

THE ROLE OF THE ACCUSATIVE/PARTITIVE ALTERNATION IN ASPECTUAL COMPOSITION IN POLISH*

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ABSTRACT

This paper examines the function of the accusative/partitive case alternation on the noun object in aspectual composition in Polish, a language with robust verbal aspectual morphology. In contrast to earlier approaches to partitive case morphology both in Polish (cf. Piñón 1993) and in other languages (cf. Filip 1999), we will claim here that (at least in Polish) partitive genitive does not serve to encode the *proper part-of* relation and hence, that the accusative/partitive case alternation need not correspond to the holistic/partitive semantic opposition. Instead, we will show that Polish partitive genitive expresses the meaning of unspecified quantity and prefers nouns with mass semantics, typically bare singular mass nouns and bare plural nouns of an appropriate kind. We will also demonstrate that despite the quantitative indeterminacy of the object, perfective predicates with partitives have the same distribution as other perfective predicates, and thus should be treated as denoting bounded events in Polish, in contradiction to both Kiparsky's (1998) and Verkuyl's (1998) generalizations. The empirical evidence for our claim is based on a small class of verbal predicates exhibiting the accusative/partitive case alternation on their internal arguments, such as *dać* 'give', *kupić* 'buy' and *zjeść* 'eat (up)' (which are also selected as most relevant for investigating the peculiarities of the Polish partitive in Szupryczyńska and Zaremba 1993).¹

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¹ This paper is intended as a starting point for a larger project related to the role of case morphology in aspectual composition and does not discuss the partitive in other distinct verb classes, such as, e.g. verbs with the accumulative prefix *na-* (treated as expressing the extensive measure function in Filip 2000), which require the partitive, or verbs with the quantificational prefix *do-*, where the partitive/accusative alternation is accepted by the majority of speakers and much more systematic. Those verbs deserve a separate discussion because of their distinct semantics. We believe that our view of the Polish partitive can be extended to account for its distribution with measurement and quantificational prefixed verbs as well and we leave a detailed analysis of all the complexities for immediate future research.

1. Introduction

By now it has been widely accepted and amply demonstrated for various languages that aspectuality (to use Verkuyl's term, which covers both situation/lexical aspect and grammatical/viewpoint aspect) is a compositional phenomenon. The crucial distinction in all aspectual studies is that of telicity vs. atelicity, which is often also rephrased as boundedness vs. unboundedness, resultativity vs. irresultativity, completedness vs. incompleteness, etc. A telic sentence is defined as one expressing an inherent end-point of the eventuality described by the verbal predicate. Atelicity arises in the absence of an inherent end-point. In Verkuyl's influential theory of compositional aspectuality, telicity is derived in the presence of an eventive (nonstative) verb [+ADDTO] combining with an internal argument with a specified quantitative value [+SQA]. Such a VP-predicate is [+SQA]. If the external argument with which the [+SQA] VP-predicate combines also expresses quantification of some sort, i.e. is [+SQA], the sentence is [+SQA], i.e. telic/terminative. The main idea behind this principle, known as Verkuyl's generalization, is that for a verb expressing development in time and space to reach an end-point, whereby the number of spatiotemporal intervals can be finite, the scale provided by the internal argument must also be bounded. Slavic languages have a grammatical category of aspect and it is widely assumed in the literature that perfective aspect is the grammatical expression of telicity (terminativity, boundedness, etc.). In Verkuyl (1998), perfective morphology [+P] has an aspectual (semantic) property, marking the tenseless verbal predicate as telic/terminative [+T]. Importantly, a [+P] prefix requires a telic/terminative verb, which in turn requires a [+SQA] internal argument, or obligatorily activates an undetermined quantity value as the plus value (Verkuyl 1998: 132). In other words, it is the presence of the perfective prefix which determines a predicate as telic/terminative, the accusative case being unable, in and of itself, to turn the nominal predicate into a [+SQA] one. The alternation between accusative and partitive case morphology on accusative nominal arguments seems to be important in this connection: if perfective morphology does all the job of determining the aspectual value of the sentence, one wonders what the case alternation corresponds to. In this paper we focus on this alternation in Polish with a view to finding out what, if anything, is special or inherent in the semantics of the so-called Polish partitive genitive that makes it compatible with certain verbal predicates but incompatible with others. We will discuss this alternation in comparison with Finnish, where it is only the accusative/partitive alternation and not verb morphology that determines aspectual interpretation. In Polish it is mainly verb morphology and not the form of the nominal complement that marks aspectual distinctions. The fact that we still can identify the accusative/partitive contrast with certain Polish verbs complicates the whole picture, yet a closer look at it might be important for the compositional theory of aspect cross-linguistically, and in particular for the exploration of the interaction of NP semantics and verbal aspect, a topic which has recently attracted a lot of attention of aspectologists.

Our paper is organized as follows: in section 2, we briefly introduce the concept of partitivity and in section 3, we review the accusative/partitive alternation in Finnish to set the background for exploring the accusative/partitive alternation in Polish. In section 4, we present the basic contrast between (partitive) genitive and accusative with a selected class of Polish verbs that allow such an alternation. Specifically, we argue that partitive genitive expresses an unspecified quantity of the object NP. This is an alternative view to the treatment of partitive as encoding the *proper part-of* relation suggested by Piñón (1993) or accounts that treat bare partitive as equivalent to NPs with empty vague quantifiers. We also demonstrate that with respect to most standard tests, Polish partitive structures behave like other perfective predicates, suggesting that they are bounded. If boundedness can be derived in the absence of a [+SQA] object of a perfective verb, as we claim, it seems that the correlation between perfectivity and boundedness cannot reduce to quantification *sensu stricto*.

2. Partitivity

The term *partitive* is used in reference to two distinct types of nominal structure, a construction with a (quantificational) determiner followed by a partitive complement, and to a noun phrase marked with morphological (partitive) case or introduced by a partitive preposition, which is not embedded under an upstairs (quantificational) determiner. The former type, referred to as full or headed partitive and illustrated below with English examples in (1) from Chierchia (1997), exhibits similar empirical properties in a variety of languages. Importantly, the partitive complement must have a restricted, unique interpretation.² By contrast, bare (or determinerless) partitives, have a more restricted distribution. For example, bare partitives in Russian, illustrated in (2a-b) from Paducheva (1998) are incompatible with the imperfective:

Full partitives:

- (1a) Some of the bottles are broken.
 (1b) Most of the country is in favour.

Bare partitives (Russian):

- (2a) Ja vypil vody.
 I drank-P(er)f(ective) water-Part(itive)
 'I drank (some) water.'

² De Hoop (1997) suggests that weak NPs are allowed in partitives when they can get a referential or specific reading, e.g. *one of several students who arrived late*.

- (2b) *Ja pju vody.
I drink-Inf water-Part
'I am drinking water.'

Apart from the differences in internal structure, full and bare partitives differ with regard to their interpretation. In particular, while full partitives generally pattern with definites, they sometimes pattern with indefinites (Hoeksema 1996).³ By contrast, bare partitives have been claimed to pattern with indefinites (Chierchia 1997, Paducheva 1998).⁴ The reason why the two types of nominal structures are subsumed under the same term is that they are both considered to express the *part-of* relation, one of the fundamental categories of human cognition, which involves the relationship between (a quantity of) some substance and its portion(s), an individual and its parts, a group or collection and its subgroups or members, etc. (Hoeksema 1996). The *part-of* relation can be extended from the domain of individuals to the domain of eventualities (Filip 1999), since events can be viewed in their totality, i.e. as single indivisible wholes, or they can be viewed in relation to their parts. Filip claims that the semantic contribution of the category of the imperfective aspect can be seen as representing the *part-of* relation, involving a partitive operator in its meaning. By contrast, the perfective can be taken to involve a totality operator in its semantics, which is responsible for the holistic interpretation of the eventuality denoted by the sentence. Therefore, the *part-of* relation on the object and the *part-of* relation on eventualities are closely related in the current aspectual theories advocating the homomorphism from objects to events for those predicates which denote events whose progress is mapped out into the parts of the object. While 'part' and 'whole' may be seen as basic notions contributing to aspectual distinctions across languages, the perfective and imperfective operators may have different semantic entailments in different languages and the constraints on their application may differ across languages (Filip 1999).

In this paper, we will be concerned only with (formally) bare partitive arguments marked with morphological case (cf. (2) above) and their role in aspectual composition in Polish.

³ In particular, full partitives are disallowed in existential sentences which make claims of existence, just like definite descriptions. On the other hand, full partitives are possible in so-called presentational sentences, which do not make claims of existence, but rather, which assert the presence of an entity in some domain of discourse, and in sentences stating the size of a certain set (so-called cardinality statements). The relevant contrast is illustrated respectively in (i) and (ii) from Hoeksema (1996: 13):

- (i) There is (=exists) *the boy/*one of the two boys.
(ii) There were (=were present) *the boys/several of the boys in the room.

⁴ Chierchia (1997) shows that in Italian, bare partitives pattern with overt indefinites, admitting both wide and narrow scope readings, in contrast to bare nouns, which do not have wide scope readings.

3. Bare partitives in Finnish

Partitive case plays an important role in aspectual composition in Finnish, in particular in contrast to accusative case-marking on the object of the verb. With an aspectually ambiguous verb, typically a verb with an Incremental Participant (Theme/Path), the object can be in the partitive or in the accusative.⁵ If the object is in the partitive, the interpretation of the whole sentence is that of an unbounded, durative, event. If it is in the accusative, the interpretation is of a total, bounded, completed event. Compare (3a) with (3b):

- (3a) Hän luki kirjaa. (Vainikka and Maling 1996: 186)⁶
he read book-Part
'He was reading a/the book.'
(3b) Hän luki kirjan.
he read book-Acc
'He read a/the book.'

As the examples in (3) show, with an aspectually unmarked verb, the object is ambiguous between the definite and the indefinite reading and the choice between the accusative and the partitive gives rise to (and marks) an aspectual distinction.⁷ This is VP-related partitivity. With an intrinsically atelic (irresultative) verb, the object must be in the partitive regardless of its type, i.e. regardless whether it is a determined or an undetermined count singular, mass or plural noun (Kiparsky 1998: 292):

⁵ An Incremental Participant is one entailed to undergo a definite change of state, where the change can be decomposed into "distinguishable separate stages, i.e. subevents" (Filip 1999: 96). Roughly speaking, the Incremental Theme is the 'effected object' (e.g. write *a book*), a 'destroyed object' (e.g. destroy *the palace*), a 'consumed object' (e.g. drink *coffee*), an 'object of performance' (e.g. play *a sonata*), the subject of a transitive verb of direct motion (e.g. enter), or the subject of an intransitive verb like *melt* (Filip 1999: 96). The Incremental Participant also subsumes the Path in (motion) events like *walk from the bank to the post office* (Filip 1999: 97).

⁶ Accusative is the second most common case-inflection marking objects in Finnish (Chesterman 1991: 93).

⁷ That the partitive is not restricted to indefiniteness of reference is also borne out by partitive noun phrases co-occurring with the quantifiers *all* and *most*, which are both strong (Vainikka and Maling 1996: 187):

- (i) Jukka kokeili kaikkia/ useimpia reseptejä.
Jukka tried all-Part/most-Part recipes-Part
'Jukka tried all the/most (of the) recipes.'

Conversely, accusative case is compatible with a typically indefinite determiner like *jonkun* 'some-Acc' (Vainikka and Maling 1996: 187):

- (ii) Seija oli tavannut jonkun mielenkiintoisen taiteilijan.
Seija had met some-Acc interesting-Acc artist-Acc
'Seija had met an (lit. 'some') interesting artist.'

- (4) Rakastin teitä.
 loved-1Sg you-Pl.Part
 'I loved you.'

With an intrinsically telic (resultative) verb such as *saan* 'get', the object is partitive if it is quantitatively indeterminate (an undetermined mass or plural noun). This is NP-related partitivity. A quantitatively determinate object is in the accusative (Kiparsky 1998: 268, Chesterman 1991: 92):⁸

- (5a) Saan *karhua/ karhu-ja.
 get-1Sg bear-Part/ bear-Pl.Part
 'I'll get the/a bear./I'll get bears.'
- (5b) Saan karhun/ karhut.
 get-1Sg bear-Acc/ bear-Pl.Acc
 'I'll get the/a bear./I'll get the bears.'
- (6a) Ostin omenat.
 bought-1Sg apples-Acc
 'I bought the apples.'
- (6b) Ostin omenoita.
 bought-1Sg apples-Part
 'I bought some apples.'

To summarize, partitive case in (3) licenses an imperfective VP-predicate, i.e. a predicate denoting an incomplete (atelic) eventuality. In other words it is the type of the object that decides on the (partial vs. holistic) interpretation of the event denoted by the verb. By contrast, where the choice between the accusative and the partitive does not correspond to (in)completeness ((a)telicity) of the event, the case alternation marks quantitative (NP-related) partitivity, as in (5) and (6). With the accusative, reference is to the total quantity denoted by the noun while with the partitive, reference is to a partial quantity. In cases like (5) and (6), the partitive yields an indefinite reading of a plural or mass noun (Chesterman 1991, Kiparsky 1998, Filip 1999). Importantly, a singular countable noun cannot be marked with partitive case in Finnish if it were to express NP-related partitivity. A singular countable noun may be partitive in Finnish only when partitive case has the VP-related function (cf. (3)).

⁸ Partial quantity implies a (contextually relevant) surplus of the quantity denoted by the partitive noun phrase (Chesterman 1991, Filip 1999). In other words, (6b) implies that there were contextually relevant apples the speaker did not buy, whereas (6a) implies that the speaker bought the total contextually relevant quantity of apples. The totality reading of a noun phrase entails definiteness of reference and the partial reading typically entails indefiniteness of reference.

In his study of partitive-accusative case alternation in Finnish, Kiparsky (1998) proposes to capture its nature with the notion '(un)boundedness', which is akin to (a)telicity and (ir)resultativity, but is nevertheless distinct from them. Details aside, Kiparsky (1998: 285) captures the aspectual properties of an unbounded VP predicate under (7). The VP-related function of partitive case is captured under (8) (Kiparsky 1998: 286):

- (7) A VP predicate is unbounded if it has either an unbounded head, or an unbounded argument.
- (8) The object of an unbounded VP is obligatorily partitive.⁹

As follows from (7), for Kiparsky (1998), the aspectual properties of a VP-predicate are determined compositionally, and they are determined in view of the properties of the verb and the properties of its object. However, verbal predicates fall into three distinct classes under this approach, bounded [+B], unbounded [-B] and aspectually ambiguous [+/-B]. Once the aspectually unbounded verbs are marked as either [+B] or [-B], they are treated on a par with intrinsically [+B] or [-B] predicates. Whether an aspectually unmarked predicate will be treated as [+B] or [-B] depends on the properties of the object.¹⁰ Undetermined mass and plural nouns (e.g. *food*, *bombs*) are unbounded [-B]. Other nouns are bounded [+B], e.g. *a bomb*, *two bombs*, *the bomb(s)*, *a few bombs*, *a little food*, *a lot of food*. As follows from (7) and (8), an unbounded (partitive) object is ungrammatical with a bounded VP-predicate while a bounded (accusative) object is ungrammatical with an unbounded VP-predicate.

4. Bare partitive genitive-marked objects in Polish

Unlike Finnish, Polish does not have distinct partitive morphology, but traditional grammars regard some uses of the genitive as partitive.¹¹ For example, Szober (1963) takes genitive case morphology to express the *part-of* relation when a part rather than the whole is denoted by the genitive-marked noun phrase, meaning *part*

⁹ Importantly, the subject of an (intrinsically) unbounded verbal predicate cannot be marked with partitive case and hence, it cannot be a bare mass or plural noun.

¹⁰ The meaning of the verb can be coerced (e.g. from bounded (*drop the ball*) to unbounded (*keep dropping the ball*) by case. Likewise, in a language which marks verbal unboundedness via imperfective aspect, aspect can change the meaning of the verb.

¹¹ In contrast to Finnish partitive, genitive has a much narrower distribution in Polish. The unmarked case of the object is accusative in Polish, which shifts to genitive under sentential negation. Also the nominal argument in existential and locative presentational sentences shifts from nominative to genitive under sentential negation. The genitive does not mark the subject of a transitive sentence and it is not found with unergative verbs. Some unaccusative verbs take the nominal argument in the genitive. Unlike Finnish, Polish does not have passives with genitive subjects.

of *x* or *some x* rather than *the whole of x* or *all of x*. Genitive case is marked on objects of certain classes of verbs. With some such verbs the genitive is the only case-marking available for the nominal object, but with others genitive alternates with the accusative or a prepositional complement, which may correspond to an aspectual distinction or be correlated with a restriction on the type of object. Some examples of verbs taking a genitive object alternating with the accusative are shown in (9)–(15). To understand the import of the case-alternation on objects in Polish, we begin with (9), which illustrates a verb taking an accusative object in both its perfective and imperfective variant. We restrict our attention to the ‘on-going’ reading of the imperfective in (9a):

- (9a) On jadł truskawki/ jabłko.
 he-Nom ate-Ipf strawberries-Acc apple-Acc
 ‘He was eating some/the strawberries./He was eating an/the apple.’
- (9b) On zjadł truskawki/ jabłko.
 he-Nom ate-Pf strawberries-Acc apple-Acc
 ‘He ate (all) the strawberries./He ate an/the apple.’

Notice that the use of the accusative on a discrete (bounded) noun phrase like *an apple* with an unbounded predicate in (9a) is in direct contrast to Finnish (cf. (3)), which suggests that, as opposed to Finnish, the accusative is not a semantically conditioned case (hence, unmarked) and further, that it does not serve to resolve the aspectual ambiguity of the verbal predicate. The latter is unsurprising as in (9a) the verb is imperfective while in (9b), it is perfective. In contrast to Finnish, then, the eventuality denoted by (9a) is unbounded by virtue of the verb’s unboundedness and is irrespective of the type of the object (i.e. whether it is plural, mass, count, definite, indefinite, etc.).

Let us now turn to verbs with which the object can be expressed in the accusative or in the genitive, where the case-alternation is correlated with an aspectual distinction. The accusative marks the object in the imperfective on the ‘on-going’ reading, while in the perfective, the genitive alternates with the accusative (Wierzbicka 1967: 2238).¹²

¹² Our aim in this paper is to analyse the accusative/partitive contrast and not to provide an exhaustive list of alternating verbs. Therefore, in our discussion in subsequent paragraphs, we will include only selected examples so as to emphasize the relevant contrasts as reflected in the collected material. When indicating grammaticality judgments, we rely on our own intuitions and where possible, provide examples after the Polish literature we refer to in this paper. At the same time, we note that there is at times considerable speaker variation as regards the acceptability of partitive objects with individual verbs and the original examples given here as grammatical were drawn from a questionnaire when at least 90% of responses were positive from ca. 90 speakers.

- (10a) On kupował chleb/ *chleba.
 he-Nom bought-Impf bread-Acc bread-Gen
 ‘He was buying a/the loaf of bread/the bread./He was buying bread.’
- (10b) On kupił chleb /chleba.
 he-Nom bought-Pf bread-Acc /bread-Gen
 ‘He (has) bought a/the loaf of bread/the bread./He (has) bought (some) bread.’

When the genitive is restricted in its distribution to perfective aspect, the object can be a bare mass noun, as in (10b), or a bare plural, as in (11), but it cannot be a singular count noun, as shown in (12):¹³

- (11) On kupił (sobie) truskawek.
 he bought-Pf self-Dat strawberries-Gen
- (12) *On kupił (sobie) jabłka.
 he bought-Pf self-Dat apple-Sg.Gen

In view of the fact that perfective aspect is compatible with the genitive on a bare mass or plural noun but incompatible with a count noun denoting an individual, the verb *kupić (sobie)* in the perfective aspect appears to behave on a par with an inherently bounded predicate in Finnish (cf. (5a)): in both languages bare mass or plural nouns are in the genitive or partitive case, respectively, with such predicates. This suggests that the genitive case has the NP-related partitive function with such predicates in Polish. Recall that in Finnish, with an intrinsically bounded predicate the accusative marks a bounded NP-predicate (i.e. a count noun or a determined plural). If the accusative/genitive case alternation with perfective verbs in Polish reflects precisely what the case alternation reflects with intrinsically bounded verbs in Finnish (cf. (5a)), we expect that with a verb like *kupić (sobie)* in the perfective aspect the accusative should be possible on a count noun and a determined plural. This prediction is corroborated, as shown in (13):

- (13) On kupił książkę/ dwie książki.
 he-Nom bought-Pf book-Acc/ two-Acc books-Acc
 ‘He (has) bought a/the book./He (has) bought two books.’

Unexpectedly in this scenario, however, accusative case can also mark a formally bare mass and plural noun in Polish, which is in the partitive in such a case in Finnish:

¹³ English translations are provided unless the grammatical glosses are self-explanatory.

- (14) On kupił ziemniaki/ ciasto/ jabłko.
 he-Nom bought-Pf potato-Pl.Acc/ cake-Sg.Acc/ apple-Sg.Acc

If the genitive rather than the accusative is the marked member of this case-alternation, the accusative may be expected on nouns otherwise marked with the genitive, but the question that arises is what the case-alternation correlates with in this case in Polish. In (14), the accusative can mark an indefinite (weak, existential) noun phrase as well as a definite description (depending on the context). In other words, it seems that the accusative can mark both definite and indefinite reference. What, then, is marked with the genitive in cases where the accusative alternates with the genitive? Consider (15) and (16) below in the context of the following real-life situation: John went on a business trip somewhere and bought various things (for his wife and sons). Assuming relative rather than absolute judgements, most speakers find a contrast between (15) and (16):

- (15) Kupił wino/tort czekoladowy/różne wina/komputery.¹⁴
 bought wine-Sg.Acc/chocolate cake-Sg.Acc/different wine-Pl.Acc/
 computer-Pl.Acc
 'He bought a bottle of wine/a chocolate cake/different wines/some computers.'
- (16) Kupił wina/??tortu czekoladowego/??różnych win/??komputerów.
 bought wine-Sg.Gen/chocolate cake-Sg.Gen/different wine-Pl.Gen/
 computer-Pl.Gen
 'He bought some wine/(of) a chocolate cake/(of) various wines/(of) computers.'

As indicated, the accusative readily admits mass nouns, singular countable nouns, as well as plurals. The genitive partitive is best on a mass noun in this particular context. It does not readily allow a singular countable noun or a plural noun with clearly individuated denotation (e.g. the plural of nouns denoting objects such as computers, different types or different bottles of wine). The contrast seems to suggest the following: with the accusative, the bounded (individuated) reading of the object is always possible, allowing for the object to be pluralized, whereas with the genitive, the unbounded reading is the only possible or the strongly preferred one. In other words, with the accusative, a typical undetermined mass noun can shift from unbounded (*wine*) to bounded interpretation (*portion* or *kind of wine*), whereas this seems not to be possible for all speakers with the partitive.¹⁵ Therefore, it seems to us that the contrast between (15) and (16) reflects an important property of partitive

¹⁴ The reason that we include the modifier *różny* with the pluralized mass noun in (15) is that not all speakers accept a bare pluralized mass noun (immediately).

¹⁵ Interestingly, though, Szupryczyńska and Zaremba (1993) include even combinations like *upiec ciast* ('bake cakes-Part') and *kupić chlebów* ('buy breads-Part') among possible partitive structures.

case, namely that it does not easily allow a shift to a countable interpretation of a mass object NP. Hence, in the context of the partitive genitive, the countable plural, especially when combined with a prenominal modifier such as *różne* 'different', is restricted. This particular restriction is at variance with Finnish, where any bare plural noun can occur in the partitive, and we conclude that the correlation between the Finnish NP-related partitive and the Polish NP-related genitive is not perfect. Note, furthermore, that genitive case morphology on a noun object is in contrast to a vague lexical quantifier, which can easily co-occur both with a singular mass noun or with a pluralized mass noun in the context of accusative case (cf. (16)):¹⁶

- (17) Przywiózł dużo wina/ (różnych) win.
 brought-3Sg.Pf many-Acc wine-Sg.Gen/ (different) wine-Pl.Gen
 'He brought a lot of wine/many (different) kinds of wine.'

In particular, a vague lexical quantifier can take both an unbounded, singular mass nominal predicate and a bounded countable (individuated) plural noun in the context of accusative case. As (15) shows, a shift from unbounded interpretation to bounded interpretation can be successful with a bare mass or plural noun in the context of accusative case, even without the support of a vague lexical quantifier. Given that the singular genitive *wina* in (16) cannot be interpreted as bounded, in contrast to (15), it seems that a bare mass noun cannot be shifted from unbounded to bounded in the context of genitive case. Furthermore, notice the following contrast:

- (18) Piotr zjadł sobie kaszę/*kaszy do ostatniego ziarnka.¹⁷
 Piotr ate-Pf self-Dat groats-Acc/*Gen till the last grain
 'Peter ate the groats/of the groats to the last grain.'
- (19) Piotr zjadł sobie truskawki/*truskawek prawie do końca.
 Piotr ate-Pf self-Dat strawberries-Acc/*strawberries-Gen almost till end
 'Peter ate the strawberries/of strawberries almost to the bottom (of the bowl).'

The contrast is reminiscent of the contrast between (20a) and (20b) observed by Smollett (2001):

¹⁶ The genitive on the mass and plural noun in (17) is triggered by the (vague) quantifier.

¹⁷ The role of the unselected dative *sobie* with the verb *jeść* 'eat' in (18) is unclear to us at the moment. While it may contribute to turning *jeść* 'eat' into a resultative, hence stative predicate in the context of the perfective prefix (cf. the discussion of (21) below), it does not require a bounded object, unlike the PP-delimiter in (18). The perfective predicate *zjeść* 'to eat up' is compatible with an accusative as well as a partitive-marked object.

- (20a) Kathleen ate the ice cream to the last spoonful.
 (20b) *Kathleen ate ice cream to the last spoonful.¹⁸

In view of the above contrast it seems reasonable to suggest that the delimiting modifier of the type illustrated for English in (20) and for Polish in (18)-(19) requires a bounded NP object. In English, a bare mass noun is not bounded and thus it is not compatible with a modifier specifying the end of the path for the Incremental Theme participant. Given this, we can conclude that Polish partitive NP objects, in contrast to accusative objects, are not bounded. Not providing the end-point of the object (and of the event), they are incapable of co-occurring with delimiting modifiers.

Another piece of evidence for some such difference in boundedness comes from the contrast noticed by Szupryczyńska and Zaremba (1993: 17):

- (21) Jan zjadł chleba do syta.
 Jan ate-Pf bread-Gen to satiation
 'Jan ate bread until he was satiated./He satiated himself by eating bread'
 (21b) *Jan zjadł chleb do syta.
 Jan ate-Pf bread-Acc to satiation

In (21), the PP specifies the state of the Agent, i.e. it refers back to the subject, and not to the object of the sentence. In other words, it is the participant that appears in the subject position and not the NP object of the sentence that provides the scale for measuring the event delimited by the PP *do syta*. Given the 'one delimiter per event rule' (cf. Tenny 1994), another delimiter (i.e. bounded NP object) is illicit here. Therefore, (21b) with the accusative NP object cannot co-occur with the PP delimiting the event along a dimension set up by the Agent. In contrast to this, the unbounded (and thus not delimiting) partitive object is not in conflict with that delimitation.

To summarize our discussion so far, nouns which can occur with genitive case morphology with perfective verbs in Polish are mass and (some) bare plural nouns. The function of genitive case morphology is NP-related with such nouns. In contrast to accusative case morphology on NP objects, genitive partitive expresses the unboundedness of the object NP, or, in other words, unspecified quantity. Partitive objects have a different distribution from NP objects with vague lexical quantifiers.

Our view of the Polish partitive is crucially different from views treating it as a true partitive structure, i.e. as expressing the proper part-relation, advocated, e.g. in

¹⁸ However, Bill Sullivan (p.c.) notes that there are episodic contexts where it is still possible to utter (20b). In view of this unexpected co-occurrence of the mass NP object and the delimiting PP modifier, further careful investigations in this area are needed. For the time being, we assume here the standard episodic context, after Smollett (2001).

Piñón (1993). The reason we do not follow Piñón is that we believe that the implication of *a part of x* but not *the whole of x* attributed by him to genitive-marked bare mass and plural nouns seems to be a matter of (cancellable) pragmatic implicature rather than strict logical entailment. For example, in (22) there seems to be no logical implication that Peter did not give the children all the sweets, but only a partial quantity of (contextually relevant) sweets:

- (22) Piotr dał dzieciom cukierków.
 Peter gave-Pf children-Dat sweets-Gen
 'Peter gave the children (some) sweets.'

Furthermore, Piñón does not distinguish between noun objects with *trochę* 'some' and partitive noun objects, i.e. they are the same semantic objects in his approach. It seems to us that some variations on the sentences presented in Piñón (1993) indicate that his partitive structures do not necessarily entail the proper part-relation.¹⁹

- (23) Marysia nałożyła sałatki na talerz i nic nie zostawiła Jankowi.
 Mary put-Pf salad-Gen on plate and nothing not left-3Sg John-Dat
 'Mary put (some) salad on the plate and didn't leave any for John.'
 (24) ?*Marysia nałożyła trochę/część sałatki na talerz i nic nie zostawiła Jankowi.
 Mary put-Pf some/part salad and...
 'Mary put some/part of salad on the plate and didn't leave any for John.'
 (25) *Marysia nałożyła sałatkę na talerz ale trochę/część zostawiła Jankowi.
 Mary put-Pf salad-Acc on plate but some/part left-3Sg John-Dat
 'Mary put the salad on the plate but she left some/a part for John.'
 (26) ?Marysia nałożyła sałatkę na talerz i nic nie zostawiła Jankowi.²⁰
 Mary put-Pf salad-Acc on the plate and nothing not left-3Sg John-Dat
 'Mary put the salad on the plate and didn't leave any for John.'

(23) does not have the flavour of a contradiction. Also, there seems to be a contrast between the quantified noun object in (24) and the bare object in (23). Piñón claims that the partitive genitive cannot refer to wholes. In view of the relative acceptability of (23) we would like to suggest that the quantity of the denoted noun is simply not specified in the context of partitive case. If bare mass and plural nouns in the geni-

¹⁹ The meaning of the prefix *na-* in (23)-(26) is not quantificational (accumulative) but locative, regardless the case of the object.

²⁰ The explanation for the awkwardness of (26) is the same as in the case of (29a) below.

tive expressed the proper part-relation, giving rise to an unspecified/indeterminate, but nevertheless partial quantity of the noun's denotation, i.e. *some x* or *some of the x*, bare mass and plural nouns supported with the lexical quantifier *trochę* 'some' could be expected, other things being equal, to pattern with such implicitly quantified bare mass and plural nouns in Polish. Yet, there are some asymmetries, as noted above and illustrated further below.²¹

- (27a) *Mama dała dzieciom trochę cukierków, i to całkiem dużo.
mother gave-Pf children-Dat some candies-Gen and quite a lot.
'Mother gave the children some candies, and in fact, she gave them a whole lot'
- (27b) Mama dała dzieciom cukierków, i to całkiem dużo.
mother gave-Pf children-Dat candies-Gen and a whole lot
'Mother gave the children candies, and in fact, she gave them a whole lot.'
- (28a) (*)Utrzyj trochę sera, ale tylko trochę.
grate some cheese-Gen but only a little
'Grate some cheese, but only a little.'
- (28b) Utrzyj sera, ale tylko trochę.
grate cheese-Gen but only a little
'Grate (some) cheese, but only a little.'
- (29a) ?Po obiedzie wypili wino i nic nie zostawili dla Irka.
after dinner drank-3Pl wine-Acc and nothing not left-3Pl for Irek
'After dinner they drank (up) the wine and left nothing for Irek.'
- (29b) Po obiedzie napili się wina i nic nie zostawili dla Irka.
after dinner drank-3Pl wine-Part and nothing not left-3Pl for Irek
'After dinner they drank (up) the wine and left nothing for Irek.'
- (29c) Ewa dołożyła Bożenie sałatki i nic nie zostawiła dla Irka.
Ewa added Bożena-Dat salad-Gen and nothing not left for Irek
'Ewa added Bożena (some) salad and left nothing for Irek.'

²¹ Although the verbs in (29b-c) belong to the class of verbs with special, quantificational prefixes, we include these examples here, because they are certainly relevant for the discussion of the semantics of bare partitives in Polish. Since with those verbs, partitive is easily accepted by the majority of Polish speakers, the contrasts are much clearer than with verbs which statistically admit the partitive in a more restricted way, e.g. *zjeść* 'eat up'.

(27a) does not sound felicitous, because the vague quantifier *dużo* ('much') in the adjunct clause is incompatible with the vague quantifier *trochę* ('some').²² No such infelicity arises in the parallel sentence with the bare partitive. If the partitive denotes unspecified quantity rather than the proper part-of relation, such contrast is expected. Furthermore, while (28b) does not require any special intonation to be accepted, (28a) is only acceptable if the particle *tylko* ('only') is contrastively focused. Otherwise, it is uninformative. In other words, partitive is compatible both with *trochę* ('some') and with *dużo* ('much'). A similar observation is also made in Szupryczyńska and Zaremba (1993), who note that sentence (30) can be paraphrased with a whole range of quantifiers, often antonymous (i.e. *mało, odrobinę, nieco* 'a little bit', not excluding *dużo, wiele, masę, górę* 'a lot/much, etc.')

- (30) Zjadł mięsa i ziemniaków.
ate-3rd-Sg meat-Gen and potatoes-Gen
'He ate meat and potatoes.'

Polish speakers do not find any contradiction in (29b) and (29c), which is also expected if partitive denotes unspecified quantity. Those speakers who find (29a) or (26) a little bit awkward say that the second clause is redundant, suggesting that the accusative necessarily denotes a bounded quantity (a contextually relevant portion) of the object NP. All in all, the above contrasts may be interpreted as indicating that bare mass and plural nouns in the genitive do not contain an implicit quantifier in their semantic structure, hence, they are truly quantitatively indeterminate and hence truly unbounded.

Recall that under Kiparsky's generalization in (7), an unbounded noun object cannot co-occur with a bounded VP-predicate, i.e. the VP-predicate is necessarily unbounded in the presence of an unbounded object. Indeed, in contrast to an accusative object, a genitive-marked bare mass or plural noun is not possible in the presence of a frame-adverbial like *in an hour*, which is generally taken to unambiguously diagnose a verbal predicate as telic (terminative, completed, etc.). Consider the following contrast (cf. also Szupryczyńska and Zaremba 1993):

- (31) Zrobił sobie herbatę w pięć minut.
made-Pf self-Dat tea-Acc in five minutes
'He made some tea for himself in five minutes.'
- (32) ?*Zrobił sobie herbaty w pięć minut.
made-Pf self-Dat tea-Gen in five minutes.
'*He made tea for himself in five minutes.'

²² Independently, Grochowski (2003) observes that *trochę* 'some', while expressing an unspecified quantity, excludes *dużo* 'much/a lot' from its range.

While (32) is unacceptable, suggesting that it patterns with unbounded predicates, at the same time, however, sentences with genitive-marked bare mass or plural noun objects are clearly not atelic:

- (33a) *Zjadł sobie truskawek przez pięć minut.
ate-Pf-3Sg self-Dat strawberries-Gen for five minutes.
'*He ate (up) strawberries for five minutes.'
- (33b) *Wypił wina przez godzinę.
drank-Pf-3Sg wine-Gen for hour
'*He drank (up) wine for an hour.'

Thus Polish perfective verbs with partitive objects have the same distribution with respect to durative measure adverbials as other perfective verbs, which are clearly quantized/bounded predicates. Also with respect to other tests, such as their non-co-occurrence with time point adverbials, future time reference with stems in the present tense, or their incompatibility with phasal verbs, they behave exactly like standard perfective verbs (hence quantized, or bounded predicates, according to Filip 2000). Also sentences such as those in (34) behave like other telic predicates (cf. Mittwoch 1991):

- (34a) Marysia zjadła sobie truskawek-PART w sobotę i w niedzielę.
'Mary satiated herself with eating strawberries on Saturday and on Sunday.'
- (34b) Jacek dał im wina-PART rano i wieczorem.
'Jacek gave them wine in the morning and in the evening.'

In (34a) and (34b) the only possible interpretation is that of two separate events involving mutually non-overlapping portions of strawberries or wine. Hence, the events referred to in (34) are discrete, bounded eventualities rather than protracted activities. Furthermore, while an accusative bare mass or plural object is licit, a genitive object is disallowed in the presence of a durative modifier suggesting gradual progress of the process denoted by the verb:

- (35a) Zjadł (sobie) kaszę powoli.
ate-Pf (self-Dat) groats-Acc slowly
'He ate the groats (up) slowly.'
- (35b) *Zjadł sobie kaszy powoli.
ate-Pf self groats-Gen slowly
'He ate groats (up) slowly.'

The contrast in (35) seems to indicate to us that in the presence of an accusative object, reference can be made to all the successive stages of the development of the

eventuality described by the verbal predicate reaching a culmination. In the presence of genitive object, reference can only be made to the culmination itself. In other words, a bounded object can delimit the eventuality. With an unbounded object, the eventuality is delimited by the perfective aspect alone. Since the perfective aspect terminates the eventuality so that reference is to a single, time-bounded event, also the unbounded nominal predicate receives a bounded interpretation: the quantity of the object is delimited at the point in time when the eventuality ceases, but it remains undetermined rather than determined [+SQA], as Verkuyl (1999) would predict. We conclude that sentence boundedness can arise in the absence of a quantitatively determined noun object, in contradiction both to Kiparsky (1998) and Verkuyl (1999).

5. Conclusion

In conclusion, we have suggested that a bare object in partitive genitive in Polish is quantitatively indeterminate. It prefers a noun with mass interpretation in its denotation. In standard approaches to aspectual composition (cf., among others, Kiparsky 1998, Verkuyl 1999, Filip 1999), a quantitatively indeterminate nominal predicate is unbounded, and combined with a dynamic verbal predicate, produces an unbounded/atelic VP-predicate/sentence. In Polish, a partitive-marked noun object can be combined only with a perfective verb, which can describe a bounded event (like instantaneous predicates). Hence, Polish offers evidence contradicting the generally accepted view that boundedness cannot be induced in the presence of a [-SQA] argument. It is the perfectivity of the verb that can delimit the event in Polish in and of itself. At the same time, while the perfective operator puts a bound on the object, the quantity value of the object itself remains unspecified, roughly speaking, as much of *x* as the process described by the verb involved before the event terminated. As expected, such delimited events with a [-SQA] object do not pass standard telicity tests as easily as events delimited by virtue of the object being bounded in the first place. Our observations about Polish partitive structures seem to provide additional support for Borer's (2003) conclusion that quantity structures (which, in her theory replace notions such as quantization or telicity) do not necessarily require *telos*, i.e. they do not require a defined end-point.

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