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1. Introduction

When analyzing the meaning of plant terms, it is important to distinguish between common plant names and “purely botanical” or Latin terms, a distinction that underlies the opposition between expert vs. folk (or natural) categories.¹ The latter, as Taylor (1989) observes,

¹ Using the term *expert categories* J.R. Taylor refers to notions used by “experts (...) who, because of their professional standing, are *supposed to know* about their relevant field” and “are competent to say whether or on what grounds, any particular instance is or is not a member of the category.” (Taylor 1989:75). To indicate the same term, Kempton (1981) uses the notion of *devised classification systems* (Taylor 1989:75). Langacker for a change explains the difference between the expert definition and the natural one recalling the concept of ‘circle’:

Anyone who is familiar with [the] definition [of circle] as the set of points in a plane that lie in a specified instance from a reference point... But despite the mathematical elegance of this characterization, it is doubtful that it reflects a person’s naive or primary understanding of [CIRCLE]. Many people (e.g. young children) acquire [CIRCLE] as a salient and deeply entrenched concept without being exposed to the mathematical definition or focusing their attention

are “structured around prototypical instances and (...) [are] grounded in the way people normally perceive and interact with the things in their environment” (Taylor 1989:75). The importance of common plant names, which are often incompatible with their botanical or Latin counterparts, is reflected in the statement that “people name many things in the course of ordinary life” (Carroll 1985:43). Because, as Lakoff and Johnson (1980, 1999) tell us “metaphors structure reality for us”, it comes as no surprise that many common plant names should derive from metaphor, metonymy, or simply become a symbolic interpretation of the literal expression.²

It is the symbolic interpretation and the meaning of plant terms that we are interested in. In particular, we shall claim that the meaning of plant names can be systematically analysed using methodological tools of cognitive linguistics. Assuming as we do that meanings of lexical items are decomposable to a certain degree, our claim can essentially be rephrased in the form of a question of how to measure the degree of an item’s decomposability, and by the same token, the degree of its semantic transparency. In this paper I would like to claim that the degree of decomposability/transparency of a lexical item’s meaning - in this case, the meaning of a common plant name - can be measured using two related notions: analyzability and compositionality, proposed by Ronald Langacker in his analysis of a word’s meaning (Langacker 1987, 1991, 2000).

It should be observed that, because very often common plant names have the structure of idiomatic expressions, we should expect them to behave like idioms, that is like “institutionalised construction[s] that [are] composed of two or more lexical items and [have] the composite structure of a phrase or semi-clause, which may feature constructional idiosyncrasy” (cf. Langlotz’s 2006:5 definition

specifically on the length of line segments from the center to the circumference. (Langacker 1987:86)

² The naive interpretation of the perceived reality is the basis of the theory of the linguistic picture of the world as developed by the Ethnolinguistic School of Lublin (see Bartmiński 2007).

of an idiom). If so, then, just like in idioms, we should expect plant names to display the varying degrees of the *transparency* of meaning, or the varying degree of compositionality and analysability. Thus, whereas in the case of English expressions such as *pale-touch-me-not* (*Impatiens pallida* L.), *Jack-go-to-bed-at-noon* (*Tragopogon pratensis* L.) or Polish *wróć się zaś* (*Botrychium lunaria* L. Sw.) and *warkoczek Najświetszej Marii Panny* (*Agrimonia eupatoria* L.), the “transparency” of meaning is rather high, in the case of such terms as *goatsbeard* (*Aruncus dioicus* L.) and *myszomord* (*Aconitum vulparia* Rchb.) their meaning is definitely less transparent. The least transparent, hence least analyzable are terms whose meanings are figurative such as, for example, Pol. *kochanek* (*Adonis vernalis* L.), or Eng. *rape* (*Brassica napus* L.). Although lacking an “idiomatic structure” (as the meanings above suggest), such one-word metaphors may become one-word idioms via the processes of institutionalization and lexicalisation, which is the result of semantic extension (Langlotz 2006:100).³

2. The Analyzability/Compositionality parameter

So far we have been using the terms: analyzability and compositionality without attempting to define them. It is time to do so now. Compositionality and analyzability are related, yet distinct notions. What Langacker means by analyzability is the extent to which the contribution of component structures (i.e. structures that integrate with one or other structures in a combinatory relationship) shapes the composite structure (i.e. a structure which is the result of a combination of two or more structures in a valence relation) (Langacker 1987:487). Compositionality, on the other hand, is understood as the relationship in which the value of the composite structure is predictable from the value of its parts. According to Langacker, analyzability resembles a “horizontal” relationship which

³ Langlotz gives a thorough explanation of how single words gain the status of an idiom analysing the case of a literal and idiomatic meaning of the word *mouse* (Langlotz 2006).

illustrates semantic motivation, whereas compositionality explores a “vertical” dimension between composite structures and the component unit (Langacker 1987:448).

Although analyzability and compositionality are distinct phenomena, for the purpose of this analysis and in view of the fact that this distinction does not impinge on our analysis, unless otherwise indicated, we shall treat them as complementary and jointly refer to them, depending on the context in which they appear, as A/C parameter, the A/C scale, A/C principle or A/C criteria. Indeed, as observed by Langacker, the degree of analyzability increases in the case of fully compositional expressions such as, for example, *a patriotic pole climber* which consists of easily recognizable morphological units, and decreases in the case of quasi morphemes such as, for example, the quasi morpheme *-er* in the expression *father*.⁴

With this in mind, let us now focus on the semantic value of expressions in which, in Langacker’s parlance, “a coherent composite structure fails to emerge from the specified mode of integrating the component structures” (Langacker 1987:293). The problem relates to contrasting pairs such as: *acorn* vs. *fruit (or nut) of an oak tree* or *pork* vs. *pig meat*. The “integration problem” can also be noticed in plant

⁴ Naturally, *father* is a one morpheme word, hence it is a non-compositional. Still, as Langacker notes, the speaker may treat *-er* as a quasi morpheme, which contributes its meaning to the meaning of the expression *father*, that is, the speaker can treat *-er* as a suffix indicating, for example, a kinship term (cf. *sister, mother, brother*, etc.)

It is instructive to see how Langacker (2000:152) defines analyzability. According to him,

Analyzability resides in coactivation of component and composite structures, with the former thus serving to categorize and motivate the latter. For fixed expressions - where the composite structure already has status of a learned, established unit (so that no computation is required to arrive at it) - one naturally expects the component structures to vary in their likelihood or level of activation (and hence in their cognitive salience). Degrees of analyzability are thus recognized and easily accommodated.

names describing the same species, e.g. Polish *dziurawiec* vs. *ziele Świątego Jana* (both designating *Hypericum perforatum* L. – *St. John's wort*). Although the composite structure of an expression *ziele Św. Jana* is considered to be identical with its less periphrastic counterpart, *dziurawiec*, the former should be judged to be more distinct and more complex semantically. Unquestionably, *dziurawiec* conveys all the concepts that are recalled in *ziele Świątego Jana*, but these concepts, being component structures, are not emphasized individually. In other words, they are less prominent in *dziurawiec*, the semantic value of which resides in a single unified conception, making this expression practically unanalyzable. Notice that, in contrast to *dziurawiec*, *ziele Świątego Jana* (which is its periphrastic counterpart), *does* evoke an individual prominence of both [ZIELE] (herb/wort) and [ŚWIĘTY JAN] (St. John), thus rendering these two component structures more salient. The above comparison lends support to the claim that expressions gain their composite structures via different compositional paths, which in turn results in subtle differences of meaning. Whereas in the case of *dziurawiec* the compositional path leads to direct symbolization, in *ziele Świątego Jana*, the process of the integration of component symbolic structures takes place. These observations are reinforced by Langacker in the following statement (1987: 294):

The use of a compositional expression to convey the notion results in greater salience for the explicitly mentioned substructures than with a non-compositional equivalent. Often there are alternate grammatical constructions allowing the speaker to arrive at identical or comparable composite structures via different compositional paths, resulting in contrasting images and nuances of meaning. Since other phenomena may be sensitive to these meaning contracts, even when seemingly minor, the constructions are capable of exhibiting different grammatical behaviour and combinatory potential at higher levels of organization.

As already mentioned, once we realize that common plant names are to a great extent conventionalised expressions, which gives them the status of idiomatic expressions, one can pose the question of the varying degrees of their analyzability. We can thus establish an A/C scale and place “fully analyzable” plant terms at one end of the scale,

less analyzable in the middle of the scale and least analyzable or non-analyzable at all at the other end of scale.

In this formulation, the A/C scale directly relates to the notion of “meaning transparency”: the more analyzable/compositional a given expression is, the more transparent it becomes. By the same token, non-analyzable units represent the lowest degree of transparency.

With this in mind, consider those common plant names which are labeled as “least analyzable or non-transparent”. Non-transparency means that language users, at a particular level of processing and conceptualization, become less cognizant of the constituents shaping the composite whole. In this case a given expression undergoes the process of reanalysis in the sense of Langacker (1987:462), which manifests itself in the expression’s inability to activate its component structures.

Numerous examples that reveal the non-transparent or non-analyzable nature can be found in the world of plants. In English, they are usually monomorphemic structures which, by their nature, do not contain any component structures. Thus such plant names as *leek* (*Allium ampeloprasum* (L.)J.Gay), *cress* (*Lepidium sativum* L.), *nut* (*Corylus avellana* L.), *oak* (*Quercus* L.), *dock* (*Rumex acetosa* L.), *wheat* (*Triticum* L.) and countless others are practically unanalyzable. Other non-transparent cases appear with the names in which there is a visible lack of a meaningful morpheme, e.g. *bilberry* (*Vaccinium myrtillus* L.- there is nothing like *bil), *cucumber* (*Cucumis sativus* L.), or *dandelion* (*Taraxacum officinale* L.). We have similar, “non-transparent” cases of plant terms in Polish as well. Thus we have *szczaw* (*Rumex acetosa* L.), *rzep* (*Arctium* L.), *włok* (*Chenopodium album* L.), or *szalej* (*Hyoscyamus niger* L.), as well as those words which seem to be more complex on what we wish to call after Henryk Kardela (private conversation) the “morphological transparency scale”, but still remain non-transparent, as it is seen in the case of *chaber* and its synonym *blawatek* (*Centaurea cyanus* L.).

Langacker’s assertion that “analyzability is a matter of degree” is not, however, unproblematic. In particular, it is not clear, for example, how to treat two distinct symbolic units which appear to share similar

morphological properties? Let us consider two Polish plant names: *mniszek* (*Taraxacum officinale* L.) and *kochanek* (*Adonis vernalis* L.), which have the same degree of compositionality (in the sense of Langacker), i.e. in which we can easily distinguish two morphemes *mnich-ek* and *koch-anek* respectively. The question is: do they have the same degree of analyzability? At first glance, the answer seems to be yes. Yet, for an average language user, it is easier to semantically (and conceptually) decompose *kochanek* - the root *kochać* plus a diminutive suffix *-ek* here are more salient within the composite whole - than to decompose *mniszek*, which is more readily conceptualized as a whole.⁵ It is only owing to “the linguistic sensitivity of a simple man which manifests in the explanation of names ascribed to the designates and the attempt to etymologize them,” (Pelcowa 2001:99, translation mine) that we are able to access the components of *mniszek* separately. The net result of this observation is clear: *kochanek* is analyzable to a greater degree than *mniszek*. This neatly accords with Langacker’s (1987: 462) statement that

If analyzability is a matter of degree (which is seemingly undeniable on intuitive grounds), then we must further conclude that the question of whether a certain form is morphemically complex is not always answered adequately with a simple ‘yes’ or ‘no’ response. Granted, for example, that the components of *swimmer* are more frequently elicited and saliently perceived within the whole than those of *propeller*, it must also be admitted that the decomposition of *propeller* into the separate morphemes (...) is more tenuous than that of *swimmer*. The question merits an unqualified yes/no answer only when the expression is either novel or fully opaque.

Let us now turn to a large group of both Polish and English plant names forming compounds such as *may apple* (*Podophyllum peltatum* L.), *foxglove* (*Digitalis purpurea* L.), *shepherd’s purse* (*Capsella*

⁵ *Mniszek* as a plant name is accessed immediately, without taking into account the components/morphemes (i.e., the root *mnich* and a suffix *-ek*). Very few people associate the name with the following definition ‘po zdmuchnięciu puchu na łądźce pozostaje naga główka, która przypomina ogoloną głowę mnicha’ (Pelcowa 2001:101). If a language user becomes aware of the components which shape a given expression, he is likely to choose the most ‘diagnostic’ features (Tokarski 1993:340-341), such as, e.g. physical properties which are accessed via the sense of vision.

bursa-pastoris L.), *gromowy korzeń* (*Asparagus officinalis* L.), *wronie ziele* (*Sedum* sp.), or *ośla stopa* (*Tussilago farfara* L.) As Bybee (1985:106) notes, seen from a morphological point of view, compounding “resembles lexical expression in that the resulting unit is a word, and the meaning of the word is not predictable from a summation of the meaning of its parts.”

Viewed in the context of analyzability, a compound “goes beyond pure morphology”, highlighting the importance of both the component structures and the composite whole. The role of the individual concepts evoked by component structures can hardly be minimized. Not only do they contribute to the understanding of the composite structure, but they also indicate an interplay that occurs between particular components, as well as in the individual relation that each component structure bears to the whole. This phenomenon is particularly visible in compounds where it is much easier to extrapolate the components and observe the above relationships than it would be with a typical derivation of the *swim/swimmer-propel/propeller* type (Langacker 1987:462). To illustrate these dependencies, let us consider the following diagram:

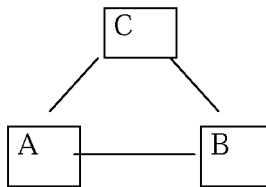


Fig. 1 (Langacker 1987:450)

The above figure is a schematic representation of all the parameters and relationships which must be activated to establish the idea of compositionality and understand the principle of analyzability. As emphasised by Langacker, “a full description of the construction must specify all of these structures and relationships” (Langacker 1987:450). In the diagram, [C] stands for the composite whole, whereas [A] and [B] represent component structures. As it is indicated

by solid lines, all the parameters remain in appropriate correspondences: the outcome of a horizontal relationship between [A] and [B] is the integration of these two components, which gives an [AB] structure and simultaneously becomes the basis for the composite whole [C]. In this sense, [C] is calculable from [AB], as it happens in the case of an English plant name *blackberry* (*Rubus fruticosus* L.). The other side of the coin is that *black* and *berry* also exist as distinguishable individual concepts [A] and [B], and each of them might be individually recalled in the composite structure [C]. Therefore, it also seems necessary to stress vertical relationships between [A] and [C] and [B] and [C]. Once the above parameters are retained, it is possible to talk about full compositionality of an expression.

Let us ponder over the case of such plant names as Polish *wilcza jagoda* (*Atropa belladonna* L.) or English *gooseberry* (*Ribes uva-crispa* L.) in order to interpret the aspects of their analyzability and compositionality via the diagram. It appears that both these compounds diverge from typical easy-to-follow relationships as presented for *blackberry*. Both 'wilcza' and 'goose' are not activated immediately in the composite structure of *wilcza jagoda* and *gooseberry*, as it happens in the case of 'black' in *blackberry*⁶. Thus, a simple computation of the composite whole [C] from the components [A] and [B] is much less transparent than in the case of *blackberry* and, as such, it should be substituted with the following calculation: [C]= [ABX] (Langacker 1987:450).

⁶ *Wilcza jagoda* and *gooseberry* may be analysed only if we take into account the parameters which go beyond a pure calculation of [A] and [B] components. According to Pelcowa, plant names which comprise the reference to an animal usually recall pejorative connotations and frequently serve as a warning for people (Pelcowa 2001:109). Therefore, *wilcza jagoda* is not a summation of the components *wilcza* and *jagoda*, as the former triggers off the associations connected with sth unpleasant and dangerous for people. All these associations establish an extra X value which cannot be neglected while accessing the composite whole.

The *blackberry-gooseberry* case evokes the notions of immanence and recognition (Langacker 1987:458) which come along the A/C principle. Let us consider their graphic interpretations:

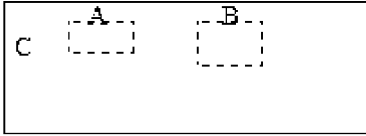


Fig. 2. Immanence

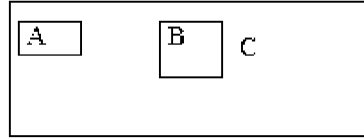


Fig. 3. Recognition

The notion of immanence is interpreted by Langacker in the following way (Langacker 1987:458):

Structure [A] is a component of [C] in this sense if the cognitive events comprised by [A] are included among the more extensive set of cognitive events constituting [C]; the occurrence of the former set of events is thus intrinsic to the execution of the latter

The above definition applies to the English plant name *gooseberry* and the Polish expression *wilcza jagoda*, in which neither of the components is individually recognized as an individual symbolic unit, but both are to be found in the composite structure. This stands in contrast to *blackberry*, in which case both components: *black* and *berry* are not only immanent within the composite whole, but they are also easily accessed and identified within this structure.

Another interesting aspect of analyzability is the notion of *natural path*, briefly mentioned above, which may be represented by, as Langacker puts it, “each natural cognitive arrangement of the elements of the composite whole”, and which “has a tendency towards coalignment” (Langacker 2005:109-110, translation mine). The greater the coalignment, the more understandable an expression is. Let us consider English *foxglove* (*Digitalis purpurea* L.), or Polish *lwia pascza* (*Linaria vulgaris* Mill.). In both languages the violation of word order “distorts” the composite structure of the conceptualized plant (after all there is nothing like **glovefox* in English and **pascza lwia* in Polish to play the role of synonyms for the above plant names). Word order thus, as retained in compounds, is one of the examples illustrating the natural path.

Going deeper into the structure of compounds, one may identify so-called patronymy relations which contribute to the overall picture of a compound. While the first element of a compound is the reference point in the sense of Langacker (1991, 2000, 2005) which manifests in greater conceptual salience, the second element indicates the target we reach via reference point. The natural path allows to view the component structures as established symbolic units and describe the relationships between [A] and [B] components, which in turn leads us to the composite whole.

Both English and Polish plant names indicate patronymy relations, which usually reside in possessive constructions. Thus we have English *bachelor's buttons* (*Centaurea cyanus* L.), *Lady's thumb* (*Polygonum persicaria* L.), *Bastard cabbage* (*Rapistrum rugosum* L.), *ox-eye* (*Heliopsis helianthoides* L.), *henbit* (*Lamium amplexicaule* L.), *catmint* (*Nepeta cataria* L.) and Polish *żabie oczka* (*Myosotis* sp.), *wilczy ogon* (*Lycopodium clavatum* L.), *gęsi pępek* (*Bellis perennis* L.), *babia róża* (*Alcea rosea* L.), *końskie kopyto* (*Tussilago farfara* L.), or *psia pietruszka* (*Aethusa cynapium* L.)⁷

3. The prismatic architecture of composite expressions

Let us now look at the phenomenon of analyzability and compositionality from the point of view of Geeraert's (2003) analysis of meaning. Geeraerts proposes to establish the so-called 'prismatic architecture' of composite expressions like idioms and compounds allowing, as he puts it, for "the syntagmatic and the paradigmatic axes in their meaning" and graphing "the various ways in which metaphor and metonymy can interact along these axes" (Geeraerts 2003: 435). Thus consider the Polish expression *krwiściąg* (Eng. *burnet*) (*Sanguisorba* L.), in the meaning of which the relation between the

⁷ English compounds as described in the above article represent a gradual loss of a typical possessive construction- hence the gradation: *Lady's thumb* > *bastard cabbage* > *catmint*. The Polish language has developed an adjectival form which plays as a substitute for a possessive structure, e.g. *wilczy ogon* or *psia pietruszka* instead of the respective forms * *ogon wilka* or * *pietruszka psa*.

literal and figurative readings obtained via the process of meaning extension, can be presented by the following prismatic model:

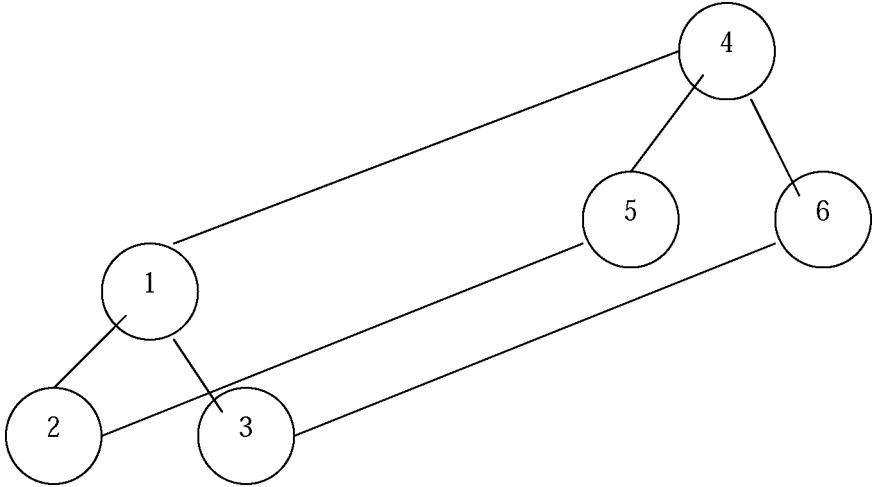


Figure 4. Analysis of *krwiściąg* (*Sanguisorba* L.)

1. *krwiściąg* 2. *ściągać* (to tighten) 3. *krew* (blood) 4. *krwiściąg-roślina hamująca krwotok* (a plant that stops bleeding) 5. *hamować* (to stop) 6. *krwotok* (bleeding)

The following relations can be deduced from Figure 4: point 1 indicates a literal meaning of *krwiściąg*; points 2 - *ściągać* and 3 - *krew* are the constituents of the composite whole on the literal level; point 4 is a figurative meaning that is accessed via metonymy (*krwiściąg* as the plant which stops bleeding), whereas points 5 and 6 become the constituents of the figurative meaning and remain in a paradigmatic relation with their literal counterparts 2 and 3. The interpretation of 5 and 6 consists in the activation of metaphor in the relationship between 2 and 5, and metonymy in the relationship between 3 and 6.

Apart from the paradigmatic dimensions involved in relations 1-4, 2-5 and 3-6, there are also syntagmatic relations between the composite whole and its constituents, both on the literal and figurative level of meaning. The above analysis of a prismatic model emphasizes the importance of compositionality and/or analyzability, opening a way to a “non-directional” interpretation of a given expression which Geeraerts calls ‘isomorphism’ (Geeraerts 2003:438).

While talking about isomorphism, it is impossible to ignore the notion of motivation which is believed to share the same characteristic feature, namely, transparency. However, much as isomorphism has an inclination towards syntagmatic transparency, motivation is described as paradigmatic transparency, i.e. the figurative meaning of an expression ceases to be opaque once there is a motivating image in the literal expression (Geeraerts 2008 : 439).⁸

The analyzability of compounds is a mixed blessing, which raises the problem of placing such semantic units on the analyzability scale. In terms of the represented form, a symbolic unit which usually consists of two words being component structures appears to be much more complex and much more analyzable than its monomorphemic counterparts or stem + suffix models. As far as the composite whole is concerned, compounds are still likely to designate and recall one particular object which occurs as a gestalt figure for an average language user, thus pertaining to less analyzable a nature of a concept than it might be indicated by direct analysis and extrapolation of the components. One may ask whether any compromise may be reached

⁸ Geeraerts notices that the notion of motivation as presented in his work is a different value than its generally accepted interpretation:

In most work in the tradition of Cognitive Semantics, the concept of motivation is used in a slightly broader way than the way in which it is defined here. In Lakoff (1987) and related work, for instance, ‘motivation’ involves the principles that explain (or make plausible) why a particular linguistic expression means what it does.(...) the distinction that is drawn here between ‘motivation’ and ‘isomorphism’ tries to be more specific about the general concept of motivation by distinguishing between its syntagmatic and its paradigmatic form (Geeraerts 2003 :439).

to strike a balance between the extremes and finally establish the position of compounds on the analyzability scale. Again, it seems that there is no clear yes/no response. The position of a given compound on the analyzability scale is conditioned by two poles we activate to access a given expression: if a language user is more likely to be motivated by the components of a symbolic unit, he is also more likely to adopt the principle of analyzability rather than compositionality, as it happens in the case of recalling the composite whole. Although somewhat vague, Langacker's opinion may be helpful here (Langacker 1987:462):

The familiarity of a complex expression does not blind us to its componentiality and render us unable to perceive the contribution of individual components. If this were so, the notion of a complex lexical item would be a contradiction in terms: the unit status characteristic of lexical items would entail their immediate and automatic loss of analysability, removing any grounds for considering them to be complex; all fixed expressions would therefore constitute single morphemes, regardless of size or any resemblance to other units. In fact, though, a fixed expression appears capable of retaining some measure of analyzability almost indefinitely. At any one time, a language has many thousands of complex symbolic units whose values are enriched by the recognition of their components. We need not assume that the component structures are accessed on every occasion when the composite structure is employed, or that when accessed they are necessarily activated at the same level of intensity as they are in a novel expression. However, only when the composite structure loses altogether its capacity to elicit the activation of its components can it be regarded as fully opaque and unanalysable.

Going further in our considerations concerning both analyzability and compositionality of selected English and Polish plant names, it is impossible not to mention the names which, from a syntagmatic point of view, remain the most complex expressions in terms of their structure.⁹ Consider for instance English *Love-lies-bleeding* (*Amaranthus caudatus* L.), *Kiss-me-over-the-garden-gate* (*Polygonum orientale* L.), *sent from Heaven* (*Hemerocallis* sp.), *Jack-go-to-bed-at-*

⁹ As far as the complex grammatical structure of English plant names is concerned, they are arranged in the above article in a diminishing order, which is indicative of the omnipresent tendency towards the simplification of the linguistic utterance and results in greater economy of language.

noon (*Tragopogon pratensis* L.), forget-me-not (*Myosotis* L.), touch-me-not (*Impatiens pallida* L.), Jack-o'-the-rocks (*Heuchera rubescens* L.), Jack-in-the-pulpit (*Arisaema triphylla* L.), or finally radiator Charlie's mortgage lifter tomato (*Solanum lycopersicum* L.). The Polish language may also vaunt such expressions as *pieprzyca łodygę obejmująca* (*Cardaria draba* (L.)Desv.), *wróc się zaś* (*Botrychium lunaria* (L.)Sw.), or *nietubyć* (*Anthyllis vulneraria* L.) although it must be admitted that the grammatical complexity as revealed in Polish common plant names is less advanced than that of the English language.

At first glance, the grammatical complexity of the above Polish and English plant names may suggest easiness in their immediate attempt to introduce the A/C principle: after all, individual words in the structure displaying sentence characteristics are more salient and can be much easier extrapolated from the whole than it has been observed in the case of a typical derivation visible in the *propel/propeller* example, or selected compounds with their two-edged interpretation (e.g. *babia róża*). Is this however a 'sufficient condition' to label *Kiss-me-over-the-garden-gate* or *nietubyć* as fully analyzable or fully compositional structures?

Let us try to tackle this problem from two perspectives. Basing on the insights of Gestalt psychology, it is seen that the role of the component structures being individual linguistic units is downgraded to the advantage of the holistic perception recalled by the composite whole. In other words, the meaning of such expressions as, e.g. *Jack-go-to-bed-at-noon*, or *wróc się zaś* is perceived as the combination of individual linguistic inputs, however, these separate inputs do not have to indicate the same meaning as the composite structure (Pelletier 2004:136). In this sense, the principle of compositionality as well as its reverse process - analyzability - may be called into question. Both *Jack-go-to-bed-at-noon* and *wróc się zaś* are perceived as Gestalt figures, thus questioning the sense of their compositionality and/or analyzability.

The above plant names can also be viewed as idioms once we stick to the definition describing an idiom as "a polyword listeme that looks

like a phrase or clause and the meaning is figurative and not predictable from the literal meanings of its constituents” (Allan 2001:126). However, the claim that the meanings of particular literal expressions have no input into the understanding of the composite whole places the expressions comprising any aspect of idiomaticity on the non-analyzable and simultaneously non-compositional pole, as it happens in the case of Gestalt figures.

To counterbalance this attitude, let us focus on the arguments which play in favour of plant names’ semantic compositionality and thus contribute to a deeper understanding of their analyzability, especially in the case of such complex structures as *Jack-go-to-bed-at-noon*. Once again, Geeraerts’ prismatic model which emphasizes the importance of both syntagmatic and paradigmatic relations holding in such complex structures comes in handy:

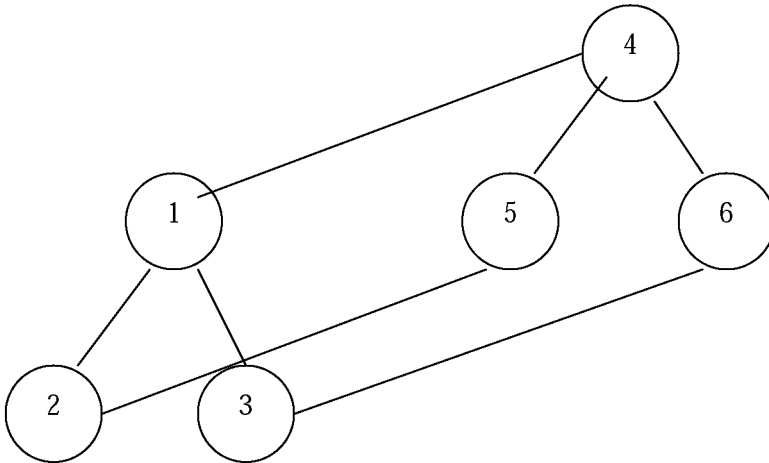


Figure 5. Analysis of *Jack-go-to-bed-at-noon* (*Tragopogon pratensis* L.)

1. Jack-go-to-bed-at-noon (literal level) 2. Jack 3. to go (to bed at noon) 4. Jack-go-to-bed-at-noon (The name of the plant which closes its calyx at noon) 5. a plant 6. to close

Considering the paradigmatic axis, there is metonymy relationship between 1 and 4. The same process operates on the constituent level between 2 and 5, whereas metaphor operates between components 3 and 6.

Another argument for the A/C parameter of such complex expressions is included in two statements proposed by Pelletier:

1. If a language lacked compositionality it would be *unlearnable*¹⁰
2. Compositionality is the only explanation of how a finite mechanism (such as the human brain/mind) can understand an infinite set of sentences. (Without compositionality, novel utterances would be non-understandable). (Pelletier 2004:142)

Let us now observe how Pelletier's statements apply to such expressions as *kiss-me-over-the-garden-gate* as the composite whole. As can easily be observed, each component of the above name may exist as an individual linguistic item. When these items are put together, we obtain a sentence depicting a particular situation. Apart from evoking this situation, the sentence also points to the plant's behaviour which may suggest the plant's resemblance to the situation described in the sentence. This is so because each language user has the potential to create an infinite number of expressions or sentences from a "finite number of parts and finite number of ways of putting them together" (Pelletier 2004:142). Without individual components, Pelletier claims, it would be impossible to acquire any language, which in turn would automatically result in our impossibility to understand such a language. This is what makes compositionality such an outstanding phenomenon.

¹⁰ Chierchia & McConnell-Ginet appear to support argument 1 with the following statement:

Whatever linguistic meaning is, there must be some sort of compositional account of the interpretation of complex expressions as composed from the interpretations of their parts and thus ultimately from the interpretations of the (finitely many) simple expressions contained in them and of the syntactic structures in which they occur (Chierchia & McConnell-Ginet 1990:6).

It has to be admitted that expressions of the highest structural complexity are a tough nut to crack. Considering the aspects of their analyzability or compositionality, a scholar might be flooded with numerous viewpoints and theories which might be a good starting point for a separate work and analysis.

4. Conclusion

Using the A/C criteria, the analysis of selected Polish and English common plant terms, developed in this paper, has revealed a varying degree of the semantic transparency of these terms. The A/C scale was proposed to deal with meaning transparency involving spectrum forms, starting from unanalyzable, and thus non-compositional expressions such as *leek* or *dąb*, including stem+suffix formations such as *kochanek* and compounds such as *blackberry*, *wilcza jagoda*, and ending with *Kiss-me-over-the garden-gate* as the most complex structures displaying the highest degree of A/C. Because many plant names are perceived by native speakers as Gestalt figures, whose substructures are generally not judged to contribute to the overall picture of the plant, the so-called linguistic sensitivity of an average language user should be seen as playing a significant role here: the more sensitive the language user is, the greater the probability is that he or she will be guided by the A/C principles in his or her analysis of meaning. It should also be obvious why analyzability/compositionality is not a matter of yes/no question. Indeed, we are speaking here of tendencies and of degrees to which a given feature or attribute manifests itself in a given category. And this should come as no surprise, because, as stated by Dancygier and Sweetser (2005:25), "cognition and language are (...) less than compositional and more than compositional."

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