

Justyna Maria Małek

Basic linguistic ontology and plants: A semantic sketch

Introduction

My linguistic foray into the plant kingdom was inspired primarily by the rapidly growing field of critical animal and, more appropriately for the below essay, plant studies. Contemporary attempts to describe the plant kingdom involve a number of different perspectives – and include notions hailing from natural sciences as well as the humanities (Szopa, 2015, pp. 150–155). It was my objective to compile a semantic reconnaissance into common and colloquial Polish, particularly the verbs collocating with the lexeme *roślina* ‘plant’. This, in turn, was supposed to unearth the answer to the question “What/who is the plant”, thus allowing us to determine its location in the linguistic hierarchy of beings.

In language, the lines between *someone* and *something* are rather hard, fixed. In the essay below, I will be proving that this immutability stems from language itself. Why? To paraphrase a passage from an essay on the lexeme *Bóg* ‘God’ in Polish, and drawing on the presumptions the essay was based upon, we could say understanding it is contingent on situating the text on the map of linguistic methods and disciplines (Małek, 2018, pp. 37–50). My objective was to identify those linguistic units whose collocations with the lexeme *roślina* are not metaphorical in character. I sought sentences that could say something about *roślina* in a literal, meaningful way; expressions that could predicate upon *roślina* without ambiguity or any sort of doubt. To that end, I drew on linguistic phenomenology, which herein is considered a particular method of inquiry on the one hand, and a (potential, rather than obligatory) hermeneutic perspective on the other.

The study was conducted at the author's own expense.

No competing interests have been declared.

Publisher: Institute of Slavic Studies, Polish Academy of Sciences.

This is an Open Access article distributed under the terms of the Creative Commons Attribution 3.0 PL License (creativecommons.org/licenses/by/3.0/pl/), which permits redistribution, commercial and non-commercial, provided that the article is properly cited.

© The Author(s) 2019. © To English translation: Jan Szelągiewicz 2019.

The realm of linguistic phenomenology comprises structural linguistics and analytical philosophy; only a merger of these two fields yields the essential structure of linguistic phenomenology. It is on these aforementioned “shoulders of giants” that the phenomenology of language developed and there it continues to grow. This particular concept is theoretical and material in nature, and is neither a philosophy of language nor of linguistics; it is situated a little higher and applies to a somewhat broader spectrum. In short, we could outline it by presuming that language maps reality, meaning that language fits reality like a trunk fits an elephant. The notion can be further illustrated by the phrase “To reach the world through language” (*Do świata przez język*), which could just as well become a catchphrase for the entire concept. The direction of the inquiry, therefore, is determined by language itself, as it continues to stand as the most perfect representation of reality.¹

An outline of basic “linguistic ontology”²

All things under the sun are either something or someone. Plants are no different. Before we begin discussing the lexeme *roślina*, however, we first have to determine how and why we can say it, and what derives from it. Alongside the aforementioned indefinite pronoun *someone* sits (as if comprising a pair) the pronoun *something*, which describes everything in existence that may carry the label “something”. These specific uses divide reality into referents of the words *someone* and *something*. No other way of partitioning applies.³

The character of the lexeme *ktoś* ‘someone’ has to be necessarily traced in opposition to *coś* ‘something’. If a given element belongs to the category *someone*, it does so only by the grace of not belonging to the category *something*, and vice versa. Such a frame naturally produces a number of mutually exclusive binaries – object and subject, which can then be assigned their respective *something* and *someone*. When speaking of object, we are faced with two

¹ Responding to numerous, otherwise profoundly interesting suggestions to apply my findings to ethnolinguistics, cognitivism or the linguistic image of the world, I would like to state that such an approach would exceed the frame of both the discipline I practise as well as the methodology. My particular area of expertise, namely semantics – or, to put it more precisely, structural semantics – employs its own methods of inquiry including, among others, semantic analysis, which takes solely literal meanings into account. Cognitivism entails the study of metaphors, which presupposes (and negatively so) the impossibility of pursuing a scientific inquiry using conceptual and primary metaphor theories by default. The latter two, however, are not the subject of my investigation.

² For an in-depth history of the term and its significance to linguistics and semantic analyses, see Nowak, 2014, pp. 12–16.

³ It is worth noting, as emphasized by Zofia Zaron – a linguist investigating the ontological structure of linguistic entities – that in Polish, *coś* ‘something’ has an equivalent in *to* ‘this’. *To* ‘this’ comprises everything that is not encompassed by *ktoś* ‘someone’ – which implies that its semantic scope is identical to that of *coś* ‘something’. Although we can use *to* ‘this’ to indicate both inanimate objects and activities, the pronoun cannot be applied to animate beings, such as humans or animals. This can be illustrated with examples; cf. *Ktoś zrobił coś*. ‘Someone did something.’; *Ktoś zrobił to*. ‘Someone did this.’; **To zrobiło to*. **This did this*. Using it to denote plants, however, is wholly acceptable in Polish; cf. *To pięknie rośnie* ‘This is growing nicely’ (*this* meaning a climber rose). *To pięknie kwitnie* ‘This is blooming nicely’ (*this* meaning a lily of the valley) (Zaron, 1998).

possibilities – one is the possibility to say that a given object is (or is becoming) a certain way; cf. *The towel is dry. The towel is drying*. The other, meanwhile, is rooted in the fact that an object can be the target of someone's actions (something can be done with it or to it); cf. *Mother is drying the towel*. The above qualities are also inherent to the subject – it can be said to be one way and not another; something can also be done with it. In this particular instance, the attributes of the object and the subject overlap. What, then, decides the subjectification of this highly significant category? Differentiating between a subject and an object is based on a specific syntactic and semantic cue, the implication that a subject has the possibility to act consciously and deliberately, while the object does not. A subject can do something with an object – *Adam ate the apple*, for example. But the reverse is beyond the realm of the possible.

What does *someone* do?

The findings above signal that (solely) the *someone* can be acting with deliberate intent. Zofia Zaron's classification of predicates⁴ identifies three categories corresponding to specific extents of someone's actions (Zaron, 2007, pp. 84–88): class 1 – actions situated within the actor; class 2 – actions situated within the actor but extending beyond them; class 3 – actions. Subclasses of the three major classes are outlined in the table below:

Class	Action	Example
1	Physical and psychological sensation	Someone feels a headache coming on.
	Thinking about the world	Someone thought to go swimming.
	Knowledge about the world	Someone saw Janek at the movies yesterday.
	Expectations (desires) of the world	Someone wanted for everyone to be happy.
2	Contact with the outside world through senses	Someone smelled the roses.
	Contact with the outside world through speech	Someone spoke with someone else about the weather.
	Exerting impact on the outside world through speech (performative function)	I take you to be my wife.
3	Actions which may include speech and which have a target audience	Someone asked someone else for the time.
	Actions – operations performed by the actor	Someone organized a party.
	Actions located upon an object	Someone is washing a car.
	Efforts aimed at moving someone or oneself	Someone rode a bike down the forest pathway.

⁴ The predicates in this text were excerpted from *Uniwersalny słownik języka polskiego* (A Universal Dictionary of the Polish Language, hereafter USJP) and *Narodowy Korpus Języka Polskiego* (The National Corpus of the Polish Language, hereafter NKJP, available at <http://www.nkjp.pl>; Narodowy Korpus Języka Polskiego, n.d.); they are sourced from examples of uses wherein the semantic role of agent is occupied by the lexeme *roślina*.

Who *someone* is?

Prior findings on identity developed by Zaron imply that *someone* can act, i.e. serve as either the initiating or the receiving party (Zaron, 1998, pp. 507–513). The category *someone* naturally applies to humans. This particular declaration does not – nor can it – raise any doubts.

Identifying the precise semantic scope of the word *human* lies within the remit of both natural sciences and the humanities. The term *human* also encompasses linguistic units such as *foetus*, *newborn*, *infant*, *child*, *adolescent* and *adult*, as evinced by a considerable body of linguistic proof. When tasked with identifying one attribute that sets mankind apart from its living brethren, most of us would choose speech first, and deliberate, conscious action second. A review of the current body of medical literature on animal consciousness lies far beyond the scope of this study – I will, however, assume for the purpose of my inquiry that whereas an animal might be a conscious recipient of communication (speech), speech itself (receiving and, first and foremost, issuing verbal communication) is patently and exclusively a human trait.⁵

A broader look at the deliberations above would reveal that the category *someone* usually denotes a living entity. As evinced by linguistic findings, however, the entity does not necessarily have to be human (but I will take this opportunity to reaffirm that it is beyond doubt that the pronoun *ktoś* ‘someone’ does apply exclusively to human beings). Linguistic analysis clearly reveals that the category *someone* also applies to animals. This notion seems to be corroborated by the following arguments. First, some animals actually have names (naturally, not all of them). This fact can be considered indirect proof of animal subjectivity, because a subject will always be declared a *someone* (Nowak, 2011a, pp. 47–61). Second, although animals cannot produce speech (a biological fact), many are capable of communication (intra- and interspecies). Third, animals are capable of receiving verbal signals issued by humans and are rarely indifferent to them – in many instances, animals lively react to human speech, clearly implying that they are conscious recipients of its content. In Zaron’s eyes (Zaron, 1998, p. 507), this confirms the notion that animals can be *someone*, too. Examples from language include: “Someone came to them.

⁵ Moreover, referring to the aforementioned findings pertaining to the full semantic scope of the word *human*, we should take a stance on the relationship between mankind (in the broadest possible meaning of the word) and speech. Herein, speech should be understood as an ability. *Ability*, meanwhile, is defined as proficiency in a given area or ease of learning something. And learning implies a process. According to the above – speech is not something man has command of since birth, it has to be learned. Thus, the category ‘speech’ applies to all the individual elements of the set *human*, including *foetus*, *newborn*, *infant*, *child*, *adolescent* and *adult*. In the case of *foetus*, *newborn* and *infant*, we are dealing with potential linguistic ability, whereas in the case of *child*, *adolescent* and *adult* that ability has already been actualized.

It turned out it weren't humans, but a bear" (*Ktoś przyszedł do nich. Okazało się, że nie byli to ludzie, a niedźwiedź*) (Zaron, 1998, p. 513). Thus, subjectivity is reserved not just for humans, but animals, too, while the lexical material clearly supports conferring upon them the ontic status of *someone*. Language assigns them both the semantic roles of the agent (the subject of knowledge and action) and the recipient (the addressee of human speech and human intention). To recap, an animal is: *someone who does not speak although can be spoken to; someone, despite whom someone else may say something; someone who moves and, finally, someone who perceives*.

Who is it or what is it? The status of the plant in view of basic linguistic ontology

The question of interrogating the status of plant as potential referent for the word *ktoś* 'someone' seems rather improbable, situated somewhere in the realm of "plant lovers who speak with their beloved charges", the placing presupposing a metaphorical use which, in turn, precludes the conferring of the status of *someone* onto plant life. The above hypothesis (Can a plant be *someone*?) seems shocking and implausible only at first glance. After all, as demonstrated before, *someone* is a living, acting entity. It is my assumption, made with absolute certainty, that a *plant cannot speak* (although *it can be spoken to*) and is a living being (like humans and animals). The lexeme *roślina* collocates with verbs such as *czuć* 'feel', *percypować* 'perceive', while using it with *wiedzieć* 'know' or *myśleć* 'think' is considered unacceptable; it is also unclear whether *plants* can "want". Although examples of collocations with the verb *chcieć* 'want' do not raise particular linguistic doubts, we cannot simply ignore them without a word of explanation. The intentionality of the *plant* is different from that of humans or animals, its manifestations do not immediately impact other beings (apart uses indicating competition), thus bestowing upon the plant the status of a static entity, nearly entirely at the mercy of the forces of nature and mankind:

- (1) *[ktoś] czuje [coś]*
'[someone] feels [something]'
- (2) *Bratki posadzone w donicach czuły nocny mróz.*
'Pansies in the planters felt the night's chill.'
- (3) *[ktoś] myśli, że...*
'[someone] thinks that...'
- (4) **Róża myśli, że niedługo spadnie deszcz.*
*'The rose thinks that rain is coming soon.'

- (5) *[ktoś] chce [coś] robić*
 '[someone] wants [something]'
- (6) *Tulipany chcą pić.*
 'The tulips want water.'
- (7) *? Róża chce piąć się po murze.*
 ? 'The rose wants to climb the wall.'
- (8) *[ktoś] wie [coś]*
 '[someone] knows [something]'
- (9) **Klon wie, że nadeszła jesień i należy zrzucić liście.*
 *'The maple knows it's autumn and it's time to shed leaves.'
- (10) **Tulipan wie, że wieczorem należy zwinąć kwiat.*
 *'The tulip knows to close up at night.'
- (11) *[ktoś] percypuje*
 '[someone] perceives'
- (12) *Goździki wypily całą wodę z wazonu.*
 'The cloves drank all the water in the vase.'
- (13) *Nasturcje przywiędły po upalnym dniu.*
 'The nasturtiums wilted from the afternoon heat.'
- (14) *[ktoś₁] robi [coś₁] [komuś₂] lub [czemuś]*
 '[someone₁] does [something₁] to [someone₂] or [something]'
- (15) *Kaktusy pokłuły ogrodnika.*
 'The cacti skewered the gardener.'
- (16) *Chwasty zagłuszyły rosnące w grządce truskawki.*
 'The weeds nearly suffocated the strawberries.'
- (17) *[ktoś] powoduje [coś]*
 '[someone] causes [something]'
- (18) *Jemioła powoduje zamieranie drzew.*
 'The mistletoe slowly smothers the trees it grows on.'
- (19) *[ktoś] przemieszcza się [gdzieś]*
 '[someone] is moving [somewhere]'
- (20) **Róża przemieszcza się po ogrodzie.*
 *'The rose is moving across the garden.'

Particular attention should be paid to the interrogation of the question of activity, or, to be more precise, the "mobility" of plants (with regard to the classes of someone's activity defined above). Because of the permanent attachment of plants to the ground and their

inability to simply uproot and relocate themselves, most referents of the lexeme *roślina* are associated primarily with passive, static entities which, although alive, rarely advertise their vitality. These ossified associations, however, need to “survive” the confrontation with those analyses of verbs indicating movement which assign an agentive role to the plant itself. We have a body of lexical proof to corroborate the notion that the plant itself is a *mobile* being. Most of this evidence is provided by verb phrases from the categories *communicating* and *competing*.⁶ The repertoire of movements that plants are capable of performing is rather diverse – but the movement itself is usually associated with their essential life functions, i.e. sustenance or breathing. In Polish, *roślina* ‘plant’: *coś zrzuca* ‘sheds’, *puszcza* ‘sprouts’, *pokłada się* ‘spreads’, *podnosi się* ‘pulls itself up’, *kieruje coś* ‘turns something’ or *kieruje się* ‘turns itself’, *przechyla się* ‘leans’, *przechyla coś* ‘tilts’, *obraca się* ‘bends’, *wygina się* ‘curves’, *zwija się* ‘closes itself’, *zwija coś* ‘closes something’, *rozwija się* ‘opens’, *stula się* ‘closes itself’ or *stula coś* ‘closes something’, *porusza czymś* ‘moves something’:

- (21) *Lipa zrzuciła już liście.*
‘The lime tree already shed its leaves.’
- (22) *Bambus puścił nowe pędy.*
‘The bamboo sprouted new shoots.’
- (23) *Róża pokładła się pod murem.*
‘The rose spread along the wall.’
- (24) *Po podlaniu piwonia się podniosła.*
‘After watering, the peony pulled itself up.’
- (25) *Słonecznik kieruje kwiat w stronę słońca.*
‘The sunflower turns its flower toward the sun.’
- (26) *Słonecznik kieruje się do słońca.*
‘The sunflower turns toward the sun.’
- (27) *Słonecznik wygina się do słońca.*
‘The sunflower bends toward the sun.’
- (28) *Rumianek przechyla się do słońca.*
‘The chamomile leans toward the sun.’
- (29) *Rumianek przechyla kwiat do słońca.*
‘The chamomile tilts its flowers toward the sun.’
- (30) *Róża obraca się do światła.*
‘The rose curves toward the light.’
- (31) *Tulipan zwija się pod wieczór.*
‘The tulip closes itself at night.’

⁶ Henceforth, I will be using the categories I identified when collecting specific predicates pertaining to plants.

- (32) *Tulipan zwija kwiat pod wieczór.*
 'The tulip closes its flower at night.'
- (33) *Stokrotka rozwija się w słoneczny dzień.*
 'The daisy opens on a sunny day.'
- (34) *? Skrzydłokwiat porusza liśćmi.*
 ? 'The spathiphyllum moves its leaves.'

Applied to plants, the predicate *poruszać się/czymś* 'move/move something' usually positions them as objects, leaving forces of nature, primarily wind, in the role of the actor. Nevertheless – common usage knows instances in which the *plant* itself is the driving force behind a movement (in many cases, the *movement* applies only to a specific part of the plant's anatomy). The movement performed by a plant is inherently different than human or animal movement, as the former is usually discreet, elusive and noticeable only on much closer inspection – however, it is still an attribute of the plant, and as such is represented in language.

Mobility remains a specific problem with regard to plants. Does a plant move? A plant is unable to perform a movement that would take it down one way and back, but that does not mean it is not capable of movement. After all, it is capable of "climbing" (*wspina się*), defying gravity and other barriers, of "moving upwards" (*przesuwa się (w górę)*), either "creeping" (*pełzając*) or "winding" (*wijąc się*). Finally, a plant can reach a specific space, and do it precisely by "moving" (*poruszając się*):

- (35) *Bluszcz dopęłzył już do okien na piętrze.*
 'The ivy already crept all the way up to the first floor window.'
- (36) *Winorośl pnie się po murze.*
 'The vines climb along the wall.'
- (37) *Fasola wije się po palikach.*
 'The beanstalks are winding up the sticks.'
- (38) *Pnącze wspina się po murze.*
 'Creepers are climbing up the wall.'
- (39) *Groszek oplótł drzewo.*
 'The green pea wrapped itself around the tree.'

Plant movement is necessarily associated with their growth and territorial expansion. In light of that, the character of the plant's movement will depend on the rate of its growth – itself usually slow, especially for a human, but present nonetheless.

The conditions deciding whether plants can be included in the category *someone* are thus met. Language, as a map of reality, clearly indicates that plants are *someones* rather

than *somethings*. Herself a specialist in the matter, Zaron sees certain predicates (applicable to mankind, animals and plants alike) as a sufficient argument for the inclusion of plants into the ranks of *someones* (Zaron, 2011, p. 125); cf. *Dziecko rosło szybko*; *Kocię rosło szybko*; *Roślina rosła szybko*; 'The child grew fast'; 'The kitten grew fast'; 'The plant grew fast'. An even clearer example of plant activity can be found in the following assertions: *Rośliny pobierają fosfor z gleby* 'Plants absorb phosphorus from the soil'; *Kwiaty gazanii w dzień pochmurny stulają się* 'The gazania flowers close up on cloudy days'.

What does a plant do? The agentive position of plants in Polish predicates

The ontological status is tied directly to the activity of the subject. Its specific type derives from semantic position occupied by the subject itself. The agentive position is the most representative for activity, as it unambiguously informs the reader of the actor behind an action.

The term 'agent' has firmly embedded itself in the vast majority of semantic structure descriptions. Intuitively, it is understandable to most of us (even those not dealing with linguistics in a professional capacity). A concise definition of the term can be found in Kazimierz Polański's *Encyklopedia języka polskiego* (1991: 13). According to that interpretation, an agent is "the actor behind an action, or an acting entity appearing alongside a transitive verb" (as cited in Zaron, 2007, p. 89). Furthermore, linguistics grew to identify four particular ways of understanding the nature of the agent. "An agent is: (i) 'someone who does something (with something)'; (ii) 'someone who knows something about something'; (iii) 'someone who does something (with something) or knows something about something'; (iv) 'someone who does something (with something) and knows what they are doing'." These framings suggest a specific interpretation of the relationship between semantic role, the results of semantic analysis and indefinite pronouns (Nowak, 2012, pp. 15–36).

The question of *who* the plant is is inextricably linked with what that plant does. The function of the lexeme *roślina* in Polish is described primarily by predicates (ca. 160 of them) in which said lexeme occupies the role of the agent (rarely the object).⁷ To thus arranged predicates, I assigned categories describing specific activities "performed" by the plant:

⁷ When a plant occupies the position of the object in a sentence, it usually denotes its dependence on humans or forces of nature (which occupy the agentive position).

sprouting, growing, feeding, breathing, communicating, competing, reproducing, dying. Below, I included analyses of selected “plant” predicates.

The “birth” of the plant, as portrayed in language, entails overcoming the weight and density of the earth. Every plant must (according to lexical data) create itself in two directions – literally, must germinate upwards and downwards. This birth entails “sprouting” (*kiełkowanie*, the appearance of cotyledons) on the one hand and “growing roots” (*ukorzenianie*, involving downward movement) on the other.⁸ Without growing roots, there can be no sprouting:

(40) *Zobaczyłam, że wykiełkowała moja bazylia.*

‘I saw my basil began sprouting.’

(41) *Moja bazylia się ukorzeniła.*

‘My basil finally grew roots.’

On the other end of the semantic spectrum, meanwhile, is death. The final stage of a plant’s life is embodied by the predicates: *paść* ‘perish’, *wygnić* ‘rot’, *zdechnąć* ‘die₂’ (normally used in reference to animals, in contrast to *umrzeć*, ‘die₁’, which is used exclusively in reference to humans),⁹ *wymrzeć* ‘die out’, *uschnąć* ‘wither and perish’. However, using the verb *umrzeć* ‘die₁’ to denote the end of the plant’s life is at once somewhat comical and metaphorical:¹⁰

(42) *Po ataku mszyc padły moje róże.*

‘My roses perished after the aphids moved in.’

(43) *Po ulewnych deszczach wygniły/wymarły wszystkie ogórki.*

‘All my cucumbers rotted/died out after the recent downpours.’

(44) *Zapomniałam podlać fiołka i zdechł.*

‘I forgot to water my violets and they died₂.’

(45) *Wymarły [not: umarły] mi wszystkie ogrodowe konwalie.*

‘All of my lilies of the valley died out.’ (not: ‘died₁’)

⁸ When speaking about *plants*, we usually mean the part growing above ground, without taking note of the linguistic attestations which consider the below-ground portion an integral part of the plant; one exception: *wyrwać z korzeniami* ‘tear out root and stem’.

⁹ In Polish, the verb ‘to die’ has two different forms which are used to differentiate between human and other deaths. To describe human death, Polish uses *umrzeć*, which for the purpose of this essay we translated as ‘die₁’. For deaths other than human, primarily animal deaths, Polish uses *zdechnąć*, which in this essay we translated as ‘die₂’. Using the latter form in reference to a human dying is derogatory – translator’s note.

¹⁰ This metaphorical nature is best evinced by poetry – its language includes plenty of lexical instances denoting the death of a *plant*, e.g. “Everything dies what is not immortal/all men plants animals condemned” (*Wszystko umiera co jest nieśmiertelne/ludzie rośliny zwierzęta skazane*) (Twardowski, 2019). In the essay, I focus solely on the literal meaning of the analysed verbs.

- (46) *Uschły moje róże w ogrodzie.*
 'The roses in my garden all withered and perished.'
 (47) **Umarł mój bluszcz.*
 *'My ivy died₁.'

Apart from those uses which allow us to categorically declare that a *plant* is no longer alive, i.e. all of its life functions have ceased, there is a large number of predicates indicating that the expiration of a plant is a process; cf. *Moje pelargonie w tym roku się wyrodziły* 'My geraniums have really degenerated this year'. The predicate *wyrodzić się* 'degenerate' signals that in the plant's current condition it is no longer capable to reproduce, i.e. bloom or produce seeds, and thus nearing the end of its existence. The plant's end-of-life period also includes a decrease in the volume of water circulating through it. However, verbs such as *zwiędnąć* 'wilt' or *zmarnieć* 'waste away' do not imply that the plant is actually dying. In the case of plants, the latter denotes a state that the organism may still "recover" from (*odżyć*) – given enough time (more than in the case of it simply "wilting" (*zwiędnięcie*)):

- (48) *W tym roku zmarniała mi fasola.*
 'This year my beans wasted away.'
 (49) *Zmarniała mi fasola, ale po deszczu odżyła/odrodziła się/odrosła.*
 'The beans wasted away a little, but recovered/sprung back after the recent rains.'
 (50) *W zeszłym roku zmarniała mi fasola, ale w tym roku odżyła/odrodziła się/odrosła/podniosła się.*
 'Last year my beans wasted away, but it really sprung back/recovered this year.'
 (51) *Tulipany w wazonie zwiędły, ale kiedy zmieniłam im wodę, odżyły.*
 'The tulips in the vase wilted, but sprung back after a water change.'
 (52) *Szałwia zwiędła po całym tygodniu, ale kiedy ją podlałam, odżyła/odrodziła się/podniosła się.*
 'The sage wilted after the whole week, but quickly recovered/sprung back after I watered it.'

The process of the plant "dying" can also be denoted through descriptions pertaining to individual parts of its anatomy. However, the fact that leaves, shoots or roots "atrophied" (*obumarły*) does not necessarily imply that the entire organism will soon be dead, too:¹¹

¹¹ The USJP notes that *obumrzeć* 'to atrophy' can be defined as 'to gradually lose function, become dead, expire, dwindle away'. In the case of plants, however, *obumieranie* 'atrophy' does not necessarily mean nearing the end of the plant's life; leaves and roots may atrophy, but the plant may be able to carry on; the plant itself may even atrophy, but then "recover" (*odrodzić się*) later. The moment of the plant's "death" is best embodied by the verb *uschnąć* 'wither and perish'; cf. *Uschły moje róże*. 'My roses withered and perished'.

- (53) *Liście skrzętnika obumarły* (meaning: *nie wszystkie, bo roślina przecież żyje*).
 'The streptocarpus leaves atrophied.' (meaning: 'not all of them, the plant is still alive')
- (54) *Po upalnym czerwcu uschły liście niecierpka*.
 'The touch-me-not leaves atrophied in the wake of the June heatwave.'

Language also attests to other types of plant activity, including reproduction. Pollination, however, remains dependent on wind or animal intervention, whereas self-pollination mostly lacks linguistic representation:

- (55) *W ogrodzie rozmnożyły się mchy i sukulenty*.
 'Mosses and succulents really took over the garden.'
- (56) *Właśnie pyłq lipy*.
 'The lime trees are pollinating.'
- (57) *Rozmnożyły mi się rozchodniki*.
 'The stonecrops are breeding like crazy.'
- (58) *W tym roku obrodziły mi jabłonie* (meaning: *dały owoce*).
 'My apples trees really produced this year.' (meaning: 'bore plenty of fruit')
- (59) *W tym roku obrodziły mi astry* (meaning: *dały kwiaty*).
 'My aster beds really produced this year.' (meaning: 'bore plenty of flowers')

The richest set of predicates (ca. 74) in which the lexeme *roślina* occupies the agentive role can be found for verbs collected in the category *growing*. The Polish language identifies a number of substages in any plant's growth phase: growth, blooming, maturation, metamorphosis, adaptation.¹² Particular attention should be given to predicates that denote metamorphosis, a transformation which usually follows in the wake of growth and maturation, including *płożyć się* 'creep along the ground', *krzewić się* 'spread', *plenić się* 'expand', as well as *karłowacieć*, *karleć* 'grow stunted', *dziczeć* 'grow wild', *zdrewnieć* 'lignify' or *zazielenić* 'turn green'.

The NKJP includes an example: *Roślina przekwitła, obumarła i zdrewniała* 'The plant shed its blossoms, withered and lignified'. The latter differs from the natural process in which lignin is deposited in cell walls of (usually) stems and which takes place over the course of the plant's life, rather than during its end-of-life stage (as the NKJP usage suggests). When the entirety of the plant grows ligneous, it usually means it is withering. Common uses of the predicate *zdrewnieć* 'lignify', however, indicate a yet another type of process – one

¹² The representation of these phases in language might be wholly different from representations offered by natural sciences. We need to remember, however, that the mental (common) lexicon differs from scientific jargon; in other words – common knowledge is rather far removed from encyclopedic knowledge. "The lexicon of a language is the speakers' fundamental cognitive resource; it is a treasury where the shared knowledge of the world, and the shared models of biological, mental, and social aspects of life, are held" (Wierzbicka, 1996, p. 350).

in which only specific parts of the plant's anatomy (usually stems or shoots, rather than roots) grow ligneous. Naturally, the predicate *zdrewnieć* 'lignify' applies only to certain living beings, usually considered plants. Applying it to trees, however, is unacceptable; cf. **Dąb jesienią zdrewniał* *'The oak grew ligneous in the autumn' or (more vividly) **Trawa zdrewniała* *'The grass grew a little ligneous'. The question of collocating predicates with appropriate referents of the term *roślina* is highly complex and requires a separate inquiry. Insofar as the predicates I interrogated indeed refer to the lexeme *roślina*, the semantic scope of the lexeme itself remains an issue that calls for a separate, detailed linguistic investigation.¹³

The inevitable attachment of plants to the earth by no means results in their lack of influence over their environment, including over other living beings. The magnitude of that influence informs the predicates from the categories *communicating* and *competing*. Like in the case of *movement*, plant communication and competition is represented in language by depictions of parts of the plant itself (petals, stems, leaves) being moved or readjusted. In this way, the plant might affect a subtle change in the existence of some other being, reshape its environment, or ultimately even cause the complete extinction of some other plant or animal species. Although the plants' communication- and competition-related impacts rarely produce immediate change, over time they can accumulate into significant and irreversible transformations. Such slow-paced but not unintentional influence is the source of a lot of dynamics in nature:

- (60) *Kaktus pokłuł mi rękę.*
'The cactus stung my hand.'
- (61) *Powój oplótł drzewo.*
'The bindweed wrapped itself around the tree.'
- (62) *Liany oplotły chatę.*
'The vines grew all over the cabin.'
- (63) *Fasola wije się po płocie.*
'The beanstalk twines itself around the fence.'
- (64) *Dęby całkowicie zagłuszyły pozostałe drzewa w lesie.*
'The oaks smothered all other trees in the forest.'
- (65) *Chwasty w ogródku zagłuszyły truskawki.*
'Weeds smothered the strawberries in the garden.'

¹³ A cursory review thereof indicates that, for example, language sees rose as a plant, but first and foremost considers it a flower, whereas trees are rarely considered plants from a linguistic standpoint.

- (66) *Jemioła pasożytuje na gałęziach drzew, powodując ich zamieranie.*
'Mistletoe feeds of the trees it inhabits, sapping and withering them.'
- (67) *Pszenica zainfekowała len.*
'The wheat infected the flax.'
- (68) *Jodła wyparła świerk.*
'The firs pushed out the spruces.'

Among all the predicates collocating with the lexeme *roślina* are those which, used literally, can be applied solely to plants, including *kiełkować* 'germinate', *(u)korzenieć się* 'take root', *kwitnąć* 'bloom'. These are often used to make up metaphors describing a variety of aspects of human life.

Conclusion

Linguistic analyses reveal to us the somewhat muted, yet still diverse, rich and powerful life of plants. The place that common language assigns to plants shares some elements with the metazoan kingdom, including with mankind. The fact that we can often consider plants to be *someone* is indicative of the prominent position they occupy in the human world (only humans predicate on plants and it is these statements that enable us to determine the linguistic status of plant organisms).

Further inquiry into how language describes the part of reality that includes *vitam plantae* should focus on predicates pertaining to individual plant species. This, in turn, would allow us to investigate new rungs in the linguistic hierarchy of beings.

Translated by Jan Szelaǳiewicz

Bibliography

- Bańko, M. (2006). *Wielki słownik ucznia*. Warszawa: Wydawnictwo Naukowe PWN.
- Dubisz, S. (2003). *Uniwersalny słownik języka polskiego*. Warszawa: Wydawnictwo Naukowe PWN.
- Grzegorzczkova, R. (2007). *Wstęp do językoznawstwa*. Warszawa: Wydawnictwo Naukowe PWN.
- Małek, J. (2018). Bóg zapisany w języku czy język zapisany w Bogu? Analiza semantyczna leksemu *Bóg*. In J. Szarlej (Ed.), *Myślenie religijne – wczoraj i dziś* (pp. 37–50). Bielsko-Biała: Wydawnictwo Naukowe Akademii Techniczno-Humanistycznej.

- Narodowy Korpus Języka Polskiego. (n.d.). Retrieved May 30, 2017, from <http://nkjp.pl//poliqarp/nkjp-balanced/query/>
- Nowak, T. (2011a). Co mogę (po)wiedzieć o wiedzy, komunikacji i malarz zwierząt? Rekonesans semantyczny. *Linguistica Copernicana*, 2(6), 47–62. <https://doi.org/10.12775/LinCop.2011.022>
- Nowak, T. (2011b). *Język w świetle odkryć nauki*. Kraków: Wydawnictwo Petrus.
- Nowak, T. (2012). Opozycja „człowiek (umysł) – maszyna (komputer)” w języku: Głos językoznawczy w dyskusji nad sztuczną inteligencją. *Linguarum Silva*, 1, 15–36.
- Nowak, T. (2013). Fenomenologia lingwistyczna, czyli o „chmurce filozofii w kropli lingwistyki”. *Linguarum Silva*, 2, 215–224.
- Nowak, T. (2014). O „drabinie bytów” w języku. *Speculum Linguisticum*, 1, 9–22.
- Szopa, K. (2015). Rośl-inne myślenie, czyli przyczynek do plant studies. *Czas Kultury*, 31, 150–155.
- Twardowski, J. (2019). Powrót. Retrieved May 11, 2019, from <https://literatura.wywrota.pl/wiersz-klasyka/24636-ksiadz-jan-twardowski-powrot.html>
- Wierzbicka, A. (1996). *Semantics: Primes and universals*. Oxford: Oxford University Press.
- Wierzbicka, A. (1999). *Język – Umysł – Kultura*. Warszawa: Wydawnictwo Naukowe PWN.
- Zaron, Z. (1998). Czy zwierzę to ktoś? *Prace Filologiczne*, 43, 507–513.
- Zaron, Z. (2001). Obraz Boga językiem narysowany: Orzecznikowe dystynkcje pojęcia „Bóg”. *Studia Slavica Oldenburgensia*, 9, 449–459.
- Zaron, Z. (2007). *Problemy składni funkcjonalnej*. Warszawa: Wydawnictwo Bel Studio.
- Zaron, Z. (2011). Ktoś to znaczy kto? O językowym statusie roślin. *Poradnik Językowy*, 2011(1), 121–130.

Elementarna ontologia językowa *rośliny* – szkic semantyczny

Przedmiotem artykułu są polskie czasowniki, które zgodnie z łączliwością semantyczno-składniową występują z leksemem *roślina*. Celem tekstu jest ustalenie językowego statusu rośliny oraz, dzięki badaniu semantyki czasowników, znalezienie odpowiedzi na pytanie, czy roślina jest kimś, czy czymś. Autorka analizuje czasowniki, w których roślina występuje w semantycznej roli agensa; następnie na podstawie badań językowych formułuje wnioski dotyczące sposobu funkcjonowania leksemu *roślina* w języku polskim, określając jego cechy unikatowe (łączliwość semantyczną) oraz role semantyczne. Metody wykorzystane w pracy to testy językowe na materiale pozytywnym i negatywnym oparte na kompetencji językowej użytkowników polszczyzny. Analiza językowa odkrywa miejsce wyznaczone dla rośliny w hierarchii organizmów żywych.

Słowa kluczowe:

roślina; czasownik; semantyka; język; status

Basic linguistic ontology and plants: A semantic sketch

This article is devoted to verbs collocating with the Polish lexeme *roślina* 'plant'. The aim of the study is to determine the linguistic status of the plant and to investigate whether it is 'someone' or 'something' in view of the semantics of the verbs in question. The author analyses cases in which the plant appears in the semantic role of the agent. She makes conclusions about how the lexeme *roślina* functions in Polish and defines its unique features (semantic connectivity) and semantic roles. The study is based on language surveys conducted among native speakers of Polish. Language analysis reveals the place of the plant in the hierarchy of living organisms.

Keywords:

plant; verb; semantics; language; status

Note:

This is a translation of the original article entitled "Elementarna ontologia językowa *rośliny* – szkic semantyczny", which was published in *Adeptus*, issue 13, 2019.

Citation:

Małek, J. M. (2019). Basic linguistic ontology and plants: A semantic sketch. *Adeptus*, 2019(13). <https://doi.org/10.11649/a.1564>