Alternating frames of ‘deprivation’ verbs in Polish or: How to distribute and model the information of lexical representations and event structures

Short title: Alternating frames of ‘deprivation’ verbs in Polish

Abstract

The text is devoted to an analysis concerning the representation of the Polish verbs with alternating frames which express the meaning of deprivation (also called ‘clear’ verbs). Such verbs allow the alternation to occur between their arguments expressed in terms of Direct Object DPs and Prepositional Phrases. The alternation does not affect the meaning of the sentence. The possibilities of the alternation are reduced by poorly researched limitations, which might be connected with the lexical representation of the verb, its type, or the event structure in which the verb is situated in a given context. Rearrangements of this kind have been analyzed for English, Greek and Hebrew. We will present an alternative analysis based on the Polish data, which differs considerably from the proposed solutions.

The analysis takes into consideration the specificity of the Polish data and assumes the lexical representation of the verb in Polish which includes the information about Location, while the other element of the semantic representation - Substance (Stuff) - is not included in the same way. It is contributed by event structure frames, or it is the lexical property of only some, designated verbs, so consequently it is less ‘stable’. Our solution is more complex than
the solutions proposed for English or Greek but it reflects the strongly lexicalized character of Polish verbal valency phenomena.

The proposed representation for the roots of deprivation verbs also allows us to address the issue connected with the mode in which such verbs and their more complex correspondents – dispositional middles and anticausatives – should be derived. The data shows clearly that the lexicalist approach to Polish morpho-syntax is much more appropriate for the given material than the root-based construction model.

1. **Introducing deprivation verbs as a subclass of Polish valency rearrangement data**

At the same time these verbs allow us to see clearly how the division of labor between the lexicon and the grammatical component should be conducted. They give us an opportunity for a deep insight into the underpinnings of semantic representations of valency dependent structures, in which certain information is not to be predicted and it is not generalized; Consequently it has to be introduced in the lexical entries for particular verbs. At the same time some information is regular and as such it can be introduced by grammatical devices.

This paper is devoted to these two important aspects concerning the shape of modern morpho-syntactic generative theories which. Both issues are tagged with essential developments when we analyze the behaviour of deprivation verbs in Polish and other morphologically complex forms based on the same roots as the verbs.

The next section will introduce the linguistic material we intend to analyze (section 2).

The following section (3) will introduce very briefly the analyses of the analogical material available for Greek and Hebrew (based on earlier finding for English). Section (4) will focus on the Polish non-alternating data and it will offer an overall analysis of the Polish system of deprivation verbs. In the final part of this paper (section 5) we will wonder whether dispositional middles and anticausatives corresponding to deprivation verbs should be derived from these verbs or from the common roots. The data will allow us to show that the lexical model is much more explanatory than the root based one in this area of Polish morpho-syntax. Section 6 will sum up our findings.

2. Polish deprivation verbs

Deprivation verbs, also called in the literature of the subject ‘clear’ verbs, have been extensively discussed quite recently by Alexiadou and Anagnostopoulou (2012) and Segal and Landau (2012) for Greek and Hebrew respectively, continuing earlier analyses of Rappaport Hovav and Levin (1998), and Levin (2006) for English.

To our knowledge, in Polish they have not been given any more thorough thought.
The verbs constitute a semantically coherent class of predicates which name various ways of removing substances from places. They are of a particular interest to linguists because they possess interesting grammatical properties. These verbs can be followed by two verb phrase internal arguments which take the guises of a plain DP and a PP, while the semantic contents of these complements can alternate. The alternation, however does not result in any semantic rearrangement, in other words the sentences with alternating grammatical frames always mean the same. The data below illustrate this property for the Polish material:

1)  
   a. *Mężczyzna wyczyścił płaszcz z brudu*. ‘A man has cleaned dirt from his coat’  
   b. *Mężczyzna wyczyścił brud z płaszcza*. ‘A man has cleaned his coat of dirt’

   a. *Dziewczyna zamiotła chodnik z pyłu*. ‘A girl brushed the pavement of dust’  
   b. *Dziewczyna zamiotła pył z chodnika*. ‘A girl brushed dust from the pavement’

   a. *Mechanik umył ręce z oleju*. ‘A mechanic washed his hands of oil’  
   b. *Mechanik umył olej z rąk*. ‘A mechanic washed oil from his hands’

The Direct Object is realized as the Location (1 a) from which some substance (Staff) is removed, expressed as a PP object. Alternately, the Direct Object expresses Stuff, while the PP stands for the Location from which something has been removed (1 b).

Some of the uses of the verbs in such structures sound more colloquial than others but our research, carried out on the National Corpus of the Polish Language\(^1\), shows that both frames are realized by Polish speakers quite easily and both are attested. Below we give a few examples illustrating the alternating uses taken from the Corpus. The relevant verb and its arguments are marked with bold characters:

2)  
   …*obieramy pyrke z łupiny*…’We peel the potato from its peel’  
   …*obieram skórę z mandarynki*…’I peel the skin from the mandarin’

---
\(^1\) In the references it has been entered as Przepiórkowski et al. (2012), henceforth in the text it will appear as NKJP standing for its Polish abbreviated name: Narodowy Korpus Języka Polskiego.
Sprzątali śmieci z ulic. ‘They cleaned trash off the streets’
Co rano trzeba było sprzątać okolicę z prezerwatyw. ‘Every morning it was necessary to clean the surroundings of condoms’

czyscić atmosfere z kurzu... ‘clean atmosphere from dust’
Narzędziem skutecznie czyszczącym dane z dysków jest program Acronis DriveCleanser. ‘The instrument effectively cleaning data off disks is Acronis DriveCleanser’

drenując pienią z kieszeni... ‘draining the money from the pockets’
drenując kolonie z bogactw... ‘draining the colonies from the riches’

In all the cases the meaning of the alternating phrases remains the same as far as the relationship between the Location and the Stuff is concerned: the Stuff always leaves the Location no matter what their formal realizations are.

The problem so far seems easy enough to analyze. The basic verb could be represented in the lexicon with the information concerning just the number of arguments and their type and without the specification how they are to be assigned in the syntactic structure. The rest of the information concerning the realization of the arguments can be given in grammar, for instance in the form of event structure frames, which can augment the lexical information of the verb.

Such a solution has been proposed by Levin (2006:14), who claims that the alternation is visible with a subclass of manner verbs, which should be represented in the lexicon as in (3) below. The illustration is provided for the verb to wipe:

3) [XACT<WIPE,Y]

X represents the external argument of the verb, while Y—the so called pure root participant which may show up in various forms in the clausal structure. The root participant has also this specific property that it may not be realized in the clausal structure at all and then the verb has the implicit object (absolute use). The rest of the information about other participants in a given event comes from event structure frames, belonging not to the lexicon, but to the grammar of a language. These frames (also called templates) for the verbs analyzed
here take up the form given by Alexiadou and Anagnostopoulou (2012) (see also Segal and Landau 2012:233):

4) COL: [X CAUSE [Y BECOME [AWAY FROM Z]]]
5) COS: [X CAUSE [Z BECOME [WITHOUT Y]]]

COL is a frame for the change of location verbal uses, that is the Direct Object expresses the Stuff participant, while the PP—the Location; COS stands for the change of state verbal uses, with the Direct Object standing for Location and the PP—for the Stuff participant.

When these frames supplement the lexical representations of deprivation verbs, we get the complex structures illustrated below:

6) [[xACT <MANNER>][X CAUSE [Y BECOME [AWAY FROM Z]]]
7) [[xACT <MANNER>][X CAUSE [Z BECOME [WITHOUT Y]]]

Let us illustrate how these structures apply to Polish deprivation verbs. We will do this for obierać ‘peel’. Obierać is represented in the lexicon with the information about its external argument and the fact that it can appear with an internal argument, the pure root participant (which can take up various syntactic guises: a DP or a PP in the case at hand). The internal argument is included, as obierać normally requires the presence of an explicit (or implicit) argument of this type; In other words it is not an intransitive (unergative) verb. The verb also specifies (albeit very indirectly) the manner in which the action is performed – in this case the manner interpretation concerns the peeling technique of ‘deprivation’.

Consequently, obierać classifies as a manner verb. The verb is taken from the lexicon in such a form and then it can be supplemented with one of the two above (see 4, 5) event structure templates to appear in the sentences given in (2) above.

If that was all, then the analysis would have been simple enough and without further consequences for the grammatical system as such or for the choice of grammatical description. However, some deprivation verbs do not alternate in the predictable ways. For
instance some can appear in the so called truncated frames for one kind of argument representation (see Levin 2006: 14, Segal and Landau 2012), while the other alternating frame can be fully spelled out:

8) Tom wiped the water off the table. (The full COL frame)  
Tom wiped the table*of water. (The full COS frame)  
Tom wiped the water. (Truncated COS frame)

The verb in (8) above cannot appear in the full COS frame, so it cannot form the grammatical sentence like:*Tom wiped the table of water. The sentence with the Location Direct Object and no PP Stuff is nevertheless possible.

Polish also shows irregularities of this type. Most deprivation verbs are alternating ones, but a subset contains COL-only verbs and another subset delimits COS-only verbs. That means that although all deprivation verbs can appear in the truncated frames, some of them can appear only in full frames typical of change of state uses, while some—in the frames of change of location uses (if both the internal arguments are to be present). Below we will illustrate all the three types of behavior with some Polish verbs:

9) Alternating verbs

Joanna oblizuje loda z palców ‘Joanna licks ice cream from her fingers’ vs. Joanna oblizuje palce z loda ‘Joanna licks her fingers clean of ice cream’
Rolnik drenuje wodę z pola ‘A farmer drains water from the field’ vs. Rolnik drenuje pole z wody ‘A farmer drains a field of water’
…drenując pieniędze z kieszeni podatników… (NKJP) ‘draining money from tax-payers’ pockets’ vs. …drenując kolonie z bogactw … (NKJP) ‘draining colonies of riches’

The verbs above illustrate the situation when a verb appears in two full frames indiscriminately and both sentences have the same meaning. Below we will give examples of such verbs that tolerate just a single frame, either the change of location— in the first three examples, or the change of state— in the remaining sentences.

10) COL-only verbs
Łamię gałązkę z rosnącego przy drodze bzu. ‘I am breaking a twig from a lilac bush growing near the road’ vs. *Łamię rosnący przy drodze bez z gałązki. ‘*I am breaking a lilac bush growing near the road of a twig’

Uległ tragicznemu wypadkowi ratując dzieci z pożaru. ‘He had a tragic accident while rescuing the children from the fire’ vs. *Uległ tragicznemu wypadkowi ratując pożar z dzieci ‘He had a tragic accident while rescuing the fire from the children’

Będą usuwać bezdomnych z dworców. ‘They will remove the homeless from railway-stations’ vs. *Będą usuwać dworce z bezdomnych ‘They will remove railway-stations from the homeless’

COS-only verbs

Ja nie ośmieliłbym się leczyć kogoś z depresji. ‘I would not dare to treat anybody for depression’ vs. *Ja nie ośmieliłbym się leczyć depresji z kogoś. ‘I would not dare to treat depression for anybody’

Gdy jedna z kobiet zajmowała się osobą pokrzywdzoną, druga plądrowała mieszkanie z pieniędzy. (NKJ) ‘While one of the women was taking care of the hurt person, the other plundered the apartment from money’ vs. *Gdy jedna z kobiet zajmowała się osobą pokrzywdzoną, druga plądrowała pieniądze z mieszkania ‘While one of the women was taking care of the hurt person, the other plundered the money from the apartment’

Otrzeźwili ojca z upojenia. ‘They have sobered the father from intoxication’ vs. Otrzeźwili upojenie z ojca. ‘They have sobered intoxication from the father’

The grammaticality of particular frames cannot be predicted on the basis of meanings of individual verbs as verbs with very close meanings differ in distributional properties:

11) Żołnierze konfiskowali mienie ze szkoły. ‘Soldiers confiscated equipment from the school’ (COL-only) vs. Żołnierze grabili szkołę z mienia/mienie ze szkoły. ‘Soldiers robbed the school of the equipment / the equipment from the school’ (alternating COS/COL)

Joanna zbiera wodę ze stołu. ‘Joanna gathers water from the table’ (COL-only) vs. Joanna wyciera wodę ze stołu/stół z wody ‘Joanna wipes water from the table/the table of water’ (alternating COL/COS)

Joanna usunęła brud z koszuli. ‘Joanna removed dirt from the shirt’ (COL-only) vs. Joanna splukala koszulę z brudu/brud z koszuli. ‘Joanna washed out the shirt of dirt/dirt off the shirt’ (alternating COS/COL)

Consequently, an analysis of the material has to explain why some verbs alternate, while some others do not and how their lexical representations differ in the alternating and non alternating cases. Such analyses are available for Hebrew and Greek and we will adumbrate them in the next section.

3. Existing analyses of deprivation verbs
While analyzing the Greek data Alexiadou and Anagnostopoulou (2012) came up with the idea that while alternating verbs have in the lexicon the representation in (3), their non-alternating kins possess the frames specifying the full event structure in which they appear already in the lexicon. Thus, the non-alternating verbs are not augmented with the alternating frames by the grammatical component. These frames, following Levin’s (2006:15) and Alexiadou and Anagnostopoulou’s (2012) suggestions would take the following forms:

12) [[x ACT[^manner]] CAUSE [y BECOME [y AWAY FROM z>]] (with non-alternating COL verb)

[[x ACT] CAUSE [z BECOME [z <result state (without) y >]] (with non-alternating COS verb)

Such a model explains why the alternating verbs appear in sentences without any objects much more easily than the non-alternating ones—for which the presence of the internal arguments is predicted lexically. Additionally Alexiadou and Anagnostopoulou’s (2012) notice that in the case of alternating verbs the presence of one internal argument does not entail the presence of the other, which is not the case with the non-alternating verbs. Similar facts have been observed by Segal and Landau (2012) for Hebrew. Consequently, the alternating verbs are represented in the lexicon only with the information that there may be an internal argument of unspecified type which accompanies them. This argument may take the

---

2 Alexiadou and Anagnostopoulou (2012) quote the following entailment data from Greek to support their analysis:

Alternating verb with V DP-Stuff (No COL entailment)
Kseplina tin laspi (alla den efige apo tis skales)
Washed-I the mud-ACC (but not left-it from the stairs)
‘I washed the mud (but it stayed on the stairs)’

Alternating verb with V DP-Loc (No COS entailed)
Kseplina tis skales (alla pareminan vromikes apo laspi)
Washed-I the stairs (but remained-they dirty from mud)
‘I washed the stairs (but they remained dirty with mud)’

Verbs with DP-Stuff (COL entailed)
Diegrapsa tin protasi (≠≠alla paremine sto kimeno)
‘I deleted the sentence (≠≠but it remained in the text)

Verbs with DP-Loc (COS entailed)
Ekkenosan to ktirio (≠≠alla pareminan kapii anthropi mesa)
‘They evacuated the building (≠≠but some people remained inside)
form of the Direct Object Location or Direct Object Stuff in the truncated frames, it may also appear as an implicit argument if no object follows an alternating verb. In contrast to this situation, the non-alternating verbs have in their lexical entries the information about the number, type and form of arguments that accompany them and these arguments cannot be made implicit; the verbs lack absolute uses. As will be shown in the next section, the Polish data do not adhere to the findings concerning the deprivation verbs in Hebrew and Greek, but represent their own pattern of dependencies. This may be disappointing if we want to reduce valency phenomena to more universal principles, nevertheless it is a fact.

4. Polish non-alternating deprivation verbs

Polish non-alternating verbs adhere only partially to the regularities observed for Greek and Hebrew. Not all non-alternating verbs in Polish are ungrammatical without overt objects. Likewise, the entailment data are significantly different than in Greek or Hebrew.

First let us illustrate the behavior of Polish verbs re the presence of the overt Direct Object:

13) Alternating verbs do not require the overt object:

Ajax czyści dobrze ‘Ajax cleans well’
Ja gołę, a ona wyrywa ‘I shave and she clips (understood - unwanted hair)’
Chłopiec grabił przez cały dzień ‘The boy raked the whole day’

14) COL non-alternating verbs do not require the overt Direct Object (unlike in Greek):

Żołnierze konfiskowali przez cały ranek ‘Soldiers confiscated the whole day’
Dziewczyny spędzily w sadzie dużo czasu. Joanna zbierała, a Anna zrywała.’ ‘The girls spent a lot of time in the orchard. Joanna gathered and Anna picked’
Dziewczyna była w trudnym położeniu i usunęła (ciążę). ‘The girl was in dire straits and she aborted’

15) COS non-alternating verbs require the Direct Object:

*Złodziej okradł i miał z tego satysfakcję ‘The thief stole and was satisfied’
*Złodziej obrobił i miał z tego satysfakcję ‘The thief robbed and was satisfied’
*Pokutnik oczyścił i otrzymał rozgrzeszenie ‘The penitent confessed and was pardoned’
The data suggest that in Polish the demarcation line does not run between the alternating and non-alternating verbs, but between the alternating and COL-only verbs on the one hand and the non-alternating COS-only verbs — on the other.

This distinction is supported by the entailment data. Both alternating and COL-only verbs always entail Location, while COS-only verbs do not entail Stuff:

16) *Dziewczyna starła podłogę, zostawiwszy na niej smugi* ‘The girl has cleaned the floor having left smudges on it’ (an alternating verb)
17) *Dziewczyna starła smugi, zostawiwszy je na podłodze* ‘The girl has cleaned the smudges having left them on the floor’ (an alternating verb)
18) *Uratował dzieci, zostawiwszy je w pożarze* (a COL-only verb) ‘He saved the children having left them in the fire’
19) *Splądrował mieszkanie, zostawiwszy w nim pieniądze* (a COS-only verb)

The data suggest that the element of Location is present in the lexical representation of the alternating verbs and COL-only verbs since it can be understood as an implicit object in (13) and (14) and it is present in the entailments in (17) and (18), rendering the complex sentences ungrammatical. The ungrammaticality results in particular from the fact that the first clause entails the Location from which the Stuff has been removed, while the second clause states that the Stuff remained in the Location. On the other hand, the Stuff is not specified in the same way as it cannot be understood as the implicit Object in (15) and is not entailed in (19), which remains grammatical as the Location is not entailed by the first clause.

Also some other data suggest that the positions of the Stuff semantic argument and that of the Location differ in Polish in the material of deprivation verbs. Segal and Landau (2012) have observed such a distinction for Hebrew, which can be also traced in Polish. They have noticed that the element of Location is in fact implied in the COS and COL frames slightly differently. In the COL frames Location has ‘the path’ meaning, which is absent from COS frames. The ‘path’ is understood here as a vector along which the Stuff changes its position. In Polish the same phenomenon can be noticed and we will illustrate it in the examples below.
The ‘path’ semantics is illustrated here with the two PPs introduced by the prepositions \textit{z...do} ‘from...to’:

20) \textit{Zmywali brud \textit{z} ulic do kanalów} ‘They have washed the dirt from the streets into the channels’ (alternating verb, COL frame)
21) \textit{*Zmywali ulice \textit{z} brudu do kanalów} ‘They have washed the streets of dirt into the channels’ (alternating verb, COS frame)
22) \textit{*Obrobili mieszkanie \textit{z} cennych przedmiotów \textit{i} pieniędzy do worka} ‘They robbed the apartment of precious objects and money into a sack’ (COS-only verb)
23) \textit{Będą usuwać bezdomnych \textit{z} dworców do noclegowni} ‘They will remove the homeless from railway-stations to shelters’ (COL-only verb)

The examples above show that COS-only verbs (see 19) fail to entail the absent Stuff argument and they also fail to encode Location (22) in the same way as the verbs in (20) and (23) do. The ungrammaticality of the ‘path’ Location structures can be observed also in the case of the alternating verbs in the COS frame (see 21). Thus ‘path’ Location is not supported by COS-only and COS alternating verbs.

Let us now sum up the findings relevant for the Polish material and model the lexical representations of particular subclasses of deprivation verbs in the appropriate way. We will also explain how these representations tie in with the grammatical information supplied by the event structure frames.

From all the data we have collected for the Polish deprivation verbs, it may be gathered that the alternating verbs are represented in their lexical entries with the Location as the internal argument (pure root participant in Levin’s 2006 terms). Then, depending on the frame which is contributed by the grammar, the Location argument is realized either as a DP or as a PP (or not at all for absolute uses). The non-alternating COL-only verbs specify Location argument in their entries separately from the frames; the frames have to be present in verbal lexical representations anyway to explain the selective complementation of COS-only and COS-only verbs. The absence of the Location pure root participant is evident, however for COS-only verbs. They do not appear without Direct Objects, which should be possible were
pure root participants specified in their lexical entries. The grammaticality of COL-only verbs in (23) results from the fact that two locative phrases here are adjacent and the ‘path’ meaning results from this adjacency. This cannot happen in the case of COS-only verbs because here the Location argument is preceded by the Stuff PP element, so no ‘path’ meaning results. It seems that the ‘path’ elements have to be linearly (and structurally) close/adjacent to produce the desired grammatical result.

5. **Lexical nature of derivations with deprivation verbs in Polish**

We have discussed so far the nature of deprivation verbs in Polish quite extensively, having shown beyond any doubt that they have to be represented in the lexicon with various idiosyncratic properties, such as the presence or absence of the Location argument in their lexical entries and the presence therein of two types of event structure frames for the non-alternating verbs. Consequently, the deprivation verbs in Polish constitute a highly irregular body of data, yet the irregularities are not completely random but represent a specific underlying system. However, for each particular verb we have to specify its particular mode of behavior.

These verbs and their more complex corresponding forms lend themselves very well to a lexicalist type of description. If we assume that there is a system of rules that derive particular verbal forms from other verbal forms, we may predict that idiosyncrasies of the bases will be inherited by the derivatives. We will show that it is what really happens when the deprivation verbs enter the derivational relation with dispositional middles or anticausatives.

Dispositional middles are such verbal forms which express the predisposition of their only overt arguments to undergo a change of state expressed by the basic verb which is conceptualized as caused by an external causer. In English they have the same form as their
corresponding transitive counterparts and as anticausatives, which do not imply the presence of an external causer:

24) *John broke a branch* (transitive verb) vs. *The branches broke easily* (dispositional middle) vs. *The branch broke*.

Because of the identical forms of transitive, anticausative and middle verbs, English offers no clear opportunity to claim that one class is derived from the other. In Polish the situation is different. Dispositional middles and anticausatives have a complex morphological make-up as they not only subsume the verbs which are identical in form to the transitive verbs but their derived nature is iconically marked with the presence of an additional morpheme: the particle *się*:

25) *Jan złamał gałąź* ‘John broke the branch’ vs. *Gałąź złamala się łatwo* ‘The branch broke easily’
   (dispositional middle) vs. *Gałąź złamala się* ‘The branch broke’ (anticausative)

The formal complexity of the middle/anticausative verbs suggests that they may be based on the transitive counterparts. In fact lexicalist analyses of similar data take the iconicity of a morphological process to be an indication that one form is based upon the other (see e.g. Reinhart and Siloni 2005). Proponents of root-based approaches do not think that such argumentation is sufficient and they derive such classes of forms independently but from the common root (e.g. Alexiadou and Doron 2012). The roots (and common parts of structure – if any) are to account for the similarities in the behavior of the related formations.

The Polish data, apart from the iconic argumentation, supply us with other pieces of evidence that the lexicalist approach makes sense in the area of morpho-syntax and it may be superior to analyses conducted in the root-based model.

Dispositional middles and anticausatives in Polish share more properties with their corresponding transitive deprivation verbs than with the roots. Let us first illustrate the property that characterizes the relationship of transitive verbs and their middle counterparts or
anticausatives: The Direct Object of the transitive predicate corresponds to the subject of the middle verb/anticausative. Thus in the cases of COS-only and COL-only verbs only one middle/anticausative construction is available, while the alternating verbs offer us an opportunity to derive two middles/anticausatives – corresponding to two alternating frames:

26) Żołnierze konfiskowali mienie ze szkoły (COL-only) ‘Soldiers confiscated the property from school’ – Mienie konfiskowało się łatwo ‘The property got easily confiscated’/*Szkoła konfiskowała się łatwo ‘The school got easily confiscated’

Policjant otrzeźwił mężczyznę z upojenia (COS-only) ‘The policeman has sobered the man up from intoxication’ – Mężczyzna otrzeźwił się łatwo ‘The man has sobered up easily’/*Upojenie otrzeźwiło się łatwo ‘The intoxication has sobered up easily’

Dziewczyna zmywa podłogę z brudu/brud z podłogi (alternating) ‘The girl cleans the floor of dirt/dirt from the floor’ – Podłoga zmywa się łatwo ‘The floor cleans easily’/Brud zmywa się łatwo ‘Dirt cleans easily’

The data above show that the verbs and their dispositional middles/anticausatives show clear regularities: Dispositional middles/anticausatives arise with the external arguments which correspond to the Direct Objects of the corresponding verbs. The arguments which cannot function as Direct Objects cannot be the subjects of dispositional middle/anticausative constructions. This is easily explained in the lexicalist approach in which we can derive dispositional middles from the corresponding verbs by means of a lexical derivational rule.

It may seem equally easy to express these relationships in the system where the derivation is based on the root. The roots of the alternating verbs differ from the roots of the non-alternating ones in this respect that the first group specifies the Location argument (as we argued in the preceding section), while the remaining subclasses specify the whole frames (COSs or COLs). Consequently, the information how the dispositional middles/anticausatives should behave is available at the root level.

However the situation is much more complex. Certain deprivation verbs in Polish change their frames if they are prefixed. Surprisingly, the dispositional middles/anticausatives change too. If their derivation were based on the roots, they should not have changed as the specification of roots does not change in the derivation. The relevant data are presented below in (27). It has to be mentioned that the data are difficult to be found in the Corpus as the
structures are rare in Polish and to illustrate our point we need to consider specific verbs, i.e. such which show differences in valency frames between the unprefixed and prefixed variants. However, whenever it was possible we have quoted the data from NKJP in order to avoid possibly biased judgments. In the examples below we will specify the frames available for the non-prefixed verbs and distinct frames available for the prefixed counterparts. Then examples of middles/anticausatives will be supplied to illustrate the correlation with the prefixed verbs and not with those based on the unprefixed roots. The roots are marked with bold characters:\(^3\):

27)

a) **suszzyć** ‘dry’ is a non-alternating
   COS-only – *Słońce suszy ubrania z wody* ‘The sun dries up clothes from water’ vs. *Słońce suszy wodę z ubrań* ‘The sun dries up water from clothes’

**wysuszyć** ‘dry up’ is an alternating verb
   COL/COS frames - Wysusz wodę z włosów! ‘Dry water from your hair’/ Wysusz włosy z wody! ‘Dry your hair of water’ - ...pieczenie wysuszą się na podeszwy... (NKJP) ‘The baked meat will dry up hard as soles’ (Location Direct Object externalized)/ Woda wysuszy się na słońcu ‘Water will dry up from the sun’ (Stuff argument externalized)

**osuszać** ‘dry’
   COL/COS- osuszał pot z czoła ‘He dried sweat from his forehead’ - osuszał czoło z potu ‘He dried his forehead from sweat’ – Woda osuszyła się ‘Water dried up’/ Jednak w wyniku opadania wód gruntowych, jaskinia osuszyła się (NKJP)’ However as a result of of ground waters running low, the cave dried up’ (Location externalized)

b) **myć** ‘wash’
   COS – *Mył wannę z czarnych plam* ‘He washed a bath-tub of black stains’

**zmywać** ‘wash’
   COL- ... *zmywający farbę z policzków wojowników* ‘washing out pain from the warriors’ cheeks’
   COS - ... *zmywając ciało z grzechu* ‘washing the body of sin’ – ... *farba zmyje się dopiero po kilku tygodniach* (NKJP) ‘The dye will wash off only after a few weeks’ (Stuff externalized)/Naczynia zmywają się ciężko ‘The dishes wash with difficulty’(Location externalized)

c) **sprzedawać** ‘sell’
   COL – **sprzedawała mienie z domu** ‘She sold the belongings from home’ (COL-only verb)

**wyprezdawać** ‘sell out’
   COL – Wyprzedaża mienie z domu ‘She sold out the belongings from home’
   COS - *Wyprzedaża rodzinę z mienia* (NKJP) ‘She sold her family out of their belongings’ -

---

3 Various morpho-phonological alternation modify the froms of the roots in prefixed and unprefixed verbs. We disregard them as they have been studied extensively for Polish e.g. by Gussmann (2010). Within the limits of this paper we could not possibly even sketch the system.
Fundusz wyprzedawał się, żeby przeżyć (NKJP) ‘The fund got sold out in order to survive’ (Stuff externalized) /Rodzina wyprzedawała się aby przeżyć ‘The family has sold out in order to survive’ (Location externalized)

d) *trześć* ‘rub’, e.g. *Tarł rękę* ‘He rubbed his hand’ (the verb takes Direct Objects only)

ścierać ‘wipe out’
COL - *ścierać wodę ze ścian* ‘to wipe water from the walls’
COS - *ścierała podłogę z krwi* (NKJP) ‘She wiped the floor of blood’

Spękany naskórek ściera się i unosi w pyle domowego powietrza (NKJP) ‘Cracked cuticle rubs off and floats on the home air’ (Stuff externalized) / Podłoga ściera się powoli ‘The floor gets rubbed off slowly’ (Location externalized)

e) *brać* ‘take’, e.g.: *brać torbę* ‘to take a bag’
COL – *Brat właśnie torbę z ławki*... ‘He was just taking the bag from the bench’

obierać ‘peel’
COL - ... *obrać skórkę z limetki*... (NKJP) ‘to peel the skin off a lime’
COS - *obierał ziemniak z topiny* (NKJP) ‘We peel the potato from its peel’

Potem wszystkie pomarańcze obierały się już najzwyczajniej w świecie, jak pomarańcze
(NKJP) ‘Then all oranges peeled in the most usual manner, like oranges’ (Location externalized)/
Potem wszystkie skórki obierały się już najzwyczajniej w świecie, jak skórki ‘Then all the peels peeled in the most usual manner, like peels’ (Stuff externalized)

f) *suwać* ‘push’, e.g.: *suwać nogami* ‘to drag one’s feet’ (the verb takes the Instrumental Case Object)

zsuwać ‘push’
COL - *zsuwasz kamień z pokrywy* (NKJP) ‘You push a stone from the lid’

Cień zsuwa się z ławki ‘The shadow slides off the bench’ (Stuff externalized) / *Ławka zsuwa się z cienia* ‘The bench slides off the shadow’

usuwać ‘remove’
COL - *usuwać bezdomnych z dworców* ‘to remove the homeless from stations’ – *żwir usuwał się spod nóg* (NKJP) ‘Gravel gave in under one’s feet’ (Stuff externalized)

g) *czërścić* ‘clean’ – an alternating verb
COL - *Narzędziem skutecznie czyszcącym dane z dysków jest program Acronis DriveCleanser* (NKJP) ‘The instrument effectively cleaning data off disks is Acronis DriveCleanser’
COS - *Czyszczy podłogę z krwi* ‘They cleaned the floor of
czyszczać ‘cleanse’
COS-only – *Oczyszcza dywan z brudu* ‘Cleanse the carpet from dirt’ / *Oczyszcza brud z dywanu* ‘Cleanse dirt from the carpet’ – *Dywan oczyszcza się łatwo* ‘The carpet cleanses easily’ (Location externalized) / *Brud oczyszcza się łatwo* (Stuff cannot be externalized)

The examples above show that there need not be similarity in the event structure frames between non-prefix verbs and their prefixed counterparts. In all the cases considered in (27) such situations arise. At the same time the middle/anticausative formations which are prefixed follow the event structure frames present in the prefixed verbs, and not of the simpler,
unprefixed ones, where we could speculate that the event structure frames are the same as
with the actual verbal roots. In the cases where the prefixed verbs allow alternating frames (27
a, b, c, d, e), the middles/anticausatives which arise allow the alternation in their external
arguments: both the Stuff and the Location Direct Objects of the prefixed verbs can
correspond to the external arguments of the intransitives. We interpret such a situation in the
lexicalist model as the externalization of the Direct Object internal argument of the basic verb.
In the root based approaches the regularity constitutes a coincidence. Similarly in the cases
where the prefixed verbs allow only just a single frame: (27 f) - the COL frame and (27 g) –
the COS frame – the arising intransitives externalize the Direct Objects of the prefixed verbs,
i.e. Stuff for the COL-only frame and Location for the COS only frame. Again in the lexicalist
model the intransitives are derived from the prefixed transitives and the correspondence
naturally falls out. Not so in the root based model – here it is pure chance due to irregular
lexicalization phenomena.

The data above show that the behavior of the dispositional middles/anticausatives
copies the frame of the prefixed verb, not of the verb based directly on the root (unprefixed).
This regularity obtains in the class of deprivation verbs in Polish. If all complex forms are
based on roots and are not derivationally connected with each other (as the root based
approach claims) then the data of this kind should not exist. Consequently, we think that the
lexicalist model is more appropriate minimally for some material in Polish morpho-syntax
than the root based construction one.

6. Conclusions

In this text we have established the representation of deprivation verbs in Polish, or
more precisely, we have revealed which portions of the semantico-argumental structure of
such verbs should be included in the lexicon and which should be contributed by grammar.
Having established that, we have shown that the complex forms based on the roots which
have to be represented in particular ways in the lexicon do not necessarily inherit all their properties from these roots, but in clearly designated cases they reflect the properties of other corresponding lexical forms. These findings undermine the viability of the root based approach in the area of Polish morpho-syntax, strengthening at the same time the lexicalist approach to morphology.

**Works cited**


Bloch-Trojnar, Maria. “A note on the alleged hybrid status of -nie/-cie in Polish.”


