The coordinators *i* and *z* in Polish:
A cognitive-typological approach (PART 1)

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Abstract: Developed within the frame of cognitive and typological linguistics, the present study examines the taxonomical status of the lexemes *i* and *z* in Polish. To achieve this aim, the author analyzes the compliance of the two forms with the prototype of coordinate-hood and the structure of their maps of polyfunctionality. The evidence demonstrates that *i* is a canonical instantiation of the category of coordinate-hood while *z* is less canonical. Additionally, the two lexemes yield different maps of polyfunctionality (with distinct prototypicality nuclei), which reflects their distinct diachronic and conceptual origin. The map of *i* radiates from the value of 'also' while the map of *z* radiates from a comitative sense.

This article – the first in a series of two – presents the framework underlying the research and introduces the empirical evidence related to the lexeme *i*.

Keywords: Polish, coordination, cognitive linguistics, typology, radial categories, maps

1. Introduction

Developed within the frame of cognitive linguistics and linguistic typology, the present study aims to analyze the taxonomical status of two lexemes that in Polish may be used in a broadly understood coordinating function, namely *i* and *z* (Buttler, Kurkowska & Satkiewicz 1971; Kallas 1993; Haspelmath 2004; Bhat 2004; Willim 2012; Prażmowska 2013).[1] In order to accomplish this objective, I will determine and compare the degree of coordinate-hood of *i* and *z*, as well as estimate the ranges of their functions and senses, including those that extend beyond coordination. The former objective will consist of testing the two items for the presence of features that are postulated as essential to the prototype of coordinators. These tests will reveal the extent to which *i* and *z* approximate that prototype, and hence will determine their degree of canonicity as coordi-

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[1] In this study coordinating constructions (and thus terms such as coordinator, coordinand, coordination, coordinate-hood) will only refer to conjunctive coordinating constructions, i.e. the so-called 'and'-type. (Haspelmath 2004:5). Other types of coordination can be disjunctive coordination (the 'or'-type), adversative coordination (the 'but'-type) and causal coordination (the 'for'-type; Haspelmath 2004:5-6). In coordinating constructions such as *John and Mary*, *and* is a coordinator while the elements linked by it are coordinands.

nators. The later objective entails the comparison of the maps of polyfunctionality of the two forms, and the assessment of their cartographic overlap and/or dissimilarity (Haspelmath 2004).

Due to its length, the study is divided into two articles. The present article – the first in a series of two – will be organized in the following manner. In section 2, I will explain the theoretical framework that underlies the analysis. In section 3, the empirical evidence showing the phonetic, morpho-syntactic and discourse-pragmatic properties of the lexeme *i* will be introduced. Lastly, in section 4, interim conclusions will be drawn and the content of the next article will be outlines.

2. Theoretical framework

The suitability of a cognitive-typological approach for the study of functionally complex items and for the evaluation of their equivalence (or difference) with other, similar, components of a language cannot be overestimated. This suitability has its roots in that the method accounts both for the internal variability of a form (i.e. its polysemy or polyfunctionality) and for its coherence, representing the complex semantic or functional potential of that form as cognitively (both conceptually and diachronically) structured (see Janda 2015; Hamawand 2016). In this approach, two classes of ideas, adopted from cognitive linguistics and language typology, are crucial: (a) a grammatical category is a radial network organized around an idealized prototype that is instantiated in concrete languages by more or less canonical representatives; (b) the total meaning or function of a grammatical form attested in a language is a map structured along the (universal or crosslinguistically sound) grammaticalization path that this form has travelled (Janda 2015; Hamawand 2016).

In cognitive and typological linguistics, a definition of a grammatical category commences with postulating a prototype. A prototype is a mental ideal. It is constructed given the frequency and saliency of features exhibited by forms that are attested crosslinguistically and that are regarded as members of a certain linguistic taxon. A prototype encompasses and internalizes all the most relevant properties that are associated with the members of that category (Hamawand 2016:129). The principal relevance of a prototype resides in its ability to meaningfully structure a category by constituting its (this category) conceptual center (see below in this section). However, being a mental construct formulated by linguists a prototype does not exist in a real sense. More importantly, the prototype and the set of features that define it cannot be equaled with the category in question – the category being much more than its prototype.

More realistically, a category should be understood as a radial network whose members – i.e. forms actually attested crosslinguistically – are related to each other in terms of family resemblance. Certain members of this network offer all the features postulated for the prototype, while others only exhibit a number of them. The former can be viewed as canonical and imagined as populating the center of the taxonomical grid. The latter are less canonical or non-canonical, and are to be located in more peripheral spheres of this web. This approach is sufficiently flexible to include in the category all members

that resemble the prototype to a certain extent. This is possible because belonging to a category is not a matter of identity and perfect match, but rather the matter of degree and similarity. Instances where a form is non-canonical, thus, cease to be problematic (Janda 2015; Hamawand 2016:129-131).

As far as the category of a coordinator is concerned, its prototype exhibits, at least, seventeen features outlined in list L 1 below. The presence (or absence) of these features in concrete forms can be used to estimate the degree with which a given construction approximates the prototype of coordinate-hood. Inversely, it can be employed to determine the dissimilarity in the categorial status of similar, yet not identical, constructions that can be used to coordinate elements of a language (see for instance, Yuasa & Sadock 2002; Haspelmath 2004; 2007).

(**F 1**)   The construction unites two (or more) entities in a manner that corresponds to the operator $\wedge$ in first degree Classical logic or to $\cap$ in Set theory, implying that all the coordinated items satisfy a given proposition;[2]

(**F 2**)   No coordinand is more salient than the other; all exert an identical degree of control on the action or activity ('semantic symmetry'; Haspelmath 2004);

(**F 3**)   All coordinands exhibit an identical status of topicality – if one constitutes the topic of the clause, the other should also do so ('pragmatic symmetry'; Haspelmath 2004:16);

(**F 4**)   The order of the coordinands can be reversed with no implications for the truth conditions of the sentence ('syntactic symmetry'; Yuasa & Sadock 2002; Haspelmath 2004:35);

(**F 5**)   All the coordinands should be marked by the same grammatical case ('morphological symmetry'; Yuasa & Sadock 2002).[3]

(**F 6**)   Coordinated categories belong to the same lexical class and to the same syntactic type that is also the type of the whole construction ('morpho-syntactic symmetry'; Haspelmath 2004:34);

(**F 7**)   Two clauses that are coordinated exhibit intonational phrasing, being separated by an intonation break (Haspelmath 2004);

(**F 8**)   The equal control over the action by all the coordinands does not imply that this action is performed simultaneously, neither temporally nor spatially (Haspelmath 2004:15-16);

(**F 9**)   Independent pronouns are used, rather than clitics or affixes (Haspelmath 2004);

(**F 10**)   Coordination requires number agreement on the verb, and thus its plural form (Haspelmath 2004:18-19);

(**F 11**)   Coordinators can be employed with categories other than a N(oun) P(hrases) (Haspelmath 2004:19);

(**F 12**)   Individual (non-clausal) coordinators cannot be extracted and focused. Coordinators cannot be left behind and no coordinand can be moved outside of its position or its hosting conjunct. They cannot be questioned separately ('Coordinate Structure Constraint'; Haspelmath 2004:19, 28, 35; see also Ross 1967; Lakoff 1986; Kehler 1996, 2002);[4]

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[2] This criterion is similar to the intersective value of coordination postulated by Champollion (2016; see also Gazdar 1980, Partee & Rooth 1983, and Keenan & Faltz 1985 who argue for the intersective function of conjunctive coordination and use the operators $\wedge$ and $\cap$ to define it).

[3] The ideal of symmetry may be less realistic than it seems as coordinators often combine with one coordinand, being either pre-posed (proclitics and prefixes) or postposed (enclitics and suffixes; see below in this section).

[4] In generative approaches, two types of Coordinate Structure Constraint are distinguished: Conjunct Constraint (i.e. the movement of whole conjuncts) and Element Constraint (i.e. the movement of elements contained within a conjunct; Grosu 1973; Pollard & Sag 1994; Kehler 1996).

(**F 13**) Coordinating constructions do not allow for backward anaphora, whereby a pronoun in the first clause would be co-indexed with a full NP in the subsequent clause (Haspelmath 2004:35);

(**F 14**) Coordinators link multiple conjuncts and, thus, tolerate multiple NPs (Haspelmath 2004:17);

(**F 15**) If a coordinating construction includes more than two coordinands, a coordinator can be omitted with the exception of the last one (Haspelmath 2004:35);

(**F 16**) Coordinating constructions can be used bi-syndetically (Haspelmath 2004:17);

(**F 17**) In SVO languages, coordinating conjunctions precede the verb (Haspelmath 2004:16).

List 1: Features of the prototype of conjunctive coordination

Features 2, 8, 10, 12 and 14-17 listed above enable one not only to establish the degree of coordinate-hood of an item, but also to distinguish coordinating constructions from comitative constructions, which as will be explained below are conceptually and diachronically related to coordinators. Specifically, a comitative construction implies that only one member exerts full control over an action (cf. F 2); it entails the temporal and local simultaneity of the coordinands (cf. F 8); it fails to necessitate a plural form of the verb (cf. F 10); it allows extraction and focusing (cf. F 12); it does not tolerate multiple coordinands (cf. F 14); it does not allow the omission of an item that links NPs (cf. F 15); it is typically mono-syndetic (cf. F 16); and it follows the verb in SVO languages (cf. F 17; Haspelmath 2004).

Apart from being distinguishable for features mentioned above (which test grammatical forms for their proximity to the categorial prototype of coordinate-hood), coordinating constructions can differ in other properties. These properties are related to the arrangement of the coordinands and the coordinator(s), and to the semantic characteristics of the coordinands. To be exact, as far as mono-syndetic coordination is concerned, four or five possible arrangements of coordinands can be identified: [A] [co B];[5] [A co] [B]; [A] [B co], [co A] [B], and [A] [co] [B]. A coordinator can be sensitive to the lexical class of the coordinand, thus being restricted (or not) to a specific word class.[6] It can also be sensitive to the semantic properties of the coordinand (e.g. animate or human, proper vs. common; Haspelmath 2004:12). Some clausal coordinators imply the sameness of the subject while others suggest their distinctiveness (Haspelmath 2004:13). They may also exhibit additional meaning of sequentiality, similar to 'and then'. It should be noted that although all these properties enable us to further structure the category, they have little bearing for the categorial status of a form and, therefore, cannot be employed for the purpose of diagnosis.

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[5] Since the English conjunction *and* is argued to represent this type, a degree of asymmetry seems to be implied in most coordinating constructions. The symbols "A" and "B" refer to the subsequent coordinands. The symbol "co" stands for 'coordinator'.

[6] This sensitivity is related to category hierarchy, which links the strategies of conjunctive coordination in the following implication sequence depending on the category of the coordinand: CP – VP – AP – NP (Haspelmath 2004:12; see also Payne 1985:5, who postulates a separate phase for PP, arguably located between AP and NP).

In individual languages, apart from being used as genuine coordinators (constituting more or less canonical instantiations of the prototype), a given coordinating item usually offers other grammatical functions. Indeed, coordinators are highly polyfunctional, being crosslinguistically able to communicate a variety of functions, e.g. comitative, manner, instrument, agent, comparison, and existence, as well as the senses similar to the lexemes 'also' and 'even' in English (Haspelmath 2004:19-24). A map is an elegant manner for representing this relatively messy and multifarious polyfunctionality of items that, at least in some cases, function as coordinators.

A map is a model of the total meaning or function of a form that is found in a language. In this paper, a specific type of map will be employed, namely a map that has a diachronic dimension. Such a map geometrically structures the polyfunctionality of a form by matching each function (or sense) exhibited by that form with a stage on the grammaticalization processes (path), which that form has followed and which is crosslinguistically regular. The map schematizes the evolution of a class of grammatical constructions from their chronological and conceptual inputs to possible outputs. The regularity of the map has its roots in the pervasiveness of certain types of developments or certain extents of polyfunctionality attested in the world's languages. It can be interpreted as (quasi-)universal and used to structure the total meaning of forms given the synchronic array of their uses (Andrason 2016a; 2016b).[7]

The map indicates that each sense or function is cognitively motivated as it is derived from its conceptual and diachronic predecessor by means of universal mechanisms that enable meaning extensions, e.g. metaphor, metonymy, synecdoche or abduction. As a result, the polyfunctionality of a form can be viewed not only as structured but also as cognitively coherent. However, this coherence resides not in a shared or invariant meaning that transverses the entire form, but rather in the diachronic process that underlies it. It is the historical reiteration of the cognitive mechanisms responsible for subsequent meaning extensions that licenses the semantic and functional unity of the construction. That is to say, while two adjacent functions or senses are conceptually connected – they share certain semantic or functional properties that enabled the meaning extension from the predecessor to the successor – senses or functions located at the opposite extremes of the process may fail to share any semantic or functional characteristics. They are rather connected via a chain of x replications of motivated semantic extensions, thus exhibiting a family-resemblance relationship (Andrason 2016a; 2016b; Andrason & Locatell 2016).

The dynamic map of coordinators that will be used in this paper has tentatively been posited by Haspelmath (2004) on the basis of certain diachronic and/or synchronic regularities exhibited by coordinators crosslinguistically. In this map, two main diachronic inputs of coordinators can be identified: adverbs of the type of 'also' (related to the adverbial sense 'even') and comitative prepositions, arguably derived from expressions of existence (see Figure 1 below).[8] The map predicts that such original expressions grad-

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[7] If possible, such maps can (and should) be corroborated by comparative or direct diachronic evidence.

[8] For other possible sources of conjunctive coordinators, such as quantifier words (e.g. 'two', 'both' and 'all') and 'co-ordinative' pronouns see Paperno (2012:12; see also Mithun 1988 and Malchukov 2004).

ually evolve to genuine coordinators (linking either verbs or nouns) via a unidirectional chain of intermediate functions.
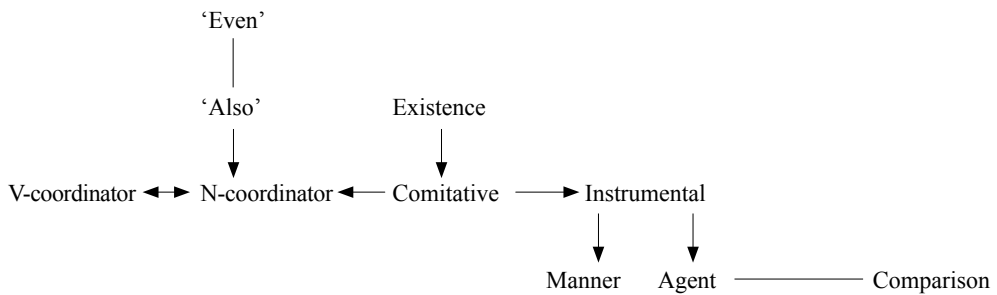

Figure 1: Map of the polyfunctionality of coordinators (adapted from Haspelmath 2004:21, 24)[9]

3. Evidence – Coordinator *i*

The lexeme *i* is typically associated with the meaning of coordination (Haspelmath 2004; Prażmowska 2013; Willim 2012). It is the most natural equivalent of the operator ∧ (coordinating conjunction) in first degree Classical logic and ∩ (intersection) in Set theory (cf. F 1; Marciszewski 1987). Its presence implies that all the coordinated entities satisfy a given proposition. For instance, in example (1) below, the use of *i* indicates that both the woman and the man are murderers.

(1)   Kobieta i   mężczyzna   zabili   dziecko
        woman   and[10]   man   killed.3PL   child
        'The woman and man killed the child'

The item *i* usually exhibits all features related to symmetry (cf. F 2-6). Semantically, all the coordinands are equally salient and exert an identical control over the activity (cf.

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[9] According to Haspelmath (2004:24), the conceptual and diachronic relationship between the genuine coordinating functions is bi-directional. This seems less likely given the hierarchy of lexical classes in coordinating constructions mentioned previously (cf. footnote 6) and that such a diachronic chain would presuppose the creation of a highly grammaticalized entity in a "*duex-ex-machina*" manner, i.e. without any more iconic and more semantically transparent input. Haspelmath distinguishes the value of 'even' and comparison only in non-directional maps (2004:21-23). Therefore, in Figure 1, I do not indicate the direction of a diachronic and conceptual extension that links these senses to other adjacent values. It should be noted that, in his maps, Haspelmath (2004:24) employs the term 'V-conjunction' and 'N-conjunction' instead of a (conjunctive) coordinator, affirming however that the notion 'conjunction' is limited to "the older literature" and should be avoided (ibid:6). A similar type of mapping has been posited by Malchukov (2004). Malchukov additionally connects conjunctive coordinators to an adversative function (*but*) via contrastive and mirative senses.

[10] The lexeme *i* will be glossed as 'and' in all the exmaples.

F 2). If we consider example (1), the participation of the man and the woman in the act of killing is equal. Neither item is given more salience or relevance.[11]

The coordinands tend to exhibit identical status of topicality, especially if they occupy an adjacent position (cf. F 3). This can be observed in left dislocation structures (2.a) and in an expression that is regularly used to introduce topics in tales (2.b):

(2) a. Co   do   kobiety   i   mężczyzny   to   zabili   to   dziecko
         as   for   woman   and   man   PART   killed.3PL   that   child
         'As for the woman and man, they killed that child'
     b. Byli   sobie   raz   król   i   królowa
         were.3PL   REFL   once   king   and   queen
         'Once upon a time there was a king and a queen'

The order of coordinands can be permutated and such elements reversed without any bearing on the truth condition of the proposition (F 4; cf. Prażmowska 2013:209)

(3) a. Tomek   i   Olek   i   Jarek   grali   w   piłkę
         Tomek   and   Olek   and   Jarek   played.3PL   in   soccer
         'Tomek, Olek and Jarek played soccer'
     b. Olek   i   Tomek   i   Jarek   grali.3PL   w   piłkę
         Olek   and   Tomek   and   Jarek   played   in   soccer
         'Olek, Tomek and Jarek played soccer'

If the coordinands are nouns, adjectives or pronouns – the lexical classes that are sensitive for grammatical case inflection in Polish – they often appear in the same case (cf. F 5). In examples (1-3) introduced above, all the coordinands are marked for nominative, while in (4.a) and (4.b) they are marked for accusative and instrumental, respectively. However, this is not a rule and coordinands in different cases can sometimes be linked as well (4.c-d; Patejuk & Przepiórkowski 2012a).

(4) a. Widziałem   chłopca   i   dziewczynkę
         saw.1SG   boy.ACC   and   girl.ACC
         'I saw a boy and a girl'
     b. Jeżdżę   do   pracy   pociągiem   i   autobusem
         go.1SG   to   work   train.INSTR   and   bus.INSTR
         'I go to work by train and bus'
     c. Obiecać   można   wszystko   i   wszystkim
         promise   may   everything.ACC and   everyone.DAT
         'One may promise everything to everyone' (Patejuk & Przepiórkowski 2012a:3)
     d. Odpowiem   komukolwiek   i   na   temat   czegokolwiek
         will.answer.1SG anyone.DAT   and   on   subject anything.GEN
         'I will answer anyone [and] concerning anything'

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[11] However, in certain cases where the coordinands are separated (for instance if one coordinand appears in the subject position while the other in the adjunct position; Prażmowska 2013) and/or where the verb is inflected in the singular, this semantic symmetry may be less evident (see further below in this section).

Coordinands linked by *i* commonly belong to the same lexical class (see examples 1-3 above where all the coordinands are nouns; cf. F 6). However, it is possible to find cases where this type of morpho-syntactic symmetry is not present (Patejuk & Przepiórkowski 2012a; Przepiórkowski & Patejuk 2014; Patejuk 2015a). In example (5), the coordinands belong to two distinct lexical classes, i.e. adjectives (*smutny*) and adverbs (*późno*; see also examples 6.a-b below):

(5)   Przyszedł   smutny   i   późno
         came.3SG   sad   and   late
         'He came sad and late'

The coordinands may also belong to different syntactic classes (Przepiórkowski & Patejuk 2014; Patejuk 2015) even though the opposite seems to be more frequent. In example (4.c), the first coordinand (*wszystko*) is a direct object whereas the second (*wszystkim*) is an indirect object. In (6.a), one coordinand (*co* 'what') is a direct object while the other (*gdzie* 'where to') is a locative adjunct (see Patejuk & Przepiórkowski 2012a; Patejuk 2015a). The same may be observed in example (6.b). In example (6.c), the first coordinand (*Janek*) functions as a canonical subject, while the other member of the coordinating construction (*Tomek*), which is introduced by means of *i*, behaves as an adjunct:[12] it is optional, occupies the positional typical of adjuncts, and fails to impose the plural agreement on the verb (compare Patejuk & Przepiórkowski 2012a; Prażmowska 2013).[13]

(6) a. Jest   co   i   gdzie   wyeksportować[14]
         is.3SG   what   and   where   export
         'There (certainly) is what and where to export to'
     b. Skąd   i   jakie   masz   wiadomości
         from.where   and   which   have.2SG   news
         'From where and what type of news do you have'
     c. Janek   przyszedł,   ah   i   Tomek
         Janek   came.3SG   ah   and   Tomek
         'Janek came, ah and Tomek [as well]'

The clauses that are coordinated by means of *i* usually exhibit intonational phrasing, being separated by an intonation break (cf. F 7). This pause can be relatively long, although it can also be shortened.

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[12] These uses can be understood as equivalent to *też*, *również* 'as well, too'.

[13] Przepiórkowski & Patejuk (2014) and Patejuk (2015a) convincingly demonstrate that the coordination of unlike categories and/or different grammatical functions – phenomena discussed already in Świdziński (1992, 1993) and Kallas (1993) – constitutes part of the Polish language system. Patejuk (2015a) offers an advanced and highly compelling formal model of coordination developed within Lexical Functional Grammar. She focuses her analysis precisely on the coordination of conjuncts that belong to different morphosyntactic categories or convey different grammatical functions. On lexico-semantic coordination in Polish and the analysis of its constituents from a formal perspective consult also Patejuk & Przepiórkowski (2012b, 2014) and Patejuk (2015b).

[14] Adapted from Patejuk & Przepiórkowski (2012a:12).

(7)   Napisałem   list   i   wysłałem   go
       wrote.1SG   letter   [pause]   and   sent.1SG   it
       'I wrote the letter and I sent it'

Although the coordinands tend to equally control the activity communicated by the verb, they do not necessarily imply local (8.a) and temporal (8.b) simultaneity (cf. F 8):

(8)   a.   Ja   i   Anna   widzieliśmy   ten   film
             I   and   Anna   saw.1PL   this   film
             'Anna and I saw this movie'
             Ja   w   Stellenbosch,   ona   w   Warszawie
             I   in   Stellenbosch,   she   in   Warsaw
             I   in   Stellenbosch,   she in   Warsaw'
       b.   Ja   i   Anna   graliśmy   kiedyś   w   rugby
             I   and   Anna   played.1PL   once   in   rugby
             'Anna and I have played rugby'
             Ja   dawno   temu,   ona   niedawno
             I   long.time   ago   she   not.long.time
             'I – long time ago, she – recently'

In instances where the choice between emphatic (independent) or dependent pronouns exists, the former may always be used.[15] In the first member of the coordinating construction, both types of pronouns can be employed. In contrast, the second (or further) coordinand cannot be a dependent pronoun – the emphatic form is obligatory. That is, after *i*, only emphatic pronouns can be employed (see example 9.a-b; cf. F 9). Furthermore, even in the first coordinand's position, there are certain constraints on the use of dependent pronouns. For instance, as suggested to me by an anonymous reviewer, if the second coordinand is a pronoun, speakers prefer the emphatic pronoun as the first coordinand (9.c).[16]

(9)   a.   Dałem   go   mu   / jemu   i   jego   mamie
             gave.1SG   it   him.DEP   him.INDEP   and   his   mom
             'I gave it to him and to his mom'
       b.   Dałem   książkę   jej   i   jemu   / *mu
             gave.1SG   book   her   and   him.INDEP   him.DEP
             'I gave the book to her and to him'
       c.   Życzę   dobrze   jemu   /*mu   i   jej
             wish.1SG   well   him.INDEP   /   him.DEP   and   her
             'I wish well him and her'

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[15] The contrast between emphatic pronouns and dependent pronouns roughly corresponds to the contrast between independent pronoun and cliticized pronouns, which is crucial for feature 9 (cf. Section 2).

[16] The use of dependent and emphatic pronouns in Polish is a complex matter that certainly requires a more in-depth analysis, especially with reference to prosody. Such a detailed analysis, however, goes beyond the scope of this paper. For a comprehensive study of phonological phrasing in Polish, to which the occurrence of dependent and emphatic pronouns is related, consult Kraska-Szlenk (2003).

The relation of *i* to the form of the verb is a complex matter in Polish (cf. F 10). If the coordinands occupy the subject position and precede the verb, they usually require plural agreement of the verb (10.a). The only exception – usually limited to literary texts – are cases where the subject corresponds to an abstract noun (10.b-c). This phenomenon is known as Last Conjunct Agreement (Willim 2012:238; Kallas 1993:64-66; Bogucka 2014; *contra* Citko 2004).

(10) a. Tomek   i   Olek   poszli   / *poszedł   do   szkoły
          Tomek   and   Olek   went.3PL   / went.3SG   to   school
          'Tomek and Olek went to school'
      b. Ból   i   miłość   zmieniła   go
          pain.MS   and   love.FM   change.3SG.FM   him
          'Pain and love changed him'
      c. Jej   pewność   życiowa i   zupełny   brak   wahań
          her   confidenceF.SG. lifeADJ and   complete   lackM.SG   doubts
          'Her confidence in life and complete lack of doubt
          działał   na   niego   uspakajająco
          acted.3SG.MS   on   him   calmingly
          had a calming effect on him' (Bogucka 2014)

Among such cases of singular agreement, by far the most frequent are those that include phrases with the same gender (11.a). If two nouns of different genders are coordinated, singular agreement is also possible, especially if verbal inflection does not differentiate gender, for instance in the present tense or the future tense (11.b). Nevertheless, there are cases of singular verbal forms even though the verb is inflected for gender (11.c; Bogucka 2014).

(11) a. Lipiec   i   sierpień   upłynął   w   pracy
          July.MS   and   August.MS   passed.3SG.MS at   work
          'For the firefighters, July and August
          strażaków   pod   znakiem   szerszeni
          firefighters   under   sign   hornets
          were marked by hornets' (Bogucka 2014)
      b. Śpiew   i   muzyka   rozwesela   serca
          singing.SG.MS   and   music.SG.MS   amuse3.SG   hearts
          'Singing and music amuses the heart' (Bogucka 2014)
      c. Ciekawość   i   zniecierpliwienie rosło   z   godziny   na godzinę
          curiosity.SG.FM   and   impatience.SG.NT grew.3.SG.NT from   hour   to   hour
          'Curiosity and impatience were growing by the hour' (Bogucka 2014)

If the coordinands follow the verb, both singular and plural forms are almost equally possible and largely unconstrained, although the former (known as First Conjunct Agreement) is sometimes perceived as more natural (12.a). At least in some cases, the use of the plural form becomes more acceptable if there is a pause between the verb and the two coordinands.

(12) a. Przyszedł   / przyszli   Tomek   i   Olek
         came.3SG   / came.3PL   Tomek   and   Olek
         'Tomek and Olek came'
     b. Do   pokoju weszli   /weszła   Maria   i   Jan
         in   room   came3.PL   /came.3SG.FM   Maria   and   Jan
         'Mary and John came into the room' (Bogucka 2014)

If one coordinand is found in the subject position preceding the verb, while the remaining ones appear after the verb, only the singular form of the verb may be used (13).

(13)   Tomek   przyszedł   /*przyszli   i   Olek   i   Jarek
         Tomek   came.3SG   came.3PL   and   Olek   and   Jarek
         'Tomek and Olek and Jarek came'

The coordinator *i* can link all possible lexical classes and syntactic categories (cf. F 11), be they Noun Phrases (14.a), Adjective Phrases (14.b), Prepositional Phrases (14.c), Adverbial Phrases (14.d), or Verbal Phrases (14.e).

(14) a. Tomek   i   Olek   przyszli
         Tomek   and   Olek   came.3PL
         'Tomek and Olek came'
     b. On   jest   mądry   i   ładny
         He   is.3SG   wise   and   handsome
         'He is wise and handsome'
     c. Pracuje   w   szkole   i   w   domu
         works.3SG   in   school   and   in   home
         'He works at school and at home'
     d. Śpiewa   głośno   i   ładnie
         sing.3SG   loudly   and   beautifully
         'He sings loudly and beautifully'
     e. Je   i   czyta
         eat.3SG and   read.3SG
         'He is eating and reading'

As for the properties related to extraction (cf. F 12), the following can be observed. In non-clausal coordination, the individual coordinand and the coordinator *i* (i.e. the structure [co B]) cannot be extracted (15.a). Neither it is possible to extract the coordinand from the scope of the coordinator that heads it and, thus, leave the coordinator behind (15.b). It is also ungrammatical to move the first coordinand and the coordinator (i.e. the structure [A] [co_]) and leave the second coordinand behind (15.c). However, the extraction of (and focusing) of the first coordinand is always admissible (15.d-e).[17] The second

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[17] Extraction also occurs in case of the so-called "across-the-board" phenomenon, where the same element is extracted from all the conjuncts (Ross 1967; Kehler 1996): *Jaką gazetę kupiłeś i przeczytałeś?* 'What newspaper did you buy and read?'

coordinand can also appear in the adjunct position, being separated from the first coordinand. In such a case, the verb must appear in the singular form (15.f).

(15)   a.   *[I   Tomka]$_i$ widziałem   Olka   [_]$_i$
                  and   Tomek.ACC   saw.1SG   Olek.ACC

        b.   *Kogo$_i$ kochasz Olka   i$_{-i}$
                  who   love.2SG Olek   and (cf. Ross 1967, Zwart 2005)

        c.   *Olka   i   widziałem $_{-i}$ Tomka
                  Olek.ACC   and   saw.1SG   Tomek.ACC

        d.   (To)   Olka   widziałem $_{-i}$ i   Tomka
                  FOC   Olek.ACC   saw.1SG   and   Tomek.ACC
                  'I saw Olek and Tomek' / 'It was Olek I saw, and Tome [as well]'

        e.   (To)   długo   pracował$_{-i}$ i   ciężko[18]
                  FOC   long   worked.3SG   and   hard
                  'He worked long and hard' / 'It was long that he worked, and hard [as well]'

        f.   Mama   przyszła   i   syn
                  mother   came.3SG.FM   and   son
                  'Mother and her son came'

The coordinator *i* usually does not allow for backward anaphora and, thus, for the use of a pronoun in the first clause that would be co-indexed with a full NP in the subsequent clause (16.a). However, in some rare instances one may construct sentences that make such a construction possible (16.b).

(16)   a.   *Odwiedziłem   jego$_i$ żonę   i   widziałem   Tomka$_i$
                  visited.1SG   his   wife   and   saw.1SG   Tomek.ACC[19]

        b.   Jego$_i$ mama   pracowała   w   fabryce i   więc   Tomek$_i$
                  his   mom   worked.3SG   in   factory and   thus   Tomek
                  'His mom worked in a factory, and thus Tomek
                  chodził   do   fabryki codziennie
                  went.3SG   to   factory every.day
                  would go to the factory every day'

As far as anaphoric possessives are concerned, it should be noted that that if the pronoun is co-indexed with its referent, only non-reflexive possessive pronouns are used in constructions coordinated by means of *i* (see Haspelmath 2004)

(17)   Tomek   i   jego   /*swój   syn   przyszli
        Tomek   and   his   /his.REFL   son   came.3PL
        'Tomek and his (own) son came'

The coordinator *i* tolerates multiple coordinands and thus multiple NPs (cf. F 14):

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[18] For some speakers, the use of *to* is odd or ungramamtical. However, one may construct a context where it is acceptable. Speaker A: *Ile lat pracował Kowalski?* Speaker B: *12 lat charował w kopalni.* Speaker A: *To długo pracował, i ciężko.*

[19] This sentence is correct if the pronoun *his* does not refer to the noun *Tomek* but has a different referent.

(18)   Tomek   i   Olek,   i   Marek,   i   Janek   przyszli
         Tomek   and   Olek   and   Marek   and   Janek   came.3PL
         'Tomek, Olek, Marek and Janek came'

If a construction includes more than two coordinands, a coordinator can be omitted with the exception of the last one (19.a; F 15). Inversely, the last coordinator can never be omitted (19.b).

(19)   a.   Tomek,   Olek,   Marek,   i   Janek   przyszli
                Tomek   Olek   Marek   and   Janek   came.3PL
                'Tomek, Olek, Marek and Janek came'
         b.   *Tomek   i   Olek,   i   Marek,   _Janek   przyszli
                Tomek   and   Olek   and   Marek   Janek   came.3PL

The coordinating constructions with *i* can be used bi-syndetically (usually with the meaning of 'both'; 20.a-b) apart from mono-syndetic (20.c) uses (cf. F 16):

(20) a. I   Tomek   i   Olek   przyszli
          and   Tomek   and   Olek   came.3PL
          '(Both) Tomek and Olek came'
      b. I   Tomka   i   Olka   można   tam   spotkać
          and Tomek.ACC   and   Olek.ACC   one.may   there   meet
          'One may meet there (both) Tomek and Olek'
      c. Tomek   i   Olek   przyszli
          Tomek   and   Olek   came.3PL
          'Tomek and Olek came'

Even though Polish is an SVO language, it typically allows for a great variation of word order. This renders the validity of the test related to feature 17 questionable. In general, even though the coordinator usually precedes the verb when linking subjects (21.a), it can also be used in position typical of prepositions introducing adjuncts (21.b-c; see also example 6.c introduced previously). In sentences like those in (21.a-b), the verb must appear in its singular form.

(21) a. Tomek   i   Olek   poszli   do   szkoły
          Tomek   and   Olek   went.3PL   to   school
          'Tomek and Olek went to school'
      b. Tomek   poszedł   do   szkoły   i   Olek
          Tomek   went.3SG   to   school   and   Olek
          'Tomek went to school, and Olek (as well)'
      c. Poszedł   Tomek   do szkoły   i   Olek
          went.3SG   Tomek   to school   and   Olek
          'Tomek went to school, and Olek (as well)'

Apart from the above properties that test the coordinator *i* for its proximity to the prototype of coordinate-hood (features F 1-17), the *i* coordinating construction offers

other characteristics. Even though this construction exhibits a great degree of symmetry (as has been previously demonstrated in this section), its arrangement is [A] [co B] rather than [A] [co] [B].[20] This stems from the fact that [co B] can be moved (*Tomek* ₋ᵢ *przyszedł* [*i Olek*]ᵢ) while [A co] or [co] cannot (*[*Tomek i*]ᵢ *przyszedł* ₋ᵢ *Olek* and *I* ᵢ *przyszedł Tomek* ₋ᵢ *Olek*; see examples 15.a-f introduced previously). The coordinator *i* is neutral for the case. It does not provide a grammatical case to the noun that follows – its case being rather generated by the verb or the syntax of the clause. Accordingly, the coordinand headed by *i* may be found in any grammatical case, including vocative. The coordinator is not sensitive for any word class, being acceptable with all lexical classes and syntactic categories. In general, the use of *i* is not conditioned by the semantic traits of the coordinands, being found, for instance, with all types of nouns (abstract, concrete, proper, animate, inanimate, etc.). However, certain morpho-syntactic properties of the entire coordinating construction may depend on the semantics of the coordinands. For example, abstract inanimate nouns behave differently from other nouns as far as the number agreement of the verb is concerned. Although the coordinator *i* typically implies the sameness of the subjects when it links clauses, two different subjects can be sometimes coordinated (e.g. *Tomek przyszedł o piątej i Olek zaraz po tym wyszedł* 'Tomek arrived at 5 and Olek left right after').[21] The coordinator *i* may also exhibit a consecutive value. For instance, in biblical texts, it is commonly used to render the idea of sequenciality expressed by the *wayyiqtol* tense, a sequential form *par excellence* in Biblical Hebrew.

Even though the use of *i* as a verbal and nominal coordinator is perceived by native speakers as the most prototypical of that lexeme, the same grammatical form offers other senses or functions, being relatively polysemous. First, *i* may be used with a force, to a degree, similar to the adverbs 'also, too, as well'. In this usage, it is roughly synonymous to the Polish adverbs such as *też, także, jeszcze* and *również*, functioning as "wykładnik podobieństwa" (*Wielki Słownik Języka Polskiego PAN* [Polish Academy of Sciences Great Dictionary of Polish] 2016, Karłowicz, Kryński & Niedźwiedzki 1902:71; see also examples 6.c and 21.b-c).

(22) a. Tomek   i   Marek,   i   Jarek   przyszli;   ah   i   Olek
           Tomek   and   Marek   and   Jarek   came.3PL   ah   and   Olek
           'Tomek, Marek, and Jarek came; ah Olek too'
      b. Jest   sława,   a   więc   będzie   i   Rzeczpospolita
           is   fame   so   then   will.be   and   Reszpospolita
           'There is fame, so there will be Rzeczpospolita too' (Karłowicz, Kryński & Niedźwiedzki 1902:71)

Second, the lexeme *i* can express the meaning of 'even, including', being equivalent to *nawet* in Polish (23a; Karłowicz, Kryński & Niedźwiedzki 1902). This usage is especially pervasive in negative, where *i* is synonymous to *ani* (23.b):

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[20] In this aspect *i* would behave as *and* in English.

[21] The dissimilarity of the subjects is more commonly expressed by means of *a*.

(23) a. Ba,   i   ja   o   tym   wiem
        well   and   I   about   this   know
        Well, even I, I know that'

   b. Nie   ma   w   tym   i   krzty   prawdy
      not   have.3SG   in   this   and   shred   truth.GEN
      'There is not even a shred of truth in this'

Third, sporadically, the lexeme *i* may exhibit an adversative or contrastive sense similar to *a* 'but' (or *ale* 'but'; Karłowicz, Kryński & Niedźwiedzki 1902:71):

(24)   Uczę   się   i   uczę,   i   mi   to   nie   wchodzi.
        learn.1SG REFL   and learn.1SG and   me   this   not   enter.3SG
        'I study and study, but I cannot learn it (lit. it does not enter)'
        I   pisze, i   pisze,   i   nie   może   skończyć
        and   write.3SG and write.3SG and   not   can.3SG finish
        He writes and writes, but cannot finish' (Karłowicz, Kryński & Niedźwiedzki 1902:71)

However, *i* is not normally used in the other contrastive-adversative senses, typical of conjunctive coordinators in other languages. For instance, it cannot be employed if the conditions of two distinct subjects or their activities are contrasted. In such cases, the coordinator *a* must be used: *Jan pracuje w fabryce a* (*i) *jego brat w kopalni* 'John works in the factory and his brother in the mine' or *Olek ma 20 lat a* (*i) *Tomek ma 19* 'Olek is 20 years old and Tomek is 19'.[22]

Fourth, *i* expresses the value of 'well, then, so' similar to *no* and *więc* in Polish (25.a). This usage is particularly common at the beginning of interrogative sentences (25.b-c).[23] Finally, the lexeme *i* sometimes seems to be semantically empty (25.d; see Karłowicz, Kryński & Niedźwiedzki 1902:71).[24]

(25)   a.   I   tak   to   ma   być!
              and   like.that this   must   be
              'So, this must be like that'
        b.   I   to   ma   być   harcerz?
              and   this   must   be   boy-scout
              '(So) Can this be a boy-scout?'
        c.   I   czego   chesz?
              and   what   want.2SG
              'What do you want?'

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[22] The lexeme *i* cannot be used in an additional function commonly associated with conjunctive coordinators in various Indo-European languages such as English, German or Spanish. In that usage, the coordinator introduces a new sentence or a new utterance, typically in an interrogative form, constituting a continuation of the sentence produced previously and providing a meaning similar to the expression 'what about…'. In such cases, the coordinator *a* is obligatory in Polish: *Ja mieszkam w Warszawie. A* (*I) *ty?* 'I live in Warsaw. And you?' or Speaker A: *Jak się masz?* 'How are you?', Speaker B: *Dobrze! A* (*I) *ty?* 'Good! And you?'. This sense seems to be similar to the contrastive value postulated by Malchukov (2004).

[23] In older texts, *i* was regularly used before interrogative words, e.g. *i kto* or *i co* instead of simple *kto* 'who' and *co* 'what' (Brückner 1985:189).

[24] Until the 16th century, the lexeme *i* was also used as a complementizer equivalent to *że* 'that' (Brückner 1985:189).

d. Nic   nie   mówię,   bo   też   i   nie mam   zdania
   nothing not   say.1SG   because also and   not have.1SG   opinion
   'I don't say anything, because I have no opinion'

Fifth, in bi-syndetic constructions, *i* may be used as the quantifier 'both'. In such cases, it functions in a manner equivalent to the expression *zarówno…jak* (see examples 20.a-b introduced previously).

4. Interim conclusion

The present paper – the first in a series of two – familiarized the reader with the theoretical framework underlying the study and presented the empirical evidence related to the lexeme *i* in Polish. First, the lexeme *i* was tested for the presence of features that are viewed as essential to the prototype of conjunctive coordinators. Second, the various uses in which *i* exhibits senses and functions that are distinct from the idea of coordinate-hood were described.

In the next article, I will offer a comparable analysis and description of the lexeme *z*. That is, I will study the performance of *z* on the tests of coordinate-hood and the range of its polysemy or polyfunctionality. The results of the empirical study of the items *i* and *z* will enable me to determine their respective degrees of canonicity as conjunctive co-ordinators, and the overlap or dissimilarity of their semantic-functional radial networks.

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