High applicatives in Polish

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1. The concept of the applicative

Applicative structures have attained high priority of linguistic interest with the publication of Pylkkänen's seminal Ph. D. thesis (MIT 2002), published in 2008 under the title: *Introducing Arguments.* One of the major claims of her work is that double object benefactive structures, which can be produced as a result of introducing additional morphological material added to the verbal stem, are in fact of two kinds – high and low applicatives, whose choice is language specific. On the structural basis, these complexes are formed thanks to the introduction of applicative heads, which bring with them additional arguments that stand in specific relationships to the whole event described in the structure (high applicatives) or only to the direct object (low applicatives). The structures analyzed by Pylkkänen (2008) realize various semantic roles, which for applicatives are described in detail in Dixon (2000) for various languages,[1] e.g., (p. 14) as benefactive / malefactive – where the new argument is the beneficient / source, or comitative / presentative – where the new argument is the company, etc. Pylkkänen (2008) reduces this inventory to few a roles, whose distribution is dependent on the type of applicative head (whether high or low, source or recipient, etc.).

1.1. Rudiments of Heim and Kratzer's (1998) semantic theory

Pylkkänen's (2008) analysis is based on the rudiments of semantics in generative grammar as presented by Heim and Kratzer (1998). The central concepts for semantic interpretation in this approach are lexically represented denotations and principles combining/reading the lexical elements. The former contain individuals, truth values and functions from individuals to truth values (p.15), the latter are principles for interpreting terminal and non-branching syntactic nodes, as well as branching ones (pp. 43–44). The first principle states that a terminal node has its denotation specified in the lexicon, a non-terminal, non-branching node has the denotation identical to its daughter node, and finally, the principle

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[1] See Amberer (2000) for Amharic, Martin (2000) for Creek, Mithun (2000) for Yup'ik, Reid (2000) for Ngan'gityemerri, Campbel (2000) for K'iche', Aikhenvald (2000) for Tariana, LaPolla (2000) for Dulong/Rawang, Onishi (2000) for Motuna.

called Functional Application allows us to interpret complex structures; it states that if we have a branching node, one of its daughters is a function from an argument to the truth value and the other daughter – the argument in the domain of this function. What it implies is that syntactic structures to be interpretable have to be binary. We deal with Functional Application, e.g., in the case of intransitive and transitive verb structures, which, of course, have very different representations: intransitive verbs contain a single function, transitive ones combine two functions, there being two arguments involved (p. 15): Thus the intransitive verb like *work* has the denotation in the lexicon, marked with [[]], which equals the function (f): between the domain D and truth values {0, 1} (not true, true) for all such individuals x in the domain D for whom f(x) = 1 if and only if *x works*. For a transitive verb, we will deal with a complex of two functions, to be interpreted as (p. 27): '*function from individuals to functions from individuals to truth-values*'. In simpler language, a transitive verb, e.g.: *like* denotes the function *f* from individuals in the domain *D* to the function *g* from individuals in the same domain to truth values for all individuals *x, y* in this domain, whose truth value is 1 iff *y likes x*. Heim and Kratzer's (1998) proposal of semantic representation mirrors the views of transitive syntactic structures as consisting of the outer layer with the external argument and the inner, lower layer of verb and its internal argument, as argued for in Marantz (1984), and it lays foundations for later Pylkkänen's (2008) analysis.

1.2. Pylkkänen's (2008) theory and views on applicatives

Pylkkänen's (2008) theory will be very briefly outlined here as far as it relates to our analysis of applicatives in Polish, since a particular theory decides what phenomena should be included under the term *applicative* and, in consequence, analyzed; what we believe to be applicatives is strongly theory dependent.

First of all, Pylkkänen (2008) maintains that the structure of a syntactic type is the only legitimate structure of a natural language (p. 5); in other words, it is out of the question that morphology and the phenomena attested within have independent principles and constructions, other than in syntax. Such a view prevails in contemporary generative studies and is implicitly accepted. It has always been present in this brand of linguistics, sometimes predominant, sometimes not, starting with generative semantics,[2] through various brands of syntactically oriented morphology putting stress either on similar structures or transformations.[3]

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[2] See, e.g., Fodor and Katz (1964); Lakoff (1971); McCawley (1976).
[3] See, e.g., Selkirk (1982); Lieber (1980, 1992); Baker (1985, 1988), etc.

Minimalism,[4] the current leading approach, continues this tradition.[5] Consequently, Pylkkänen (2008) perceives word formation that changes verb valency values as the operation of structure building, adding head (applicative) elements, which introduce new arguments (broadly described as benefactive as a cover term for all semantic varieties). A similar structure has in fact been already proposed for the introduction of the external argument in a structure, whose properties, different than those of internal (core, lexically specified) arguments, have been noticed.[6] Pylkkänen (2008: 6)) follows here Kratzer (1996) in suggesting that the external argument is introduced by the head called Voice, which intervenes between the event named by the verb and the external argument, specifying its thematic function. Consequently, the subject refers to the whole event introduced by the verb, and not to the verb itself. Similarly, benefactives are in Pylkkänen's (2008) system introduced by applicative heads, and not by the verbs themselves. Notice that one of the consequences of such a solution is that we expect optionality of applicative structures, as the basic subcategorization of the verb does not inforce the presence of the benefactive. It seems that the structures with benefactive participants we have in Polish fit such descriptions very well, as a beneficient may be specified or not:

(1)

With a transitive verb:

Czytam książkę. 'I am reading a book'.
vs. *Czytam mu książkę.* 'I am reading him a book'.

With an intransitive unergative verb:

Poszłam po wodę. 'I went to fetch some water'.
vs. *Poszłam mu po wodę.* 'I went to fetch some water for him'.

With an intransitive unaccusative verb:

Marek schudł. 'Mark slimmed down'.
vs. *Marek schudł sobie bardzo łatwo.* 'Mark slimmed down, appl. very easily'.

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[4] See, e.g., Radford (2009); Pylkkänen (2008); Labelle (2008); Ramchand (2008); Koontz-Garboden (2009); Kaufmann (2007); Alexiadou (2010), etc.

[5] However, this does not mean that all minimalistic concepts find direct application in a scope as small as a word, even morphologically complex. For instance phases do not seem to apply to intralexical phenomena, see, e.g., Bondaruk (to appear).

[6] See Marantz (1984) for explicit analysis of subjects of verbs as not having the same influence on verbs developing idiosyncrasies as, e.g., direct objects. To give a trivial, but telling example compare: *John broke my arm* vs. *A bullet broke my arm*: In both cases the arm is broken, but this is not the case in: *John broke my arm*, *John broke my heart*, *John broke his promise,* where the interpretation of 'breaking', 'concrete' or 'metaphorical things', varies.

Like in English,[7] verbs used in applicative structures are not overtly marked for the operation of applicative derivation. If we insist to maintain that the presence of the applicative head be marked in some way, we may believe that the verbs contain zero affixes, but nothing important hinges on this solution. The applied argument, on the other hand, is in the dative case, and if it is co-referential with the external argument, then it takes the pronominal form *sobie,* common to all persons and numbers.

(2)
    Śpiewam sobie 'I am singing, appl.'
    Śpiewa sobie 'He/ she/it is singing, appl.'
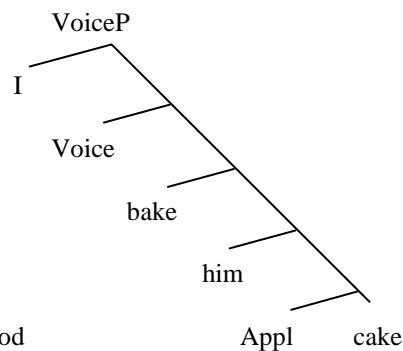   *Śpiewacie sobie* 'You, pl. are singing, appl.'

What remains to be seen is what types of applicatives appear in Polish. Pylkkänen (2008) argues that for languages of the world we may observe two major types of applicative constructions, whose semantic properties correlate with structural placing of the applicative heads. High applicatives attach above the VP and here a relationship of loosely specified nature can be noticed between the described event and the applicative participant, low applicatives combine with the direct objects and consequently result in a relationship between two internal arguments. Below we present Pylkkänen's (2008: 14) structures for these types of applicatives:

(3)   **High applicative**   **Low applicative**
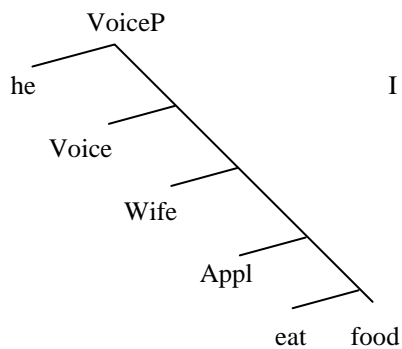
He eats food for his wife (in Chaga)[8]   I baked him a cake (in English)

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[7] Compare: *I bought a book* vs. *I bought him a book.*

[8] High applicatives, according to Pylkkänen (2008), do not appear in English, thus she gives examples from Chaga.

2.   Preview of Polish high applicatives

We will argue extensively that Polish has high applicatives and, possibly, low ones as well, and that such structures as the ones above account for interesting properties of Polish applicatives, first of all for attenuative meaning of high applicatives and limitations on verb types deriving high applicatives. We take it to be the first signal that applicatives in Polish are mostly high in that they possess a marker *sobie*, different from reflexive *się* – appearing within the VP in Polish (2.1.1.). Also the property that intransitives derive mostly co-referential applicatives results from high applicative structure (2.1.3.). Certain limitations on production of applicatives from unaccusatives (2.1.4.1.) and derivational repair techniques are also in tune with this analysis. High applicative structure similarly explains the limitations on the production of experiencer verbs (2.1.4.2.) as well as the lack of applicatives with malefactives (3.3.6.). Also distinctions between attenuative (2.1.3.) and non-attenuative meanings are explained thanks to the distinctions between high (attenuative) and low (non-attenuative) applicatives (2.2.). We explain the necessity of co-occurrence of applied arguments with direct objects with the use of subcategorization of the main verb and not the necessary relation of two arguments within the VP (see 3.3.3.). Direct impact obtaining in experiencer verb constructions is proposed to account for absence of experiencer applicative constructions (3.3.5.). In Section 4, we take up various criteria for low and high applicatives as presented in Pylkkänen (2008) and Campanini and Schäfer (2011) to show that they work for our data as well. Section 5 contains a short summary of our theoretical proposals, which are presented throughout the text, as well as our claim that there is no need to propose different semantic kinds of applicative heads, e.g., recipient and source, as proposed by Pylkkänen (2008: 9), as these distinctions are due to the semantics of lexical verbs present in applicative structures.

2.1.   Applicatives in Polish – general characteristics

2.1.1.
Applicatives in Polish appear most extensively in such structures where the argument of Voice and the argument of the applicative head are identical (co-referential). We have already mentioned that the applied argument is signalled in such a case with the dative pronominal element *sobie*, in Slavic tradition referred to as a reflexive pronoun (see Kardela 1985: 45). *Sobie* is distinct from the clitic reflexive marker in Polish, i.e., *się,* which creates a situation different than in extensively analyzed Romance languages (with which we will contrast our data in many places). Romance languages (French, Spanish, Italian), as most

recently analyzed by Campanini and Schäfer (2011), mark applicatives with markers (*se, se, si* – respectively) homophonous to the ones for reflexives, middles, unaccusatives, antipassives, etc. (whose Polish exponent is the reflexive *się*). We think that it is significant that in Polish applicatives are not marked with the reflexive clitic, as it suggests very clearly that the applied argument has to occupy a structural position different from that of the internal argument of the verb. In such a position the identity of arguments (co-reference) is marked with the reflexive clitic *się* realizing the structurally lower argument, whether it is the direct object (in 4 below), or merely a morphological marker of a verb class (in 5 below):

(4)

> *Jan czesze włosy.* 'John combs his hair'.
vs. *Jan czesze się.* 'John combs himself/refl.'.
> *Jan czesze *sobie.* 'John combs appl.'.

(5)

> **Antipassive formations**:
> *Sąsiedzi spakowali książki.* 'The neighbors have packed up books'.
vs. *Sąsiedzi spakowali się.* 'The neighbors have packed up'.

> **Unaccusative structures (anticausatives)**:
> *On zbił szklankę.* 'He broke a glass'.
vs. *Szklanka zbiła się.* 'The glass broke'.

> **Middles**:
> *On zapala lampę.* 'He switches on a lamp'.
vs. *Lampa zapala się łatwo.* 'The lamp switches on easily'.

The distinction mentioned above suggests that reflexives and applicatives are distinct in Polish as well and that applicatives are not low – not within the VP. If they were like direct objects, their marker would most probably be *się*, as it is for co-referential direct objects or for unaccusatives, antipassives, middles, etc.

This already previews our answer to the question about the kinds of applicatives we are dealing with in Polish. While analyzing Polish data, we will refer continually to Pylkkänen's (2008) and Campanini and Schäfer's (2011) solutions as the first offers the original analysis and division of applied structures and the latter present the most recent analysis of low applicatives, with which we can contrast the Polish data – mostly high applicatives.

2.1.2.

Pylkkänen (2008) argues convincingly that it matters what kinds of verbs applied structures derive from. If we want to have the low applicative structure, it must be derived from a transitive verb as there has to arise a relationship between direct and applied objects. Thus she claims that differences in structure correspond to differences in meaning, namely high applicatives specify some kind of thematic relationship obtaining between the event described by the lower structure and the added applicative participant, then low applicatives can express a transfer of possession (both ways) between direct objects and applied arguments. In other words, high applicatives may express a meaning of the sort: *I ran for him* (*and he was not even present*), while low applicatives – *I baked him a cake* (*and he will have it*). Consequently, low applicatives cannot arise with intransitive, one argument verbs, since these do not allow the direct object participant in the first place. This claim is taken up by Campanini and Schäfer (2011) for their low applicatives, where only (non-core) transitive verbs participate in the derivation. Thus it has to be made clear what types of verbs yield applicatives in Polish.

Below we will present some more arguments for treating Polish applicatives as high formations, starting with verb types taken to be bases for applicative derivations.

2.1.3.

As we have mentioned, Polish applicatives can be created from various types of intransitive verbs (see 1 above) and, in consequence, they should be treated as high applicatives. However, only derivatives with the subject and the applicative element in co-reference can be formed really easily from intransitives. This will be taken here to be another argument that speaks in favor of treating at least some Polish structures as high applicatives: we will see that Polish high applicatives apply to the whole event (as predicted by Pylkkänen (2008)) and this proposal is supported by the fact that in Polish applicative derivation under identity is much more easily admissible than in other cases. This statement requires an illustration and an explanation, which will be offered directly below. Intransitive verbs, like the ones in (6) below, produce applicative structures with co-referential arguments:

(6)

On spał sobie. 'He slept oneself (dative)'.

On stał sobie. 'He stood oneself (dative)'.

On wył sobie. 'He howled oneself (dative)'.

On biegł sobie. 'He ran oneself (dative)', etc.

If, however, we try to introduce the applied argument which is not the same as the external one (i.e., for instance another person) and the event mentioned in the predication does not agree with the interpretation where a second participant is thinkable, applicatives do not arise: *Spałam mu* 'I slept for him', *Stałam mu* 'I stood for him'. Consequently, it looks as if we were not dealing here with high applicatives after all, because these are precisely low applicatives which do not appear with intransitive verbs.

However, what we have illustrated above is not, strictly speaking, a matter of grammaticality; given the appropriate context to introduce an additional participant, the above constructions become completely viable:

(7)
> *Córeczka spała mi ślicznie w nocy.* 'My baby-girl slept beautifully for me at night' (so that I could seep as well).
>
> *Stałam mu po tę pralkę w kolejce całą noc.* 'I queued to buy this washing machine for him the whole night'.

It stands to reason that for an applicative to be tenable we need some sort of relationship to obtain between the applied argument and some other element of the structure. If the structure does not allow for any other participant, but the subject, then the benefaction directed onto oneself is thinkable, while the one directed otherwise – only in a well specified context. Thus the grammaticality judgments below are as predicted:

(8)
> *Anna skacze sobie.* 'Anna jumps, appl.'.
> vs. **Anna skacze mu.* 'Anna jumps for him'.
> vs. *Trener chciał wyniku i Anna, choć nie czuła się dobrze, zdecydowała, że mu skoczy.* 'The coach wanted results badly and Anna, in spite of her not feeling well, decided to jump for him'.

Consequently, these facts agree with the classification of Polish intransitive applicatives as high applicatives, as they are more susceptible and available for contextual modifications than low applicatives.
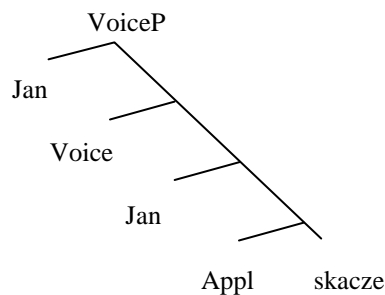
Notice that these structures in Polish do not have emphatic or reflexive semantics, which could cast some doubt on their 'applicative' status. Quite to the contrary, applicatives with intransitive verbs as in (9a), as well as with transitive (9b) and absolute (9c) ones:

(9)
- a. *Jan sobie skacze.* 'John, appl. is jumping'.
- b. *Jan sobie pije herbatę.* 'John, appl. is drinking tea'.
- c. *Jan sobie śpiewa.* 'John, appl. is singing'.

show attenuative meanings as compared with the structures without the applied argument, so they should not be rendered into English as, e.g.: *John is drinking tea himself,* but rather as *John is drinking tea perfunctorily*. Moreover, we would like to claim that the attenuative meaning of such structures directly results from the fact that the structure with the applied high argument puts some additional distance between the voice head introducing the subject and the rest of the event structure. The very distance is implanted between the subject, which is much higher in the structure, and the VP, which is much lower. In Pylkkänen's (2008) system the structure for (9a) would look like:

(10)
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           VoiceP
         /        \
      Jan           \
            /        \
         Voice        \
               /       \
            Jan          \
                  /       \
               Appl      skacze
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The structural remoteness between the subject and the verb results in the attenuative meaning of such a structure. This meaning is absent if participants are distinct, in which case the presence of the second party enriches the semantic relationships in the sentence.

Alternatively, we could claim that high applicatives appear only if the participant introduced by the applicative head is identical with the subject of the structure; otherwise we are dealing with low applicatives. Consequently, low applicatives cannot arise with intransitive, one argument verbs, since these do not allow the direct object participant in the first place.

2.1.4.
Up to now, we have simplified the derivational picture, claiming that all intransitives derive applicatives in Polish. This, however, is an oversimplification.

2.1.4.1.
There are many unaccusative predicates which even with co-reference fail to derive the relevant forms, e.g.: *osłupieć sobie* 'to get stunned, appl.', *zamarznąć*

sobie 'to freeze, appl.', **owdowieć sobie* 'to become a widow, appl.', **ocknąć się sobie* 'to wake up, appl.'. This may support the claim that they are structures in which the overt external argument originates as VP internal.[9] If we really assume such a structure, then the addition of the applicative structure layer will prevent the object moving out of the deep down position.[10] This conclusion is supported by the repair technique that can be applied in these cases. We can use effectively impersonal, subjectless structures that can be created in Polish with the help of what looks like the applied argument: *Owdowiało jej się* 'She became a widow, attenuative', *Ocknęło jej się* 'She woke up attenuative', *Zmarzło jej się* 'She got frozen attenuative'. They consist of the 3rd person neuter (default) form of the verb, dative personal pronoun taking the theta role of the would-be external argument and the reflexive clitic *się.* It can be suggested that the deep object makes it as far as the applicative stratum of the structure – which is lower than the would-be external argument. *Się* could be a trace of the argument moved to the applicative position. In Polish, apart from the results of the applicative derivation of this kind, we have also expressions which do not show the alternation between the personal and effectively impersonal uses of the like-meaning predicates. This, in turn, supports the claim that subjectless clauses are possible in Polish, e.g.: *Należy mi się to* 'I deserve this' (3rd person default verbal form, dative pronoun, reflexive clitic, argument in the nominative) vs. **Należę to* vs. **Należę sobie to.* The split in acceptability of unaccusatives with the applied argument may suggest that some so-called unaccusatives are object-derived, but some are not (cf. 1 above and 19 below).

At this point one may object saying that low applicatives would have the same 'blocking' effect since they could be higher in the structure than the direct object. However, the structure that Pylkkänen (2008: 17) seems to favor for low applicatives places the direct object higher (*I wrote John a letter*):

(11)
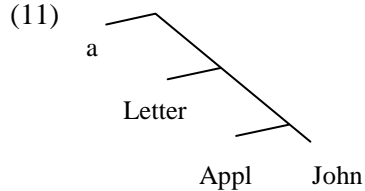
If so, then the presence of high but not low applicatives could help explain the above derivational intricacies.

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[9] For the Unaccusative Hypothesis see, e.g., Perlmutter (1978); Burzio (1986).

[10] Possibly the concept of phase could come here to our succour, but this would require much more thorough research.

2.1.4.2.

A similar limitation on the creation of applicatives obtains in Polish for experiencer verbs, where the object is the experiencer. If we assume that they are derived from the deep experiencer / experienced structure, where, in other words, experiencer argument is demoted from the highest position in the argument structure, then the lack of applicatives falls out, as again the applicative element would be in the way of the object raising derivation:

(12)

to dotyczy mnie *sobie 'it concerns me, appl.', *to szokuje mnie *sobie* 'it shocks me, appl.', **to śmieszy mnie *sobie* 'it makes me laugh, appl.', *to urzeka mnie *sobie* 'it enchants me, appl.', *to razi mnie *sobie* 'it puts me off, appl.', *to pasuje mi *sobie* 'it fits me, appl.', *to kusi mnie *sobie* 'it attracts me, appl.', *to cieszy mnie *sobie* 'it makes me glad, appl.', *to kłopocze mnie *sobie* 'it gives me problems, appl.', *to urzeka mnie *sobie* 'it attracts me, appl.', *to uwiera mnie *s*obie* 'it pains me, appl.', *to nęci mnie *sobie* 'it lures me, appl.', etc.

2.1.4.3.

Forms which are normally addressed as Experiencer verbs with the external experiencer are much better (see, however 3.3.5. below), as here no movement appears: *kocham się sobie* 'I am in love, appl.', *kojarzę sobie* 'I figure out, appl.', *cierpię sobie* 'I suffer, appl.', *ochłonęłam sobie* 'I cooled down, appl.' These derivatives are grammatical even with negatively tinged verbs (e.g., *cierpię sobie*), which do not easily take applicatives in Polish, e.g.: ?*kłamał sobie* 'he lied, appl.', ?*fałszował sobie* 'he sang out of tune, appl.', **truchlał sobie* 'he froze, appl.', **unikał sobie czegoś* 'he avoided sth., appl.', **winił sobie kogoś* 'he blaimed sb. , appl.'. We believe that this limitation results from the attenuative meaning that high applicatives reveal in Polish, which suggests enjoyment, relaxation, not to be reconciled with negative emotions. Low applicatives do not disfavor malefactives as bases as is evidenced in Pylkkänen (2008, e.g., p. 48).

2.1.4.4.

Likewise, truly stative verbs do not form applicatives – **sąsiadować sobie* 'to be neighbours, appl.',* *pamiętam sobie* 'I remember, appl.' vs. *drwię sobie z kogoś* 'I disregard / mock sb., appl.'. This limitation is not language specific, though not fully explained – see however Campanini and Schäfer's (2011) on this point.

As the data above suggest, Polish allows applicative structures with transitive and intransitive verbs, while exceptions in the latter group are due to specific limitations due to the grammatical structure or pragmatic considerations.

2.2. Low applicatives in Polish

So far we have suggested that in Polish we get only high applicatives and it is the existence of high applicatives which will be argued for in detail further on. We have to admit though that with transitive verbs we get two kinds of applicatives, high and low, and these kinds differ in meaning. *Czytam sobie książkę* 'I am reading a book, appl.' can mean two things at the same time: 1. I am reading a book to myself, and 2. I am reading a book just for fun (attenuative meaning). *Czytam mu książkę* 'I am reading him a book' has only one meaning, where *he* is the beneficiary, and that may speak in favour of treating such structures as low applicatives. It is possible then that high applicatives with transitive verbs are only derived with the coreferential applied argument: *Dekoruję sobie salę* 'I am decorating a chamber for myself' / or attenuative', *remontuję sobie dom* 'I am redecorating my house' / or attenuative – where the house is not necessarily mine. Similar contrasts can be seen in:

(13)
> *Czeszę sobie włosy.* 'I am combing my hair'. (*Czeszę sobie włosy, a nie jemu.* 'I am combing my hair and not his'.) or 'I am combing, att. hair'. (*Czeszę sobie włosy na tej peruce.* 'I am combing hair, att. on this wig'.)

Such semantic differences marking two types of applicatives can be also observed with idiomatic expressions, which represent rather low applicatives, as it makes sense to create a semantic chunk of a low piece of structure, situated within one VP, rather than of much more drawn out high applicative. Consider, for instance, the sentence *Opieram się sobie*. It can be analyzed as representing a high applicative and then it means: 'I am leaning on sth.' (*Opieram się sobie na stole*). Another meaning is related but idiomatic: *Opieram się sobie i nie jem kolejnego ciastka* 'I resist myself and am not eating the next cake'. Only the first one has the attenuative meaning and thus, as we claim, is high. Below in (10) we supply some more (idiomatic) expressions in Polish which should be rather connected with low applicatives, as we would expect smaller, more concise pieces of structure to be prone to lexicalization:

(14)
> *Zrobił mi dziecko.* 'He made me pregnant, coll.', *Napytał sobie biedy.* 'He courted disaster', *Używał sobie.* 'He enjoyed himself', *Dał sobie czas.* 'He postponed sth.', *Wyrzucał sobie.* 'He blamed himself', *Zrobił sobie krzywdę.* 'He hurt himself', *Nudzi się mi.* 'I am bored', *Przykrzy się mi.* 'I am bored', *Odbija mi się.* 'I am belching', *Dolega mi.* 'It ails me'.

This analysis is supported by the fact that some structures with the applied argument have only the benefactive meaning, while attenuative meaning is out. We may expect to find this with malefactive verbs, which, as we have mentioned before, do not easily produce high applicatives. This is really the case:

(15)
    Żałuję sobie chleba. 'I stint myself in bread'.

Here we are dealing with double object structure in Polish, as to get the meaning 'stint' we have to have two objects, otherwise, with the direct object only, the structure is grammatical, but it has the meaning 'regret': *Żałuję chleba* 'I regret (not having) bread'. Attenuative meaning is absent with (15). Similarly, it does not occur with: *Powikłałam sobie życie* 'I embroiled my life' (**Powikłałam życie*), *Napytałam sobie biedy* 'I brought problems onto myself'/lit. 'I asked on poverty' (**Napytałam biedy*), etc. This additionally supports our analysis, showing that Polish has high applicatives, inaddmissible here, as well as low applicatives. This tallies with Pylkkänen (2008), who argues that possessor dative constructions (pp. 46–49) in various languages have the structure like double object structures, but their reading is different as a result of low source applicative head present in them and not the recipient head. In our analysis the source head concept is replaced with malefactive meaning of the lexical verbal root, from which the distinction results. Pylkkänen (2008: 52) notices that these source applicatives always imply loss – here we would like to reverse the reasoning, it is the malefactives (loss?) that allow for low applicatives. We abstain from calling them 'double object structures' as they do not passivize in Polish: **Chleb jest żałowany*, **Życie zostało powikłane przeze mnie*, **Bieda jest napytana*.[11]

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[11] Possibly double object structures and low applicative structures are distinct in Polish as they behave differently with respect to passivization, but this requires further research. We assume low applicatives to have such structures as double object verbs (after Campanini and Schäfer 2011), but they certainly require a much more thorough investigation for Polish. We believe this is the right track to follow, but there is an alternative possibility along the ways quoted by Campanini and Schäfer (2011), where *se* (or in our case *sobie)* is an underspecified v-head merging with a root specifying the manner of the activity, or a non-argumental dative.

3. Cinzia Campanini and Florian Schäfer's (2011) analysis of Romance applicatives in comparison with Polish material

3.1.
We would like to compare the facts and theoretical findings for Polish applicatives with the analysis of Romance (French, Italian and Spanish) applicatives as presented in *Optional Se-constructions in Romance: Syntactic encoding of conceptual information* – a paper by Cinzia Campanini and Florian Schäfer presented at GLOW 2011. What we term here 'applicatives', in the paper are called OSCs (Optional *Si/Se* Constructions).[12]

3.2.
The first difference appears already at the level of form. Whereas in the three languages applicatives take the form of a single clitic *si/se*, the same as for reflexive structures, in Polish the form is *sobie*, if the applied argument is correferential with the external argument, other than than the reflexive clitic *się*. Likewise, in Polish, unlike in Romance languages, applicatives do not share the exponent not only with reflexives, but also with middles, unaccusatives, antipassives, etc. (as discussed earlier, see 5 above).

3.3.
The gist of Campanini and Schäfer's (2011) proposal can be presented as treating applicatives as cases of reflexivization, in particular involving double object structures with a low ApplP.[13] The applied argument must be bound by the external (co-referential) argument; it optionally realizes in the syntax what is conceptually implied by the verbal semantics.

3.3.1.
As we can see at the outset, in Polish such an analysis is doubtful, if only because that the exponents of reflexives and applicatives are distinct and because reflexives and applicatives may appear side by side in Polish (albeit not freely):[14]

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[12] We will retain the term 'applicative' as with Campanini and Schäfer's (2011) terminology there is a possibility of mixing up our data with similar, albeit structurally distinct, ISCs (Involuntary State Constructions) discussed by Rivero (2009).

[13] With the exception of Spanish.

[14] Consider, for instance, the following forms with varying degrees of acceptability: **Dał się sobie katować* 'He let himself be tortured'; ***Dał się sobie zaskoczyć* 'He surprised himself'; **Szklanka napełniała się sobie powoli* 'The glass filled slowly'; **Sznurowadła się sobie zawiązały* 'The shoe-laces got knotted up'; **Szklanka napełniała się sobie powoli*

(16)

*Dni (Acc.) spędza **się sobie** na plaży.* 'Days are spent on the beach, appl.'.
*Tańczyło **się sobie** do rana.* 'They danced appl. till dawn'.
*Najadł **się sobie** jabłek.* 'He ate up, appl. some apples'.
*Gapię **się sobie** na jego zdjęcie.* 'I am gazing, appl. at his picture'.
*Modli **się sobie** w ciszy.* 'He is praying, appl. in silence'.

The differences are not limited to the above; we have also claimed that applicatives in Polish are high,[15] as opposed to low applicatives in Romance, and that the restriction on co-reference with the external argument – vital for Romance – by and large does not obtain in Polish (see 7 above).

3.3.2.
Campanini and Schäfer (2011) begin with analyzing the classes of verbs yielding applicative structures and find out that they can be derived only from non-core transitives, i.e., verbs of consumption and psychological consumption and the ones with cognate objects. Such predicates derive applicatives in Polish as well:

(17)

Jem sobie (ciastko). 'I am eating (a cake)'. – consumption
Czytam sobie (książkę). 'I am reading (a book)'. – psychological consumption
Tańczę sobie (taniec). 'I am dancing (a dance)'. – with a cognate object

The difference is that direct objects with the applied arguments are indispensable in Romance, but optional in Polish, as shown above.

3.3.3.
In Polish also other transitives derive applicatives, and if the direct object is not optional with the basic verb, it cannot be deleted in the applicative structure either:

(18)

   Zaczepiłam żołnierza. 'I have approached a soldier'.
vs. *Zaczepiłam sobie żołnierza.* 'I have approached appl. a soldier'.
vs. **Zaczepiłam.*
vs. **Zaczepiłam sobie.*

'The glass filled slowly'; ? *Jan stykał **się sobie** z nim* 'John was in touch with him'. These relationships and limitations will be discussed in detail in Malicka-Kleparska (to appear).
[15] Only with transitive verbs there may appear low applicatives – as already mentioned earlier.

Żegnałam delegatów. 'I have said my farewell to the representatives'.
vs. *Żegnałam sobie delegatów.* 'I have said appl. my farewells to the representatives'.
vs. **Żegnałam.*
vs. **Żegnałam sobie.*

Zmieniłam sobie kolor włosów. 'I have changed appl. my hair colour'.
vs. **Zmieniłam.* 'I changed'.
vs. *Zmieniłam kolor włosów.* 'I have changed my hair colour'.
vs. **Zmieniłam sobie.* 'I have changed. appl.'.

Such verbs (core transitive verbs, verbs with unaffected objects, verbs of grooming) resemble Romance structures in that the objects cannot be deleted with their applicatives. This is easily explained in the Polish case by claiming that they are high applicatives and consequently the applied argument cannot fulfill the strict subcategorization requirements of the transitive verb that requires the object; consequently, we do not need to resort to claiming that it is the low applicative intra-VP relation between the arguments that requires their conjoined presence. Moreover, the phenomenon of requiring the object in applied structures is precisely limited to obligatory object verbs, and does not obtain for absolute uses of transitive verbs (see 17 above), unlike in Romance, which again points to Polish structures as high applicatives.

3.3.4.
The ease of formation of applicatives in Polish with intransitive verbs (see 1, 5, 6, 7 above), both unaccusative, and unergative, is of course the most important feature, as intransitives are taken by Pylkkänen (2008) to be the testing ground for high applicatives; since low applicatives have to create a bond with internal arguments, intransitive verbs cannot supply them. Polish allows for derivations with a whole spectrum of intransitive verbs:

(19)
Inchoatives (a class of unaccusatives):
Kapusta kisi się sobie w beczce. 'Cabbage pickles, appl. in a barrel'.
Rana goi się sobie powoli. 'The wound heals appl. slowly'.
Zacier fermentuje sobie. 'Moon-shine ferments appl.'.
Te barwy mieszają się sobie powoli. 'These colours mix appl. slowly'.[16]

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[16] Notice that the very same verb with 'experienced meaning' is, predictably, ungrammatical with the applied argument (see 12 above): **Dziewczyna mieszała się sobie kiedy ktoś do niej mówił.* 'The girl got confused, appl. when anybody spoke to her' (see 2.1.4.2.).

(20)
    Unergatives:
    Weszła sobie do domu. 'She came, appl. into the house'.
    Pies ujadał sobie przed budą. 'The dog howled, appl. in front of his kennel'.
    Tancerka wirowała sobie w tańcu. 'The dancer spun, appl. in her dance'.

3.3.5.
There are, however, classes of forms that systematically fail to produce applicatives in Polish – see Sections 2.1.4.2. and 2.1.4.3. First of all, experiencer verbs, both with the structure Experienced-Experiencer realized by Subject and Object, respectively, and the opposite, Experiencer (Experienced), fail to yield applicative structures:

(21)
    Experienced – Experiencer

    *Ta wiadomość szokuje mnie sobie. 'This piece of news shocks me, appl.'.
    *Ten żart śmieszy mnie sobie. 'This joke is funny for me, appl.'.
    *Ta sprzączka uwiera mnie sobie. 'This clasp pinches me, appl.'.
    *Ten pęcherz swędzi mnie sobie. 'This boil itches me'.

(22)
    Experiencer – (Experienced)

    *Speszył się jej zachowaniem sobie. 'He was put out by her behavior, appl.'.
    *Koń się spłoszył sobie. 'The horse got frightened, appl.'.
    *Dziewczyna trapi się sobie swoją przyszłością. 'The girl worries, appl. about her future'.
    *Mężczyzna powoli się uspokoił sobie. 'The man has slowly calmed down, appl.'.
    *Młodzi łakną sobie wiedzy. 'The young desire, appl. knowledge'.
    *Każdy doświadczył sobie kiedyś catharsis. 'Everybody once experienced, appl. catharsis'.

Recall that in section 2.1.4.3 we have stated that Experiencer verbs with the external experiencer and the applied argument are, by and large, grammatical. Here we would like to claim that, as far as applicative derivation is concerned the verbs mentioned in that section do not behave like experiencer verbs, but like other classes of transitive or intransitive verbs, i.e., they are not produced through any argument movement, where the applicative structure could prevent the transformation. But the Experiencer verbs in (22) above are derived like unaccusatives, from the structures where the surface external argument is in fact a deep internal one, and hence the applicative structure gets in the way of the derivation in (22).

The movement solution is not the only one that can be suggested here. Below we would like to propose another, semantic explanation for the facts in (21) and (22), which ties in closely with the high applicative analysis.

In the semantics of experiencer expressions, we perceive nothing that would, in principle, prevent low applicatives from being formed with them. To remind you, low applied arguments are attached within the VP and create a possession relationship (*into, out of*) between the applied argument and the direct object. For examples in (21) and (22), such relationships are thinkable, e.g., *Młodzi łakną sobie wiedzy* 'The young desire knowledge for themselves', *Ta wiadomość szokuje mnie sobie* 'The piece of news (that I have acquired) shocks me', etc., yet applicative structures do not arise. We would like to claim that this state of affairs can be explained away if we assume that Polish optional applicatives are high. Recall our claim that high applicatives create the (mental) distance between the subject and the object, which results in attenuative meaning of grammatical structures with high applicatives. Experiencer verbs, out of their very nature, require **direct** impact of the Experienced upon the Experiencer. Thus high applicatives, creating distance, are inadmissible in Polish with such verbs. Stative verbs, like those given in Campanini and Schäfer's (2011) data, cannot have applicatives for similar reasons: *?wiem sobie.* 'I know, appl.', *?kocham sobie.* 'I love, appl.', *stykam się sobie.* 'I come in touch, appl.'.

3.3.6.

Another general condition on the creation of applicatives in Polish is, again, connected with the distance that is responsible for attenuative meaning of high applicatives. This meaning has been noticed and specified as 'enjoyment and easy-going' (albeit for a different body of applicative data) by Boneh and Nash (2009: 8), as reported by Campanini and Schäfer (2011). Thus we may expect to find no applicatives of this type with the verbs whose semantics a priori excludes enjoyment and easy-going. The examples below illustrate this regularity with Polish verbs belonging to various classes, which in principle derive applicatives:

(23)

   Te ogórki marnują się sobie. 'These cucumbers are going bad, appl.'.
vs. *Te ogórki marynują się sobie.* 'These cucumbers get pickled, appl.'.

   Dziewczyna okłamuje się sobie. 'The girl is lying to herself, appl.'.
vs. *Dziewczyna przekomarza się sobie.* 'The girl is flirting, appl.'.

   Zając struchlał sobie na widok niedźwiedzia. 'The hare froze with fear on seeing
                                                         a bear'.
vs. *Zając skoczył sobie na widok kapusty.* 'The hare jumped, app. at seeing a cabbage'.

Yet, we may notice in the case of malefactive verbs that the limitation on their creation is not structural, but rather pragmatic; given the right context, attenuation may be transformed into a different kind of distancing – negative distancing of the interlocutor, and then the applicative structures sound acceptable: *A okłamuj się sobie, okłamuj! Zobaczysz że biedy sobie tylko napytasz.* 'But do persist to lie appl. to yourself! You will come to no good.' Consequently, we claim that the lack of applicatives in Polish with experiencer verbs is of a structural kind – incompatibility of the experiencer verbs with high applicative structure, separating the external argument from the DO, and/or semantic – the lack of direct impact of experienced on the experiencer, while inadmissibility of high applicatives with malefactive verbs (and others of similar dissonance with happy-go-lucky attitude) results from the fact that in Polish the structural distance between the external argument and the VP translates as attenuation or enjoyment.

Consequently, the distribution and semantic properties of applicatives in Polish speak in favour of their treatment as high applicatives.

3.3.7. Co-reference as a non-specific property in applicatives

Campanini and Schäfer (2011) stress the fact that Romance applicatives show great affinity with reflexive structures in form and meaning. For instance, they must have co-referential applied arguments and subjects. The linguists connect this property with applicative semantics in Romance – applicatives are analyzed as resultatives, where the external argument is affected by itself.

Applicatives in Polish neither have the same form as the reflexive clitic *się*, nor do they have to be co-referential with the external argument, e.g., *Śpiewam sobie piosenkę.* 'I am singing, appl. cor. 1st pers. sg. a song' vs. *Śpiewam mu piosenkę.* 'I am singing, appl. 3rd pers. masc. sg. a song' (see also, e.g., 7 above). Even though, as we argued in Section 2.1.3, some Polish applicatives are coreferential with external arguments, e.g., *Skaczę sobie.* 'I am jumping', this fact cannot be held against treating applicatives in Polish as high. Campanini and Schäfer's (2011) analysis is designed in particular for transitive verbs with two events being involved in the production of applicatives. Crudely speaking these events are: 1. taking sth. and 2. putting it into oneself. Such an analysis is precisely not available for Polish co-referentials as they arise in the case of intransitive predicates – clearly mono-eventive. Thus, the requirement of co-reference, even if it obtains, has no bearing on the type of applicative to postulate for Polish.

4. Polish high applicatives in the light of Campanini and Schäfer's (2011) and Pylkkänen's (2008) typologies

In this section we take up several diagnostics proposed in the literature on the subject for low/high applicatives and measure them against the Polish data, additionally supporting our analysis developed so far.

4.1. Applicatives with intensified pronouns

The high position of Polish applicatives is also stressed if we consider another body of data from Romance; Romance (low) applicatives cannot appear with intensified pronouns: *Gianni si a mangiato la torta (*a se stesso)*. 'Gianni refl. is eaten the cake (*dat. refl. self)' – taken from Campanini and Schäfer (2011). In Polish such modifications are perfectly regular:

(24)
  Jem sobie sam. 'I am eating, appl. self', etc.

and as the intensified pronoun appears high in the structure and is resumptive with respect to *sobie* then its presence clearly shows that Romance and Polish structures are different and that Polish structures are high. *Sam* 'self' is attached at the outer layer of structure in Polish and thus easily takes up (resumes) the high applied argument in Polish. This is not the case in Romance, in which the applicatives are lower down in structure.

4.2. Telicity with applicatives

Still another difference is connected with aspectual shift: In Romance low applicatives are interpreted as making an event telic (from Campanini and Schäfer (2011)): *Jean s'est mangé la pizza (*pendant 10 minutes)/ (en 10 minutes)*. 'John has eaten the pizza for 10 minutes/ in 10 minutes'. But in Polish applicative structures can be atelic because being attached 'higher' up, they do not affect the VP structure:

(25)
  Śpiewałam sobie piosenki przez 3 godziny. 'I have sung songs for 3 hours'.

4.3. Double applicatives

Similarly, in Romance two dative elements can appear in a structure as one can be the low applicative, while the other, a further dative benefative in the clause, referring to the whole event (from Campanini and Schäfer (2011)): *Il cane$_i$ (mi) si$_i$ é mangiato la bistecca.* 'The dog me ref. is eaten the steak'). As predicted by our analysis of high applicatives in Polish, such sentences are ungrammatical in this language, as we would have the two applicatives in the same high position:

(26)
  *Pies sobie zjadł mi ciastko. 'The dog has eaten a cake on me'.

As we can see, the Polish structures, in contrast to Romance applicatives, strike us in all respects as high applicatives.

4.4. Depictives

Let us also analyze some of the diagnostics for high applicatives that Pylkkänen (2008) proposes. One of her arguments refers to depictives (p. 27 and the following). These should not be available with low applicatives: **I bought John the VCR sober* – where *sober* refers to *John*. This happens because of too complex semantic structure of the low applicatives, but it should be expected with high applicatives. Unfortunately, Polish does not offer structures to this effect:

(27)
  Pobiegłam mu w maratonie po pijaku. 'I ran him a maraton drunk'. can only be
                                        interpreted so that I am drunk
  Pracowałam dla Jana na trzeźwo. 'I worked for John sober' – I am sober.

This does not necessarily mean that applicatives are not high. We believe that in Polish interpretation of depictives is pragmatically dependent:

(28)
  On dał mi klucze na trzeźwo. 'He gave me the keys when he was sober'. – most natural interpretation that he is sober.
vs.
  On ukradł mi klucze po pijaku. 'He stole my keys when I was drunk'. – I am interpreted as drunk.

4.5. Resultatives

Another diagnostic feature of Pylkkänen's (2008), however, works. She (pp. 40–41) argues that resultatives cannot appear with low applicatives, e.g., **John washed him the shirt clean*, but are grammatical with high applicatives, which is supported by Polish data:

(29)
   Pomalował sobie pokój na biało. 'He painted his room, appl. white'.
   Uprała mu koszulę do czysta. 'She washed him, appl. shirt clean'.

Thus both Pylkkänen's (2008) and Campanini and Schäfer's (2011) parameters seem to point to the solution with high applicatives for Polish.

5.   Main theoretical tenets – summary

Our proposal for the Polish language has been based both on semantics of applicatives and on the type of applicative head, as well as on the position in the structure where it attaches applied arguments in Polish.
      Pylkkänen (2008: 17) claims that applied arguments are introduced by applicative heads of various kinds for high applicatives, e.g., instrumental, benefactive, malefactive, etc., and thus varied applicative meanings result.
      We have suggested that applicative heads do not carry (with themselves) thematic properties, but are defective in this respect.[17] [18] Thus the applied argument does not have a specific semantic relation to the event described in the structure. Then, if no specific personal pronoun, not co-referential with the subject, is placed in the structure, the default co-referential *sobie* fills the argument position and, possibly, copies the thematic role of the external argument, or more probably stays devoid of the semantic role and so it brings about the peculiar attenuative semantic effect. In the case of a non-coreferential applied argument, its role is filled in on the basis of lexical structure of the verb and pragmatic considerations. Hence we have *Ukradł mi portfel* 'He stole my wallet (from me)' but *Dał mi buzi* 'He gave me a kiss (to me)', the sentences which, according to Pylkkänen (2008), would have distinct applicative heads APPL-

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[17] Already Campanini and Schäfer (2011) notice that there is something strange going on with thematic roles in their corpus. For instance they have to claim that agents in low applicative structures have to bind the possessor position and acquire thereby the role of inalienable possessor or that Agent incorporates Theme, etc.

[18] In Polish, they clearly assign the dative case though.

FROM and APPL-To, quite unnecessarily, we think, as this information is clearly predictable on the basis of verbal meanings. Remember that malefactive high co-referential applicatives (2.1.4.3) in Polish are odd, but low ones are grammatical (see 15 above and the discussion underneath). This is in agreement with treating the high ones as non thematic and attenuative and acquiring various meanings in specific contexts. We have also extensively argued that the majority of applied arguments in Polish are high, and that the low arguments possess distinct properties, both semantically and structurally.

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