from the phrasing of target sentences. Much as I tried to avoid ambiguities, there are sentences which were understood in an unintended way; consider (3.146):

(3.146) *Since when do the scientists support the theory that this virus hasn't been active?*

Example (3.146) was intended to show DP island and as such it should be evaluated very low; however, it was assessed at 4.48. It seems that the phrase *since when* must have been interpreted as a modifier of the matrix predicate, although I used Present Perfect – with which *since when* is more compatible – in the subordinate clause to force a different interpretation. At this juncture, I need to stress that such ambiguities are very difficult to omit. For example,

the pronoun *when* can be in the majority of instances interpreted as an element of the matrix clause or the embedded clause since one can almost always ask about the time of an event. A good solution would be then to use more specific wh-phrases, like *which daughter*, but then the repertoire of wh-phrases would be limited to *which* and *whose*, which could also influence results. I decided to use the full range of wh-pronouns, even at the risk of generating unintended ambiguities.

Finally, it is also relevant to compare the results of the target sentences with the results of the filler sentences, which are shown in Table 27 (see also Appendix 4 for the complete results of control sentences).

Table 27. Results of control sentences

Filler sentences/conditions	Mean
1) Grammatical non-negative	4.20
2) Grammatical negative	3.79
3) Degraded fillers	3.29

Version A = 21 informants, version B = 13 informants, version C = 23 informants.

The data in Table 27 show that the target island conditions are evaluated significantly worse than the control/filler grammatical questions of comparable length. Moreover, they are generally assessed worse than the degraded sentences with lexical mistakes. This is far from surprising given the syntactic complexity of my target questions. What is also visible is that negation is a factor complicating sentence processing, which results in a lower assessment of such sentences. This is clear in the filler sentences when one compares the result of grammatical non-negative questions, that is, 4.20, to the result of negative grammatical questions, that is, 3.79. Such an effect is also noticeable in the target sentences, where the sentences with negation were assessed slightly worse across all island constructions. The role of negation in wh-extraction has been discussed in the syntactic theory at least since 1980s (see Ross, 1984; Rizzi 1990). Specifically, Ross (1984) noticed that in English the movement of an adjunct over the matrix negation gives ungrammatical results – the effect known as “the negative island”; see (3.147) and (3.148) (from Ross, 1984, p. 265):

(3.147) *What house can't you photograph?*

(3.148) **How big a house can't you photograph?*

As visible in (3.147) the extraction of the direct object (argument) is fine in spite of the matrix negation; however, in (3.148) the extraction of the adverbial over the clause negation is illicit. Although, a detailed account of such phenomena is not the aim of the present study, the problem of the negative island is connected with a more general question, that is, whether island constraints are connected with competence, i.e., the underlying system of syntactic rules and constraints, or with performance, i.e., problems with parsing and constraints on sentence processing (see Kluender and Gieselmann, 2011). Therefore, the problem of the grammatical deviation of island construction needs further research, including other factors than mood.

3.4.3 Interim conclusions

The picture of long-distance phenomena sketched at the beginning of this section showed numerous restrictions on wh-movement in English. Although it is possible in English, in contrast to Polish, to move a wh-phrase from a tensed sentential complement, English exhibits a number of other limitations, such as Complex NP Constraint, Wh-island Constraint, Sentential Subject Constraint, Coordinate Structure Constraint as well as a ban on extractions out of subjects and adjuncts and on extractions of the left branch of a constituent (Left Branch Condition). Crucially, as observed by Chomsky (1986), some restrictions – the case of wh-island in particular – can be weakened in the context of extractions from infinitival complements. In other words, Chomsky (1986) suggests that tense may be a factor influencing movement possibilities, which is also important in the context of indicative and subjunctive complements. Therefore, inspired by Chomsky (1986), I designed a grammaticality judgement study to check if there are differences in movement restrictions between three types of complements: indicative, subjunctive and infinitive. Based on the research on other languages (see Section 1.2.2.3), I expected that subjunctive clauses in English would exhibit transparency effects, that is, the subjunctive would weaken possible movement violations. In my study I focused on three main conditions: DP island, Wh-island and the Sentential Subject Constraint, which I analyzed in three variants: indicative, subjunctive and infinitive. As a result, I did not find any systematic differences between the indicative and the subjunctive. Still, Chomsky's (1986) intuition was confirmed since infinitives had the best results across all the island contexts. Therefore, English does not seem to exhibit transparency effects for subjunctive clauses and extraction possibilities are determined by factors other than mood, such as the type of island construction, parsing aspects and differences in sentence derivation.

3.5 Chapter conclusions

In the first part of this chapter, based on traditional descriptions of the mood system in English, I argued that it is the mandative subjunctive in English that best corresponds to the category of the subjunctive described typologically. My choice was motivated by the distribution criterion, i.e., limitation to subordinate contexts, selection by directive/volitive predicates, use in deontic propositions and a special verb form combined with productivity of the whole construction, which is not limited to a single verb like the so-called past subjunctive. Moreover, the mandative subjunctive clauses under discussion show systematic differences from indicative clauses, which are summarized in Table 28.

As summarized in Table 28, the mandative subjunctive differs from the indicative in terms of modality, distribution and use. On the semantic level, I showed first that the mandative subjunctive does not appear in English outside nonveridical contexts, while indicative complements are selected by veridical verbs. It must be stressed though that the subjunctive does not appear in all nonveridical contexts in English (mind the important lack of polarity subjunctive) and that nonveridical contexts in English very often trigger infinitives and can also trigger the indicative (the problematic case of *to hope*). Second, in terms of temporal interpretation, subjunctive clauses are defective since they do not have an independent tense interpretation and are temporally interpreted quasi simultaneously with the matrix event. Third, mild obviation effects can be attested in English, but the picture of

subject coreference is blurred by frequent subjunctive/infinitive alternations in English. Then, on the pragmatic level, I demonstrated, based on the corpus data, that the indicative/subjunctive distinction in English is not connected with the notion of assertion. Specifically, mandative subjunctive clauses surface in a limited set of non-assertive contexts, that is, those connected with volition/command of the matrix subject. Moreover, in contrast to Spanish, English mandative subjunctive is not used as a discourse strategy signaling that information is old or unreliable (for the purpose of highlighting information structure English applies non-canonical syntactic constructions). Finally, on the morphosyntactic level, I analyzed restrictions on *wh*-movement in English and tried to verify whether the factor of tense impacts movement possibilities. The grammaticality judgement study that I conducted failed to prove that mandative subjunctive clauses in English – analogously to other languages – exhibit transparency effects. Both indicative and subjunctive clauses seem opaque to movement and as such stand in contrast to infinitival clauses, which weaken island violations.

Table 28. Indicative/subjunctive distinction in English

Feature	<i>Indicative clauses</i>	<i>Mandative subjunctive clauses</i>
<i>Modality</i>	Declarative (non-modal)	Event (deontic)
<i>Type</i>	Not applicable	Intensional (no polarity subjunctive)
<i>Distribution</i>	Root contexts, matrix and subordinate clauses	Only subordinate clauses (apart from the unproductive formulaic constructions)
<i>Use</i>	Assertive	Event/deontic (directive, volitive, optative, jussive)
<i>Selector</i>	Veridical verbs	Nonveridical verbs (but not present in other nonveridical contexts)
<i>Tense</i>	Absolute (root context)/ independent (subordinate context)	Defective
<i>Domain</i>	Opaque	Opaque

Source: own review.

In the end, the discussion of the mandative subjunctive and its properties showed a number of problems with subjunctivehood criteria. First, the notion of (non)veridicality as formulated by Giannakidou (2009) appears too broad to capture the indicative/subjunctive distinction in English since the subjunctive surfaces only in a small subset of nonveridical environments. Second, obviation effects are also connected with the system of sentential complementation available in a given language (Cotfas, 2015). Disjoint reference for subjunctive clauses in English was described as a preferred option by native speakers, whose judgements confusion might stem from double selection of some verbs, e.g., *to desire*, which can select for both the subjunctive and the infinitive (in the latter option joint reference holds). Another problematic aspect concerns pragmatic/discourse properties of subjunctive clauses. In English, just like in Polish, it turned out that the indicative/subjunctive does not overlap with the assertion/non-assertion contrast. Furthermore, I did not manage to find any ways in which the subjunctive could systematically mark information status in neighbouring discourse. Therefore, it seems that the indicative/subjunctive distinction in English is not operative on the pragmatic level as a way of encoding the news value or truth value of a proposition. Finally, transparency effects as a subjunctive diagnostic may be misleading as

in English it is the infinitive that weakens island violations and thus transparency seems connected with specific properties of tense and finiteness and not with a specific mood value.

CONCLUSIONS

The findings of the present study need to be discussed in two directions. First, the application of subjunctivehood criteria to *żeby*-clauses in Polish and to the selected mandative subjunctive in English provided a deeper insight into the properties of these constructions. Second, the constructions under discussion revealed a number of problems with typological diagnostics of the subjunctive. Therefore, the concluding section is organized along these two lines of reasoning.

Subjunctive in Polish and English

In the introduction to the present study I formulated two research hypotheses, repeated here for convenience:

HYPOTHESIS 1: In Polish the subjunctive is realized in the form of complement clauses introduced by the complementizer *żeby*.

HYPOTHESIS 2: In English the subjunctive is realized in the form of the selected mandatory subjunctive.

My research findings allow accepting the first hypothesis and state that *żeby*-clauses constitute a realization of the subjunctive understood in typological terms. First, *żeby*-clauses fulfill the distributional criterion as they surface as complements to volitive/directive predicates (the intensional subjunctive) as well as complements to negated epistemic verbs (the polarity subjunctive). They also satisfy the formal criterion as they follow one of the subjunctive realizations attested cross-linguistically, that is, a complementizer/particle (*żeby*) accompanied by a special verb form (*l*-participle, *-no/-to* construction or infinitive). These two main observations co-occur with a number of other subjunctive characteristics. On the semantic level, *żeby*-clauses do not emerge outside nonveridical contexts, have a relative temporal interpretation, including the so-called fake past forms, and finally exhibit obviation effects. On the morphosyntactic level, with respect to constituent movement and licensing *żeby*-clauses are more transparent than *że*-clauses, which constitute a strong barrier to transclausal operations in Polish. The only set of subjunctive criteria that *żeby*-clauses do not meet is connected with the pragmatic level since the indicative/subjunctive distinction does not correspond in Polish to assertion/non-assertion contrast and *żeby*-clauses are not used as a discourse strategy to signal the relevance or the news value of information. However, an alternative explanation can be offered at this point, i.e., mood values have no unique pragmatic properties (see later discussion).

In contrast, the selected mandative subjunctive in English does not satisfy subjunctivehood criteria and thus the second hypothesis needs to be refuted. First, the mandative subjunctive is selected by volitive/directive verbs but it does not surface under negation of epistemic verbs, which is an important subjunctive context. Second, the selected mandative subjunctive can be classified as an inflectional realization of the subjunctive, but it must be noted that the contrast with the indicative is visible only in third person singular. These special inflectional forms have their indicative and modal alternatives, used especially

in British English, which additionally blur any formal distinction between the indicative and the subjunctive in English. Furthermore, the applied subjunctive diagnostics also do not give conclusive results. On the semantic level, mandative subjunctive clauses do not surface outside nonveridical contexts, have a dependent tense interpretation, but show only mild obviation effects, which seem more connected with the presence of the infinitive as an alternative complementation form. On the morphosyntactic level, subjunctive clauses in English do not exhibit transparency effects and do not weaken island violations. In this sense, there is no systematic contrast between the indicative and the subjunctive with respect to syntactic operations. Last, the mandative subjunctive is not used as a discourse strategy in English to mark information as new or relevant. Moreover, the assertion/nonassertion contrast is also not reflected in the indicative/subjunctive distinction in English.

These two different assessments of seemingly analogous structures in Polish and English obviously stem from the research conducted in the present study. However, the present state of the analyzed constructions has its diachronic sources. Polish *żeby*-clauses emerged in the long process of grammaticalization in which the third-person singular aorist form *by* became a conditional/subjunctive particle (see Section 2.1.6). Therefore, due to the development of new conjunctions and particles in Polish, the subjunctive took form of a periphrastic construction introduced by a special complementizer/particle and involving special verb forms. On the other hand, English followed a different path of a decomposition of the inflectional form of the subjunctive starting in the Old English Period (see Section 3.1.5.1). In Middle English the subjunctive was gradually replaced by periphrastic constructions with a modal verb and the indicative, that is, the modal preterite. In this way, the contrast between the indicative and the subjunctive was becoming more and more blurred and at present the remnants of the formerly existing subjunctive do not exhibit typical subjunctive properties.

Subjunctivehood criteria

The research and discussion in the present study showed a number of problems with subjunctivehood criteria. The notion of (non)veridicality proposed by Giannakidou (1998, 2009) appears too broad to capture the indicative/subjunctive distinction. As shown in the previous chapters, Polish and English subjunctives do not surface outside nonveridical contexts, but nonveridicality is not enough to trigger the subjunctive (see also Mazurkiewicz, 2012). This is visible in the case of the predicate *to hope*, which is nonveridical in Giannakidou's terms, but selects for the indicative in both Polish and English. In Polish this fact can be explained by the idiosyncrasies connected with the verb-noun compound form of *mieć nadzieję* 'to hope,' but such an explanation cannot be applied to the English equivalent. Yet another problem with (non)veridicality is connected with the so-called polarity subjunctive, which according to Giannakidou (2000) is a nonveridical context due to the presence of negation. The pattern of polarity subjunctive triggered by the negation of epistemic verbs is productive in Polish, but completely inactive in English. This can be so because the selected mandative subjunctive in English is not subjunctive in cross-linguistic terms, but more interesting are Polish epistemic verbs, which under negation can select for both the indicative and the subjunctive, like the case of the predicate *wierzyć* 'to believe'. Giannakidou and Mari (2020, p. 267) suggest that "[...] some attitude verbs can be

underspecified with regard to whether they are construed with nonveridicality or not, as well as with respect to the types of modal spaces they take as arguments.” In this sense, some verbs carry an underspecified attitude meaning which can shift and such shifts trigger changes in complementation, including mood, complementizer type and temporal restrictions in “a chain of semantic dependency” (*ibidem*). If this line of reasoning were to be applied to Polish *wierzyć* ‘to believe,’ one would need to find out why the combination of this verb with negation gives a predication with an underspecified attitude meaning which can be followed by *że-* and *żeby-*clauses.

What also gives inconsistent results on the semantic level is the criterion of subjects coreference. In some languages, e.g., in Spanish, the subjunctive blocks coreference between the matrix and the embedded subject, which is known as obviation effects (Constantini, 2005; Quer, 2006). Nonetheless, this phenomenon seems to have a more complicated origin than just the indicative/subjunctive distinction. In Polish, coreferential possibilities are linked with the type of verb used in a *żeby-*clause: *l*-participle exhibits disjoint reference (except for the polarity context), the infinitive can give unspecified reference with the matrix subject being part of the embedded group subject, the *-no/-to* constructions trigger an arbitrary subject that cannot refer to the matrix one. Furthermore, the predicates which select for both a *żeby-*clause and an infinitive force disjoint reference for the subjunctive, e.g., *rozkazywać* ‘to order’ and *chcieć* ‘to want.’ Therefore, it seems that the availability of disjoint reference also stems from the construction of the whole complementation system in a given language. In the case of Polish, we can notice a meaning specialization between various forms, that is, if a predicate selects for both *żeby-*clause and the infinitive, then disjoint and joint reference follow accordingly. Also the three forms available in *żeby-*clauses do not duplicate their referential options. Similarly in English there are verbs which can select for both the subjunctive and the infinitive, like *to desire*, which leads to meaning specialization, that is, the subjunctive forces a disjoint reference whereas the infinitive a joint one. Such a specialization is analogous to the behaviour of some Romance languages, which use the subjunctive to trigger disjoint reference (see Coffas, 2015). Finally, the fact that the presence of negation in the polarity subjunctive allows for a coreference between subjects which is blocked in the case of the intensional subjunctive, like in Catalan (see Quer, 1998), additionally makes obviation effects an unreliable subjunctive diagnostic.

Moving to the morphosyntactic level, one also finds problems with using constituent movement as a subjunctive diagnostic. First, the postulated syntactic transparency of subjunctive clauses is difficult to apply in languages like English, where syntactic movement is not sensitive to the indicative/subjunctive distinction since long-distance *wh*-movement is allowed even from tensed complements (see Radford, 2009). In such a case one may try to see if the indicative/subjunctive contrast has any influence on island phenomena. However, the results of my grammaticality judgement study show that English does not exhibit transparency effects since subjunctive clauses do not systematically improve island violations. Movement constraints in English are rather linked with other factors, such as the type of island construction as well as specific aspects of sentence derivation and parsing. Second, transparency effects can be stronger or weaker depending on a specific syntactic context; therefore, we can only speak about scalar transparency of subjunctive clauses. In Polish, *żeby-*clauses in general were assessed better than the indicative ones and worse than the infinitival

ones. Nonetheless, even supposedly transparent *żeby*-clauses in Polish give degraded results when the subject position serves as an extraction site. In sum, it is difficult to make claims that the indicative/subjunctive distinction translates into opaque indicative clauses and transparent subjunctive clauses as what counts is always a specific syntactic context: type of extracted phrases, extraction site as well as the number and type of nodes crossed in the course of derivation. Moreover, at this point, one needs to mention specific lexical aspects which can impact movement possibilities. It has been observed many times that, for instance, factivity plays a role in restricting wh-extractions in the so-called “factive islands” as in English, where moving subjects and adjuncts out of complements to factive verbs gives ungrammatical results (Zubizarreta, 1982; Adams, 1985; Rooryck, 1992). This again shows that it is extremely hard to offer a generalization with respect to specific mood values without going back to the narrow context of a predicate and its properties.

Finally, major difficulty was encountered in the course of identifying the subjunctive on the pragmatic level. It turned out that pragmatic criteria for the indicative/subjunctive distinction, worked out on the basis of Romance languages, are far from universal. The corpus research in the present study revealed that the indicative/subjunctive contrast in Polish and English does not follow the one of assertion and non-assertion (Terrell and Hooper, 1974). In both Polish and English the majority of predicates select for indicative complements irrespective of the truth value of a proposition; subjunctive selection being restricted to the imperative predicates, which are neither asserted nor presupposed. I also examined the status of indicative and subjunctive clauses in discourse and failed to notice any uses of the subjunctive in either Polish or English that would be connected with signalling the relevance of information or its news value. Therefore, a question arises whether the indicative/subjunctive distinction is operative on the utterance level. In other words, it is questionable that the subjunctive has some universal pragmatic load that would systematically contribute to utterance interpretation although in some languages, such as Spanish, mood can be used as a discourse strategy (see Lavandera, 1983; Lunn, 1989). Obviously, the choice of mood does contribute to utterance interpretation as it is an important element of linguistic input in the process of utterance interpretation in a given context. Nonetheless, in this sense mood is no different from other verbal categories, such as tense or aspect. Tense locates an event in time, aspect defines an internal organization of an event and mood conveys the speaker’s/subject’s attitude to an event. Still, there is a difference between basic information signalled by basic linguistic categories and the use of the subjunctive as a discourse strategy, such as the use of the *-ra* past subjunctive in journalism for known information to show that it lacks newsworthiness (see Lunn, 1989). While the subjunctive in Romance languages can operate on both levels, that is, basic information about an event and additional information about its discourse status, *żeby*-clauses in Polish and the selected mandative subjunctive in English stay on the basic level.

Summing up, the aforementioned problems with subjunctivehood criteria all revolve around the notion of a predicate and its properties. On all the levels of analysis, there are predicates that defy existing theoretical explanations and blur any systematic contrast between the indicative and the subjunctive. Still, based on the observations in the present study, I propose the following narrow definition of the subjunctive:

SUBJUNCTIVE

Mood of embedded clauses, realized inflectionally or periphrastically, triggered by volitive/directive predicates in nonveridical contexts, systematically distinguished from the indicative in terms of morphosyntactic properties, whose primary function is to express the speaker's or the subject's desired state of events.

The above definition narrows down the subjunctive to the context of complement clauses and the subjunctive defined so should be distinguished from the subjunctive understood as part of the indicative/subjunctive distinction (corresponding to the typological Realis/Irrealis). What follows is that I see mood as a category divided into two parts: first, the indicative corresponding to Realis, and, second, a group of irrealis values, including subjunctive (in my narrow definition), conditional, optative, etc. Moreover, my definition includes different formal realizations of the subjunctive subsumed under one notion of the desired state of events. It also emphasizes the link between the subjunctive and the group of volitive/directive predicates, whose properties are extended in their complement clauses, e.g., temporal properties of subjunctives can be shaped by the meaning of matrix predicates. Finally, it allows capturing the difference between *zeby*-clauses and mandative subjunctive clauses: the first are realized periphrastically, serve as complements to volitive/directive predicates, emerge in nonveridical contexts and systematically contrast with the indicative *ze*-clauses on the morphosyntactic level; whereas the latter have a limited inflectional realization, do not emerge in the nonveridical context of matrix negation and lack a systematic contrast with the indicative in terms of morphosyntax.

Problems for further research

The problems discussed in the present study pertain to a more general issue of mood as a basic linguistic category. As visible in the literature on the subjunctive and in the present discussion, subjunctivehood is a heterogeneous phenomenon difficult to be characterized notionally and formally. The notional approach to the subjunctive is followed by Giannakidou (2016, p. 212), who claims that the subjunctive is a notional category cross-linguistically and its main meaning component is nonveridicality. The opposite stance is taken for example by Wiltschko (2016, p. 251), who argues that the subjunctive is a language-specific category devoid of universal meaning. Based on the present research, there are problems with both approaches. On the one hand, I showed that both in Polish and English nonveridicality is not a sufficient condition to trigger the subjunctive. On the other hand, the subjunctive does have its meaning, that is, directive/volitive import connected with the subject's command over an embedded proposition. Therefore, I would follow Giannakidou's perspective, but still more research is necessary to make more precise the notion of nonveridicality as a criterion of subjunctivehood.

Another problem which requires more scholarly attention is whether mood is a category ascribed to a sentence/utterance or a property of a given verb. As already stated, numerous generalizations on the indicative/subjunctive distinction have difficulty capturing the selectional properties of all the predicates. In Chapter 1 I referred to Portner's (2018) definition of the core mood, which includes two subcategories: the verbal mood (indicative, subjunctive and infinitive) and the sentence mood (imperative, declarative, interrogative).

Portner (2018) also stresses that the verbal mood is the mood of mainly embedded clauses and such a narrowing of the indicative/subjunctive distinction to the verbal mood seems promising as any attempts to translate this distinction into the utterance level failed for both Polish and English. Therefore, the broad definition of mood, which was given in (1.1), needs further reconsideration as the subjunctive does not appear to systematically guide utterance interpretation:

MOOD

Expression of modal meaning encoded grammatically by means of either verbal inflection or a special verb form combined with other linguistic exponents, e.g., particles and complementizers, whose function is to express the speaker's or the subject's attitude towards a proposition.

In contrast to the definition in (1.1), the definition above does not include the fragment about “guiding the modal interpretation of a clause's meaning in a given context” and the expression of modal meaning is linked with the verb/clause level, that is, “the speaker's or the subject's attitude towards a proposition.” Such a line of narrower reasoning was already presented by Raposo (1985) and Suñer and Padilla-Rivera (1985), who linked temporal properties of the subjunctive with the properties of specific predicates (see Section 1.2.2.2). Nonetheless, a question remains whether we should distinguish between the moods of root sentences, e.g., declarative or imperative, and the moods of embedded sentences, i.e., indicative or subjunctive, which can be treated as extensions of matrix predicates and their properties. At this point, my tentative answer would be to treat root and subordinate contexts in the same way but with a focus on mood as a verbal phenomenon without any further extensions to the utterance level. Yet another solution would be to distinguish between clause types, like declarative and interrogative (see Adger, 2003, p. 241), and moods, such as indicative and subjunctive.

There also remain a number of irrealis contexts which are not connected with selectional properties of specific predicates. Apart from complement clauses, Polish *żeby* can introduce purpose clauses, relative clauses, subject clauses and optative clauses. In these contexts only subject clauses are related to specific predicates, i.e., those with non-canonical subjects. Similarly in English, there are loose ends, including the uses of the modal preterite in constructions with adverbial clauses, introduced for example by *as if*, or hypothesis verbs, e.g., *to wish*, which are traditionally labelled as the past subjunctive. Furthermore, both Polish and English have conditional sentences, which bear resemblance to the subjunctive as described in the present study: in Polish the particle *by* is part of *gdyby*, which introduces potential conditional and unreal conditional clauses with past-tense forms and pluperfect forms; in English the so-called past subjunctive is used in the protasis of hypothetical conditionals. If one assumes a narrow definition of the subjunctive (as in the present study), that is, the mood of embedded clauses linked with a special category of predicates, then additional research is required to classify the remaining unreal contexts. Therefore, the picture of the mood system in Polish and English seems divided into two parts: the solid category of the indicative and the dispersed group of irrealis contexts whose part is the subjunctive.

Lastly, I believe that the approach to the research on the subjunctive adopted in the present study can be used in investigations of modal constructions in other languages. As

stressed by Topolińska (2010), terminology developed in traditional grammars can be misleading and rooted in local research conventions, which can as a result obstruct any systematic comparison between languages. In other words, constructions/structures labelled differently in different languages may in fact be analogous in their form and meaning and, conversely, what named in the same way in different languages in the end may turn out to be different linguistic phenomena (*ibidem*). Therefore, having respect for traditional descriptions of mood in Polish and English, which – I hope – is proved by the detailed literature reviews in relevant chapters, I started with a typological picture of the subjunctive, which included its properties on all levels of analysis: semantics, morphology, syntax and pragmatics. Thanks to that typological overview, I gained diagnostic tools that could be applied to Polish and English. Further, I was able to choose constructions/structures, which match the typological description of the subjunctive and subject them to a more careful scrutiny. As a result, I showed that *żeby*-clauses in Polish fulfill subjunctivehood criteria and can be classified as subjunctive, although traditionally they are not treated in this way. In contrast, in English I demonstrated that constructions traditionally known as the mandative subjunctive in fact do not exhibit subjunctive properties. Furthermore, the conducted analysis not only contributes to the descriptions of mood in Polish and English, but also the data from Polish and English add up to the cross-linguistic picture of the subjunctive. First, the analyzed linguistic data show that pragmatic properties of subjunctives attested in Romance languages do not have a universal character. Second, they confirm that semantic and morphosyntactic properties of the subjunctive should be analyzed in the context of complementation patterns available in a given language as well as existing semantic and syntactic relations between the matrix and the embedded clause.

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APPENDIX 1:

LISTS OF EXPERIMENTAL STIMULI FOR THE GRAMMATICALITY JUDGEMENT STUDY ON POLISH

Instruction (original)

Twoim zadaniem jest intuicyjna ocena poprawności poniższych zdań.

Przeczytaj uważnie każde zdanie i oceń je w skali od 1 do 5, gdzie

“1” oznacza zdanie “zupełnie niepoprawne”

“5” oznacza zdanie “zupełnie poprawne”.

Możesz więc wybrać każdą wartość od 1 do 5, ale pamiętaj, że im wyższa wartość, tym w Twojej ocenie zdanie jest lepsze.

Translated into English

Your task is to intuitively assess the correctness of the following sentences.

Please read each sentence carefully and rate them on the scale from 1 to 5, where

“1” means that a sentence is “totally incorrect”;

“5” means that a sentence is “fully correct”.

You can choose any value you want from 1 to 5, but remember that the higher the value, the better the sentence is in your opinion.

Version A (in the order of presentation)

1. Piotr dobrze zapamiętał, gdzie sprzedają najtańsze papierosy.
2. Mama nie chce, żebyśmy niczego kupowali w sklepie.
3. Nasza sąsiadka lub jej dzieci głosowała w wyborach prezydenckich.
4. Kto Dorota żąda, żeby przestał kłamać?
5. Czy chcesz dla nas kupić ten nowy materac?
6. W czyje ubrania Joanna wystroiła się od stóp do głowy?
7. Kiedy Kasia żąda, żebyśmy odpowiedzieli na jej list?
8. W której części miasta te budynki leżą pod gruzami?
9. W jakim instrumencie gra muzyk, o którym mówisz?
10. Gdzie Daria myśli, że oferują lepsze pieczywo?
11. Którego drzwi otwierają ciężko, bo zamek jest zepsuty?
12. Dlaczego Ewa pragnie przeczytać jego nową powieść?
13. Twój tato nie twierdzi, że powinniśmy oglądać tego programu.
14. Nie toleruję ciągłego przychodzenia przez twoich kolegów do naszego domu.
15. Kto Julia myśli, że spotkał jej męża w sklepie?
16. Co Piotr wierzy, że uda nam się sprzedać?
17. Nigdy nie kupuję nowe spodnie, tylko wolę używane.
18. Joanna nie jest typowana nową wychowawczynią tej klasy.
19. Gdzie nasza sąsiadka chce pożyczyć pieniądze?
20. Julia nie pragnie przeczytać żadnej książki.
21. Tomasz mu pragnie, żebym powiedział prawdę.
22. Kto Tomasz wierzy, że ukradł ten samochód?
23. Twój tato nie twierdzi, że nikt powinien przychodzić na spotkanie.
24. Czyją książkę Karolina pragnie przeczytać?
25. Twój tato nie radzi nam wybierać tego komputera.
26. Piotr nie pragnie, żebym mu opowiedział tej plotki.
27. Nie daliśmy rady wejść do szczytu góry, więc zawróciliśmy.
28. Twój tato nie radzi wybierać żadnego samochodu.
29. Czy te informacje o rozwodzie są wysłane z palców?
30. Czego twój tato radzi nam nie wybierać?
31. Nie widziałem żadne nowe oferty pracy w urzędzie.
32. Magda nie myśli, że sklep jej zaoferuje nowych kolczyków.
33. Joanna nie pamięta, którądy wraca się od jej babci.
34. Krzysztof nie pragnie, żebym nikomu o tym powiedział.
35. Nasza nauczycielka nie czyta wypracowań, które są niestarannie napisane.
36. Dlaczego jego plan spalił się na panewce?
37. Czego Kasia żąda, żebyś mi nie mówił?
38. Twój tato mu twierdzi, że nie powinniśmy sprzedawać samochodu.
39. Od jak dawna kupiłeś samochód, który jest zepsuty?
40. Czyje wykłady uczęszczają studenci, którzy są najbardziej ambitni?
41. Kto odkupiliście dom, gdzie tyle lat mieszkał?
42. Nie dałem ogłupić, bo byłem czujny.
43. Joanna nie pragnie przeczytać tej książki.
44. Piotr zapomniał i nie wezwał nas pod poradę.
45. Czego Joanna myśli, że jej mąż się boi?
46. Ja i moi koledzy dużo grają w koszykówkę, więc nie mam czasu na inne sporty.
47. Joanna nie myśli, że sklep jej niczego zaoferuje.
48. Nasz kierownik lub jego asystentka znalazła te dokumenty.
49. Kiedy Daniel wierzy, że mamy sprzedać nasz dom?
50. Dorota im pragnie przeczytać bajkę.
51. Julia mi żąda, żebyś nic nie mówił.
52. Ona nie lubi słodczy, więc nie częstuj jej cukierkami.
53. Gdzie znajduje się muzeum, które Piotr chce odwiedzić?
54. Kasia nie żąda, żebyś brał tej bluzy.
55. Dlaczego Piotr pragnie, żebyś mu powiedział prawdę?

56. Joanna lubi oglądać filmy, w których pojawiają się zwierzęta.
57. Nie wzorujmy się jej ubiorem, ale masz swój styl.
58. Nie musisz ciągle patrzeć spod zegarek, bo to mnie denerwuje.
59. Co Piotr pragnie, żebym mu powiedział?
60. Kierownik nam nie rozumie i upiera się w starych rozwiązaniach.
61. Nasza sąsiadka nie chce niczego pożyczać.
62. Kto Jacek pragnie, żeby powiedział mu prawdę?
63. Jak złożyć meble, które właśnie przywieźli?
64. O co protestują górnicy, którzy przyjechali do Warszawy?
65. Czy odnaleźli już paczkę, którą zgubił kurier?
66. Kiedy twój tato twierdzi, że powinniśmy zrobić remont?
67. Mama nie chce, żebyśmy kupili nowej kuchenki w sklepie.
68. Moja nauczycielka nie zapomniała tym przykrościom.
69. Czego mama chce, żebyśmy poszukali w sklepie?
70. Nasza solenizantka nie życzyła sobie kwiatów, bo ma na nie uczulenie.
71. Kto w który wynik konkursu czeka?
72. Dziecko sąsiadki ubrudziło i trzeba je teraz umyć się.
73. Jego Tomasz wierzy, że powinienś przeprosić.
74. Czego twój tato twierdzi, że nie powinniśmy zrobić?
75. Nasza sąsiadka nie chce pożyczyć naszych nart.
76. Kiedy twój tata radzi nam nie kupować mieszkania?
77. O której godzinie jest wjazd do szczytu góry?
78. Jemu mama chce, żebyśmy kupili nową kurtkę.
79. Twój tato zawsze obstaje nad swoim zdaniem, więc nawet mu nie przekonuje.
80. Nie będę napisał książki, bo nie mam talentu literackiego.
81. Gdybym był na twoim miejscu, to nie szukałbym nowych pracowników.
82. Twój tata go radzi nie wybierać do zarządu.
83. Na jaką wysokość lubisz alpinistów, którzy się wspinają?
84. Jemu nasza przyjaciółka chce pożyczyć pieniądze.
85. Piotr nie wierzy, że uda nam się nikomu sprzedać tego samochodu.
86. Kto mama chce, żeby zrobił zakupy?
87. Kto twój tato twierdzi, że sprowokował bójkę?
88. Który kolega ma do wszystkiego dwie lewe rączki?
89. Piotr, mimo że się stara, nie skłoni mnie wyjazdem.
90. Gdzie mama chce, żebyśmy kupili świeże warzywa?
91. Rodzice nie unikają tego tematu, więc możesz się śmiało o to zapytać.
92. Jak dużo Tomasz mieszka w miejscu, gdzie jest zieleni?
93. Piotr nie wierzy, że uda nam się sprzedać tego samochodu.
94. Czy nasza sąsiadka znalazła już fachowca do naprawy pralki?
95. Nie wymagam ciągłego skupienia, jeżeli jesteś zmęczony.
96. Co nasza sąsiadka chce pożyczyć?
97. Któremu dziecku wasi rodzice chcieli niebo przychylić?
98. Joanna go myśli, że trzeba zaprosić na obiad.
99. Czy powiedziałeś mamie o pracy, którą właśnie dostałeś?
100. Kasia nie żąda, żebyś o żadnej wyprawie mówił.

Version B (in the order of presentation)

1. Kiedy myślisz, czy przesyłka dojdzie?
2. Martwi mnie fascynowanie przez ciebie sportami walki.
3. Nie palę, bo nigdzie można.
4. Solenizantce nic ładnego nikt kupił na imieniny.
5. Domagamy się oddania pożyczki, którą zaciągnęliście rok temu.
6. Od kiedy przyjeżdżanie przez Piotra do domu cię denerwuje?
7. Piotr nie karze dzisiaj nikogo spotykać.
8. Czego życzysz sobie, żebym nie robił?
9. Nikogo znajomego widziałeś dziś nad jeziorem.
10. Kiedy robotnicy będą zamontowali półki, które wczoraj kupiłeś?
11. Czy nasza gospodarka przez ostatnie lata była efektowna?
12. Jak długo trzeba było formułować komisję dyscyplinarną?
13. Czego Kasia odpowiedziała, że masz zażądać?
14. Nasi rodzice będą zbudowali dom przez trzy lata, co jest krótkim okresem.
15. Nie wiem, gdzie można zjeść najlepszą pizzę.
16. Kasi nie spodoba się prezent, który dla niej wybrałeś.
17. Kasia go odpowiedziała, że każdy polubi.
18. Nigdy nie zwracam uwagi na krytyki mojej sztuki.
19. Nasz kierownik ich nakazuje zwolnić.
20. Kiedy w końcu Piotr przejmie sprawy w swoje ręce?
21. Nasz kierownik nie nakazuje niczego montować.
22. Wujek nie przeczytał, że żadnych słodyczy wolno mu jeść.
23. Kto domagacie się, żeby oddał dokumenty?
24. Joanna nie założyła tej sukienki, bo nie pasowała do okazji.
25. Ją życzę sobie, żebyście przeprosili.
26. Gdzie proponujesz, czy się mamy spotkać?
27. Kiedy Joanna obchodzi swoje imieniny?
28. Zaproponowałem kupno domu, o którym nikt dawno nie mieszkał.
29. Którym samochód jest lepszym i dlaczego?
30. Nasz kierownik nigdy obchodzi imieniny, co mnie dziwi.
31. Od jak dawna Kasia kupiła dom, w którym nie działa kanalizacja?
32. Znaleźliśmy dokumenty, o których wspominałeś.
33. Rodzice nie radzą, żebyś żadnej sukienki wybrała.
34. Nie pamiętam, czy musimy brać ze sobą kurtki przeciwdeszczowe.
35. Po co Joanna wynajęła mieszkanie, w którym nawet nie mieszka?
36. Kto powiedzieli, że zgubił naszą walizkę?
37. Nie domagamy się, żebyś oddał tych dokumentów.
38. Gdzie życzysz sobie, żebym zorganizował przyjęcie?
39. Co nasz kierownik nakazuje zamontować?
40. Koledzy ją powiedzieli, że widzieli na lotnisku.
41. Czyją walizkę powiedzieli, że kurier zgubił?
42. Mama lub tata odwiedzają nas co tydzień i to jest bardzo miłe.
43. Piotr nijak umiał zaszyć dziurę w spodniach.
44. Kasia nie odpowiedziała, że niczego masz przeczytać.
45. Który ich syn jest adaptowany?
46. Rodzice nie radzą, żebyś wybierała tego chłopaka.
47. Jak mamy dotrzeć do miejsca, o którym mówisz?
48. Czego przeczytałeś, że nie wolno ci jeść?
49. Rodzice ich radzą, żeby Piotr pilnował.
50. Nie powiedzieli nam, że kurier zgubił żadnej walizki.
51. Jak Wiktor woli dzisiaj przygotować kurczaka?
52. Kasia nie odpowiedziała, że masz przeczytać tej książki.
53. Kto jest najbardziej mądrzejszy w twojej rodzinie?
54. Nikt wiedział o tym, co oni zrobili.
55. Gdzie nasz kierownik nakazuje zamontować te pułki?
56. Kiedy rodzice radzą, żebyś zaczęła się uczyć?
57. Nauczycielka nie kazała mi czekać, aż przyjadą rodzice.
58. Gdzie Kasia odpowiedziała, że można obejrzeć ten film?
59. Od kiedy obowiązują nas te przepisy?

60. Kto przeczytałeś, że nie może jeść słodczy?
61. Żaden sąsiad pojawił się na zebraniu, które dziś się odbyło.
62. Nie brakuje nam jabłkami.
63. Czyje dokumenty domagacie się, żebym oddał?
64. Czy Piotr dalej pragnie kupić nowy samochód?
65. Nie życzę sobie, żebyś nigdy tego robił.
66. Jak powiedzieli, że kurier zgubił nasze dokumenty?
67. Jego domagamy się, żebyś wybrał na opiekuna.
68. Nie domagamy się, żebyście nikomu oddawali tych dokumentów.
69. Gdzie sądzisz, kto się zgromadzi?
70. Joanna razem z siostrami lubi dania warzywne, więc ugotujmy coś wegetariańskiego.
71. Czyje filmy wolisz dzisiaj oglądać?
72. Czy ty też uważasz, że ten ogród to dziewiąty cud świata?
73. Znikąd widać było pomocy.
74. Jak długo znalazłeś mieszkanie, w którym nikt nie mieszka?
75. Nie jest piękną mężczyzną, a i tak ma żonę.
76. Nie życzę sobie, żebyście oglądali tego filmu.
77. Jego przeczytałeś, że nie powinniśmy wybierać na burmistrza.
78. Nie przeczytałem, że wolno ci jeść surowych pomidorów.
79. Piotr przybyli na przyjęcie z Katarzyną, ale trochę się spóźnili.
80. Kto Magda odpowiedziała, że napisał tę książkę?
81. Kasia nie lubi nosić tej garsonki na specjalne okazje.
82. Jacek mi woli powiedzieć prawdę.
83. Co Kasia lubi nosić na specjalne okazje?
84. Kto życzysz sobie, żeby poprowadził ceremonię?
85. Czego rodzice radzą, żebyś pilnowała?
86. Kiedy sądzisz, kto przyjedzie na jej imieniny?
87. Nie powiedzieli, że kurier znalazł naszej przesyłki.
88. Kiedy Kasia lubi nosić swoją nową garsonkę?
89. Jak domagacie się, żeby Piotr oddał pożyczkę?
90. Dlaczego przeczytałeś, że nie wolno jeść tłustych potraw?
91. Piotr nie karze dzisiaj oglądać tego filmu.
92. Kasia nie lubi nosić żadnych sukienek na specjalne okazje.
93. Kto rodzice radzą, żeby wybrał nazwę restauracji?
94. Czy twój tato wie coś o mieście, w którym pracujesz?
95. Dlaczego ich córka jest ich kamieniem u nogi?
96. Nasz kierownik nie nakazuje zamontować tej półki.
97. Kierownik nie kazał wyładowywać tych pudeł, chyba że coś źle zrozumiałem.
98. Kasia zastanawia się, czy wolno jej zjeść taką tłustą potrawę.
99. Magda mu lubi kupować prezenty.
100. Skąd zakładamy, kto przyjedzie na wesele?

Version C (in the order of presentation)

1. Gdzie przeczytaliście jej nową powieść, której akcja toczy się?
2. Joanna nie marzy, żeby mąż jej podarował żadnych kwiatów.
3. Rodzice faworyzowali żadnego dziecka.
4. Kto zrobiłam zdjęcie, na którym prezentuje się niekorzystnie?
5. Dokąd nasza solenizantka woli, żeby jej przyjaciele z nią poszli?
6. Nasza kierowniczką i jej kot przeszły na drugą stronę ulicy.
7. Piotr nie zapamiętał, że mamy przynosić kwiatów.
8. Czy Kasia uświadomiła sobie, kiedy trzeba oddać raport?
9. W jaki sposób odwiedziłeś sąsiadów, którzy ciągle zachowują się?
10. Nauczyciel nie nakazuje, żebyś poprawił zadania.
11. Marta nie musi unikać tłustych potraw.
12. Kto uświadomiłeś sobie, że ma dziś imieniny?
13. Dlaczego założyłaś sukienkę, która nie pasuje do okazji?
14. Nie potrzebujesz przeczytać mojego raportu.
15. Twój tato nie lubi tego filmu, ponieważ jest za długi.
16. W jaki sposób Joanna marzy, żeby Piotr jej się oświadczył?
17. W którym sklepie kupiłaś te kolczyki?
18. Nie uświadomiłem sobie, że nikt pamięta o moich imienninach.
19. Kasia ich marzy, żeby spotkać na wakacjach.
20. Na jaki kolor podziwiałaś ścianę, którą rodzice pomalowali?
21. Piotr zawsze chodzi tylko tam, gdzie chce.
22. Kiedy rodzice wyjeżdżają na wakacje, o których tyle mówisz?
23. Nie uświadomiłeś sobie, że zamknąłem zamka do drzwi.
24. Nasi sąsiedzi nie czuli dym, więc nie wezwali straży pożarnej.
25. Nasza solenizantka nie karze, żeby on jej nic kupował.
26. Ile kupiłaś łódkę, która kosztowała?
27. Jak długo my dyskutowali o tych problemach?
28. Czyja opinia przekonywuje cię najbardziej?
29. Piotr im zapamiętał, że mamy nie przynosić nowych ubrań.
30. Kto Piotr zapamiętał, że nic mu nie przyniósł?
31. Kto Kasia wątpi, że posiadają duży dom?
32. Czy podoba wam się filmowa adaptacja tej książki?
33. Jak potrzebujesz wydrukować to sprawozdanie?
34. Co Joanna marzy, żeby mąż jej podarował?
35. Czego twoja nauczycielka umie wymagać?
36. Nikomu życzę takiej tragedii, którą on ma.
37. Kiedy przypuszczasz, kto nas odwiedzi?
38. Czyje uświadomiłeś sobie, że są dziś imieniny?
39. Dokąd uświadomiłeś sobie, że oni mogli pojechać?
40. Do czego mąż podarował jej naszyjnik, który nie pasuje?
41. Czy twoi chłopcy też ciągle się tłuczą bez powodu?
42. Nasza solenizantka im woli, żeby nie dziękować za prezent.
43. Która dziewczynka kopła twoją córkę, kiedy nie patrzyłaś?
44. Kto nauczycielka nakazuje poprawić sprawdzian, którego nie zdał?
45. Tomasz nie zapamiętał, że mamy niczego przynosić.
46. Twoja nauczycielka nie umie prowadzić zajęć.
47. Kasia nie wątpi, że jej sąsiedzi posiadają nowego samochodu.
48. Nie śpieszyłam się, bo było jeszcze sporo czasu.
49. Joanna nie pisze artykułami do gazet, bo nie ma talenta.
50. Jego nauczyciel nakazuje, żeby przeprosić.
51. Ile Piotr zjadł potrawę, która miała kalorii?
52. Jak głęboko poznałeś nurka, który schodzi pod wodę?
53. Ile lubisz filmy, które zdobyły Oscarów?
54. Który kwiat rosnął tak szybko, a teraz usechł?
55. Nasza solenizantka nie woli, żebyśmy dla niej kupowali kwiatów.
56. Jeśli nie pamiętasz, co zadała nauczycielka, to zadzwoń do Kasi.
57. Jego uświadomiłeś sobie, że są dziś imieniny.

58. Jego Marta wątpi, że jej sąsiedzi unikają.
59. Joanna poznała chłopaka, z czym jej siostra wcześniej chodziła.
60. Twoja nauczycielka nie umie od nikogo wymagać.
61. Muszę sprzedać nasz samochód, z którym wiąże się tyle wspomnień.
62. Żadna mężczyzna nie jest dla niej wystarczająco dobra.
63. Co Kasia wątpi, że jej sąsiedzi posiadają?
64. Skąd Marta musi sprowadzić te leki?
65. Jak Martyna wątpi, że jej brat gra w piłkę?
66. Nie lubię nosić tej sukienki, ale dzisiaj zrobię wyjątek.
67. Skąd Tomasz zapamiętał, że trzeba to przywieźć?
68. W tym szpitalu niczym się zarazisz, więc bądź spokojnym.
69. Joanna nie marzy, żeby mąż jej podarował pierścionka.
70. Twoja nauczycielka jej umie wytłumaczyć wszystkie zadania.
71. Marta ją musi poznać.
72. Jak nauczyciel nakazuje, żeby uczniowie napisali wypracowanie?
73. Twój tato nie kupił tego samochodu, mimo że miał wystarczająco dużo pieniędzy.
74. Kasia nie rozumie, dlaczego jej rodzice wolą spędzać wakacje w domu.
75. Kupiłem sobie spodni, których nikt inny nie ma.
76. Gdzie nie powinniśmy wybierać burmistrza, który nie mieszka?
77. Jego potrzebujesz wynająć do tej pracy.
78. Czego Marta musi unikać?
79. Żadna nauczycielka chce uczyć w naszej szkole, ponieważ dojazd jest trudny.
80. Czy Piotr napisał już sprawozdanie, które jest na jutro?
81. PKP poszerzył ofertę połączeń kolejowych, które wcześniej nie funkcjonowały.
82. PRL było państwem opresyjnym i pozbawionym wolności obywatelskich.
83. Czego Krzysztof zapamiętał, że mamy nie przynosić?
84. Czego nasza solenizantka woli, żebyśmy nie kupowali?
85. Marta nie musi nikogo unikać.
86. Syn Piotra wcale nie dostał samochód na gwiazdkę.
87. Czyje zadanie nauczyciel nakazuje, żebyś pomógł poprawić?
88. Kasia nie wątpi, że jej sąsiedzi z nikim się spotykają.
89. Żadnej składaj mi obietnice, bo i tak Ci nie wierzę.
90. Nie potrzebujemy przeczytać niczych sprawozdań.
91. Nie zostawiłem zeszytu na biurku i jestem tego pewny.
92. Czyje sprawozdanie potrzebujesz przeczytać?
93. Nauczyciel nie nakazuje, żebyśmy żadnych zadań poprawiali.
94. Kto nasza solenizantka woli, żeby nie przychodził na przyjęcie?
95. Nikt potrzebuje tego komputera, ale jeszcze go nie wyrzucam.
96. Od kiedy twoja nauczycielka wie o twoich problemach?
97. Kto nauczyciel nakazuje, żeby musiał poprawić sprawdzian?
98. Kto Joanna marzy, żeby podarował jej naszyjnik?
99. W jaki sposób twoja nauczycielka umie wytłumaczyć te zadania?
100. Nie dałem mu papierosami, bo żadnych miałem.

APPENDIX 2:

RESULTS OF CONTROL SENTENCES FOR THE GRAMMATICALITY JUDGEMENT STUDY ON POLISH

Control condition/Filler sentence	Mean
Grammatical questions	4.73
A. Czy powiedziałeś mamie o pracy, którą właśnie dostałeś?	5.00
A. Czy odnaleźli już paczkę, którą zgubił kurier?	4.92
A. Gdzie znajduje się muzeum, które Piotr chce odwiedzić?	4.92
A. Czy chcesz dla nas kupić ten nowy materac?	4.62
A. Jak złożyć meble, które właśnie przywieźli?	4.77
A. Czy nasza sąsiadka znalazła już fachowca do naprawy pralki?	4.92
B. Po co Joanna wynajęła mieszkanie, w którym nawet nie mieszka?	4.63
B. Od kiedy obowiązują nas te przepisy?	4.94
B. Jak mamy dotrzeć do miejsca, o którym mówisz?	4.69
B. Czy twój tato wie coś o mieście, w którym pracujesz?	4.63
B. Kiedy Joanna obchodzi swoje imieniny?	5.00
B. Czy Piotr dalej pragnie kupić nowy samochód?	4.63
C. Dlaczego założyłaś sukienkę, która nie pasuje do okazji?	4.88
C. Czy Kasia uświadomiła sobie, kiedy trzeba oddać raport?	4.65
C. Kiedy rodzice wyjeżdżają na wakacje, o których tyle mówisz?	4.12
C. Od kiedy twoja nauczycielka wie o twoich problemach?	4.71
C. W którym sklepie kupiłaś te kolczyki?	4.88
C. Czy Piotr napisał już sprawozdanie, które jest na jutro?	4.76
Grammatical affirmatives	4.73
A. Joanna lubi oglądać filmy, w których pojawiają się zwierzęta.	5.00
A. Nasza nauczycielka nie czyta wypracowań, które są niestarannie napisane.	5.00
A. Piotr dobrze zapamiętał, gdzie sprzedają najtańsze papierosy.	4.46
B. Znaleźliśmy dokumenty, o których wspominałeś.	5.00
B. Kasia zastanawia się, czy wolno jej zjeść taką tłustą potrawę.	4.69
B. Domagamy się oddania pożyczki, którą zaciągnęliście rok temu.	4.75
C. Muszę sprzedać nasz samochód, z którym wiąże się tyle wspomnień.	4.82
C. Nie lubię nosić tej sukienki, ale dzisiaj zrobię wyjątek.	4.71
C. Twój tato nie lubi tego filmu, ponieważ jest za długi.	4.41
Grammatical negatives	4.58
A. Joanna nie pamięta, którą wraca się od jej babci.	4.54
A. Ona nie lubi słodczy, więc nie częstuj jej cukierkami.	4.92
A. Nie wymagam ciągłego skupienia, jeżeli jesteś zmęczony.	4.62
A. Gdybym był na twoim miejscu, to nie szukałbym nowych pracowników.	4.85
A. Nasza solenizantka nie życzyła sobie kwiatów, bo ma na nie uczulenie.	4.85
A. Rodzice nie unikają tego tematu, więc możesz się śmiało o to zapytać.	4.54
B. Kierownik nie kazał wyładowywać tych pudeł, chyba że coś źle zrozumiałem.	4.25
B. Nauczycielka nie kazała mi czekać, aż przyjadą rodzice.	3.81
B. Joanna nie założyła tej sukienki, bo nie pasowała do okazji.	4.50
B. Nie wiem, gdzie można zjeść najlepszą pizzę.	4.38
B. Kasi nie spodoba się prezent, który dla niej wybrałeś	4.88
B. Nie pamiętam, czy musimy brać ze sobą kurtki przeciwdeszczowe.	4.56
C. Piotr zawsze chodzi tylko tam, gdzie chce.	4.88
C. Nie śpieszyłam się, bo było jeszcze sporo czasu.	4.65
C. Jeśli nie pamiętasz, co zadała nauczycielka, to zadzwoń do Kasi.	4.76
C. Kasia nie rozumie, dlaczego jej rodzice wolą spędzać wakacje w domu.	4.88
C. Twój tato nie kupił tego samochodu, mimo że miał wystarczająco dużo pieniędzy.	4.47

Control condition/Filler sentence	Mean
Ungrammatical questions	1.62
A. *Od jak dawna kupiłeś samochód, który jest zepsuty?	1.69
A. *Na jaką wysokość lubisz alpinistów, którzy się wspinają?	1.46
A. *Jak dużo Tomasz mieszka w miejscu, gdzie jest zieleni?	1.31
A. *Kto odkupiliście dom, gdzie tyle lat mieszkał?	1.38
A. *O co protestują górnicy, którzy przyjechali do Warszawy?	3.85
A. *W jakim instrumencie gra muzyk, o którym mówisz?	1.69
A. *O której godzinie jest wjazd do szczytu góry?	2.46
A. *Czyje wykłady uczęszczają studenci, którzy są najbardziej ambitni?	1.92
A. *Kto w który wynik konkursu czeka?	1.23
A. *Którego drzwi otwierają ciężko, bo zamek jest zepsuty?	1.08
B. *Kiedy myślisz, czy przesyłka dojdzie?	1.38
B. *Kiedy sądzisz, kto przyjedzie na jej imieniny?	1.44
B. *Kiedy robotnicy będą zamontowali półki, które wczoraj kupiłeś?	1.75
B. *Od kiedy przyjeżdżanie przez Piotra do domu cię denerwuje?	2.88
B. *Którym samochód jest lepszym i dlaczego?	2.06
B. *Kto jest najbardziej mądrzejszy w twojej rodzinie?	1.94
B. *Gdzie sądzisz, kto się zgromadzi?	1.31
B. *Gdzie proponujesz, czy się mamy spotkać?	1.31
B. *Skąd zakładamy, kto przyjedzie na wesele?	2.69
B. *Od jak dawna Kasia kupiła dom, w którym nie działa kanalizacja?	2.13
B. *Jak długo znalazłeś mieszkanie, w którym nikt nie mieszka?	1.56
C. *Na jaki kolor podziwiałeś ścianę, którą rodzice pomalowali?	1.12
C. *W jaki sposób odwiedziłeś sąsiadów, którzy ciągle zachowują się?	1.59
C. *Do czego mąż podarował jej naszyjnik, który nie pasuje?	1.65
C. *Kto nauczycielka nakazuje poprawić sprawdzian, którego nie zdał?	1.47
C. *Kto zrobiłam zdjęcie, na którym prezentuje się niekorzystnie?	1.24
C. *Ile Piotr zjadł potrawę, która miała kalorii?	1.12
C. *Gdzie przeczytaliście jej nową powieść, której akcja toczy się?	1.71
C. *Gdzie nie powinniśmy wybierać burmistrza, który nie mieszka?	1.12
C. *Ile kupiłaś łódkę, która kosztowała?	1.00
C. *Kiedy przypuszczasz, kto nas odwiedzi?	1.41
C. *Ile lubisz filmy, które zdobyły Oscarów?	1.41
C. *Jak głęboko poznałeś nurka, który schodzi pod wodę?	1.59
Ungrammatical affirmatives	1.93
A. *Piotr zapomniał i nie wezwał nas pod naradę.	2.38
A. *Twój tato zawsze obstaje nad swoim zdaniem, więc nawet mu nie przekonuje.	1.46
A. *Dziecko sąsiadki ubrudziło i trzeba je teraz umyć się.	2.00
B. *Nasi rodzice będą zbudowali dom przez trzy lata, co jest krótkim okresem.	1.63
B. *Martwi mnie fascynowanie przez ciebie sportami walki.	1.75
B. *Zaproponowałem kupno domu, o którym nikt dawno nie mieszkał.	1.94
C. *Joanna poznała chłopaka, z czym jej siostra wcześniej chodziła.	1.59
C. *Kupiłem sobie spodni, których nikt inny nie ma.	2.88
Ungrammatical negatives	2.08
A. *Nie musisz ciągle patrzeć spod zegarek, bo to mnie denerwuje.	1.69
A. *Kierownik nam nie rozumie i upiera się w starych rozwiązaniach.	1.77
A. *Piotr, mimo że się stara, nie skłoni mnie wyjazdem.	2.92
A. *Nie daliśmy rady wejść do szczytu góry, więc zawróciliśmy.	2.85
A. *Joanna nie jest typowana nową wychowawczynią tej klasy.	2.77
A. *Nie wzorujemy się jej ubiorem, ale masz swój styl.	2.23
A. *Moja nauczycielka nie zapomniała tym przykrościom.	1.54
A. *Nie dałem ogłupić, bo byłem czujny.	2.69
A. *Nie będę napisał książki, bo nie mam talentu literackiego.	2.00
A. *Nie toleruję ciągłego przychodzenia przez twoich kolegów do naszego domu.	2.77
A. *Nigdy nie kupuję nowe spodnie, tylko wolę używanie.	1.62
A. *Nie widziałem żadne nowe oferty pracy w urzędzie.	2.15
B. *Nigdy nie zwracam uwagi na krytyki mojej sztuki.	3.00
B. *Żaden sąsiad pojawił się na zebraniu, które dziś się odbyło.	1.81
B. *Nikt wiedział o tym, co oni zrobili.	2.56
B. *Nie palę, bo nigdzie można.	2.13

Control condition/Filler sentence	Mean
B. *Nie brakuje nam jabłkami.	1.25
B. *Nikogo znajomego widziałeś dziś nad jeziorem.	1.44
B. *Solenizantce nie ładnego nikt kupił na imieniny.	1.50
B. *Znikąd widać było pomocy.	2.63
B. *Piotr nijak umiał zaszyć dziurę w spodniach.	2.44
B. *Nie jest piękną mężczyzną, a i tak ma żonę.	1.44
B. *Nasz kierownik nigdy obchodzi imieniny, co mnie dziwi.	1.69
C. *Żadnej składaj mi obietnice, bo i tak Ci nie wierzę.	1.41
C. *Nikomu życzę takiej tragedii, którą on ma.	2.00
C. *Żadna nauczycielka chce uczyć w naszej szkole, ponieważ dojazd jest trudny.	2.41
C. *Żadna mężczyzna nie jest dla niej wystarczająco dobra.	1.76
C. *Nie dałem mu papierosami, bo żadnych miałem.	1.76
C. *Nie zostawiłem zeszytu na biurku i jestem tego pewny.	3.12
C. *Syn Piotra wcale nie dostał samochód na gwiazdkę.	3.24
C. *Joanna nie pisze artykułami do gazet, bo nie ma talenta.	1.53
C. *Nasi sąsiedzi nie czuli dym, więc nie wezwali straży pożarna.	2.00
C. *Nikt potrzebuje tego komputera, ale jeszcze go nie wyrzucam.	2.24
C. *Rodzice faworyzowali żadnego dziecka.	1.18
C. *W tym szpitalu niczym się zarazisz, więc bądź spokojnym.	2.35
Degraded affirmatives	3.25
A. ?Nasz kierownik lub jego asystentka znalazła te dokumenty.	3.46
A. ?Nasza sąsiadka lub jej dzieci głosowała w wyborach prezydenckich.	2.08
A. ?Ja i moi koledzy dużo grają w koszykówkę, więc nie mam czasu na inne sporty.	2.54
B. ?Joanna razem z siostrami lubi dania warzywne, więc ugotujmy coś wegetariańskiego.	4.31
B. ?Mama lub tata odwiedzają nas co tydzień i to jest bardzo miłe.	4.25
B. ?Piotr przybyli na przyjęcie z Katarzyną, ale trochę się spóźnili.	2.00
C. ?Nasza kierowniczką i jej kot przeszły na drugą stronę ulicy.	2.59
C. ?PKP poszerzył ofertę połączeń kolejowych, które wcześniej nie funkcjonowały.	3.65
C. ?PRL było państwem opresyjnym i pozbawionym wolności obywatelskich.	4.12
Degraded questions	3.33
A. ?Czy te informacje o rozwodzie są wyssane z palców?	2.92
A. ?W czyje ubrania Joanna wystroiła się od stóp do głowy?	3.69
A. ?Dlaczego jego plan spalił się na panewce?	3.85
A. ?Który kolega ma do wszystkiego dwie lewe rączki?	4.15
A. ?W której części miasta te budynki legły pod gruzami?	3.00
A. ?Któremu dziecku wasi rodzice chcieli niebo przychylić?	3.15
B. ?Czy ty też uważasz, że ten ogród to dziewiąty cud świata?	4.06
B. ?Dlaczego ich córka jest ich kamieniem u nogi?	3.25
B. ?Kiedy w końcu Piotr przejmie sprawy w swoje ręce?	4.13
B. ?Który ich syn jest adaptowany?	3.63
B. ?Czy nasza gospodarka przez ostatnie lata była efektywna?	4.00
B. ?Jak długo trzeba było formułować komisję dyscyplinarną?	3.25
C. ?Czy podoba wam się filmowa adaptacja tej książki?	2.71
C. ?Który kwiat rosnął tak szybko, a teraz usechł?	2.82
C. ?Która dziewczynka kopła twoją córkę, kiedy nie patrzyłaś?	2.59
C. ?Czyja opinia przekonywuje cię najbardziej?	3.82
C. ?Czy twoi chłopcy też ciągle się tłuczą bez powodu?	3.76
C. ?Jak długo my dyskutowaliśmy o tych problemach?	1.94

Version A = 13 informants, version B = 16 informants, version C = 17 informants.

APPENDIX 3:

LISTS OF EXPERIMENTAL STIMULI FOR THE GRAMMATICALITY JUDGEMENT STUDY ON ENGLISH

Instruction

Welcome!

I am a PhD student at the University of Wrocław. As part of my PhD project, I need to conduct a study related to certain constructions in English. I would be very grateful if you could participate!

INSTRUCTIONS

In this questionnaire, you will see different English sentences. Your task will be to make a judgement regarding their grammatical acceptability.

Please read each sentence carefully and rate its grammatical acceptability on the scale from 1 to 5, where

“1” means that a sentence is “totally incorrect”;

“5” means that a sentence is “fully correct”.

You can choose any value you want, but remember that the higher the value, the better the sentence is in your opinion. Don't think about your answers for too long. What interests me more is your intuitive answer rather than what books or teachers have to say. The whole questionnaire should take around 20 minutes.

Version A (in the order of presentation)

1. Why don't you admire her ability of ignoring all the serious problems at work?
2. At what age did the council adopt the recommendation that every child go to school?
3. In what way did you reject the suggestion not to cross the border?
4. How much did that you father pay seem a basic requirement?
5. Why can't somebody else drive you to the nearest hospital for proper consultation?
6. Who do you think will become a new manager of the sales department?
7. What did your younger brother make a photograph of?
8. In what did your boss come to the conclusion that the company hadn't invested on time?
9. Which exam did that she had failed disappoint her mother?
10. When didn't your son participate the sports activities at school?
11. How much money didn't your sister return to your mother because of the job loss?
12. Who was that new pupil responsible for bringing books to classrooms?
13. Where didn't she find any elegant dresses for the cocktail party tonight?
14. What was that she buy a requirement?
15. How do they have the tendency to wash their hands?
16. Where did for your boss not to keep documents seem a problem?
17. Whose hotel can your sister choose for her summer holiday on the French Riviera?
18. How often is that John smokes cigarettes terrible?
19. With whom was that your colleague not cooperate a requirement?
20. What music does the DJ want how loud not to play at the end of the party?
21. Who hasn't ever been to a hospital either as a patient or a visitor?
22. In which room did her mother give her the advice that she not stay?
23. Where did she explain why this bus hadn't stopped?
24. Whose car are the police investigating where he has stolen?
25. How often doesn't your grandmother remember to lock the door before leaving her house?
26. Why didn't the mayor cancel the public debate over the reconstruction of the old bridge?
27. Who did your boss decide when he not employ?
28. How often does the mayor call council meetings after the crises started?
29. What time was for each child to start their lessons difficult?
30. How often did the history teacher give his pupils homework to do in pairs?
31. Where did the mayor make the decision that nobody sing loudly?
32. What time did the teacher instruct which task he do?
33. How long did she ask where Martina had stayed?
34. What did her parents recommend how she do on her own?
35. Who are they doing the preparation not to let into the country?
36. Why did you waste your time attending those ridiculous classes?
37. What does for every teenager not to be responsible for seem reasonable?
38. When didn't Peter ask about the details because he completely forgot?
39. How often is for your mother to change her job easy?
40. Where can't you park your car after the recent changes in the traffic policy?
41. Where are they going to make a cocktail party this year?
42. Who does that she didn't marry surprise you?
43. What can't be taken if we don't want to pay for excess baggage?
44. What is the new manager of the promotion department like in your opinion?
45. How much did that your cousin hadn't returned to you bother your wife?
46. When did John neglect the message from the boss about report deadlines?
47. Whose restaurant was well-known for their exotic and delicious desserts made just before serving?
48. Which car isn't your neighbor in need for repairing after the accident?
49. Why didn't the shop assistant mention about the price of that luxurious jacket?

50. For what reason didn't he bring his best to console his mother after her sister's death?
51. What did the teacher reject the argument that is bad for her pupils?
52. Which building did you give the permission to enter?
53. What did her parents recommend her how to do on her own?
54. Who was responsible for doing those changes in the final design?
55. Where did her sister suggest which café she not choose?
56. Who did your sister impose the requirement that her husband not dance with at the wedding party?
57. When isn't your landlord definitely going to visit you and collect the rent?
58. Who didn't have heated arguments with their roommates over using a bathroom?
59. What didn't the burglar steal from your country cottage in Devon?
60. Which car was your father going to put up for sale although it wasn't that old?
61. How much money will your sister achieve after completing the project?
62. Why not give up this task and move to another one?
63. Since when do the scientists support the theory that this virus hasn't been active?
64. Which book is he clarifying where he wasn't able to borrow?
65. Where does she live now after quickly moving out from Dorset?
66. What isn't Jane thinking to buy for her parents' wedding anniversary?
67. When should we come ready to go out if there is so much traffic on the roads today?
68. Where can your mother decide what time to go?
69. To which ex-boyfriend does her mother have the belief that she will eventually come back?
70. For what was that she not be responsible indubitable?
71. What color was the wedding dress that she had just rented from this luxurious boutique?
72. How did the colonel order which tank not to use?

Version B (in the order of presentation)

1. When isn't your landlord definitely going to visit you and collect the rent?
2. On which floor are the police investigating the claim that the witness found the body?
3. What are they working on the assumption that these lizards don't eat?
4. How often does the mayor call council meetings after the crises started?
5. Where are they going to make a cocktail party this year?
6. Which task did the teacher remind how to do?
7. How much money didn't your sister return to your mother because of the job loss?
8. Which prize do you wonder in which casino you can't win?
9. Who do you think will become a new manager of the sales department?
10. When didn't your son participate the sports activities at school?
11. For what was it obvious when she not be prepared?
12. What did that every pupil not bring seem a good recommendation?
13. When should we come ready to go out if there is so much traffic on the roads today?
14. Where does she live now after quickly moving out from Dorset?
15. Which exam did they take the decision that John not retake?
16. What did your younger brother make a photograph of?
17. Who was that new pupil responsible for bringing books to classrooms?
18. How much money will your sister achieve after completing the project?
19. Why did you waste your time attending those ridiculous classes?
20. How many children did Jerry query which family has?
21. What did the city council pass the resolution that every city-dweller not do with their gardens?
22. To whom did the lawyer propose which document not to give?
23. Who was responsible for doing those changes in the final design?
24. How often did the coach suggest which exercise he repeat?
25. Who didn't have heated arguments with their roommates over using a bathroom?
26. Which car was your father going to put up for sale although it wasn't that old?
27. Why not give up this task and move to another one?
28. What time was that every child get up a suggestion?
29. When did John neglect the message from the boss about report deadlines?
30. How often did the history teacher give his pupils homework to do in pairs?
31. Where can't you park your car after the recent changes in the traffic policy?
32. Whose restaurant was well-known for their exotic and delicious desserts made just before serving?
33. For what reason didn't he bring his best to console his mother after her sister's death?
34. How much was for your brother to pay a barrier?
35. Where didn't she find any elegant dresses for the cocktail party tonight?
36. Which car isn't your neighbor in need for repairing after the accident?
37. Whose best friends is that animals are your claim?
38. Where will your aunt advise how many plates to buy?
39. What time is that children don't start their lessons ridiculous?
40. When didn't Peter ask about the details because he completely forgot?
41. What color was the wedding dress that she had just rented from this luxurious boutique?
42. Who was that your sister hadn't divorced stupid?
43. Which medicine did the doctor ensure how long he not take?
44. What is for every criminal not to plead guilty of utter nonsense?
45. How often does your daughter have the tendency not to take part in her dancing classes?
46. What isn't Jane thinking to buy for her parents' wedding anniversary?
47. With whom did your teacher wonder why you hadn't started cooperating?
48. Why don't you admire her ability of ignoring all the serious problems at work?
49. Whose book did Camilla reject the advice not to read?

50. Which version of the book did Jane take the advice that she rewrite?
51. What time did Jane accept the proposal to start work?
52. Who is for your daughter to marry important?
53. What did that she had fallen ill with bother her husband?
54. Which present did they decide to whom John give?
55. How often doesn't your grandmother remember to lock the door before leaving her house?
56. Whose hotel can your sister choose for her summer holiday on the French Riviera?
57. What are they doing the preparation to redecorate?
58. How often did the government make the recommendation that each drive change tires?
59. What can't be taken if we don't want to pay for excess baggage?
60. When did that Philip change his job appear a helpful suggestion?
61. Which building is the city council planning not to demolish this year?
62. What will Jane explain why his son stole?
63. Why didn't the shop assistant mention about the price of that luxurious jacket?
64. What risk were you familiar with the argument that processed food didn't cause?
65. Why can't somebody else drive you to the nearest hospital for proper consultation?
66. What is the new manager of the promotion department like in your opinion?
67. How did you have the idea that he stole the money?
68. Why didn't the mayor cancel the public debate over the reconstruction of the old bridge?
69. What didn't the burglar steal from your country cottage in Devon?
70. Who hasn't ever been to a hospital either as a patient or a visitor?
71. How often was for your sister not to drink alcohol easy?
72. Who was that the doctor not cure of cancer unlikely?

Version C (in the order of presentation)

1. What did that each citizen be in control of look a clear recommendation?
2. Where will you enquire whose child has to stay?
3. For whom is your father planning where to wait?
4. What can you share the idea that we won't buy for Mary?
5. Which software do you support the proposal not to install?
6. When didn't Peter ask about the details because he completely forgot?
7. Where didn't she find any elegant dresses for the cocktail party tonight?
8. For whom did she ask where Frank hadn't been waiting longer than an hour?
9. What does for your teacher not to make seem untrue?
10. How much money will your sister achieve after completing the project?
11. Which house was it certain when his sister not sell?
12. How many trees did the mayor decide where not to plant?
13. What is the new manager of the promotion department like in your opinion?
14. How often did the history teacher give his pupils homework to do in pairs?
15. For what reason didn't he bring his best to console his mother after her sister's death?
16. What time did the mayor impose the requirement that each official start work?
17. How often doesn't your grandmother remember to lock the door before leaving her house?
18. When should we come ready to go out if there is so much traffic on the roads today?
19. Who was responsible for doing those changes in the final design?
20. Why did you waste your time attending those ridiculous classes?
21. Where can't you park your car after the recent changes in the traffic policy?
22. How many bottles did people have the tendency to buy?
23. About what does she recall who not to give information?
24. Who does that every parent educates seem his theory?
25. Of what was that he not be guilty evident?
26. What didn't the burglar steal from your country cottage in Devon?
27. Whose restaurant was well-known for their exotic and delicious desserts made just before serving?
28. What was it evident where he drink?
29. Who didn't have heated arguments with their roommates over using a bathroom?
30. When didn't your son participate the sports activities at school?
31. Why didn't the shop assistant mention about the price of that luxurious jacket?
32. What can't be taken if we don't want to pay for excess baggage?
33. How often did she have the motivation not to smoke at home?
34. Who hasn't ever been to a hospital either as a patient or a visitor?
35. Which house did Peter reject all the suggestion that he not sell?
36. Why can't somebody else drive you to the nearest hospital for proper consultation?
37. About what did her father come to the conclusion that she wasn't lying?
38. What did your younger brother make a photograph of?
39. Why don't you admire her ability of ignoring all the serious problems at work?
40. What did that every worker be like appear a ridiculous resolution?
41. When isn't your landlord definitely going to visit you and collect the rent?
42. Why didn't the mayor cancel the public debate over the reconstruction of the old bridge?
43. How much did the lawyer determine in what way she not pay?
44. When does everybody hold the opinion that our house needs redecorating?
45. Where are they going to make a cocktail party this year?
46. How many times did the doctor decide which pill she take?
47. Which car isn't your neighbor in need for repairing after the accident?
48. At whom was for his sister not to be angry a fact?
49. Who do you think will become a new manager of the sales department?
50. With what kind of salary did his uncle come up with the suggestion that he not find a job?

51. At whom is that your mother isn't angry irrelevant?
52. When did John neglect the message from the boss about report deadlines?
53. With what did the president approve the resolution that every teacher help pupils?
54. To whom are you making the attempt to give this letter?
55. Which dishwasher can your mother explain why she isn't going to buy?
56. Whose hotel can your sister choose for her summer holiday on the French Riviera?
57. How much was that your parents had paid for the house a fact?
58. Who was that new pupil responsible for bringing books to classrooms?
59. What time was she asking where the guests were going to arrive?
60. Which car was your father going to put up for sale although it wasn't that old?
61. How often does the mayor call council meetings after the crises started?
62. What color was the wedding dress that she had just rented from this luxurious boutique?
63. How much money didn't your sister return to your mother because of the job loss?
64. What was that Jane not be in charge of clear?
65. Whose book did for you to read appear a problem?
66. Where does she live now after quickly moving out from Dorset?
67. What isn't Jane thinking to buy for her parents' wedding anniversary?
68. Whose desk did the manager instruct where to move?
69. Where was that Cindy didn't stay true?
70. Why not give up this task and move to another one?
71. Which computer is for the manager to buy impossible?
72. Who did the evidence support the conclusion that she had murdered?

APPENDIX 4:

RESULTS OF CONTROL SENTENCES FOR THE GRAMMATICALITY JUDGEMENT STUDY ON ENGLISH

Control condition/Filler sentence	Mean
1) Grammatical non-negative	4.20
Why not give up this task and move to another one?	4.75
What is the new manager of the promotion department like in your opinion?	4.30
Who do you think will become a new manager of the sales department?	4.30
Whose hotel can your sister choose for her summer holiday on the French Riviera?	3.56
Where does she live now after quickly moving out from Dorset?	4.16
How often does the mayor call council meetings after the crises started?	3.39
Why did you waste your time attending those ridiculous classes?	5.00
What color was the wedding dress that she had just rented from this luxurious boutique?	4.42
Whose restaurant was well-known for their exotic and delicious desserts made just before serving?	4.07
How often did the history teacher give his pupils homework to do in pairs?	4.58
Who was that new pupil responsible for bringing books to classrooms?	3.93
Which car was your father going to put up for sale although it wasn't that old?	3.91
2) Grammatical negative	3.79
When isn't your landlord definitely going to visit you and collect the rent?	2.23
What can't be taken if we don't want to pay for excess baggage?	3.86
Where can't you park your car after the recent changes in the traffic policy?	4.40
Who hasn't ever been to a hospital either as a patient or a visitor?	4.35
How often doesn't your grandmother remember to lock the door before leaving her house?	3.46
Why can't somebody else drive you to the nearest hospital for proper consultation?	4.58
Why didn't the mayor cancel the public debate over the reconstruction of the old bridge?	4.89
When didn't Peter ask about the details because he completely forgot?	2.79
What didn't the burglar steal from your country cottage in Devon?	4.47
Where didn't she find any elegant dresses for the cocktail party tonight?	3.04
Who didn't have heated arguments with their roommates over using a bathroom?	4.46
How much money didn't your sister return to your mother because of the job loss?	3.00
3) Degraded fillers	3.29
Where are they going to make a cocktail party this year?	3.25
How much money will your sister achieve after completing the project?	3.81
When should we come ready to go out if there is so much traffic on the roads today?	2.72
What did your younger brother make a photograph of?	3.49
Who was responsible for doing those changes in the final design?	4.54
When did John neglect the message from the boss about report deadlines?	4.47
Why don't you admire her ability of ignoring all the serious problems at work?	3.56
Which car isn't your neighbor in need for repairing after the accident?	2.04
What isn't Jane thinking to buy for her parents' wedding anniversary?	3.30
For what reason didn't he bring his best to console his mother after her sister's death?	2.60
When didn't your son participate the sports activities at school?	2.60
Why didn't the shop assistant mention about the price of that luxurious jacket?	3.12

Version A = 21 informants, version B = 13 informants, version C = 23 informants.

SUMMARY

The study presents the results of the research on the subjunctive on the basis of linguistic data from Polish and English. Various aspects of the subjunctive as an irrealis mood opposed to the indicative have been carefully investigated in many subfields of contemporary linguistics, such as: generative grammar, formal semantics, pragmatics, cognitive linguistics and linguistic typology. Research on the subjunctive has also covered a variety of languages, starting with the languages in which the subjunctive is inflectionally realized as a separate verbal paradigm traditionally included in descriptive grammars, e.g., in Romance languages, also covering the languages with a periphrastic realization of the subjunctive based on complementizers and particles, e.g., Greek and Russian, and ending with those where the subjunctive as a grammatical category is in a state of flux, e.g., English.

The literature review in the present work focuses on the subjunctive from the typological perspective, including distribution of this category, its form as well as semantic, morphosyntactic and pragmatic properties, which all constitute subjunctivehood criteria. Specifically, the discussion in this part of the study covers differences between the intensional subjunctive and the polarity subjunctive, predicates which select for subjunctive sentential complements, temporal properties of subjunctive clauses, relations between the matrix clause and the subjunctive embedded clause (subjects' coreference and syntactic transparency) as well as the impact of the subjunctive on the information structure and the status of a proposition in discourse. The analytical part of the study shows the results of the research on the complement clauses introduced by the complementizer *żeby* in Polish and the mandative subjunctive clauses in English. Relevant chapters include the results of the corpus research on the verbs selecting for the subjunctive in Polish and English based on the National Corpus of Polish and the Corpus of Contemporary American English as well as the results of the grammaticality judgement studies conducted on the groups of Polish and American native speakers.

The research findings in the present study show that *żeby*-clauses constitute a realization of the subjunctive understood in typological terms. They fulfill the distributional and formal criteria as well as exhibit other subjunctive properties, such as presence in nonveridical contexts, temporal deficiency and syntactic transparency. In contrast, the selected mandative subjunctive in English does not satisfy subjunctivehood criteria because of the limited inflectional realization, the lack of polarity subjunctive as an important nonveridical context and the lack of transparency effects. Furthermore, the present discussion also shows numerous problems with subjunctive criteria. The most problematic criterion seems to be connected with unique pragmatic properties of the subjunctive and its role as a discourse strategy. Such properties, earlier attested in Romance languages, are not confirmed in the present study on the data from Polish and English.

Keywords: comparative grammar, modality, mood, subjunctive

STRESZCZENIE

Praca przedstawia wyniki badań dotyczących kategorii subjunktywu jako konstrukcji gramatycznej na przykładzie danych z języka polskiego i angielskiego. Problem właściwości subjunktywu, jako trybu nierzeczywistego sytuującego się w opozycji do trybu oznajmującego, jest przedmiotem szerokich badań prowadzonych w wielu nurtach współczesnego językoznawstwa, takich jak gramatyka generatywna, semantyka formalna, pragmatyka, językoznawstwo kognitywne oraz typologia językowa. Badania nad subjunktywem obejmują różnorodne języki, począwszy od języków, w których ta kategoria realizowana jest fleksyjnie jako osobny paradygmat czasownika tradycyjnie ujęty w gramatykach opisowych, np. języki romańskie, przez języki o peryfrastycznej realizacji subjunktywu za pomocą spójników i partykuł, np. język grecki i język rosyjski, aż do języków, w których ta kategoria ulega zanikowi, np. język angielski.

Część teoretyczna rozprawy szczegółowo przedstawia kategorię subjunktywu w ujęciu typologicznym, uwzględniając dystrybucję tej kategorii, jej realizację formalną oraz właściwości semantyczne, morfo-syntaktyczne oraz pragmatyczne, które składają się na kryteria definicyjne tej wartości trybu. Dyskusja w tej części rozprawy obejmuje m.in. różnice między subjunktywem intensjonalnym (*intensional subjunctive*) a subjunktywem biegunowym (*polarity subjunctive*), grupy predykatów, dla których subjunktyw stanowi argument propozycjonalny, właściwości temporalne zdań w trybie subjunktyw, relacje między zdaniem głównym a zdaniem dopełnieniowym w trybie subjunktyw (referencja podmiotów i przesunięcia składniowe) oraz wpływ subjunktywu na strukturę informacyjną zdania i szerzej – na status zdania w dyskursie. Z kolei część badawcza przedstawia wyniki badań własnych nad zdaniami dopełnieniowymi wprowadzanymi przez łącznik *żeby* w języku polskim oraz zdaniami dopełnieniowymi dla predykatów wolitywnych w języku angielskim (tzw. subjunktyw czasu teraźniejszego, ang.: *mandative subjunctive*). Poszczególne rozdziały w tej części pokazują wyniki badań korpusowych dotyczących predykatów, dla których zdania dopełnieniowe realizowane są w trybie subjunktyw, przeprowadzonych na materiale językowym zebranych w Narodowym Korpusie Języka Polskiego i Korpusie Współczesnej Odmiany Amerykańskiej Języka Angielskiego (Corpus of Contemporary American English) oraz wyniki badań językoznawczych, polegających na ocenie poprawności gramatycznej zdań, przeprowadzonych na grupie rodzimych użytkowników języka polskiego oraz rodzimych użytkowników odmiany amerykańskiej języka angielskiego.

Uzyskane wyniki badań pozwalają stwierdzić, że zdania dopełnieniowe wprowadzane przez *żeby* w języku polskim są realizacją subjunktywu, gdyż wykazują cechy właściwe tej wartości trybu opisane w innych językach, takie jak: właściwa dla tego trybu forma i dystrybucja, związek z kontekstami niewerydykalnymi, zależność temporalna w stosunku do zdania głównego oraz przejrzystość składniowa. W odróżnieniu od języka polskiego, subjunktyw czasu teraźniejszego w języku angielskim nie spełnia kryteriów definicyjnych subjunktywu ze względu m.in. na ograniczoną realizację fleksyjną, niewystępowanie w niektórych kontekstach niewerydykalnych oraz brak przejrzystości składniowej. Ponadto analiza omawianych konstrukcji w języku polskim i angielskim pozwoliła sformułować wnioski dotyczące użyteczności poszczególnych kryteriów definicyjnych subjunktywu. Szczególne wątpliwości budzi przypisywanie badanemu trybowi uniwersalnych właściwości pragmatycznych na poziomie wypowiedzi i jej statusu w dyskursie, gdyż takie właściwości nie zostały potwierdzone w niniejszej pracy na danych z języka polskiego i angielskiego.

Słowa kluczowe: gramatyka porównawcza, modalność, tryb łączący, subjunktyw