

Maria Bloch-Trojnar

*John Paul II Catholic University of Lublin*

## Are Dispositional Adjectives a Case of Transposition? – Semantic Effects of *-liw(y)* Attachment to Verbal Bases in Polish

### Abstract

The paper presents the constraints on the formation of dispositional adjectives in Polish marked with the suffix *-liw(y)* and situates the process in a larger-scale picture of the entire class of deverbal adjectivizations. Derivatives with dispositional semantics are argued to be a subclass of Subject adjectivizations/potential adjectives since both are one-participant eventualities, the sole participant being mapped onto the subject position of the main verb. The difference between dispositional and potential semantics is not categorical but a matter of degree. The domain of this process includes intransitive verbs of communication and emission, reflexively marked intransitive verbs referring to emotional states (deponents), (reflexively marked) decausatives, verbs denoting psychological/emotional/mental experiences which syntactically may be transitive but can be viewed as one-participant internal eventualities, non-prototypical transitive verbs which take genitive- and dative-marked objects and verbal roots which alternate between transitive and middle semantics. The dispositional semantics of the adjective depends on the personal/animate or inanimate nature of the participant involved in the eventuality. Thus, it rests with the base (or partly with the nominal argument) and is not supplied by the suffix.

### Keywords

dispositional adjectives, deverbal adjectives, middle verbs, Subject adjectivizations, LMBM

### Streszczenie

Celem artykułu jest identyfikacja klas czasowników bazowych w procesie derywacji przymiotników skłonnościowych w języku polskim za pomocą przyrostka *-liw(y)* oraz ukazanie tego procesu z szerszej perspektywy tworzenia przymiotników odczasownikowych. Przymiotniki z przyrostkiem *-liwy* należy traktować jako podklasę subiektywnych przymiotników potencjalnych, gdyż charakteryzuje je jeden argument, który pełni funkcję subiektywu względem czasownika bazowego. Różnica pomiędzy znaczeniem skłonnościowym a potencjalnym nie ma charakteru kategoryjnego, lecz wskazuje na różnice w intensywności występowania wspólnej cechy, jaką jest potencjalność. Zidentyfikowano następujące klasy czasowników bazowych: nieprzechodnie czasowniki odnoszące się do komunikacji i emisji, nieprzechodnie czasowniki zwrotne odnoszące się do stanów emocjonalnych, cza-

sowniki dekauzatywne, przechodnie czasowniki odnoszące się do stanów psychicznych, mentalnych i emocjonalnych, które można interpretować jako wewnętrzne sytuacje/stany dotyczące jednego uczestnika, nieprototypowe czasowniki przechodnie, których argumenty występują w dopełniaczu lub celowniku oraz czasowniki występujące zarówno w strukturach tranzytywnych, jak i medialnych. Skłonnościowa interpretacja przymiotnika nie pochodzi od przyrostka, lecz jest zależna od cech uczestnika sytuacji wyrażonej przez czasownik (osobowy, żywotny itd.).

### Słowa kluczowe

przymiotniki skłonnościowe, przymiotniki odczasownikowe, czasowniki medialne, przymiotniki subiektywne, LMBM

## 1. Introduction<sup>1</sup>

The aim of this paper is to specify the constraints on the formation of dispositional adjectives in Polish marked with the suffix *-liw(y)*<sup>2</sup> (e.g. *łamliwy* ‘breakable, fragile’, *podejrzliwy* ‘suspicious’, *kłótnliwy* ‘quarrelsome’) and situate the process in a larger-scale picture of the entire class of deverbal adjectivizations. This suffix is now virtually unproductive and morphology textbooks single it out as an instance of a marker with a highly specialized meaning, i.e. ‘tending to V’ (when the participant involved in the activity denoted by the verbal base is inanimate) or ‘inclined to V’ (when the participant is personal) (Puzynina 1976: 265; Kallas 1999: 479; Szymanek 2010: 103). Unproductive and specialized as the suffix may seem, it may hold the key to understanding why deverbal adjectivizations do not have a common semantic denominator and why transpositional meanings<sup>3</sup> develop along specific lines.<sup>4</sup> Section 2 presents various verb-based adjectival structures, i.e. participles, departicipial adjectives and deverbal adjectivizations, with special emphasis on their semantic classification. It also contains a concise presentation of the various derivational means used to form deverbal adjectives which show a close semantic affinity to active participles. The

<sup>1</sup> I would like to express my grateful thanks to two SPL anonymous reviewers for their helpful comments and suggestions.

<sup>2</sup> The final vowel in the suffix is the marker of gender, i.e. *-y* ‘masculine’, *-a* ‘feminine’, *-e* ‘neuter/non-masculine.personal plural’, *-i* ‘masculine.personal plural’.

<sup>3</sup> Transposition need not be viewed as a purely asemantic operation. For the discussion of semantic effects inherent in transposition see Croft (1991: 99–126), Beard (1995: 177–204), Bloch-Trojnar (2013).

<sup>4</sup> Puzynina (1976) distinguishes the following modal semantic modifications accompanying the purely event-/state-related semantics: potentiality – relating to the possibility of the action being carried out (e.g. *wykonalny* ‘doable’), necessity (e.g. *płatny* ‘payable’), desirability (e.g. *senny* ‘sleepy’, destination (e.g. *(pokój) sypialny* ‘lit. sleeping room/bedroom’), ease (e.g. *pojętny* ‘quick on the up-take, such that understands easily’) and inclination (e.g. *krzykliwy* ‘tending to scream more, more loudly than others’). Ease and inclination are frequently difficult to tease apart since, e.g. *łamliwa skala* ‘fissile rock’ may denote a type of rock that breaks easily or more frequently than others.

domain of the suffix *-liwy* in Polish is specified in section 3 and it is argued that the specific semantic interpretation of transparent derivatives is a reflection of base-verb semantics rather than the contribution of the suffix. This will lead us to the conclusion that the suffix *-liwy* is not as specialized as it is professed to be.

## 2. Verb-based adjectival structures

### 2.1. Participles vs. participial adjectives

Similarly to verbal nouns, verbal participles can be regarded as an example of a hybrid category, which blurs the distinction between inflection and derivation. They can be argued to display verbal characteristics (a) side by side unequivocally adjectival traits (b), as illustrated in (1) and (2) for the *-ing* and *-ed* forms respectively.<sup>5</sup>

(1) a. *All I see are people intimidating others with weapons*  
 b. *very intimidating behaviour*

(2) a. *a pie quickly cooked by one of the best chefs in the world*  
 b. *a very worried person*

The problem of their differentiation and grammatical status continues to be the subject of a lively theoretical debate and there is no way in which we can do justice to the extensive literature on the subject (see e.g. Levin and Rappaport 1986; Borer 1990; Sleeman and Verheugd 2000). Without going into detail, I will assume here that a participle is inflectional in cases where strictly verbal properties are preserved such as the possibility of adverbial, aspectual and temporal modification, accepting agent/instrument PPs and serving as complements of perception verbs and where the forms in question display action/event/state semantics (Fábregas 2014). In this paper, however, we will not be concerned with the inflection – derivation distinction, but rather with deverbal adjectives viewed as a lexical phenomenon and we will further narrow down the scope of interest to deverbal adjectives with active semantics, as in (1b) above.

Szymanek (1988: 38–39) claims that there are no purely transpositional processes shifting verbs to the class of adjectives. He dismisses adjectivization of participles due to the lack of overt morphological marking and the lack of semantic equivalence. However, in Beard's (1995: 196, 321) Lexeme Morpheme Base Morphology (LMBM) model, participial adjectives are differentiated

---

<sup>5</sup> Example (1) comes from <http://www.freedomcardboard.com/forum/showthread.php/143717-Two-NYPD-officers-killed-as-revenge-for-Brown-and-Garner-killings?p=2231557&viewfull=1> (accessed: 8 July 2017), whereas example (2) from Fábregas and Scalise (2013: 94).

from participles on morphological and syntactic grounds in English and are argued to result from Verb to Adjective transposition. The suffix *-ing* is the only marker of the syntactically formed participle, whereas the lexically derived adjective is marked by additional formatives, which select Latinate roots (e.g. *-ive, -ant, -ary*). The adjective can be prefixed with *un-* (e.g. *unsurprising*) and suffixed with the adverbial *-ly* (e.g. *surprisingly*). It can be preceded by a degree adverb such as *very, so, too* and is capable of comparison (e.g. *more surprising*). Participles, on the other hand, can only be made negative by the addition of *not* and can be intensified with *very much* or *a lot*:

(3)

Affixes	Active Adjective	Active Participle
Same morphology	is (very/un)surpris-ing	(not) surpris-ing (very much)
	is (very/un)excit-ing	(not) excit-ing (very much)
	is (very/un)mov-ing	(not) mov-ing (very much)
Distinct morphology	is (very/un)product-ive	(not) produc-ing (very much)
	is (very/un)repent-ant	(not) repent-ing (very much)
	is (very/un)compliment-ary	(not) compliment-ing (very much)

In LMBM “the lexicon may transpose any member of any major lexical class (N, V, A) to any other major lexical class by providing it only with the lexical Grammatical-features of the target class and neutralizing (but not deleting) the inherent Grammatical-features of the base” (Beard 1995: 177). V to A transposition will involve the neutralization of [Verb Class] and [Transitivity] grammatical features and the provision of one inherently adjectival grammatical feature, i.e. [ $\pm$ Gradable]. LMBM endorses separationism, which means that the rules determining the phonological representation of bound morphemes are independent of the rules targeting the lexical or morphosyntactic representation. Lexical and syntactic rules are abstract operations, which apply to the grammatical representation of a lexeme, whereas formal base-modification operations are effected in an autonomous post-syntactic Morphological Spelling Component. The model also predicts that a given grammatical/lexical function can be expressed by more than one formal exponent.

## 2.2. Classifications of verbal adjectivizations

As mentioned above, in Beard’s model active adjectives are regarded as transpositional derivatives. They are also referred to as Subject/Agentive qualitative adjectives and can be contrasted with Object/Patientive qualitative adjectives.

According to Beard (1995: 197–198) adjectives “impute natural properties to referential terms” but are not referential terms themselves. They are one place predicates in symbolic logic, as in *X is red* – RED(X). Since deverbal adjectives may inherit two-place predicates from their base verbs, as in e.g. AN-NOY (XY), the deverbal adjective may logically link with either of the two arguments of the base but not with both. One form of adjective assigns the first (Subject) argument of the base verb to its head noun (*the annoying boy*) and another assigns the second (Object) (*the annoyed boy*). Interestingly, Szymanek (1988, 2010: 101–112) also acknowledges the existence of Subject and Object adjectivizations, but they are regarded as lexical, not purely transpositional, derivatives (see also Kallas 1999).

According to Fábregas and Scalise (2013: 95) there are two classes of deverbal adjectives, i.e. modal as differentiated from dispositional. For them, the term dispositional is applicable to deverbal adjectives denoting the property of ‘being prone to do sth’, as in Spanish *enamora-dizo* ‘someone who falls in love easily’, *hui-dizo* ‘someone or something that escapes easily’ and *enoja-dizo* ‘someone who gets angry easily’. Passive adjectives of possibility ending in *-able* in English are argued to represent the modal category since in addition to category change and the passive semantics they denote that an action can be done or must be done, as in *expendable* and *payable* respectively.

In Fábregas (2014: 276–278) we find a more fine-grained classification, in which dispositional adjectives are contrasted with modal adjectives which, in turn, are differentiated with respect to active/passive semantics. Dispositional adjectives (4a) denote the property of being prone to participate in an event. Potential adjectives (4b) are related to active participles and refer to the ability to trigger a particular event. Potential adjectives, in contradistinction to active participles, which have an episodic meaning and entail that a specific event has taken place, show a non-episodic meaning and the event expressed by the base need not occur in actuality. Modal passive adjectives (4c) refer to the possibility or necessity of undergoing the event denoted by the base verb.<sup>6</sup>

- (4) a. Dispositional adjective  
*vergess* > *vergess-lich*  
 ‘forget’ ‘forgetful’ (German)
- b. Potential adjective  
*solve* > *solve-nte*  
 ‘dissolve, solve’ ‘solvent’ (Portuguese)
- c. Modal passive adjective  
*lese* > *les-bar*  
 ‘read’ ‘legible’ (Norwegian)

<sup>6</sup> The examples in (4) come from Fábregas (2014: 278).

The above-mentioned classifications are not convergent and the category of Subject/Agentive nominalizations put forward in Beard (1995) and Szymanek (2010) subsumes the classes of dispositional and potential adjectives proposed in Fábregas (2014). In the following section, we will discuss the formal markers employed in Polish to render the relevant meanings. The research question which we intend to address in this analysis is whether adjectives of tendency/inclination form a class of their own or whether they are a subclass of potential adjectives and can be subsumed under a blanket term of Subject adjectivizations.

### 2.3. Subject adjectivization in Polish

The term Subject adjectivization used with reference to deverbal derivatives refers to the function which the head noun modified by the adjective discharges in relation to the base verb. In the phrase *wędrowni cyrk* ‘travelling circus’ the head noun *cyrk* ‘circus’ functions as the notional subject of the verb *wędrować* ‘wander, travel’ from which the adjective *wędrowni* is derived. In this case the adjective bears a distinctive marker, i.e. *-ny*, which differentiates it from the corresponding present active participle, which is marked with *-ący* (*wędrujący* ‘wandering, travelling’) (Szymanek 2010: 101). However, for many verbs, the Subjective adjective and the present participle coincide in form and we can identify them only with the aid of context (as in (1) above). In *środki piorące* ‘washing agents’ we are dealing with the adjective, whereas in *Jan patrzył na kobiety piorące bieliznę w rzece* ‘John watched women washing the laundry in the river’ we are dealing with the active participle (Bartnicka 1970; Cetnarowska 1999; Bloch-Trojnar 2015). Cetnarowska (1999) argues that the present participle undergoes conversion into an adjective. The two forms can be differentiated not only on syntactic but also on semantic grounds. Namely, the adjective, as opposed to the participle, has a non-episodic modal (potential) reading ‘such that can V’, as in (5):

- (5) a. *napój chłodzący* ‘cooling drink’ (*chłodzić* ‘to cool’)  
 b. *pocisk zapalający* ‘incendiary shell’ (*zapalać* ‘to set fire to something’)  
 c. *bomba burząca* ‘demolition bomb’ (*burzyć* ‘to destroy’)

Apart from *-ny* and *-ący*, Subjective adjectives can be marked with a variety of less productive suffixes. Kallas (1999: 471–477) also lists *-liwy* (e.g. *troskliwy ojciec* ‘a caring father’), *-czy* (e.g. *zabójczy klimat* ‘deadly climate’), *-ski/-alski* (e.g. *zapominalski chłopiec* ‘a forgetful boy’), *-ki* (e.g. *lepki śnieg* ‘sticky snow’), *-iwy/awy* (e.g. *mściwy człowiek* ‘a vengeful man’, *kulawy koń* ‘a lame/limping horse’). She underlines the fact that derivatives marked with these suffixes may have purely verbal semantics or else show an extra potential tinge. She refers to these two classes as unpredispositional and predispositional respectively and

maintains that the dividing line between the two categories may be difficult to draw in individual cases. Consider some examples in (6) with the suffix *-liw(y)*. Derivatives in (6a) can be interpreted as reflecting base-verb semantics, whereas those in (6b) have a potential/habitual/dispositional colouring:

- (6) a. *troskliwy ojciec* ‘a caring father, such that takes care of’  
*migotliwa latarnia* ‘a flickering lighthouse, such that flickers’  
*dokuczliwy wiatr* ‘disturbing/oppressive wind, such that disturbs’  
*połyskliwy materiał* ‘glittering fabric, such that glitters’  
 b. *łamiwe kości* ‘brittle bones, such that can break, such that break easily’  
*pobudliwy pacjent* ‘an irritable, excitable patient’  
*kurczliwa folia* ‘shrink wrap, such that tends to contract, contracts easily’  
*chybotliwa kładka* ‘a shaky gangplank’  
*kąśliwe bąki* ‘stinging beetles, such that sting, can sting, are likely to sting’

To make matters even more complicated in some cases there are two forms available for a given verbal base, i.e. the derivative in *-liwy* and the participial adjective in *-ący*, which is distinct from the participle, which preserves internal verbal syntax (Bloch-Trojnar 2015: 30–31):<sup>7</sup>

- (7) a. **Przenikliwy** *wzrok/ból/brzęk/głos*  
 ‘penetrating, keen sight/acute pain/strident sound/shrill voice’  
 b. *Niekiedy zawiewał zimny, **przenikający** wiatr.*  
 ‘There were gusts of penetrating wind.’  
 c. *Zostały mu po niej jedynie włosy, czerwona sukienka i **przenikający** wszystko zapach najtańszych perfum*  
 ‘The only traces of her were hair, the red dress and the smell of cheap perfume permeating everything.’

If we accept the classification put forward by Fábregas (2014), we cannot argue for the distinction between dispositional and potential adjectives on formal grounds. There is also no formal distinction between adjectives having a purely transpositional function and those with a modal tinge. The tendency illustrated in (6) holds for other formal markers as well. Furthermore, the semantic contribution of the suffix *-liw(y)* does not seem to be confined to the specialized dispositional meaning, and conversely, other suffixes may express tendency and inclination, e.g. *zapominalski* ‘forgetful’, *mściwy* ‘vengeful’, *zazdrosny* ‘envious’, *ufny* ‘trusting’, *wkurzający* ‘annoying’.

According to Nagano and Shimada (2016: 235) Fábregas demonstrates that European languages have derivational means reflecting the effects of modal auxiliaries. Dispositional adjectives, which describe characteristic behaviour, are derivational counterparts of the habitual use of the auxiliary *will* and the marginal auxiliaries *tend to* and *be liable to*. Potential and modal passive

<sup>7</sup> The examples in (7) come from the National Corpus of Polish (Przepiórkowski et al. 2012).

adjectives are derivational counterparts of the modal expressions of ability and necessity.

An alternative hypothesis which will be advanced in this analysis is that there is one set of affixes whose sole function is to perform a functional shift whereby verbs are turned into adjectives. The semantic element of modality (potentiality) is part and parcel of the adjectivization process. Whether the meaning is active or passive, and whether it additionally refers to the disposition rather than a mere ability to perform or undergo an action or process depends on the properties of the base verb.

Verbs bear specific spacio-temporal characteristics encoded in their event-structure (Pustejovsky 1991) and are further differentiated with respect to the number and type of participants involved. Adjectives modify nouns and denote properties (which can be gradable or not). The transposition of verbs to adjectives forces the identification of referents (event participants, arguments of the verb) and the expression of their inherent/salient properties (Beard 1995: 197–198).

There is general agreement that the generic interpretation of adjectives contrasts with the episodic interpretation of participles. Fábregas (2014: 279) notes that the event expressed by the adjectivized verbal base “needn’t occur in actuality for the predication to be true”, i.e. it need not be instantiated, it is merely potential. The characterizing predicate is supposed to be generic and to express a non-trivial “essential” property which is generally valid (Krifka et al. 1995: 13) – hence the habitual/potential/generic interpretation. The requirement that the deverbal adjective should denote salient properties will interact with base verb semantics. In terms of temporal characteristics atelic predicates (including psychological states) or predicates which imply iteration are more likely to give rise to dispositional readings (e.g. *talkative*, *perceptive* ‘good at noticing and realizing things’), unlike inherently delimited/bounded events which are telic and/or punctual, which will prompt conceptualizations of the potential to occur or be carried out (e.g. *manageable*, *perceptible* ‘that can be noticed’).

No less important are the event participants which are expressed as syntactic arguments. The classifications usually draw the distinction between Subject/Agentive deverbal adjectives which are related to active participles and Object/Patientive adjectives which are related to passive participles. This view brings to the fore transitive event structures with articulated agentive participants typically accompanied by patient participants. It is oblivious to the fact that there is a cline ranging from prototypical Agent/Patient transitive verbs to typical mono-argumental intransitives with a non-affected subject argument and a spectrum of middle structures in between. It is crucial to classify the verbal bases with respect to the number and type of participants involved in a given event/process/state, since the semantic effects of transposition are the reflection of base verb semantics. In our view, a more comprehensive analysis



can be carried out if we do not limit our observations to the transitive/intransitive characteristics of the base, but also grant due attention to middle verbs. According to Kemmer (1993: 16–21) middle verbs are characterized by one obligatory argument which is affected in the event. Dispositional middles (8a) stand apart in this category since they assume the (logical) presence of the Agent argument, and the subject has the role of the internal argument of the corresponding transitive verb. They are generic<sup>8</sup> and contain adverbial elements such as *easily* or *well* (see e.g. Ackema and Schoorlemmer 2006). Individual level middles (also referred to as anticausatives, decausatives) (8b) also have transitive counterparts but they lack implicit agentive arguments. They are also argued to contain the generic operator and are accompanied with an adverb. Middle deponents (unaccusative verbs) (8c) have neither a transitive counterpart nor a logical agent, i.e. they are intransitive verbs whose subjects are linked with the undergoer of the process rather than its initiator.<sup>9</sup>

(8) a. *This book reads well.*

b. *Children's skins burn easily, so use a high factor sun-cream.*

c. *This plant blooms between May and June.*

Verbs with middle semantics are intransitive (mono-argumental) and their subjects are affected to a greater or lesser extent in the events in which they participate.

The analyses establishing a link between middle structures and deverbal adjectives are relatively few and far between and mostly concern passive potential adjectives (i.e. Objective adjectives) on account of their modal, generic and passive semantics (e.g. *This book reads well/easily*. – *a readable book*) (see e.g. Grácia 1995 for Catalan, Klingvall 2008 for Swedish). On the other hand, passive potential adjectives in *-able* are traditionally linked to transitive verbs with dyadic argument structure since only verbs capable of passivization can serve as bases, thus precluding purely intransitive verbs (Chapin 1967). It is to be expected that mono-argumental bases will give rise to Subject adjectivizations. It is an empirical question whether all types of bi-argumental bases will do so as well.

A detailed analysis of the verb classes subject to *-liwy* attachment is meant to show that the tendency/inclination semantics results from the specific type of base it selects. Other readings are also available and they can be explained in terms of the base verb. What all Subject adjectives in *-liwy* have in common is that they select predicates (not necessarily mono-argumental) with affected

<sup>8</sup> In some Slavic languages, e.g. Czech or Polish (Fried 2006; Malicka-Kleparska 2017), structures bearing all other properties of dispositional middles can occasionally appear in eventive contexts, but such uses seem to be language specific (cf. Russian).

<sup>9</sup> For an excellent overview of various classifications and terminological issues see Malicka-Kleparska (2017).

participants. It will also be argued that it is not really necessary to make a distinction between potential and dispositional adjectives since the latter form a subclass of the former. The relationship between potential and dispositional meanings is addressed in the following section.

## 2.4. Linking dispositions to possibility

Before a definite link can be established between possibility and dispositions a comment on Kratzer's theory of modality is in order. According to Kratzer the modal force of dispositional predicates is that of possibility and it is a case of circumstantial modality.<sup>10</sup> If we consider the sentence *Diese Tasse ist zerbrechlich* 'This cup is fragile', "it is in view of certain properties inherent in the cup, that it is possible that it breaks. The ordering source seems to be empty" (Kratzer 1981: 64). The sentence *x is fragile* will be true iff, among the possible worlds in which *x* possesses certain features, there is one in which *x* breaks.

However, Vetter (2015) claims that this characterization of truth conditions for *x is fragile* is inadequate, i.e. there is a distinction between fragile things and those that are breakable. Not all objects that are breakable are called fragile, but only those which break easily, i.e. "fragile things break in more possible worlds" (Vetter 2015: 74). Consequently, the ordering source is not empty and there is an element of gradability. She goes on to explain that "for an object to count as 'breakable' it is enough that it is possible, in view of *x*'s intrinsic properties, that it breaks. A champagne glass and a brick are both breakable, but the glass is more breakable than the latter because it breaks in a greater proportion of relevant worlds than the brick" (Vetter 2015: 74). Vetter underlies that the variation falls within the realm of possibility and the nature of the distinction is 'at least one' as opposed to 'a few'. Thus, potentiality comes in degrees, the minimal degree being the bare possession of a potentiality, i.e. the fact that an object is barely suited to show the manifestation at all (Vetter 2015: 95). Hence, the contrast *breakable* 'such that can break/be broken (once)' and *fragile* 'liable to break/be broken'.

If we accept this line of argument, it follows that potential adjectives and dispositional adjectives are not categorically distinct but both represent

---

<sup>10</sup> Kratzer (1981, 1991) argues that modal expressions quantify over possible worlds along three dimensions: their modal force, their modal base and their ordering source. The modal force is the kind of quantification applied to the possible worlds, e.g. the modal *can* expresses existential quantification for possibility, *must* for necessity. A modal expression is relative to the conversational background, understood as a set of propositions, which determines the relevant worlds. The modal base is the set of worlds in which the propositions are true and the ordering source imposes an ordering on this set. The modal base can be circumstantial (i.e. the propositions are true in view of how things stand) or epistemic (i.e. the propositions are true in view of what we know to be true).

potentiality and the difference between them is a matter of degree. This state of affairs seems to tally nicely with the LMBM approach, where V to A transposition involves the neutralization of verbal features and the provision of the feature [ $\pm$ Gradable].

### 3. The domain of *-liw(y)* attachment

In the most comprehensive study of derivatives in *-liw(y)*, Jochym-Kuszlíkowa (1973: 87–88) notes that the adjectives in question can be denominal and deverbal. Derivatives based on concrete nouns are unproductive, e.g. *śłota* ‘rain’ – *ślotliwy* ‘rainy’. However, with onomatopoeic deverbal nouns, the suffix shows a remarkable productivity, with the derivative meaning ‘similar to the sound expressed by the base’, e.g. *dźwięk* ‘sound’ – *dźwiękliwy* ‘resonant’, *zgrzyt* ‘grating’ – *zgrzytliwy* ‘grating’, *skowyt* ‘yelp’ – *skowytliwy* ‘yelping’. There are also abstract verbal noun bases which give rise to derivatives meaning ‘inclined to perform the action expressed by the base’, e.g. *zazdość* ‘jealousy’ – *zazdrośliwy* ‘jealous’, *trwoga* ‘fear’ – *trwożliwy* ‘fearful’, *bojaźń* ‘fear’ – *bojaźliwy* ‘timorous’. Many *-liwy* derivatives related to verbal nouns can, in fact, be regarded as doubly motivated, i.e. having a verbo-nominal or verbal base. The adjective *zgrzytliwy* above can be derived from the noun *zgrzyt* ‘grating’ or the verb *zgrzytać* ‘grate’, just as *zadrosliwy* can be motivated by *zazdość* ‘jealousy’ and *zazdrościć* ‘envy’.

She observes that base verbs can be prefixed or unprefixed and their semantic interpretation amounts to ‘inclined to perform the action expressed by the base’, e.g. *gadać* ‘talk, chatter’ – *gadatliwy* ‘talkative’, *chęścić się* ‘brag’ – *chęcpliwy* ‘bragging’, *zrzędzić* ‘grouch’ – *zrzędliwy* ‘grouchy’. Novel formations in specialist technical jargon based on verbs denoting concrete physical actions seem to be on the rise, e.g. *kurczyć się* ‘contract’ – *kurczliwy* ‘contractile’, *krzepnąć* ‘coagulate’ – *krzepliwy* ‘coagulable’, *topić (się)* ‘melt’ – *topliwy* ‘fusible’.

In sum, when characterizing the bases, Jochym-Kuszlíkowa pays attention primarily to the semantic and formal properties. Syntactic regularities are expressed at the crude level of category labels. In her view the bases can be transitive, intransitive and reflexive but their valency characteristics plays no significant role in establishing the semantics of the derivative (Jochym-Kuszlíkowa 1973: 53).

Since her monograph contains many derivatives which seem obsolete or confined to poetic language, we will conduct a detailed corpus-based analysis of *-liw(y)* formations listed in Bańko et al. (2003) to establish which derivatives are currently in use and pinpoint the restrictions which curtail the domain of *-liw(y)* attachment. We will demonstrate that the base verbs for *-liwy* attachment are not random and form an orderly set. In our view, Subject adjectivizations are formed from verbs denoting eventualities with an affected participant.

### 3.1. Semantically opaque formations and denominal derivatives

We will exclude from the scope of our interest those forms terminating in *-liw(y)* which are not formally and semantically transparent, as well as morphologically complex words based on nouns for which a verbal base is not available. In *sprawiedliwy* 'righteous', *nobliwy* 'noble', *możliwy* 'possible', *upierdliwy* 'annoying', *ckliwy* 'sentimental', *tkliwy* 'sensitive', *rzewliwy* 'tearful', *wrażliwy* 'sensitive', *gorliwy* 'ardent', *wstrzemięźliwy* 'abstemious', *spolegliwy* 'pliant', it is not possible, in synchronic terms, to identify the base.<sup>11</sup> In the V – A pairs such as *cierpieć* 'suffer' – *cierpliwy* 'patient', *dotykać* 'touch' – *dotkliwy* 'severe, acute', *(o)pryskać* 'spray' – *opryskliwy* 'rude', *życzyć* 'wish' – *życzliwy* 'well-wishing', *kwapić się* 'hasten to, be willing to' – *skwapliwy* 'eager', *chwycić* 'catch' – *podchwytliwy* 'tricky', *przerażać* 'terrify' – *przeraźliwy* 'terrible, awful', *gryźć* 'bite' – *zgrzyźliwy* 'malicious', *obrzydzić* 'put off' – *obrzydliwy* 'disgusting, terrible', *zapobiegać* 'prevent' – *zapobiegliwy* 'prudent', or *dolegać* 'ail, gripe' – *dolegliwy* 'painful, troublesome', we can observe various semantic and formal peculiarities/inconsistencies which point to lexicalization.<sup>12</sup> Similar discrepancies blurring the N – A relationship can be observed in, e.g. *osoba* 'person' – *osobliwy* 'peculiar', *jad* 'venom' – *zjadliwy* 'snide', *błysk(ot)* 'flash' – *błyskotliwy* 'intelligent', *żar* 'hot coals, fervor' – *żarliwy* 'fervent', or *swary* 'quarrel, dispute.pl' – *swarliwy* 'quarrelsome'. There is a sizeable group of *-liw(y)* derivatives which can be related to nouns and which can be paraphrased as 'having, showing N', e.g. *wada* 'flaw' – *wadliwy* 'faulty', *popęd* 'urge' – *popędliwy* 'impulsive', *cnota* 'virtue, virginity' – *cnotliwy* 'virtuous, chaste', *kłopot* 'trouble' – *kłopotliwy* 'troublesome', *chuć* 'lust' – *chutliwy* 'lusty', *bojaźń* 'fear' – *bojaźliwy* 'timorous', *burza* 'storm' – *burzliwy* 'tempestuous', *urok* 'charm' – *urokliwy* 'charming', *chrypa* 'hoarseness' – *chrypliwy* 'hoarse', *choroba* 'disease' – *chorobliwy* 'abnormal, unhealthy'<sup>13</sup>. Since there are no verbal bases available for these formations they will be considered products of a separate word formation operation.

<sup>11</sup> However, see Jochym-Kuszklikowa (1973) for information concerning the relevant bases from a diachronic perspective.

<sup>12</sup> The term lexicalization is "the whole process whereby an established word comes to diverge from the synchronically productive methods of word-formation" (Bauer 2001: 45). Different types of lexicalization can be distinguished (semantic, phonological) and words can be partly lexicalized. Lexicalization involves the loss of semantic compositionality (including metonymic and metaphorical sense extensions) and/or formal transparency. For example, the semantic relationship between *zapobiegać* 'prevent' and *zapobiegliwy* is no longer transparent, since *zapobiegliwy* means 'prudent' and the meaning of 'such that prevents, can prevent' is rendered by *zapobiegawczy* 'preventive'. Formal inconsistencies, in turn, are manifest in the use of prefixes. The existence of adjectives *kąśliwy* 'stingy' and *ukąśliwy* 'stingy' is motivated by the existence of the aspectual verb pair *kąsać* – *ukąsić* 'bite'. However, there is no \**zgrzyźć* to motivate *zgrzyźliwy* 'malicious'.

<sup>13</sup> There is a verbal base *chorować* 'fall ill', but the corresponding dispositional adjective is *chorowity* 'sickly'.

### 3.2. Verbal bases for *-liw(y)* attachment

In this section we will identify the semantic-syntactic classes of verbs which can serve as bases for *-liw(y)* attachment. Intransitive verbs of communication and manner of speaking are fairly prominent (9a), as well as intransitive verbs referring to sound, light or smell emission (9b).

(9) Verb	Adjective
a. <i>żartować</i> ‘make fun of’	<i>żartobliwy</i> ‘speaking lightly of’
<i>zrzędzić</i> ‘complain’	<i>zrzędlivy</i> ‘grumpy’
<i>milczeć</i> ‘be silent’	<i>milkliwy</i> ‘reticent’
<i>burczeć</i> ‘growl’	<i>burkliwy</i> ‘grumpy’
<i>mruczeć</i> ‘murmur’	<i>mrukliwy</i> ‘taciturn’
<i>krzyczeć</i> ‘shout’	<i>krzykliwy</i> ‘gobby’
<i>kłamać</i> ‘lie’	<i>kłamlivy</i> ‘deceitful’
<i>gderać</i> ‘grumble’	<i>gderliwy</i> ‘grumpy’
<i>gadać</i> ‘talk, chat’	<i>gadatlivy</i> ‘talkative’
<i>kokietować</i> ‘tease, dally’	<i>kokietliwy</i> ‘flirtatious’ <sup>14</sup>
<i>szczebiotać</i> ‘prattle, pipe’	<i>szczebiotliwy</i> ‘piping’
<i>bełkotać</i> ‘mumble’	<i>bełkotliwy</i> ‘mumbling’
<i>wątpić</i> ‘doubt’	<i>wątplivy</i> ‘doubtful’ <sup>15</sup>
b. <i>beczeć</i> ‘cry, bleat’	<i>bekliwy</i> ‘bleating’
<i>plakać</i> ‘cry’	<i>placzliwy</i> ‘tearful’
<i>szczekać</i> ‘bark’	<i>szczekliwy</i> ‘barky’
<i>skrzeczeć</i> ‘squak’	<i>skrzekliwy</i> ‘screeching’
<i>hałasować</i> ‘bang around’	<i>hałaśliwy</i> ‘noisy’
<i>jazgotać</i> ‘bang around’	<i>jazgotliwy</i> ‘noisy’
<i>klekotać</i> ‘clack’	<i>klekotliwy</i> ‘clacking’
<i>ćwierkać</i> ‘twitter’	<i>ćwierkliwy</i> ‘twittering’
<i>jęczeć</i> ‘wail’	<i>jękliwy</i> ‘wailing’
<i>brzęczeć</i> ‘buzz’	<i>brzękliwy</i> ‘twangy’
<i>warczeć</i> ‘snarl’	<i>warkliwy</i> ‘snappy’
<i>piszczeć</i> ‘shreek’	<i>piskliwy</i> ‘squeaky’
<i>chrapać</i> ‘snore’	<i>chrapliwy</i> ‘croaky’
<i>zgrzytać</i> ‘grate’	<i>zgrzytliwy</i> ‘grating’
<i>chichotać</i> ‘giggle’	<i>chichotliwy</i> ‘giggling’
<i>smrodzić</i> ‘fart’	<i>smrodliwy</i> ‘stinky’
<i>migotać</i> ‘twinkle’	<i>migotliwy</i> ‘lambent’
<i>połyskiwać</i> ‘glitter’	<i>połyskliwy</i> ‘glittery’

<sup>14</sup> There is only one attestation of *kokietliwy* in the Corpus as opposed to 14 hits for *kokieteryjny*.

<sup>15</sup> Notably, *wątplivy* does not mean ‘such that doubts’ but ‘such that is in doubt, is doubted about’, the latter paraphrase being best rendered by means of a passive impersonal construction *taki, o którym się wątpi*, e.g. *wątplivy rezultat* ‘a doubtful result’. For more information about the relatedness of *-liw(y)* derivatives to middle structures see below.

Another prominent class of verbs bears the characteristic clitic *się*. According to Malicka-Kleparska (2010) *się* appears with a wide range of semantic classes of verbs and their only common denominator is intransitivity. Following Laskowski (1984: 139–140, 1998: 191–192), we can identify the following classes of verbs: reflexives proper, reciprocals, *reflexiva tantum*, inchoatives/decausatives, unaccusatives and middles.<sup>16</sup> According to Tabakowska (2003), who conducts a detailed analysis of the opposition between the strong form of the reflexive pronoun *sobie* and its light clitic equivalent *się*, constructions in which the replacement of the light form with the heavy form is not possible represent cases of semantic Middle. These constructions are seen as involving a single participant, because the Agent is unknown/not identified (e.g. *Drzwi się (same) otwierają*. ‘The door opens (all by itself).’), (potentially) identifiable but not salient (*We wsi buduje się nową szkołę*. ‘A new school is being built in the village.’), or because reference to a specific Agent is communicatively irrelevant (*Ta książka dobrze się czyta*. ‘This book reads well.’).<sup>17</sup>

The suffix *-liw(y)* is attested with *reflexiva tantum* verbs (10a) and decausatives (10b).

(10) **Verb**

- a. *frasować się* ‘worry’  
*pobudzić się* ‘be stimulated’  
*wstydzić się* ‘be ashamed’  
*powściągać się* ‘restrain oneself’  
*wahać się* ‘hesitate’  
*strachać się* ‘be afraid’  
*trwożyć się* ‘be terrified’  
*(za)kochać się* ‘be (fall) in love’  
*lękać się* ‘be afraid’

**Adjective**

- frasobliwy* ‘tending to worry, worried’  
*pobudliwy* ‘excitable’  
*wstydlivy* ‘shy, bashful’  
*powściągliwy* ‘restrained’  
*wahliwy* ‘changeable’  
*strachliwy* ‘cowardly’  
*trwożliwy* ‘timorous’  
*kochliwy* ‘amorous’  
*lękliwy* ‘apprehensive’

<sup>16</sup> In reflexives proper *się* functions as a reflexive pronoun in the accusative case in the object position (e.g. *Janek się myje*. ‘John is washing himself.’). The action is directed towards the Actor himself and there exists a transitive counterpart lacking the clitic element (*myć się* ‘wash oneself’ – *myć kogoś* ‘wash sb’, *czesać się* ‘comb oneself’ – *czesać kogoś* ‘comb sb.’). The clitic can be a marker of reciprocal constructions (e.g. *Jan i Tomek się biją*. ‘John and Tom are fighting/ beating each other.’). In *reflexiva tantum się* is an indispensable element, since the bare verb does not exist (*śmiać się* ‘laugh’ – \**śmiać*, *kłócić się* ‘quarrel’ – \**kłócić*, *guzdrać się* ‘procrastinate’ – \**guzdrać*). The *się* element is a marker of deadjectival and denominal inchoative verbs, as in *starzeć się* ‘get old’ (*stary* ‘old’) or *zamyślić się* ‘ponder’ (*mysł* ‘thought’). It is a marker of deverbal decausative constructions derived from causative verbs referring to self-contained processes, as in e.g. *Ołówek się złamał*. ‘The pencil has broken.’ (*złamać* ‘break, tr.’ – *złamać się* ‘break, intr.’). *Się* appears also in various complex multilexical structures expressing a spontaneously appearing state (Laskowski 1984: 139), e.g. *Dobrze mu się pracuje*. ‘In these conditions he works comfortably’, and can be classified as unaccusative. Passive impersonal constructions express middle semantics (e.g. *Ta szkoła buduje się osiem lat*. ‘This school has been built for eight years.’).

<sup>17</sup> For a more detailed discussion of a wider range of structures the reader is referred to Tabakowska (2003).

<i>troszczyć się</i> ‘look after’	<i>troskliwy</i> ‘attentive’
<i>chępić się</i> ‘brag’	<i>chępliwy</i> ‘braggy’
<i>kłócić się</i> ‘quarrel’	<i>kłótiliwy</i> ‘quarrelsome’
<i>gniewać się</i> ‘be cross with’	<i>gniewliwy</i> ‘irascible’
<i>śmiać się</i> ‘laugh at’	<i>śmiechliwy</i> ‘such that laughs at’
<i>kurczyć się</i> ‘shrink, contract’	<i>kurczliwy</i> ‘shrinkable, contractile’
b. <i>ruszać się</i> ‘move’	<i>ruchliwy</i> ‘moving, mobile’
<i>płoszyć się</i> ‘be frightened’	<i>płochliwy</i> ‘skittish’
<i>ciągnąć się</i> ‘stretch’	<i>ciągliwy</i> ‘malleable, ductile’
<i>rozciągać się</i> ‘stretch, extend’	<i>rozciągliwy</i> ‘elastic, tensile’
<i>łamać się</i> ‘break’	<i>łamliwy</i> ‘fragile, breakable’
<i>topić się</i> ‘melt’	<i>topliwy</i> ‘fusible, liquefiable’
<i>chybotać się</i> ‘shake’	<i>chybotliwy</i> ‘shaky’
<i>łączyć się z</i> ‘connect’	<i>łączliwy</i> ‘connective’

Polish grammarians characterize *reflexiva tantum* verbs as unmotivated since they lack unmarked transitive counterparts (e.g. *bać się* ‘be afraid’ – *\*bać*). In Kemmer’s (1993) classification they would fall into the class of deponents (cf. (8c) above). All verbs in (10a) save the last one (*kurczyć się* ‘shrink’) denote what Kemmer defines as “mental events”. There is a general tendency for emotions and cognitive processes to be conceptualized as one-participant events, and the corresponding structures show “progressively lower participant distinguishability” (Kemmer 1993: 73). Given the fact that the base verbs relate to mental and psychological states, the tendency/inclination semantics is to be expected.

The difference between dispositional and individual-level middles (cf. (8a) and (8b) above) is such that the former imply the logical presence of an Agent. No such implication whatsoever is present in the latter. Therefore, decausatives are one-participant eventualities pure and simple, because they are internally caused and refer to a “spontaneous process”. Compare *Włosy łamią się same z siebie*. ‘Hair splits of its own accord.’ – *łamliwe włosy* ‘splitting hair’. At the same time, when we analyse the sentence in (11), we can hardly say that *łamliwy* has the semantics of ‘tending to, inclined to break’, it merely allows a potential reading ‘such that can break, breaks easily’:

- (11) *Historycy sztuki nie mają wątpliwości, że łamliwy lód rzeki, pułapka na ptaki, czarne kruki siedzące na gałęziach drzew – wszystko to symbolizuje kruchość ludzkiej egzystencji.*

‘Art historians have no doubt that the breakable ice of the river, a trap for birds, the black ravens perching on the branches of the trees, – all this symbolizes the frailty of human existence.’

By the same token, in (12a) *rozciągliwy* does not imply ‘tending to, inclined to stretch’ but rather ‘capable of stretching, expanding’ and in (12b) it could be interpreted as ‘stretching easily’:

- (12) a. *Budżet nie jest rozciągliwy, nie jest z gumy.* – ‘nie da się go rozciągnąć’  
 ‘The budget is not expandable, it is not from rubber’ – ‘it does not lend itself to stretching’  
 b. *Żakiecik jest rozciągliwy, przylega do ciała jak druga skóra.*  
 ‘The jacket is stretchy, it fits like a glove (lit. it adheres to the body like skin)’

The group in (10a) could be expanded with 5 more intransitive verbs which are like *kurczyć się* ‘shrink’ since they are activity/change of state verbs with affected subjects.<sup>18</sup>

- |  |   |
|--|---|
| (13) <b>Verb</b>                         | <b>Adjective</b>  |
| <i>przeziąkać</i> ‘soak’                 | <i>przeziąkliwy</i> ‘such that soaks’   |
| <i>nasiąkać</i> ‘soak, absorb’           | <i>nasiąkliwy</i> ‘absorptive’  |
| <i>krzepnąć</i> ‘solidify, coagulate’    | <i>krzepliwy</i> ‘coagulable’   |
| <i>pierzchać</i> ‘run away, disperse’    | <i>pierzchliwy</i> ‘skittish’   |
| <i>schodzić</i> ‘sell easily (of goods)’ | <i>chodliwy (towar)</i> ‘such that sells easily, is in great demand (of goods)’ |

In the group of transitive bases (sporadically also intransitive bases with prepositional complements) we can observe verbs whose subjects can be understood as some kind of Experiencer or other type of affected participant<sup>19</sup> (Saksena 1980; Marantz 2009; Moreira 2014), as in (14a) and (14c) respectively. Transitive verbs in (14b) take affected, not effected, objects which additionally evoke the idea of detrimental affectedness.

- |  |  |
|--|--|
| (14) <b>Verb</b>                                       | <b>Adjective</b>                       |
| a. <i>pożądać</i> ‘desire’                             | <i>pożądliwy</i> ‘desiring’            |
| <i>pogardzać</i> ‘despise’                             | <i>pogardliwy</i> ‘contemptuous’       |
| <i>wzgardzić</i> ‘reject, despise’                     | <i>wzgardliwy</i> ‘despicable’         |
| <i>podejrzewać</i> ‘suspect’                           | <i>podejrzliwy</i> ‘suspicious’        |
| <i>drażnić – rozdrażnić</i> ‘irritate, make irritated’ | <i>drażliwy</i> ‘irritable, sensitive’ |
| <i>wstydzić się</i> ‘be ashamed of’                    | <i>wstydlivy</i> ‘shy, shameful’       |
| <i>pobudzić (się)</i> ‘excite, become excited’         | <i>pobudliwy</i> ‘easily excited’      |
| <i>dociekać</i> ‘investigate’                          | <i>dociekliwy</i> ‘investigative’      |
| <i>wnikać</i> ‘probe’                                  | <i>wnikliwy</i> ‘insightful’           |
| <i>pamiętać</i> ‘remember’                             | <i>pamiętliwy</i> ‘unforgiving’        |

<sup>18</sup> Affected subject should be regarded as a shorthand term for an affected participant in the LCS which is mapped onto the Subject position in syntax.

<sup>19</sup> Semantic affectedness typically characterizes participants which are acted upon, i.e. Patients, Recipients and Experiencers. Even the Agent, which is “the typically animate perceived instigator of the action” (Fillmore (1968: 24) can in some cases be viewed as affected. Saksena (1980) argues that there is a morpho-syntactically defined class of verbs in Hindi whose agents are simultaneously performers and recipients of activities. “Activities like ‘eat’ or ‘read’ are not only directed at their objects (‘food’ or ‘book’) but also toward their agents. The agents undergo a change of state physically (as in the activity expressed by running) or psychologically (as in the activity of studying)” (Saksena 1980: 821), unlike verbs such as ‘tear’, ‘open’, ‘plant’, where the activities are directed solely at their patients.



b. <i>szkodzić</i> ‘do harm’	<i>szkodliwy</i> ‘harmful’
<i>dokuczać</i> ‘tease’	<i>dokuczliwy</i> ‘troublesome’
<i>napastować</i> ‘harass’	<i>napastliwy</i> ‘leering’
<i>czepiać się (kogoś)</i> ‘niggle, nit-pick’	<i>czepliwy</i> ‘nit-picking’ ( <i>czepialski</i> )
<i>łaskotać</i> ‘tickle’	<i>łaskotliwy</i> ‘ticklish’
<i>szczypać – uszypnąć</i> ‘pinch’	<i>uszczypliwy</i> ‘catty, snide’
<i>kąsać</i> ‘bite’	<i>kąśliwy</i> ‘cutting’
<i>chwycić (się)</i> ‘catch’	<i>chwytliwy</i> ‘catchy’
<i>zarażać – zarażić się</i> ‘infect, become infected’	<i>zaraźliwy</i> ‘infectious, contagious’
<i>urągać</i> ‘curse’	<i>urągliwy</i> ‘cursing’
<i>obrażać (się)</i> ‘offend, be offended’	<i>obraźliwy</i> ‘offensive’
<i>zdradzić (się)</i> ‘betray, reveal’	<i>zdradliwy</i> ‘treacherous, revealing’
c. <i>przenikać</i> ‘penetrate, permeate’	<i>przenikliwy</i> ‘penetrating’
<i>ustępować</i> ‘yield’	<i>ustępliwy</i> ‘yielding, pliable’
<i>ciężżyć</i> ‘burden’	<i>uciążliwy</i> ‘cumbersome’

Psych-predicates describe mental dispositions, feelings and emotions. Depending on how the Experiencer role is projected in the syntax a distinction is made between Subject-Experiencer verbs (e.g. *bać się* ‘fear’, *pragnąć* ‘desire’, *pożądać* ‘desire’, *kochać* ‘love’, *nienawidzić* ‘hate’, *podejrzewać* ‘suspect’, *ufać* ‘trust’, *szanować* ‘respect’) and Object-Experiencer verbs (e.g. *interesować* ‘interest’, *fascynować* ‘fascinate’, *irytować* ‘irritate’, *drażnić* ‘irritate’), as in (15a) and (15b) respectively:

- (15) a. *Podejrzewam go o zdradę – jestem podejrzliwa*  
 ‘I suspect him of infidelity’ – ‘I am suspicious’  
*Rycerz tęskni do ukochanej – tęskliwy rycerz*  
 ‘The knight misses his beloved’ – ‘the yearning knight’
- b. *Ten temat mnie drażni – drażliwy temat*  
 ‘This topic irritates me’ – ‘an irritating topic’

Rozwadowska (1997) investigates the distribution of *by*-phrases and possessive phrases in deverbal nominalizations and concludes that, when nominalized, transitive non-psych events take *by*-phrases, whereas psych-nominals behave like intransitive action nominals: “Their Experiencer argument is realized as the possessive rather than in the *by*-phrase (like the Agent of intransitive action nominals), whereas the second satellite is expressed in some other prepositional phrase (as various modifiers often are)” (Rozwadowska 1997: 96–97):

- (16) a. *Uderzenie nas wszystkich ciężkim parasolem przez Marka*  
 ‘hitting everyone with a heavy umbrella by Mark’
- b. *topnienie śniegu/ \*topnienie przez śnieg*  
 ‘the melting of the snow’
- c. *Nienawiść Jana do Marii / \*Nienawiść przez Jana do Marii.*  
 ‘John’s hatred for Mary.’

The *by*-phrase accommodates Agents of transitive actions (2 participant eventualities), as in (16a). Rozwadowska (1997) proposes a distinction between external (non-psych-) events and internal (psych-) events, which rests on the location of the event. The former take place in the outside world, whereas the latter are located in the Experiencer and are typically viewed as one-participant eventualities, a feature which they share with intransitive actions, i.e. “a psychological experience is located solely in the Experiencer participant” (Rozwadowska 1997: 55). She goes on to explain that “there is good reason to assume that psychological experiences are cognitively construed as one-participant eventualities, despite the fact that the verbs that denote them are syntactically transitive” (Rozwadowska 1997: 100).

In the case of adjectivized transitive structures, however, the form – meaning correspondences as well as argument mapping can be quite varied. For example, the adjective in *-liw(y)* can logically link with either of the nominal arguments. In (15b) above, (i.e. *drażliwy temat* ‘irritating topic’), the adjective modifies the Source argument and is interpreted as ‘such that irritates, can irritate’, but we may envisage a situation where the head noun is the Experiencer and the relevant paraphrase will involve a middle/passive structure *taki, który łatwo się rozdrażnia/którego łatwo rozdrażnić* ‘such that is irritated easily’, e.g.

- (17) *Najgorzej przyjmowany przez kobiety jest polityk spięty, zamknięty, drażliwy.*  
 ‘An uptight, withdrawn, irritable politician is badly received by women.’

Whereas the suffix *-aln(y)* is prototypically used with two-participant eventualities, syntactically expressed in transitive structures, the suffix *-liw(y)* prototypically is attached to one-participant eventualities, mostly expressed with intransitive syntax. However, in some cases the formal distinction between transitive, middle and intransitive uses of a given verbal stem can be neutralized:

- (18) *obrazić kogoś* ‘offend sb, TRANS’ – *obrazić się* ‘become offended, INTRANS’  
 a. *Tamta uznała jej śmiech za obraźliwy.* (Subject adjectivization of a transitive verb)  
 ‘The other one considered her laughter offensive.’  
 b. *Zdanie to zostało tak sformułowane, że obraźliwy Val nie wiedział, czy ma się czuć pochlebiony, czy obrażony.* (Subject adjectivization of an intransitive verb)  
 ‘The sentence was formulated in such a way that touchy/oversensitive Val did not know whether he should feel flattered or offended.’

The adjective *obraźliwy* in (18a) can be paraphrased as ‘such that offends, can offend’, whereas in (18b) it means ‘easily offended’. It is important to note that its sentential analogue would employ a middle verb – *taki, który łatwo się obraża/ łatwo go obrazić*. ‘such that takes offence easily/ It is easy to offend him.’ On the second use, there also exists a more entrenched synonymous derivative based on the same stem – *obraźalski*.

In another transitive – intransitive pair *zarażać* ‘infect’ – *zarazić się* ‘become infected’, the adjective *zaraźliwy* ‘contagious’ is best understood as the equivalent of a middle structure ‘such that you can become infected with/ you become infected with easily’. An alternative paraphrase ‘such that infects’ related to the subject of a transitive verb is not possible, i.e. the adjective modifies nominals which denote what you can become infected with, as in (19b) and there are no examples in the corpus denoting people/animals that infect:

- (19) a. *Wyjątkowo zaraźliwy wirus objawiający się podwyższoną temperaturą ciała*  
 ‘A highly contagious virus manifesting itself with high body temperature’  
 b. *zaraźliwy śmiech, humor, uśmiech, entuzjazm, przykład, pech*  
 ‘contagious/infectious laughter, humour, smile, enthusiasm, example, bad luck’

In the pair *zdradzić* ‘betray sb, TRANS’ – *zdradzić się* ‘give oneself away, INTRANS’, the adjective *zdradliwy* can either modify the subject of a transitive verb ‘such that betrays, can betray, is inclined to betray’ or to the oblique object expressed by means of the Instrumental of the intransitive counterpart:

- (20) a. *Politycy opozycji zdradzają ojczyznę – zdradliwi politycy*  
 ‘Opposition politicians betray the fatherland’ – ‘treacherous politicians’  
 b. *Edmund nie zdradził się najmniejszym gestem – zdradliwy gest*  
 ‘Edmund did not give himself away with the slightest gesture’ – ‘revealing gesture’

Finally, there are cases of transitive structures marked with the clitic *się* such as *wstydzić się czegoś* ‘be ashamed of sth’. The corresponding adjective *wstydlivy* will be interpreted as ‘such that is ashamed of, bashful’ or ‘such that one is ashamed of’, i.e. equivalent to an impersonal construction – *taki, którego się wstydzi*.<sup>20</sup>

- (21) a. *Wciąż był bardzo wstydlivy, nieśmiały, pełen kompleksów.*  
 ‘He was still very shy, timid, full of complexes.’  
 b. *ktoś poznał wstydlivy epizod z jego życiorysu*  
 ‘someone learned about a shameful episode from his life’

The verbal bases which take accusative-marked objects are in the minority. Most of them take objects marked with the genitive or dative case, which means that they do not fall within the core of transitive structures.

Last but not least, let us consider a derivative related to the transitive verb *jeść* – *zjeść* ‘eat’. As expected, there is a regular derivative in *-aln(y)* ‘such that can be eaten, edible’ as in *grzyby jadalne* ‘edible mushrooms’. The derivative in *-liw(y)* implies that something is consumable, *da się zjeść* ‘such that lends itself to consumption’:

<sup>20</sup> Impersonal constructions of this type can also be interpreted as middles (Holvoet and Linde-Usiekniewicz 2015).

- (22) *zmieszanie owych składników daje mało zjadliwy rezultat*  
 ‘the mixing of these ingredients produces a barely consumable result’

Why is this derivative possible? This may be due to the fact that *eat* and other ‘verbs of ingestion’ belong to the class of verbs with affected agents (Saksena 1980; Næss 2007).

Bloch-Trojnar (2017) delimits the domain of *-alny* suffixation. The base verb for the derivation of Objective/passive potential adjectives is to be associated with an internal theme argument, an implication of causation and change of state. The best match is an aspect variable [Agent, Theme] verb. The domain of *-alny* suffixation primarily includes transitive bases (e.g. *akceptowalny* ‘acceptable’, *osiągalny* ‘attainable’, *wykonalny* ‘doable’). However, intransitive bases with a selected PP are not impossible (e.g. *odpowiedzialny* ‘responsible’, *porównywalny* ‘comparable’). There are also isolated cases of an intransitive verb with a locative (e.g. *mieszkać* ‘live’ – *mieszkalny*), or an unaccusative verb (e.g. *palny* ‘combustible’, *przemakalny* ‘permeable’). If a verb allows two uses, only the passivizable variant is selected as the base, i.e. the adjective *mierzalny* ‘measurable’ can be formed only in reference to the situation in (23b) below:

- (23) a. *On mierzy dwa metry.* ‘He is two meters tall.’  
 b. *Mierzą prędkość nowego modelu.* ‘They measure the speed of the new model.’

In isolated cases where *-liwy* and *-alny* adjectives contain the same root, they can be related to distinct verbal bases, e.g. the adjective *rozciągliwy* ‘expandable, stretchy’ can be related to the intransitive/reflexive verb *rozciągać się* ‘stretch’, while *rozciągalny* ‘extensible’ to the transitive verb *rozciągać* ‘stretch (sth)’. However, more frequent are cases where there is one polysemous derivative, e.g. *rozpuszczać (się)* ‘dissolve-TRANS/INTRANS’ – *rozpuszczalny* ‘soluble’, where *rozpuszczalny* means ‘such that can be dissolved’ or ‘such that dissolves easily’, and conversely the adjective *łamliwy* which is related to *łamać (się)* ‘break-TRANS/INTRANS’ can be interpreted as ‘brittle’ and ‘breakable’.

## 4. Conclusion

The semantic interpretation of adjectives ending in *-liw(y)* is not confined to the tendency and inclination reading. Derivatives with dispositional semantics should be regarded as a subclass of Subject adjectivizations/potential adjectives on account of the fact that both are one-participant eventualities and their sole participant is mapped onto the position of the subject of the main verb. In line with Vetter’s (2015) proposal the difference between dispositional and potential semantics is not categorical but a matter of degree. The domain of this process includes intransitive verbs of communication and emission, reflexively marked intransitive verbs referring to emotional states (deponents),

(reflexively marked) decausatives, verbs denoting psychological/emotional/mental experiences which syntactically may be transitive (*pożądać* ‘desire’, *pogardzać* ‘despise’) but can be viewed as one-participant internal eventualities, non-prototypical transitive verbs which take genitive- and dative-marked objects as well as verbs whose roots can appear in verbal structures alternating between transitive and middle semantics (*obrazić* (*się*) ‘offend, become offended’). The division of labour between *-al(n)y* and *-liw(y)* suffixes in the process of V to A transposition has been tentatively hinted at, a hypothesis which is, of course, in need of further, more extensive and in-depth research. Whereas objective potential adjectives require external causation/manifestation, subjective adjectives are to be associated with internal causation/manifestation and/or affectedness. The dispositional character of the adjective depends on whether the participant involved in the eventuality denoted by the verb is personal/animate (e.g. *kłótlivy pracownik* ‘gobby worker’, *szczekliwy piesek* ‘barky noisy dog’) or inanimate (e.g. *przenikliwy wiatr* ‘piercing wind’), or some other intrinsic property of the nominal argument which raises/intensifies the possibility of something happening (e.g. *łamliwe kości* ‘brittle bones’, *chwytliwy slogan* ‘catchy slogan’). Thus, the source of this feature rests with the base (or partly with the nominal argument) and is not supplied by the suffix.

## References

- ACKEMA Peter, SCHOORLEMMER Maaïke (2006). Middles. In *The Blackwell Companion to Syntax*, vol III. Martin EVERAERT, Henk VAN RIEMSDIJK (eds.), 131–203. Oxford: Basil Blackwell.
- BAŃKO Mirosław, KOMOSIŃSKA Dorota, STANKIEWICZ Anna (eds.) (2003). *Indeks a tergo do Uniwersalnego słownika języka polskiego*. Warszawa: Wydawnictwo Naukowe PWN.
- BARTNICKA Barbara (1970). *Adietywizacja imiesłowów w języku polskim*. Warszawa: Państwowe Wydawnictwo Naukowe.
- BAUER Laurie (2001). *Morphological Productivity*. Cambridge: Cambridge University Press.
- BEARD Robert (1995). *Lexeme Morpheme Base Morphology*. Albany, NY: SUNY Press.
- BLOCH-TROJNAR Maria (2013). *The Mechanics of Transposition: A Study of Action Nominalisations in English, Irish and Polish*. Lublin: Wydawnictwo Katolickiego Uniwersytetu Lubelskiego.
- BLOCH-TROJNAR Maria (2015). Derivatives based on participles in Irish and Polish and the inflection–derivation distinction. *Linguistics Beyond And Within* 1, 25–42.
- BLOCH-TROJNAR Maria (2017). A note on the structure of passive potential adjectives in Polish. In *Route 66: From Deep Structures to Surface Meanings. A Festschrift for Henryk Kardela on his 66<sup>th</sup> Birthday*. Przemysław ŁOZOWSKI, Adam GŁAZ (eds.), 165–187. Lublin: Maria Curie Skłodowska University Press.

- BORER Hagit (1990). V + ing: It walks like an adjective, it talks like an adjective. *Linguistic Inquiry* 21(1), 95–103.
- CETNAROWSKA Bożena (1999). On inherent inflection feeding derivation in Polish. In *Yearbook of Morphology 1999*. Geert BOOIJ, Jaap VAN MARLE (eds.), 153–183. Dordrecht: Kluwer.
- CHAPIN Paul (1967). *On the Syntax of Word-Derivation in English*. Cambridge, MA: MIT Press, PhD dissertation.
- CROFT William (1991). *Syntactic Categories and Grammatical Relations*. Chicago: University of Chicago Press.
- FÁBREGAS Antonio (2014). Adjectival and adverbial derivation. In *The Oxford Handbook of Derivational Morphology*. Rochelle LIEBER, Pavol ŠTEKAUER (eds.), 276–295. Oxford: Oxford University Press.
- FÁBREGAS Antonio, SCALISE Sergio (2013). *Morphology. From Data to Theories*. Edinburgh: Edinburgh University Press.
- FILLMORE Charles (1968). The case for case. In *Universals in Linguistic Theory*, Emmon BACH, Robert HARMS (eds.), 1–88. New York: Holt, Rinehart & Winston.
- FRIED Mirjam (2006). Agent-backgrounding as a functional domain: Reflexivization and passivization in Czech and Russian. In *Demoting the Agent, Passive, Middle and Other Voice Phenomena*. Benjamin LYNGBELT, Torgrim SOLSTAD (eds.), 83–110. Amsterdam: John Benjamins.
- GRÁCIA Lluïsa (1995). *Morfologia lexica. L'herència de l'estructura argumental*. Valencia: Servei de Publicacions de la Universitat de Valencia.
- HOLVOET Axel, LINDE-USIEKIEWICZ Jadwiga (2015). The middle voice in Polish: An attempt at rehabilitation. *Studies in Polish Linguistics* 10(3), 105–124.
- JOCHYM-KUSZLIKOWA Ludwika (1973). *Przymiotniki z formantami -iv-, -liv-, -čiv- w języku rosyjskim: w porównaniu z odpowiednimi formacjami polskimi*. Wrocław: Zakład Narodowy im. Ossolińskich. Wydawnictwo Polskiej Akademii Nauk.
- KALLAS Krystyna (1999). Przymiotnik. In *Gramatyka współczesnego języka polskiego*. Renata GRZEGORCZYKOWA, Roman LASKOWSKI, Henryk WRÓBEL (eds.), 469–523. Warszawa: Wydawnictwo Naukowe PWN.
- KEMMER Suzanne (1993). The Middle Voice. *Typological Studies in Language* 23. Amsterdam: John Benjamins.
- KLINGVALL Eva (2008). *(De)composing the Middle: A Minimalist Approach to Middles in English and Swedish*. Lund: Lund University, PhD dissertation.
- KRATZER Angelika (1981). The notional category of modality. In *Words, Worlds, and Contexts. New Approaches in Word Semantics*. Hans J. EIKMEYER and Hannes RIESER (eds.), 38–74. Berlin: de Gruyter.
- KRATZER Angelika (1991). Modality. In *Semantics: An International Handbook of Contemporary Research*. Arnim VON STECHOW, Dieter WUNDERLICH (eds.), 639–650. Berlin: de Gruyter.
- KRIFKA Manfred, PELLETIER Francis Jeffrey, CARLSON Gregory N., TER MEULEN Alice, CHERCHIA Gennaro, LINK Godehard (1995). Genericity: An introduction. In *The Generic Book*. Gregory N. CARLSON, Francis Jeffrey PELLETIER (eds.), 1–124. Chicago/London: The University of Chicago Press.
- LASKOWSKI Roman (1984). Kategorie morfologiczne języka polskiego – charakterystyka funkcjonalna. In *Gramatyka współczesnego języka polskiego. Składnia – Mor-*

- fologia – Fonologia*. Renata GRZEGORCZYKOWA, Roman LASKOWSKI, Henryk WRÓBEL (eds.), 121–169. Warszawa: Wydawnictwo Naukowe PWN.
- LASKOWSKI Roman (1998). Diateza a morfologiczna kategoria strony. In *Gramatyka współczesnego języka polskiego. Morfologia*. Renata GRZEGORCZYKOWA, Roman LASKOWSKI, Henryk WRÓBEL (eds.), 187–203, Warszawa: Wydawnictwo Naukowe PWN.
- LEVIN Beth, RAPPAPORT Malka (1986). The formation of adjectival passives. *Linguistic Inquiry* 17(4), 623–661.
- MALICKA-KLEPARSKA Anna (2010). Się verbs in Polish – A disparity of form and function. In *Verb Structures. Between Phonology and Morphosyntax*. Eugeniusz CYRAN, Bogdan SZYMANEK (eds.), 177–192. Lublin: Wydawnictwo KUL.
- MALICKA-KLEPARSKA Anna (2017). *Middles in English and Polish*. Lublin: Wydawnictwo KUL.
- MARANTZ Alec (2009). Roots, re-, and affected agents: can roots pull the agent under the little *v*? Paper presented at the workshop *Roots: Word Formation from the Perspective of “Core Lexical Elements”*, Universität Stuttgart, 12 June.
- MOREIRA DA COSTA Bruna Elisa (2014). Two types of dispositional adjectives. *Revista Virtual de Estudos da Linguagem* 8, 186–196.
- NÆSS Ashild (2007). *Prototypical Transitivity*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- NAGANO Akiko, SHIMADA Masaharu (2016). How poor Japanese is in adjectivizing affixes and why. In *Word Formation across Languages*. Lívia KÖRTVÉLYESSY, Pavol ŠTEKAUER, Salvador VALERA (eds.), 219–240. Newcastle upon Tyne: Cambridge Scholars Publishing.
- PRZEPIÓRKOWSKI Adam, BAŃKO Mirosław, GÓRSKI Rafał, LEWANDOWSKA-TOMASZCZYK Barbara (eds.) (2012). *Narodowy Korpus Języka Polskiego*. Warszawa: Wydawnictwo Naukowe PWN.
- PUSTEJOVSKY James (1991). The syntax of event structure. *Cognition* 41, 47–81.
- PUZYNINA Jadwiga (1976). Z problematyki opisu słowotwórczego przymiotników dewerbalnych. In *Semantyka tekstu i języka*. Renata MAYENOWA (ed.), 257–267. Wrocław: Zakład Narodowy im. Ossolińskich. Wydawnictwo Polskiej Akademii Nauk.
- ROZWADOWSKA Bożena (1997). *Towards a Unified Theory of Nominalizations. External and Internal Eventualities*. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego.
- SAKSENA Anuradha (1980). The affected agent. *Language* 56(4), 812–826.
- SLEEMAN Petera, VERHEUGD Els (2000). Deverbal adjectivization as a gradual process. *Acta Linguistica Hungarica* 47, 315–333.
- SZYMANEK Bogdan (1988). *Categories and Categorisation in Morphology*. Lublin: Redakcja Wydawnictw KUL.
- SZYMANEK Bogdan (2010). *A Panorama of Polish Word Formation*. Lublin: Wydawnictwo KUL.
- TABAKOWSKA Elżbieta (2003). Those notorious Polish reflexive pronouns: A plea for middle voice. *Glossos* 4, 1–18.
- VETTER Barbara (2015). *Potentiality: From Dispositions to Modality*. Oxford: Oxford University Press.

Maria Bloch-Trojnar  
Katolicki Uniwersytet Lubelski Jana Pawła II  
Instytut Filologii Angielskiej  
Al. Raławickie 14, 20-950 Lublin  
[bloch(at)kul.pl]