

Sławomir Zdziebko

The Semantics of *still* and the Modification of Polish Adnominal Participles

Abstract

Polish adnominal participles accept a wide range of event modifiers except when they are additionally modified by focus or phase particles corresponding to *still*. The paper argues that the semantic contribution of *still* is incompatible with the change-of-state component of the meaning of participles. While *still* presupposes that the property denoted by the participle holds over the initial proper subinterval during which the focalized state holds, the measure-of-change function found in resultative participles entails that the relevant subinterval corresponds to the change of state over which the relevant property does not hold yet. The participles modifiable by *still* are argued to lack the change-of-state component.

Keywords

participles, passives, degree achievements, focus particles, adverbials

1. Introduction

As visible in (1a–b) Polish adnominal adjectival participles also referred to as resultative adjectives (Cetnarowska 2000) can be modified by the equivalents of the focus particle *still* or by temporal completion and locative adverbials as well as agentive *by*-phrases. What is not possible is the combination of the two classes of modifiers within a single phrase (1c).

- (1) a. *ciągłe~wciąż/jeszcze* *prze-mocz-on-e* *ubrani-e*
still₁/still₂ through-wet-PTCP-NOM.SG.N¹ clothing-NOM.SG
‘clothes that are still soaked’

¹ The grammatical information has been omitted in the glosses except where it is crucial. The paper uses the following set of abbreviations: F = feminine, M = masculine, N = neuter, NOM = nominative, NVIR = non-virile, PL = plural, PTCP = participle, SG = singular, TH = thematic element.

- b. *prze-mocz-on-e* *celowo* *przez* *Tomka*
 through-wet-PTCP-NOM.PL.N purposefully by Tomek
w 5 minut, w ogrodzie ubrani-e
 in 5 minutes in garden clothing-NOM.SG
 'clothes that have been soaked on purpose, by Tomek in 5 minutes in the garden'
- c. **ciagle~wciqż/jeszcze* *prze-mocz-on-e* *celowo,*
still₁/still₂ through-wet-PTCP-NOM.PL.N purposefully
przez Tomka, w 5 minut, w ogrodzie ubrani-e
 by Tomek in 5 minutes in garden clothing-NOM.SG
 Intended: 'clothes that have been soaked on purpose, by Tomek in 5 minutes in the garden and are still soaked'

Anagnostopoulou (2003, 2017), Alexiadou et al. (2015) and Bondaruk and Rozwadowska (2018) among others treat the incompatibility of participles modified by *still* with event modification as the property of the entire class of target state passives. Since the participles modified by *still* are unambiguously target state passives and *still*-modified constructions are incompatible with event modifiers, target state passives are incompatible with event modifiers.

In what follows I will show that this view is not necessarily correct in the case of Polish adnominal participles and I will argue that the unacceptability of examples such as (1c) is the consequence of the incompatibility of the Polish equivalents of *still* with telic degree achievement predicates and the incompatibility of event modifiers with predicates that lack the relevant aspectual specification.

In section 2 I argue that a very common analysis according to which adnominal participles are reduced relative clauses is extremely difficult to maintain in Polish. Section 3.1. discusses the details of the patterns of modification attested with adnominal participles and focuses on their (in)compatibility with the focus particles *ciagle~wciqż* 'still₁' and *jeszcze*² 'still₂', while section 3.2. focuses on the modification of adnominal participles by means of *still* in combination with temporal adverbials, locative phrases, durative result state-oriented adverbials as well as external argument-oriented adverbials, instrumentals and *by*-phrases. Sections 4.1. and 4.2. investigate the semantics of the Polish equivalents of *still* as well as the relevant event and result state-oriented adverbials, while section 4.3. concentrates on the syntax and semantics of the change-of-state predicates and argues that the incompatibility of the modification of resultative adjectives by *still* and most types of event modifiers stems from the incompatibility of the presupposition triggered by *still* with the semantics of the measure-of-change function which returns the difference between the degrees to which the property holds at the end and at the beginning

² The difference between *ciagle* and *wciqż* is a matter of register. Whereas the former is colloquial, the latter is a feature of the cultivated and literary language. In section 4.1., I argue that the difference between *ciagle~wciqż* and *jeszcze* is in the nature of the implicature they trigger.

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, *(którą) 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 unprefixated 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

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.

a particular 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. ??*ciagle~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. ??*ciagle~wciąż/jeszcze* *prze-kupi-on-y* *polityk*
 still₁/still₂ through-buy-PTCP-NOM.SG.F 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.F 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. ??*ciagle~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. *ciagle~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. *ciagle~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-l-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 minute 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.PL.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

on this observation one could be tempted to formulate a generalization whereby the participles modified by *still* may be freely modified only by result state modifiers. Such a generalization would be largely correct, but at the same time too weak in that there are state modifiers which are incompatible with *still*-modification. An example of such a class of modifiers is the class of durative result state-oriented adverbials introduced by *na*.

- (20) a. **ciągle~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'

At the same time the state-modification by *na*-adverbials may be accompanied by the event-modification by means of temporal completion adverbials (21a), manner adverbials (21b) as well as locative and *by*-phrases phrases (21c) and agent-oriented adverbials (21d).

- (21) a. *za-marz-nię-t-y* *w kilka godzin* *na*
 for-freeze-TH-PTCP-NOM.SG.M in several hours for
 resztę zimy *staw*
 rest winter pond-NOM.SG
 'pond that has frozen in a couple of hours for the rest of the winter'
- b. *wy-łysi-a-ł-y* *błyskawicznie* *na resztę*
 out-bald-TH-PTCP-NOM.SG.M in a flash for rest
 życia *mężczyzn-a*
 life man-NOM.SG
 'a man that became bald in a flash for the rest of his life'
- c. *most* *s-konstru-owa-n-y* *na poligonie*
 bridge-NOM.SG with-construct-TH-PTCP-NOM.SG.M on training ground
 na czas *przeprawy* *przez saperów*
 for time crossing by military engineers
 'a bridge constructed by military engineers in the training ground for the time of the crossing'
- d. *prze-rw-a-n-a* *celowo* *na 2 godziny*
 through-tear-TH-PTCP-NOM.SG.F purposefully on 2 hours
 łączność *radiow-a*
 communication-NOM.SG radio-NOM.SG.F
 'radio communication that has been interrupted on purpose for two hours'

Needless to say, none of the above phrases could be additionally modified by the Polish equivalents of *still*.

Moreover, state modifiers such as *obficie* 'lavishly' or *na brunatno* 'grey (lit. on grey)' are also compatible with event modifiers as illustrated in (22).

- (22) a. *puchar-y* *obficie* *wy-pełni-on-e*
 cup-NOM.PL lavishly out-full-PTCP-NOM.PL.NVIR
w kilka chwil *przez służących*
 in several moments by servants
 'cups that were lavishly filled by the servants in a few moments'
- b. *u-brudz-on-e* *celowo* *na brunatno*
 at-dirt-PTCP-NOM.PL.N purposefully on grey
ubrani-e
 clothing-NOM.SG
 'clothes that are still made grey from dirt'

In sum, the modification of adnominal participles by the Polish versions of *still* is incompatible with event modification, including agent-oriented modifiers and *by*-phrases (see 16–17), as well as result state-oriented *for*-adverbials (see 20). *Still* may, however, co-occur with result state modifiers such as the adverbial *obficie* 'lavishly', and result phrases such as *na brunatno* 'grey' (18). Absent *still*, virtually all kinds of modification may freely co-occur. Temporal completion adverbials, manner adverbials, locatives and agent-oriented modifiers are compatible with durative *na*-adverbials as well as other result state-oriented modifiers (21–22).

4. The analysis

4.1. The meaning contribution of *still*

The analysis presented below has been influenced by the analyses of the German particle (*immer*) *noch* 'still' (see König 1991; Löbner 1999; Krifka 2000, Irmer and Mueller-Reichau 2018) and English *still* (see Ippolito 2007; Greenberg 2009) as focus or phase particles.

According to Löbner (1999), *noch (immer)* is a focus particle whose meaning depends on the nature of the focalized constituent in a sentence. In the case of the aspectual uses of *noch (immer)* focus scopes over the state predicate and contributes an assertion and a presupposition concerning the property that holds over two abutting time intervals.

In what follows I adopt the concept of 'relevant periods' from Greenberg's account of the meaning of *still* (Greenberg 2009: 72) to restrict the domain of existential quantification over the presupposed and asserted time intervals. To be precise, I assume that there is a relevant period *D*, which is a superinterval

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. *ciągłe~wciąż/jeszcze* *prze-mocz-on-e*
 still₁/still₂ through-wet-TH-PTCP-NOM.PL.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 *ciągłe~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 *ciągłe~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. *Myslisz, że ubrani-e jest ciągłe~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 ciągłe~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 ciągłe~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. $\lambda x \lambda d \lambda t \lambda b. \text{przemok}(x) \geq (d')(t')$
 b. $\exists t \exists d [t \subset D \wedge t_{\text{INIT.}} = D_{\text{INIT.}} \wedge t < t \wedge t \supset t \wedge d \leq d']$

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. $\lambda x \lambda d \lambda t \lambda b. \text{przemok}(x) = (d'')(t'')$
 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.

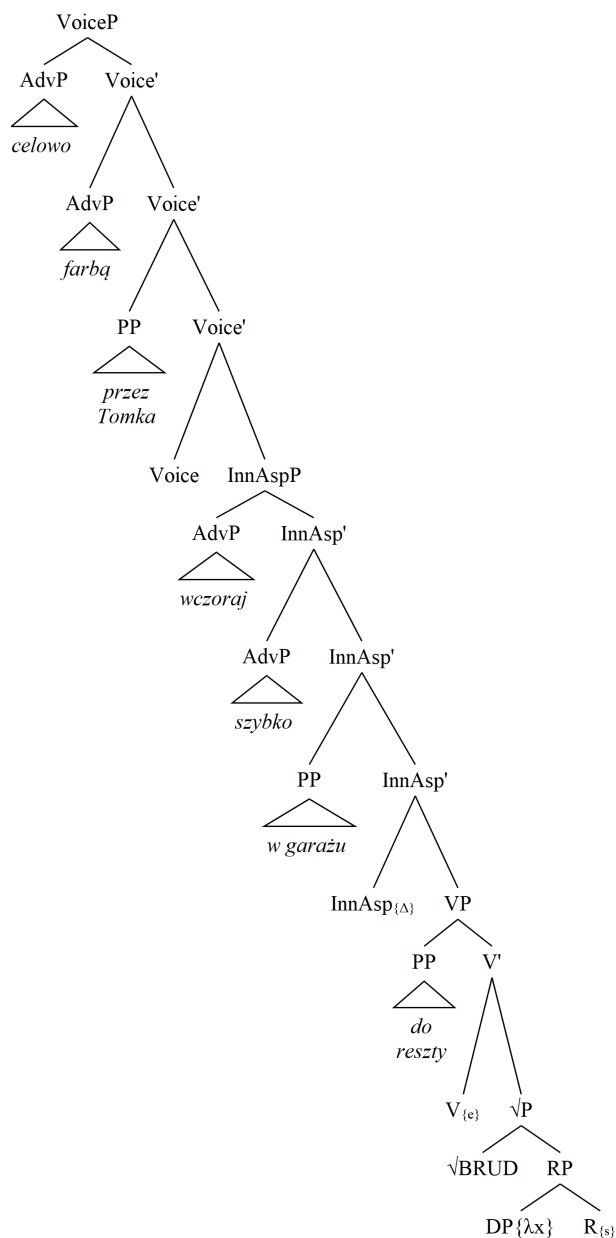
- (28) a. (*ubrani-e*) *u-brudz-on-e* *do reszt-y, wczoraj,*
 (clothing-NOM.SG) at-dirt-PTCP-NOM.SG.N to rest yesterday
 szybko, w garażu celowo farbą, przez Tomka
 quickly in garage purposefully paint by Tomek
 ‘clothes made completely dirty with paint, yesterday, quickly, in the garage, on purpose,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

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.

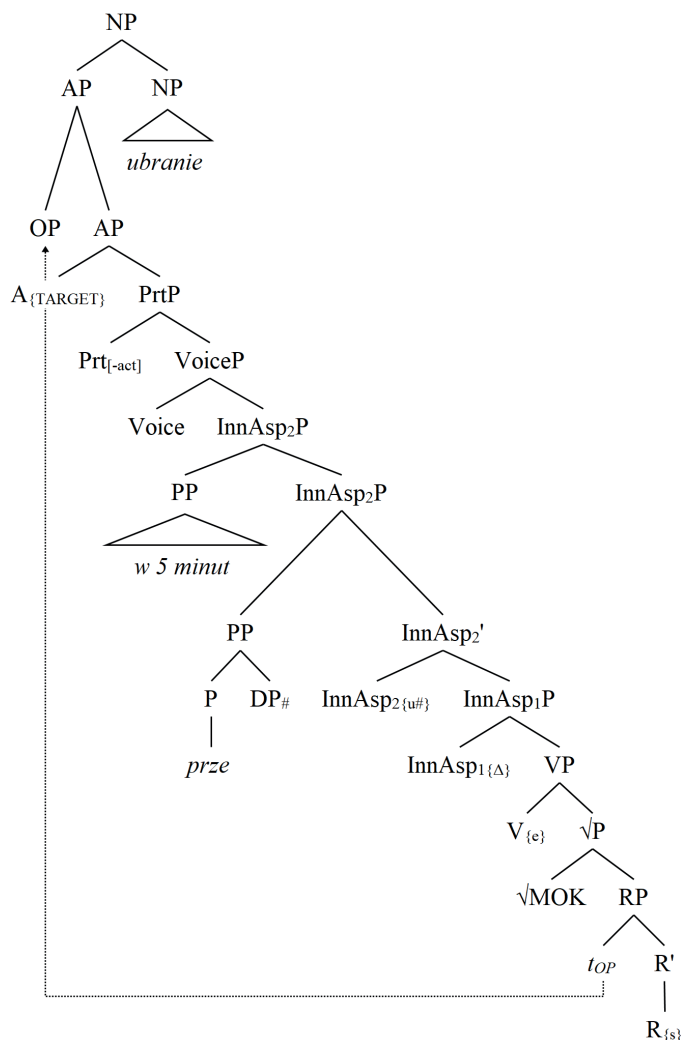
The root merges with the categorizing V-head, which introduces the event variable into the structure. The verbalized root is subsequently merged with the inner aspectual head that carries the Δ -operator, whose role is to introduce the measure-of-change function $\mathbf{wet}\Delta = \lambda x \lambda e$. 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).

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)

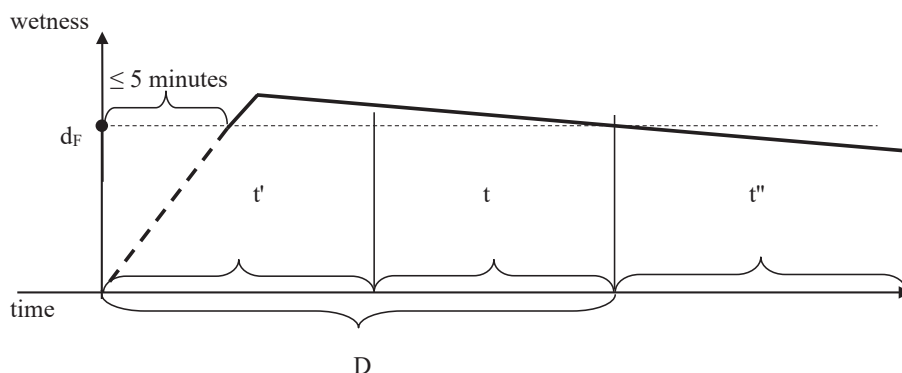


Recall that the focus of the constructions under investigation is the predicate of state mapped onto the superinterval D throughout which a focalized property holds. In the relevant case, it is the property of being entirely wet. Syntactically speaking, the focus is congruent with the c-command domain of the particles *ciągłe~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) **ciągłe~wciąż/jeszcze prze-mocz-on-e w 5 minut*
 still₁/still₂ through-wet-PTCP-NOM.SG.N in 5 minute
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. d_F 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 *ciągle~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. *ciągłe~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. *ciągłe~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. **ciągłe~wciąż/jeszcze za-kwit-l-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’

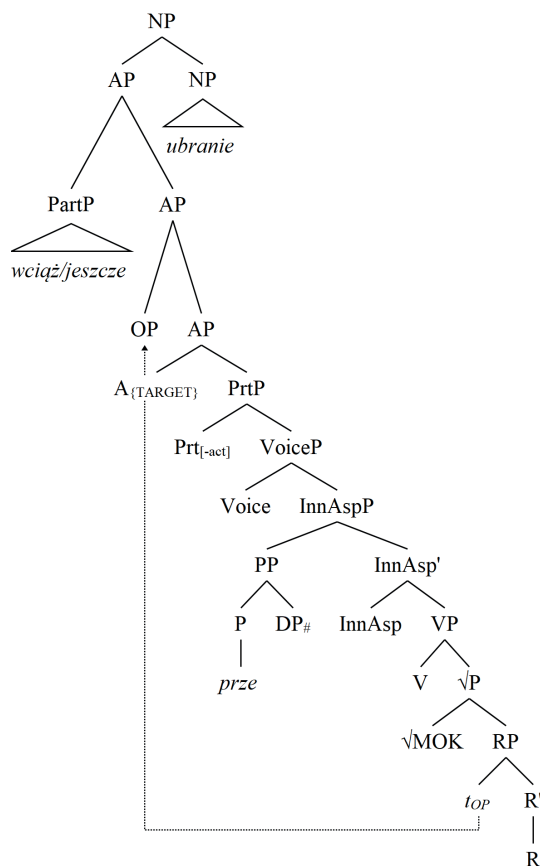
- b. **ciąggle~wciąż/jeszcze* *prze-mocz-on-e/*
 still₁/still₂ though-wet-PTCP-NOM.SG.N/
u-brudz-on-e *na godzinę* *ubrani-e*
 at-dirt-PTCP-NOM.SG.N for hour clothing-NOM.SG
 Intended: 'clothes that have been soaked/made dirty for an hour and are still soaked/made dirty'

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) *ciąggle~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.

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Sławomir Zdziebko
Instytut Filologii Angielskiej
Katolicki Uniwersytet Lubelski Jana Pawła II
Al. Racławickie 14
20-950 Lublin
Poland
s.zdziebko86(at)gmail.com
ORCID: 0000-0001-8303-8773