

However, unlike English, Polish does not allow for the non-realization of the relative pronoun outside the context of ellipsis.⁴ Accordingly, relative clauses such as (4) and (5) must contain the relative pronoun.

- (5) *książk-a, *(którq) Tomek prze-czyt-a-ł*
 book-NOM.SG which Tomek through-read-TH-PTCP
 ‘a book (that) Tomek read’

Additionally, Polish does not have a phonologically unrealized version of the auxiliary verb *zostać* ‘get’ which normally introduces verbal or eventive passives (Bondaruk and Rozwadowska 2018). Although verbless participial constructions such as (6a) are grammatical in Polish, the dropped element is the copula *być* ‘be’ that introduces resultative/adjectival passives. The verbless constructions do not license event modifiers such as temporal adverbials and *by*-phrases as visible in (6b).

- (6) a. *walizk-i (sq) już s-pak-owa-n-e!*
 suitcase-NOM.PL are already with-pack-TH-PTCP-NOM.PL.NVIR
 ‘The suitcases have already been packed!’
- b. *?*Walizk-i (sq) już s-pak-ow-an-e*
 suitcase-NOM.PL (are) already with-pack-TH-PTCP-NOM.PL.NVIR
wczoraj przez Romka!
 yesterday by Romek
 Int.: ‘The suitcases were already packed yesterday by Romek!’

Moreover, Polish allows participial modifiers which cannot be found in predicative position.

- (7) a. *przy-by-ł-y gość*
 next-be-PTCP-NOM.SG.M guest-NOM.SG
 ‘a guest that arrived’
- b. **gość, który jest/był przy-by-ł-y*
 guest-NOM.SG who is/was next-be-PTCP-NOM.SG.M
 Intended: ‘a guest who arrived’

Finally, Polish allows participial modification whose meaning is different from the (seemingly) corresponding relative clause. For example, the most natural reading of the unprefixed participles *pisany* and *krojone* found in (8a–b) is the same as the reading of their perfective prefixed counterparts *na-pisany* ‘written’ and *s-krojone* (*w kostkę*) ‘diced’. By contrast, the relative clauses found in (9) allow the present or past progressive reading or a habitual meaning where a particular

⁴ Admittedly, the absence of the relative pronoun in putative reduced relatives may be due to the non-projection of the specifier of a defective C rather than its non-realization. If that were the case, reduced relative clauses containing participles would be the only kind of relative clauses in Polish in which C does not project a specifier.

kind of letter is or was customarily written with red ink and where a particular sort of vegetables is or was diced in accordance with a recipe. The key point is that the perfective resultative reading found in (8) is inconceivable for the relative clauses in (9). This is problematic for the analysis which claims that the clauses in (9) are the derivational source of (8).

- (8) a. *list* *pis-a-n-y* *czerwonym* *atramentem*
 letter-NOM.SG write-TH-PTCP-NOM.SG.M red ink
 'a letter written in red ink'
- b. *kroj-on-e w* *kostkę* *warzyw-a*
 slice-PTCP-NOM.PL.NVIR in dice vegetable-NOM.PL
 'diced vegetables'
- (9) a. *list,* *który* *jest/był* *pis-a-n-y*
 letter-NOM.SG which is/was write-TH-PTCP-NOM.SG.PL
czerwonym *atramentem*
 red ink
 'a letter that is/was (being) written in red ink'
- b. *warzyw-a,* *które* *są/były* *kroj-on-e*
 vegetable-NOM.PL which are/were carve-PTCP-NOM.PL.NVIR
w *kostkę*
 in dice
 'vegetables that are/were (being) diced'

The arguments above suggest that relative clauses are not the source of the pre- and post-modifying uses of passives in Polish.

3. Constraints on the modification of adnominal participles

3.1. The modification by *still*

Most Polish resultative adjectives are ambiguous between target and resultant states and have a reading in which an event gives rise to a transitory target state and a reading in which the resultant state is an irreversible consequence of the event having taken place.

As noted on multiple occasions (Kratzer 2000; Anagnostopoulou 2003, 2017; Alexiadou et al. 2015; Irmer and Mueller-Reichau 2018 and Bondaruk and Rozwadowska 2018 for Polish, among many others) only target state passives (but not the resultant state passives) accept the modification by the focus particle *still*. Moreover, Irmer and Mueller-Reichault (2018) claim that only target state passives may be modified by definite-time result state-oriented *for*-adverbials. (10)–(12) present a selection of Polish resultative adjectives which do not accept the relevant modifiers.

- (10) a. ??*ciągłe~wciąż/jeszcze* *prze-czyt-a-n-a* *książk-a*
 still₁/still₂ through-read-TH-PTCP-NOM.SG.F book-NOM.SG
 Intended: ‘a book that is still read’
- b. ??*prze-czyt-a-n-a* *na rok* *książk-a*
 through-read-TH-PTCP-NOM.SG.F for year book-NOM.SG
 Intended: ‘a book that was read for a year’
- (11) a. ??*ciągłe~wciąż/jeszcze* *prze-kupi-on-y* *polityk*
 still₁/still₂ through-buy-PTCP-NOM.SG.M politician-NOM.SG
 Intended: ‘a politician that is still bribed’
- b. ??*prze-kupi-on-y* *na 2 lata* *polityk*
 through-buy-TH-PTCP-NOM.SG.M for 2 years politician-NOM.SG
 Intended: ‘a politician that is bribed for two years’

The participles found in (10) and (11) do not give rise to target states. In fact the entities involved do not undergo any change of state. The participles such as *przeczytana* ‘read’ or *przekupiony* ‘bribed’ are abstract perfect states arising as a consequence of the culmination of relevant events (see Parsons 1990).

However, as has already been noted by Kratzer (2000), the fact that a given participle is incompatible with *still* and *for*-adverbials does not mean that it is not a target state passive. The data in (12) illustrate the cases of participles that denote irreversible target states. The unacceptable status of such participles with *still* and *for*-adverbials is the consequence of the incompatibility of the latter with irreversible states. While durative *for/na*-adverbials quite explicitly contain the terminating point of the state in their denotation, the German equivalent of *still*, i.e. *immer noch*, has been argued by Irmer and Mueller-Reichau (2018) to trigger an implicature whereby the time interval at which a property denoted by a participle holds is followed by a time interval at which the relevant property does not hold.⁵

- (12) a. ??*ciągłe~wciąż/jeszcze* *z-mar-ł-y/*
 still₁/still₂ with-die-PTCP-NOM.SG.M/
za-mord-owa-n-y *prezydent*
 for-murder-TH-PTCP-NOM.SG.M president-NOM.SG
 Intended: ‘a president who is still dead/murdered’
- b. ??*z-mar-ł-y/* *za-mord-owa-n-y*
 with-die-PTCP-NOM.SG.M for-murder-TH-PTCP-NOM.SG.M
na godzinę *prezydent*
 for hour president-NOM.SG
 Intended: ‘the president that was dead/murdered for an hour’

In what follows I focus on more complex patterns of modification.

⁵ For the discussion of further conditions on the modification of participles by *still*, e.g. the incompatibility with script-final frames, I refer the reader to Irmer and Mueller-Reichau (2018).

3.2. *Still* in combination with state and event modifiers

Most adjectival participles that introduce target states allow the modification by *still* and by means of manner adverbials, temporal (completion) adverbials as well as locative adverbials. This is true both about the resultative adjectives based on unaccusative verbs (13) and those based on transitive verbs (14). In addition, the latter allow for the modification by means of agent oriented adverbials such as *specjalnie* or *celowo* ‘on purpose, intentionally’, instrumentals as well as Polish equivalents of *by*-phrases that introduce the external argument of the participle (see 15).

- (13) a. *ciągle~wciąż/jeszcze za-kwit-ł-e* *wiśni-e*
 still₁/still₂ for-flower-PTCP-NOM.PL.NVIR cherry-NOM.PL
 ‘cherry trees that are still in bloom’
- b. *za-kwit-ł-e* *wczoraj* *wiśni-e*
 for-flower-PTCP-NOM.PL.NVIR yesterday cherry-NOM.PL
 ‘cherry trees that came into bloom yesterday’
- c. *szybko* *za-kwit-ł-e* *wiśni-e*
 quickly for-flower-PTCP-NOM.PL.NVIR cherry-NOM.PL
 ‘cherry trees that quickly came into bloom’
- d. *wiśni-e* *za-kwit-ł-e* *w ogrodzie*
 cherry-NOM.PL for-flower-PTCP-NOM.PL.NVIR in garden
 ‘cherry trees that came into bloom in the garden’
- (14) a. *ciągle~wciąż/jeszcze prze-mocz-on-e* *ubrani-e*
 still₁/still₂ through-wet-PTCP-NOM.SG.N clothing-NOM.SG
 ‘clothes that are still soaked’
- b. *prze-mocz-on-e* *w 5 minut* *ubrani-e*
 through-wet-PTCP-NOM.SG.N in 5 minutes clothing-NOM.SG
 ‘clothes that have been soaked in five minutes’
- c. *błyskawicznie* *prze-mocz-on-e* *ubrani-e*
 in a flash through-wet-PTCP-NOM.SG.N clothing-NOM.SG
 ‘clothes that have been soaked in a flash’
- d. *ubrani-e* *prze-mocz-on-e* *w basenie*
 clothing-NOM.SG through-wet-PTCP-NOM.SG.N in swimming pool
 ‘clothes that have been soaked in the swimming pool’
- (15) a. *prze-mocz-on-e* *celowo* *wodą* *ubrani-e*
 through-wet-PTCP-NOM.SG.N purposefully water clothing-NOM.SG
 ‘clothes that have been soaked on purpose with water’
- b. *prze-mocz-on-e* *przez Tomka* *ubrani-e*
 through-wet-PTCP-NOM.SG.N by Tomek clothing-NOM.SG
 ‘clothes that have been soaked by Tomek’

The key observation that this paper is meant to account for is that the joint modification by means of the Polish equivalents of *still* and manner/temporal/locative/agent-oriented phrases is ruled out in Polish resultative adjectives (see 16–17).

- (16) **ciągle~wciąż/jeszcze za-kwit-ł-e* *wczoraj/szybko*
 still₁/still₂ for-flower-PTCP-NOM.PL.NVIR yesterday/quickly/
w ogrodzie wiśni-e
 in garden cherry-NOM.PL
 Intended: ‘cherry trees that are still in bloom and came into bloom yesterday/quickly/in the garden’
- (17) a. **ciągle~wciąż/jeszcze prze-mocz-on-e*
 still₁/still₂ through-wet-PTCP-NOM.SG.N
w 5 minut/ błyskawicznie/ w basenie ubrani-e
 in 5 minutes in a flash in pool clothing-NOM.SG
 Intended: ‘clothes that are still soaked and have been soaked in 5 minutes/in a flash/in the swimming pool’
- b. **ciągle~wciąż prze-mocz-on-e* *przez Tomka*
 still₁/still₂ through-wet-PTCP-NOM.SG.N by Tomek
/celowo ubrani-e
 purposefully clothing-NOM.SG
 Intended: ‘clothes that are still soaked by Tomek/on purpose’

At the same time the participles modified by *still* accept certain types of modification which are not found with underived root adjectives (18–19).

- (18) a. *ciągle~wciąż/jeszcze obficie wy-pełni-on-e*
 still₁/still₂ lavishly out-full-PTCP-NOM.PL.NVIR
puchar-y
 cup-NOM.PL
 ‘cups that are still lavishly filled’
- b. *ciągle~wciąż/jeszcze u-brudz-on-e* *na brunatno*
 still₁/still₂ at-dirt-PTCP-NOM.SG.N on grey
ubrani-e
 clothing-NOM.SG
 ‘clothes that are still made grey from dirt’
- (19) a. **obficie pełn-e* *puchar-y*
 lavishly full-NOM.SG.NVIR cup-NOM.PL
 Intended: ‘cups that are lavishly full’
- b. **brudn-e* *na brunatno ubrani-e*
 dirty-NOM.SG.N on grey clothing-NOM.SG
 Intended: ‘clothes that are grey from dirt’

Adverbials such as *obficie* ‘lavishly’ and *na brunatno* ‘grey (lit. on grey)’ modify the target state brought about by the event denoted by the participle. Building

composed of (i) the time interval directly before the reference time and (ii) the time interval overlapping the reference time, and that the relevant property holds at the interval D.

On these assumptions the assertion contributed by the Polish equivalents of *still* in (23a) is as in (23b) and acknowledges that *wciąż/jeszcze* 'still₁/still₂' says that the property of being soaked holds of the individual, i.e. the individual is soaked at least to degree *d*, at time *t* which falls within the reference time.

(23c) is the truth condition that says that there exists a time interval *t* which is a proper part of the superinterval D at which the entity is soaked, and that *t* is a part of the reference time.

- (23) a. *ciągle~wciąż/jeszcze* *prze-mocz-on-e*
 still₁/still₂ through-wet-TH-PTCP-NOM.SG.N
ubrani-e
 clothing-NOM.SG
 'clothes that are still soaked'
- b. $\lambda x \lambda d \lambda t. \text{przemok}(x) \geq (d)(t)$
 where *t* is part of the reference time identified by the tense of the sentence
- c. $\exists t [t \subset D \wedge t \subseteq \text{tr}]$

Following the majority of the literature on *still* I assume that *ciągle~wciąż* and *jeszcze* as used in (23a) presupposes the existence of a contextually salient time interval directly preceding time *t* at which some substantive degree of being soaked also held.

The component of the meaning of *ciągle~wciąż* and *jeszcze* described above is retained in a question about a belief (24a) and when the assertion is denied by means of negation or by being placed in the antecedent of an unreal conditional clause (24b–c).

- (24) a. *Myślisz, że ubrani-e jest ciągle~wciąż/jeszcze*
 you think that clothing-NOM.SG is still₁/still₂
prze-mocz-on-e?
 through-wet-PTCP-NOM.SG.N
 'Do you think the clothes are still soaked now?'
- b. *To nie prawda, że ubrani-e jest ciągle~wciąż/jeszcze*
 it not truth that clothing-NOM.SG is still₁/still₂
prze-mocz-on-e.
 through-wet-PTCP-NOM.SG.N
 'It's not true that the clothes are still soaked now.'
- c. *Gdyby ubrani-e było ciągle~wciąż/jeszcze*
 if clothing-NOM.SG was still₁/still₂
prze-mocz-on-e, suszyłby je.
 through-wet-PTCP-NOM.SG.N would dry it
 'Were the clothes still soaked, he would be drying them.'

The semantics of the presupposition together with its truth condition is presented in (25).

- (25) a. $\lambda x \lambda d \lambda t'. \text{przemok}(x) \geq (d')(t')$
 b. $\exists t' \exists d' [t' \subset D \wedge t'_{\text{INIT.}} = D_{\text{INIT.}} \wedge t' < t \wedge t' \supset \subset t \wedge d \leq d']$

Ciągle~wciąż and *jeszcze* presuppose the existence of a time interval t' that is the initial proper part of the focalized superinterval D , i.e. the initial subinterval of t' is the initial subinterval of D , and that t' precedes and abuts the interval t . (25) says also that at time t' the relevant entity was soaked to the degree which was greater than or equal to the asserted degree d .

Finally, (26) summarizes the semantic component of *ciągle~wciąż/jeszcze* responsible for their incompatibility with participles denoting irreversible states (see 12 above). Irmer and Mueller-Reichau (2018) claim that the said component of the meaning of *immer noch* 'still' is an implicature that points to the existence of a time interval at which a relevant property does not hold and which is later than the reference time.

- (26) a. $\lambda x \lambda d \lambda t'' \text{przemok}(x) = (d'')(t'')$
 b. $\exists t'' \exists d'' [t < t'' \wedge d'' = 0]$

(26) says that *ciągle~wciąż* and *jeszcze* trigger an inference according to which an entity is assigned value 0 on the scale of being soaked at interval t'' which follows interval t .

It is probably useful to note that for most speakers the implicature triggered by *ciągle~wciąż* is cancellable given the right context. This is illustrated by the sentence in (27a). At the same time, any attempts at cancelling the relevant meaning contribution of *jeszcze* is judged much less acceptable by the speakers I consulted.

- (27) a. *Basen* *jest* *ciągle/wciąż* *o-próżni-on-y* *i*
 pool-NOM.SG is still₁ about-empty-PTCP-NOM.SG.M and
zostanie *o-próżni-on-y* *już* *na* *zawsze*.
 will remain about-empty-PTCP-NOM.SG.M already for always
 'The swimming pool is still emptied and it will remain emptied forever.'
- b. ??*Basen* *jest* *jeszcze* *o-próżni-on-y* *i*
 pool-NOM.SG is still₂ about-empty-PTCP-NOM.SG.M and
zostanie *o-próżni-on-y* *już* *na* *zawsze*.
 will remain about-empty-PTCP-NOM.SG.M already for always
 Intended: 'The swimming pool is still emptied and it will remain emptied forever.'

To the extent that the component of meaning of the Polish equivalents of *immer noch* is indeed an implicature, it may be concluded that it is the nature of the said implicature that differentiates between *ciągle~wciąż* and *jeszcze* in that only the implicature triggered by the former is defeasible the same time the two subclasses of particles share the same assertion and presupposition.

4.2. The meaning of other event and result state-oriented modifiers

The analysis of temporal adverbials such as *wczoraj* ‘yesterday’ as well as manner, locative, instrument, resultative and agent-oriented adverbials assumed here follows the traditional Neo-Davidsonian lines. They are treated as semantic type $\langle s, t \rangle$ (see Morzycki 2015: chapter 5) and are assumed to attach at different levels of structure. I take the *by/przez*-phrase to be merged in the extended projection of Voice Phrase (see e.g. Bruening 2012) and to saturate the external argument of the participle. The example in (28) illustrates the modification of resultative adjectives with different types of adverbials.

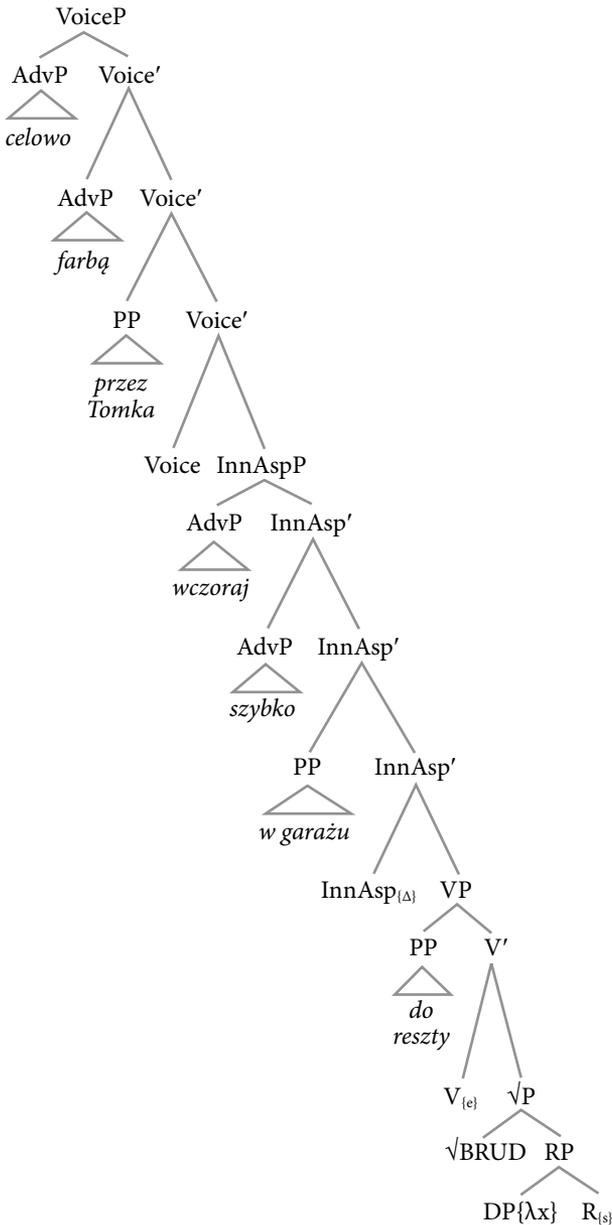
- (28) a. (*ubrani-e*) *u-brudz-on-e* *do reszt-y, wczoraj,*
 (clothing-NOM.SG) at-dirt-PTCP-NOM.SG.N to rest yesterday
szybko, w garażu celowo farbą, przez Tomka
 quickly in garage purposefully paint by Tomek
 ‘clothes made completely dirty with paint, yesterday, quickly, in the garage, on purpose, by Tomek’
- b. $\lambda e \lambda s \lambda d. (d > d')(s)(e) \wedge \lambda e. wczoraj(e) \wedge \lambda e. szybko(e) \wedge \lambda e. IN(garaż)(e) \wedge \lambda e. celowo(e) \wedge \lambda e. WITH(farba)(e) \wedge \lambda e. Initiator(Marek)(e) \wedge \lambda e. u-brudz(e)$
 Where d' is a contextually defined degree of being dirty above which one talks about being ‘completely dirty’

Following Bruening (2012, 2014) I assume the modified nominal (in the case above *ubranie* ‘clothing’) not to be born as the internal argument of the participle but rather that the participial structure merges in the extended projection of the nominal phrase headed by the noun. The place of the internal argument is taken by an empty operator (lambda abstractor) that moves to the extended projection of the stativizing AP and allows the structure to function as a predicate of individuals.

(30) illustrates the position of the adverbials found in (28). The point of attachment of each class of adverbials can be deduced on the basis of their ungrammaticality is certain classes of verbs and participles. Thus, agent-oriented adverbials such as *celowo* ‘on purpose’ as well as *by/przez*-phrases and instrument adverbials such as *farbą* ‘with paint’ are absent in passive participles based on unaccusatives, which, by definition, do not introduce an external argument and lack the Voice layer altogether (see 29).

- (29) a. **za-kwit-ł-e* *celowo* *kwiat-y*
 for-flower-PTCP-NOM.PL.NVIR purposefully flower-NOM.PL
 Intended: ‘flowers that came into bloom on purpose’
- b. **pęk-nię-t-a* *kamieniem/przez Tomka* *szyb-a*
 crack-TH-PTCP-NOM.SG.F stone by Tomek pane-NOM.PL
 Intended: ‘a pane that was cracked with a stone/by Tomek’

(30)



Manner adverbials such as *szybko* ‘quickly’, temporal adverbials of the type *wczoraj* ‘yesterday’ as well as locative adverbials intuitively modify the change of state denoted by the participles. Since I assume the change of state to be substantiated by the measure-of-change function introduced at the level of

the Inner Aspect, the relevant adverbials are analysed as Inner Aspect-level adverbials. As I will argue in the following section, participles modified by the Polish equivalents of the particle *still* in principle cannot possess the Inner Aspect specification in their structure, hence, they are expected not to accept the modification by temporal, manner and locative adverbials.

Adverbials such as *do reszty* ‘completely’ (lit. ‘to rest’) as well as *obficie* ‘lavishly’ or *na brunatno* ‘grey’ may modify the passives of transitive and unaccusative verbs as well as the passives modified by *still*. They will be treated as result state modifiers and will be analyzed as VP level adverbials whose grammaticality is licensed by the presence of the state variable (introduced by the Result-head), the event variables (introduced by the V-head) and the semantic R(result) relation between the two. Thus, the semantics of VP attested in (30) is as follows:

$$(31) \quad \lambda d \lambda e \lambda s \lambda x. [\exists s [\lambda d \lambda x. \mathbf{brud}(x) \geq d \wedge d > d' \wedge R(e)(x)(s)]]$$

I take the denotation of the root to involve a mapping from an individual to the degree on a scale of being dirty.

Concerning the semantic contribution of durative *for*-adverbials, I will follow Piñón (1999) in assuming that durative result state-oriented adverbials are compatible only with predicates containing the result state argument. (32) presents the semantics of the phrase *na 2 godziny* ‘for 2 hours’ based on Piñón’s (1999) account. The semantic interpretation of the adverbial incorporates the relation of Result (R) that involves the theme of the state assumed to be identified with the theme of event (x), the state argument (s) and the event argument (e). Piñón takes *for* to apply to predicates of states and to existentially bind the state argument. In the relevant case the predicate of state is the measure phrase *godziny* ‘hours’ treated as a measure function from states to degrees on the scale of number of hours.

$$(32) \quad \llbracket \text{for/na} \rrbracket = \lambda P \lambda R \lambda x \lambda e [\exists s [R(e, x, s) \wedge \mathbf{hour}(s) \geq 2]]$$

where $P = \lambda d \lambda s. \mathbf{hour}(s) \geq 2$

Finally, temporal completion adverbials will be given a familiar Neo-Davidsonian analysis. The phrase presented in (33) maps the event on a temporal scale of hours.

$$(33) \quad \text{a. } \begin{array}{ll} \textit{prze-mocz-on-e} & \textit{w 2 godzin-y (ubrani-e)} \\ \text{through-wet-PTCP-NOM.SG.N} & \text{in 2 hour (clothing-NOM.SG)} \\ \text{‘clothes that became soaked in two hours’} & \end{array}$$

$$\text{b. } \lambda e. \mathbf{przemocz}(e) \wedge \lambda d \lambda e. \mathbf{hour}(e) \leq 2$$

Whereas durative *for/na*-adverbials are VP-level modifiers, completion *in/w*-adverbials will be introduced in the extended projection of the Inner Aspectual Phrase that decides about the telic or quantity character of the predicate.

4.3. The change-of-state component of resultative adjectives

The analysis presented below has been strongly influenced by the approaches to the meaning and structure of degree achievements argued for in Hay et al. (1999), Kennedy and Levin (2008), Baglini (2012) and Bobaljik (2012) among others. I will start the account by discussing the semantic and syntactic structure of the participle *prze-mocz-on-y* ‘through-wet-PTCP-NOM.SG.M, meaning ‘soaked’.

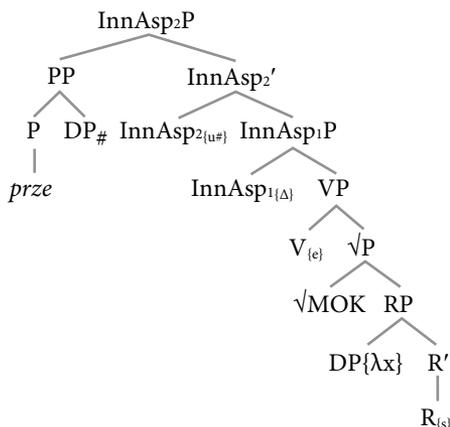
The semantic packaging of the root *mok*⁶ ‘wet’ is assumed to be a function from an individual to the degree on a scale of wetness ($\lambda d \lambda x. \mathbf{mok}(x) \geq d$). The root takes the Result Phrase as its complement. The Result-head introduces the state argument into the derivation.

The root merges with the categorizing V-head, which introduces the event variable into the structure. The verbalized root is subsequently merged with the inner aspectual head that carries the Δ -operator, whose role is to introduce the measure-of-change function $\mathbf{wet}\Delta = \lambda x \lambda e$. The said function returns the difference between two points on a derived scale of wetness whose lowest point coincides with the initial point of the event. The returned value is the difference between the degree to which the entity is wet at the final point of the event and at the initial point of the event.

The next step in the derivation involves turning the so-far unbounded predicate into a bounded or telic predicate. The structural interpretation of telicity assumed in this study is the presence of the open value (#) in need of range assignment in the head of another inner aspectual phrase (InnAsp₂P). Adopting the account presented in Borer (2005), I will assume that the range assignment takes place as a consequence of the spec-head agreement between the Inner Aspectual-head carrying the said open value and the phonologically null quantity DP located in the spec-InnAsp₂P. The relevant DP is the complement of the prefix that heads a PP merged in the specifier of the InnAsp₂P. (34) presents the relevant portion of the representation of a telic change-of-state verb *przemoczyć* ‘to soak.’ and the participle *przemoczony* ‘soaked’.

⁶ The alternation between the velar *k* /k/ and the post-alveolar *cz* /tʃ/ attested in the stem of the participle *przemoczony* is a regular morphophonological change known as the 1st Velar Palatalization (see Gussmann 1980, 2007; Rubach 1984 for details and analyses).

(34)



The key point of the analysis put forward in this study is that the semantics of the structure presented in (34) makes it incompatible with the modification by the Polish equivalents of *still*. To understand why this has to be the case, let us consider (35b), which breaks down the application of the measure-of-change function **mok** Δ applied to individuals and events and returning the difference between d' , i.e. the degree to which the property holds over x at the end of the event ($\text{END}(e)$), and d , i.e. the degree to which a property holds at the beginning of the event ($\text{BEG}(e)$).

(35) a. *prze-mocz-on-e w 5 minut ubrani-e*
 through-wet-PTCP-NOM.SG.N in 5 minutes clothing-NOM.SG
 'clothes that became soaked in 5 minutes'

b. $\lambda e \lambda x \lambda d \lambda d' \lambda P. \mathbf{mok}(\text{BEG}(e))(x)(d) \wedge (\text{END}(e))(x)(d') \wedge \mathbf{minute}(e) \leq 5$
 where $P = \lambda e \lambda d. \mathbf{minute}(e) \leq 5$

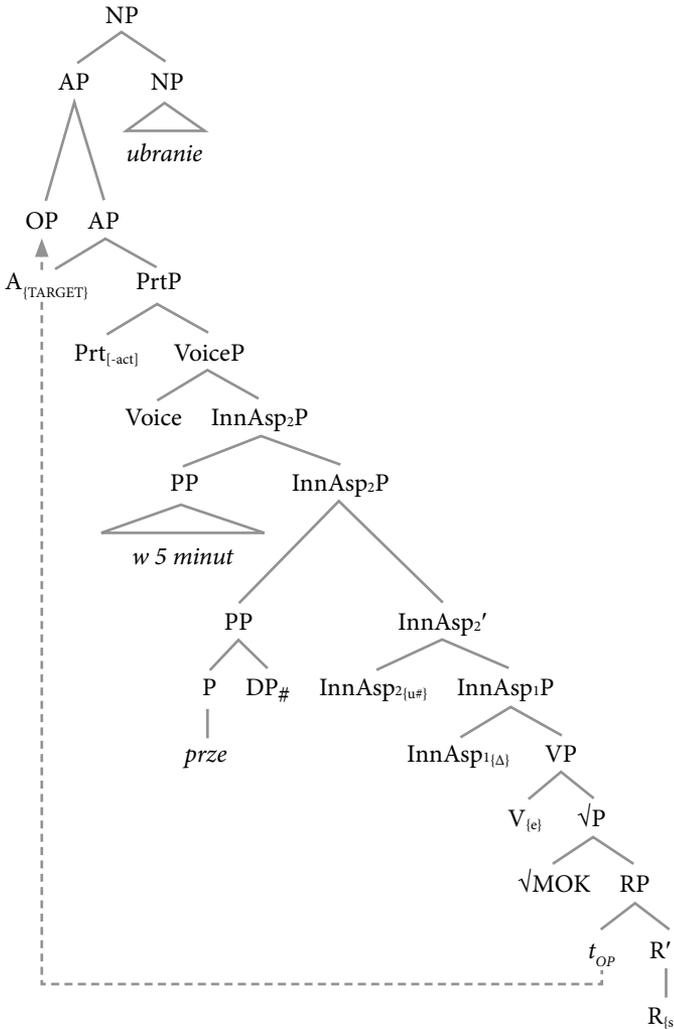
Importantly, for the proposition contained within (35a) to be true, the entity could not have been entirely wet (i.e. wet in every part) at the inception of the event. (35a) says, rather, that the entity has undergone a change from not being entirely wet to being entirely wet, and that this state has been achieved in (no more than) 5 minutes.

It is quite clear that the point of attachment of the completion *in/w*-adverbials is as the modifier of Asp2P that defines the predicate as quantized, bounded or telic. At the same time the point of attachment of *still* and its Polish equivalents is above the stativizer, which I take to be the TARGET-operator occupying the head of the AP and assumed by Paslawska and von Stechow (2003) to map a relation between events and states onto properties of states (see 36).

(36) $\lambda R \lambda s \exists e R(s)(e)$ (Kratzer 2000, Paslawska and von Stechow 2003)

To be more precise, I assume *still* to occupy the Particle Phrase (PartP) in the extended projection of the Adjectival Phrase that categorizes the participle. The graph in (37) presents the placement of the modifiers in question in the structure.

(37)

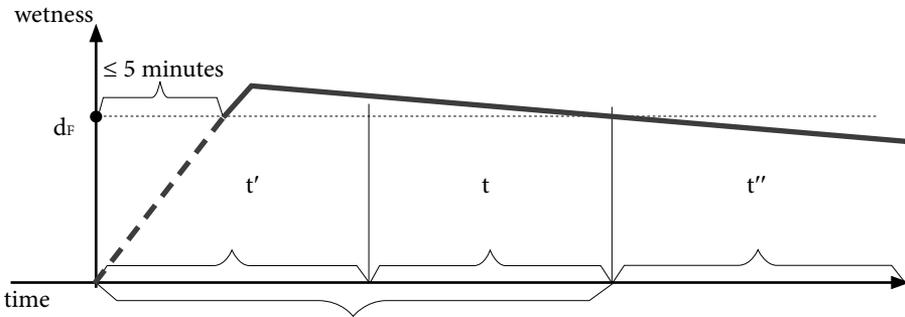


Recall that the focus of the constructions under investigation is the predicate of state mapped onto the superinterval D throughout which a focalized property holds. In the relevant case, it is the property of being entirely wet. Syntactically speaking, the focus is congruent with the c-command domain of the particles *ciągle~wciąż/jeszcze*. In other words, the property of being entirely wet holds of the state predicate defined by the TARGET-operator.

At this point it becomes clear why the modification by *still* is incompatible with the representation of a change-of-state predicate. The presence of the change of state entails the existence of an interval within the scope of the focus particle at which not every part of the clothes is wet. This is incompatible with the semantic contribution of *still*, which requires that the state of being entirely wet, i.e. soaked, hold throughout the superinterval D. The unacceptability of the phrase found in (38) is illustrated by means of the graph in (39).

- (38) **ciagle~wciqz/jeszcze prze-mocz-on-e w 5 minut*
 still₁/still₂ through-wet-PTCP-NOM.SG.N in 5 minutes
ubrani-e
 clothing-NOM.SG
 Intended: ‘clothes that have become soaked in 5 minutes and are still soaked’

(39)



The graph presents the interaction of the scale of wetness and the time scale. The degree of wetness expressed by the predicate in (38) relative to time is represented by means of the bold line. *dF* represents the contextually salient point on the scale of wetness defined by the prefix above which the entity counts as entirely wet (much as in Kagan 2013). *D* is the relevant period at which the property of being entirely wet is expected to hold or, to put it differently, at which the truth condition of the focalized predicate of state is expected to be fulfilled. As discussed in section 4.1 the said truth condition includes the assertion concerning the interval *t* which is identified as part of the reference time and a presupposition of the interval *t'* which abuts *t* and is the initial proper subinterval of *D*. *Still* is also claimed to implicate the existence of an interval *t''* after *t* at which the property of being entirely wet does not hold anymore. This is illustrated in (39) by the bold line descending below the level marked with the horizontal dashed line, which represents the level of being entirely wet (or soaked). The predicate represented by (39) is unacceptable due to the existence of the 5-minute-long interval which falls within the focalized superinterval *D* and during which the entity is not entirely wet. This interval, indicated by

means of the dashed bold line, is the interval during which the change of state from not being entirely wet to being entirely wet takes place. To be more precise, the existence of the said interval contradicts the truth condition of the presupposition triggered by *ciągłe~wciąż/jeszcze*, which says that the property of being entirely wet should hold over the initial proper interval of D.

According to the account outlined above, completion adverbials that measure the duration of the event as well as other temporal, manner and locative adverbials are not incompatible with *still* per se. It is rather the case that *still* is incompatible with the change-of-state component of the meaning of participles, and that the presence of the change-of-state component is the prerequisite for the grammaticality of temporal, manner and locative adverbials, which all modify the change of state.

4.4. Participles modified by *still*

The issue that obviously needs to be addressed at this point is why most target state resultative adjectives actually allow the modification by *still*. I would like to postulate that those participles do not contain the Δ -operator that introduces the measure-of-change function. Additionally, the participles accompanied by *still* will be claimed to constitute an extreme case of uninstantiated event kind-based participles, whose compatibility with modifiers is regulated by the State Relevance Hypothesis (McIntyre 2013, 2015).

The idea that (stative) adjectival participles are constructed on uninstantiated event kinds has been articulated in Gehrke (2011, 2015). According to the Gehrke's original analysis, statives lack the viewpoint aspectual specification that instantiates the event forming part of the participle. For such an account, all the participles discussed in this article are uninstantiated as all of them lack the viewpoint aspectual specification. At the same time, unlike adjectival participles in predicative position, the adnominal participles accept a wide variety of modifiers, except for when they are accompanied by the phase particles equivalent to *still*.

In the light of these facts, it seems justified to claim that for Polish adnominal participles it is not the lack of the viewpoint aspectual specification that decides about the (un)availability of event modification but rather the presence and absence of inner aspectual specification. To be precise, the participles modified by *still* that do not contain the change-of-state component function as uninstantiated event-kind based participles and may be accompanied only by modifiers which possess a very specific relation to the result state they denote.

McIntyre (2013, 2015) discusses the scope of various constraints on event modification attested in the environment of adjectival participles and proposed by Gehrke (2011, 2015). He puts forward an additional constraint which he refers to as the State Relevance Hypothesis (see 40).

(40) State Relevance Hypothesis (McIntyre 2013, 2015)

In adjectival passives in e.g. German, English, Hebrew, event-related satellites are unacceptable unless they contribute to the description of the state expressed by the participle or of the theme during the interval *i* during which this state holds. They are most acceptable if they provide information which can be inferred solely by inspection of the theme during interval *i*.

The modification of resultative adjectives accompanied by the Polish equivalents of *still* is constrained by the State Relevance Hypothesis. Note that the participles found in the scope of *still* may be accompanied by some modifiers which are unattested with adjectives and which, therefore, count as ‘event-related satellites’ (see 41).

- (41) a. *ciąggle~wciąż/jeszcze obficie wy-pełni-on-e*
 still₁/still₂ lavishly out-full-PTCP-NOM.PL.NVIR
puchar-y
 cup-NOM.PL
 ‘cups that are still lavishly filled’
- b. *ciąggle~wciąż/jeszcze u-brudz-on-e na brunatno/*
 still₁/still₂ at-dirt-PTCP-NOM.PL.N on grey
farbą ubrani-e
 paint clothing-NOM.SG
 ‘clothes that are still made grey from dirt’

Result state modifiers such as *obficie* ‘lavishly’, *na brunatno* ‘grey’ as well as the Voice-layer modifiers such as *farbą* ‘with paint’ describe the properties whose presence can be ‘inferred solely by inspecting the theme’ during the interval over which the properties of being filled or being dirty hold. They may, therefore, be attested in the environment of the extreme case of spatio-temporally uninstantiated event kind-based participles, i.e. participles compatible with *still*. At the same time, the fact that the relevant type of modifiers is not attested with adjectives suggests that the *still*-modified resultative adjectives possess at least some portions of the verbal structure found in event token-based participles.

In addition, if we assume that the *still*-modified participles are necessarily based on aspectually uninstantiated event kinds and that the modification of such predicates is constrained by the State Relevance Hypothesis, we account for their incompatibility with durative result state-oriented *for/na*-adverbials (see 42).

- (42) a. **ciąggle~wciąż/jeszcze za-kwit-ł-e na 2 tygodnie*
 still₁/still₂ for-flower-PTCP-NOM.PL.M for 2 weeks
wiśni-e
 cherry-NOM.PL
 Intended: ‘cherry trees that came into bloom for 2 weeks and are still in bloom’

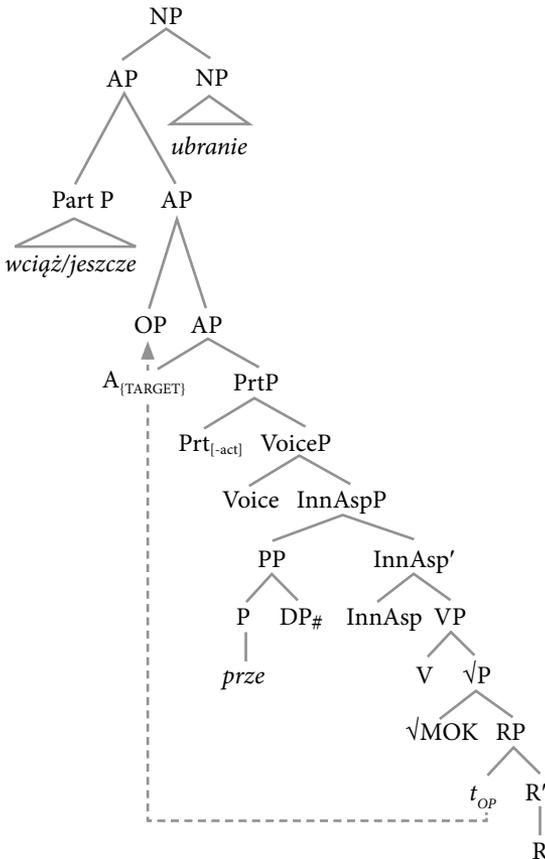
- b. **ciągle~wciąż/jeszcze* *prze-mocz-on-e/*
still₁/still₂ *though-wet-PTCP-NOM.SG.N/*
u-brudz-on-e *na godzinę* *ubrani-e*
at-dirt-PTCP-NOM.SG.N *for hour* *clothing-NOM.SG*
 Intended: ‘clothes that have been soaked/made dirty for an hour and are still soaked/made dirty’

Although durative *for*-adverbials are result state modifiers, their presence does not conform with the State Relevance Hypothesis as it is not possible to tell for how long cherry trees have been in bloom or for how long a piece of clothing has been soaked/dirty by simply inspecting them physically, e.g. looking at them or touching them.

(44) summarizes the structure of the *still*-modifiable resultative adjective found in (43).

- (43) *ciągle~wciąż/jeszcze* *prze-mocz-on-e* *ubrani-e*
still₁/still₂ *though-wet-PTCP-NOM.SG.N* *clothing-NOM.SG*
 ‘clothes that are still soaked’

(44)



The structure in (44) lacks the inner aspectual specification responsible for the change-of-state semantics as well as the open value in need of range assignment. At the same time the state(-kind) expressed by the structure is a result of the event(-kind), hence it may be modified by adverbials which are not accepted by underived root adjectives.

5. Conclusion

Out of the several questions that one might want to ask in connection with the analysis presented in this paper I think I should address the one concerning the place of the postulated participles among the cross-linguistically attested classes of passives. This contribution isolates two subclasses of participles which are not specified for viewpoint aspect: (i) participles built on telic events possessing the measure-of-change function within their structure and (ii) participles built on event kinds lacking the measure-of-change component. The division certainly does not overlap with the division into the target state and resultant state passives discussed in Kratzer (2000), Anagnostopoulou (2003, 2017), Alexiadou et al. (2015) and Bondaruk and Rozwadowska (2018) for Polish. Rather the two subclasses discussed here are target state passives in that they possess a modifiable target state and are not just abstract perfect states arising as a result of the culmination of the event. Moreover, although the class of *still*-modifiable participles is deprived of much of the aspectual information, it is still a class of resultatives rather than statives (see Embick 2004 for the distinction between resultatives and statives). Polish possesses a separate class of constructions which are completely deprived of eventive semantics and give rise to adverbials. These are participles such as *wzniosły* 'lofty, noble', *wytrwały* 'durable', *przestarzały* 'old-fashioned' or *zacořany* 'backward'. It seems, therefore, that the two classes of participles discussed in this study illustrate an additional line of division within the class of resultative target state passives.

References

- Alexiadou Artemis, Anagnostopoulou Elena, Schäfer Florian (2015). *External Arguments in Causativity Alternations: A Layering Approach*. Oxford: Oxford University Press.
- Anagnostopoulou Elena (2003). Participles and voice. In *Perfect Explorations*, Artemis Alexiadou, Monika Rathert, and Arnim von Stechow (eds.), 1-36. Berlin: Mouton de Gruyter.
- Anagnostopoulou Elena (2017). Voice, manners, and results in adjectival passive. In *The Verbal Domain*, Roberta D'Alessandro, Irene Franco, and Ángel J. Gallego (eds.), 105-128. Oxford: Oxford University Press.

- Baglini Rebekah (2012). The scalar source of stative passives. In *Proceedings of Sinn und Bedeutung 16*, Ana Aguilar Guevara, Anna Chernilovskaya, and Rick Nouwen (eds.), 29–41. Utrecht, The Netherlands: MIT Working Papers in Linguistics.
- Bobaljik Jonathan (2012). *Universals in Comparative Morphology*. Cambridge, MA: MIT Press.
- Bondaruk Anna, Rozwadowska Bożena, (2018). Heterogeneity of states in Polish stative passives. In *Canonical and Non-canonical Structures in Polish*, Wojciech Guz and Bogdan Szymanek (eds.), 33–53. Lublin: Wydawnictwo KUL.
- Borer Hagit (2005). *Structuring Sense Volume II: The Normal Course of Events*. Oxford: Oxford University Press.
- Bruening Benjamin (2012). *By* phrases in passives and nominals. *Syntax* 16(1): 1–41.
- Bruening Benjamin (2014). Word formation is syntactic: adjectival passives in English. *Natural Language and Linguistic Theory* 32(2): 363–422.
- Cetnarowska Bożena (2000). Resultative adjectives in Polish. *Acta Linguistica Hungarica* 47(1–4), 47–79.
- Cinque Giulio (2010). *The Syntax of Adjectives*. A Comparative Study. MIT Press, Cambridge, MA.
- Embick David (2004). On the structure of resultative participles in English. *Linguistic Inquiry* 35(3), 355–392.
- Gehrke Berit (2011). Stative passives and event kinds. In *Proceedings of Sinn und Bedeutung 15*, Ingo Reich, Eva Horch, and Dennis Pauly (eds.), 241–257. Saarland University Press. Saarbrücken.
- Gehrke Berit (2015). Adjectival participles, event kind modification and pseudo-incorporation. *Natural Language and Linguistic Theory* 33(3), 897–938.
- Greenberg Yael (2009). Presupposition accommodation and informativity considerations with aspectual *still*. *Journal of Semantics* 26(1), 49–86.
- Gussmann Edmund (1980). *Studies in Abstract Phonology*. Cambridge, MA: MIT Press.
- Gussmann Edmund (2007). *The Phonology of Polish*. Oxford: Oxford University Press.
- Hay Jennifer, Kennedy Christopher, Levin Beth (1999). Scalar structure underlies felicity in Degree Achievements. In *Proceedings of SALT IX*, Tanya Matthews and Devon Strolovitch (eds.), 127–144. Ithaca, NY: CLC Publications.
- Ippolito Michela (2007). On the meaning of some focus-sensitive particles. *Natural Language Semantics* 15(1), 1–34.
- Irmr Matthias, Mueller-Reichau Olav (2018). Script knowledge and the felicity of phase particles in German adjectival passives. *Journal of Semantics* 35(4), 585–637.
- Kagan Olga (2013). Scalarity in the domain of verbal prefixes. *Natural Language and Linguistic Theory* 31(2), 481–516.
- Kayne Richard (1994). *The Antisymmetry of Syntax*. Cambridge, MA: MIT Press.
- Kennedy Christopher, Levin Beth (2008). Measure of change: The adjectival core of degree achievements. In *Adjectives and Adverbs: Syntax, Semantics and Discourse*, Louise McNally and Christopher Kennedy (eds.), 156–182. Oxford: Oxford University Press.
- König Ekkehard (1991). *The Meaning of Focus Particles*. A Comparative Perspective. London and New York: Routledge.
- Kratzer Angelika (2000). Building statives. In *Proceedings of the Twenty-Sixth Annual Meeting of the Berkeley Linguistics Society*, Lisa J. Conathan, Jeff Good, Darya

- Kavitskaya, Alyssa B. Wulf, and Alan C.L. Yu (eds.), 385–399. Berkeley: Berkeley Linguistics Society.
- Krifka Manfred (2000). Alternatives for aspectual particles: semantics of *still* and *already*. In *Proceedings of the Twenty-Sixth Annual Meeting of the Berkeley Linguistics Society General Session and Parasession on Aspect*, Lisa J. Conathan, Jeff Good, Darya Kavitskaya, Alyssa B. Wulf, and Alan C.L. Yu (eds.), 401–412. Berkeley: Berkeley Linguistics Society.
- Laskova Vesselina (2007). Verbal participles and the prenominal position in English. *Rivista di Grammatica Generativa* 32, 125–140.
- Löbner Sebastian (1999). Why German *schon* and *noch* are still duals: A reply to van der Auwera. *Linguistics and Philosophy* 22(1), 45–107.
- McIntyre Andrew (2013). Adjectival passives and adjectival participles in English. In *Non-canonical Passives*, Artemis Alexiadou and Florian Schäfer (eds.), 21–41. Amsterdam/Philadelphia: John Benjamins.
- McIntyre Andrew (2015). Event modifiers in (German) adjectival participles: Remarks on Gehrke. *Natural Language and Linguistic Theory* 33(3), 939–953.
- Morzycki Marcin (2015). *Modification*. Cambridge: Cambridge University Press.
- Parsons Terence (1990). *Events in the Semantics of English*. Cambridge, MA.: The MIT Press.
- Paslawska Alla, von Stechow Arnim (2003). Perfect readings in Russian. In *Perfect Explorations*, Artemis Alexiadou, Monika Rathert, and Arnim von Stechow (eds.), 307–362. Berlin: Mouton de Gruyter.
- Piñón Christopher (1999). Durative adverbials for result states. In *Proceedings of the West Coast Conference on Formal Linguistics*, Sonya Bird, Andrew Carnie, Janson D. Haugen, and Peter Norquest (eds.), 420–433. Somerville, MA: Cascadilla Press.
- Rapp Irene (2001). The attributive past participle: Structure and temporal interpretation. In *Audiatur Vox Sapientiae: A Festschrift for Arnim von Stechow*, Caroline Féry and Wolfgang Sternefeld (eds.), 392–409. Berlin: Akademie Verlag.
- Rubach Jerzy (1984). *Cyclic and Lexical Phonology: The Structure of Polish*. Dordrecht: Foris.
- Sleeman Petra (2011). Verbal and adjectival participles: Position and internal structure. *Lingua* 121(10), 1569–1587.

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