The control status of German participle constructions headed by the past participle

1. Introduction

This article is concerned with the control status of adverbial German participle constructions headed by the past participle (PAPC). These constructions lack a finite predicate and an overt subject, but have several other clause-like characteristics: Similar to embedded sentences, PAPC denote a proposition, form a constituent of the matrix clause and contain phrases functioning as arguments and adjuncts of the participial head, sometimes even a subordinating conjunction, as in (1):

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(1) Wenngleich in der Chemie anrüchig "Ureum" benannt, bildet der Harnstoff although in the chemistry inappropriatelyurea called PST.PTCP forms the urea ("CH4N2O") lediglich farb- und geruchlose Kristalle.

CH4N2O only colour and odourless crystals (Oberösterreichische Nachrichten, 28. 12. 1999, S. 1; "Manneken Pis" enteist Flugfelder) 'Although inappropriately referred to as "urea" in chemistry, carbamide only forms colour- and odourless crystals.'
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Relying on a Chomskyan-generative framework, we assume that clause-like constructions such as PAPC (in accordance with binding principle A and the theta criterion) contain a phonetically empty PRO subject that is controlled by an antecedent, usually a nominal argument of the matrix clause (cf. Chomsky 1973, 1981). Because these constructions have their own argument structure and denote a predicational relation between a PRO subject and the participial predicate, we analyse PAPC as verbal Small Clauses.

Based on data from a corpus consisting of 509 PAPC, we show that the PRO subject of these constructions is not always controlled by the matrix clause subject, but also displays control relations such as object control, speaker control, generic control, split control, event control and Long-Distance (non-local, pragmatic) control. Based on Landau's (2013) criteria for distinguishing between obligatory (OC) and non-obligatory control (NOC), we argue that the PRO subject of PAPC is usually obligatorily controlled. However, when an obligatory control relation cannot be established, a default mechanism yields non-obligatory control. Relying on empirical evidence and the adverbial hierarchy described by Frey/Pittner (1998, 1999) and Pittner (1999), we argue that the position a PAPC is adjoined to, is crucial for its control status: While PAPC adjoined below T typically display OC, constructions adjoined above T normally display NOC (see also Landau 2013, p. 231).

2. Empirical basis

The analysis that will be outlined in 3 is based on a corpus study of 509 adverbial PAPC extracted from *Das deutsche Referenzkorpus* (DEREKO) and *Oslo Multilingual Corpus* (OMC). This material was analysed with regard to the internal structure, distribution, adverbial interpretations and control relations displayed by the constructions. Our study shows that German PAPC are diverse in all aforementioned respects.

The PAPC in the corpus have in common that they are headed by the past participle form of a transitive verb or an intransitive verb lacking an external argument, i. e. unaccusative, reflexive or psychological verbs (Zimmermann 1999, p. 125; Helland/Pitz 2012, p. 94). The phonetically empty PRO subject of these constructions is usually a theme or an experiencer argument, suggesting that most PAPC have an underlying passive structure (cf. Helland/Pitz 2012, p. 94; Zifonun/Hoffmann/Strecker 1997, p. 1863, 2160). All the PAPC in our material are complex constructions in which the participial head is combined with up to three arguments and/or adjuncts of many different types.

As has been noted in previous research, German PAPC can function both as adnominal and as adverbial adjuncts (cf. Rath 1971, p. 50 ff.; Helbig 1983, p. 195 f.; Zifonun/Hoffmann/Strecker 1997, p. 2217 among others). The constructions in the corpus all function as adverbials (or depictives), which occur in all non-verbal positions of German sentences, i.e. in the clause-initial position (the so-called prefield), clause-medial position (the so-called middle field) and clause-final position (the so-called postfield).

PAPC are compatible with a range of different adverbial readings. While previous research such as Rath (1971) and Filipović (1977) focuses on so-called situational-adverbial readings that modify different aspects of the matrix event (Duden 2016, p. 795), our material shows that PAPC can have adverbial readings that modify other levels of the matrix clause as well. These constructions are compatible with readings from all five syntactico-semantic adverbial classes described by Frey/Pittner (1998, 1999) and Pittner (1999): PAPC can have a narrow scope and modify the process denoted by the predicate (process-related adverbials such as adverbials of manner), they can modify the event itself (event-internal or event-related adverbials such as instrumentals and adverbials of time or reason), and they can be interpreted as sentence, domain and speech-act adverbials that modify the entire proposition or speech act.

Finally, our study shows that while subject control is often claimed to be the standard control relation for these constructions (cf. Helbig 1983, p. 209; Kortmann 1988, p. 64; Zimmermann 1999, p. 125 among others), a large minority of 41% of the PAPC in the corpus display other control relations. In most constructions with a situational-adverbial or depictive reading, PRO is controlled by the matrix subject, but (accusative- or dative-) object control and Long-Distance control occur regularly when the matrix clause is low in agentivity (cf. Starke 1996, p. 12). More importantly, it turns out that the implicit subject of a sentence-, domain- or speech-act-adverbial PAPC is normally interpreted as the matrix event or proposition, the speaker or the generic pronoun *man* ('one'). The adverbial interpretation of a PAPC thus seems to play an important role for the control status of its PRO subject.

3. The control status of German PAPC

In line with scope-based approaches like Frey/Pittner (1998, 1999) and Pittner (1999), we assume that German adverbial adjuncts are located in different syntactic domains corresponding to their semantic scope (see also Haider 2000 and Ernst 2002, 2014). Adverbials, including adverbial PAPC, modifying the speech act or proposition are adjoined to CP and TP, whereas event-modifying and process-related adverbials are vP and VP adjuncts. Interestingly, the control status of an adverbial PAPC seems to correlate with its syntactic position. Adjuncts in the c-command domain of T typically exhibit obligatory control whereas adjuncts located above T appear to be non-obligatorily controlled.

Our corpus study reveals that these adjuncts generally display the OC properties described by Landau (2013): 1) The controller must be an argument of the adjunct's matrix clause (usually, but not always, a subject), cf. (2)–(3), 2) Long-Distance and arbitrary control are ruled out, cf. (4), 3) OC PRO only allows a sloppy reading under ellipsis, cf. (5), and 4) PRO's antecedent is not restricted to [+human], but can also be [-human], cf. (3).

- (2) [PRO_i Als tauglich eingestuft], stellte Nils_i zunächst den Antrag

 as fit found_{PST,PTCP} handed.in Nils first the_{ACC} application

 auf Verweigerung des Dienstes an der Waffe.

 for exemption the_{GEN} service by the_{DAT} weapon

 'After having been found to be fit for service, Nils applied for exemption from military service.'
- (3) Er liest die Dialoge, [PRO, stark pointiert], eben in Schauspielermanier.

 he reads the dialog strongly emphasized_{PST.PTCP} exactly in actor.way

 'He is reading the dialogue in a strongly emphasized way, just like an actor'
- Nils stellte [PRO als tauglich eingestuft] den Antrag auf Verweigerung Nils handed.in as fit foundpst.ptcp the ACC application for exemption des Dienstes, und das tat auch Peter stellte [PRO $_{j/*i}$ als tauglich eingestuft] the GEN service and that did also Peter handed.in as fit foundpst.ptcp den Antrag auf Verweigerung des Dienstes. the ACC application for exemption the GEN service 'After having been found fit for service, Nils had applied for exemption from military service, and so did Peter'

OC is attested in event-related, event-internal and process-related adjuncts, such as temporal, causal, (true) conditional, counterfactual, instrumental, and manner adverbials, i.e. in adjuncts assumed to be adjoined below T. Drawing on the *OC-as-Agree* analysis, based on Landau (2000) and developed further by Wurmbrand (2011), Fischer (2018), and Høyem (2018), we argue that these adjuncts are obligatorily controlled through reverse Agree (cf. Wurmbrand 2011 or Zeijlstra 2012), either directly by a local antecedent (Wurmbrand 2011; Fischer 2018) or indirectly via a functional head T, v or Appl (Høyem 2018) located in the adjunct's matrix clause.

Speech-act, domain- and sentence-adverbial adjuncts, on the other hand, appear to be NOC adjuncts, according to Landau's criteria: 1) The controller can, but does not have to be an argument in the adjunct's matrix clause, 2) the controller can be long-distance, arbitrary or speaker, and 3) NOC is always [+human]. According to the adjunct hierarchy described above, these adjuncts are located above T. Following McFadden/Sundaresan (2016) as well as Fischer (2018), we assume that non-obligatory control is regulated by a last resort or default mechanism. In PAPC adjoined outside the c-command domain of a potential local controller for PRO, PRO gets an NOC interpretation.

In our corpus study, we also find interesting control phenomena like event control and split control. These seem to be understudied phenomena which in our opinion deserve more attention in future research.

References

- Chomsky, Noam (1973): Conditions on transformations. In: Anderson, Stephen/Kiparsky, Paul (Hg.): A Festschrift for Morris Halle. New York: Holt, Rinehart and Winston, pp. 232–286.
- Chomsky, Noam (1981): Lectures on government and binding. Berlin: De Gruyter.
- Duden (2016): Der Duden in zwölf Bänden. Bd. 4: Die Grammatik. Unentbehrlich für richtiges Deutsch. 9., vollst. überarb. u. aktual. Aufl. Berlin: Dudenverlag.
- Ernst, Thomas (2002): The syntax of adjuncts. Cambridge: Cambridge University Press. (= Cambridge Studies in Linguistics 96).
- Ernst, Thomas (2014): The syntax of adverbs. In: Carnie, Andrew/Siddiqi, Daniel A./Sato, Yosuke (Hg.): The Routledge handbook of syntax. London: Routledge, pp. 108–130.
- Filipović, Nada (1977). Die Partizipialkonstruktionen in der deutschen dichterischen Prosa von heute. Tübingen: Narr. (= Forschungsberichte des Instituts für Deutsche Sprache 32).
- Fischer, Silke (2018): Locality, control, and non-adjoined islands. In: Glossa: a journal of general linguistics 3, 4: 82, pp. 1–40.
- Frey, Werner/Pittner, Karin (1998): Zur Positionierung der Adverbiale im deutschen Mittelfeld. In: Linguistische Berichte 176, pp. 489–534.
- Frey, Werner/Pittner, Karin (1999): Adverbialpositionen im deutsch-englischen Vergleich. In: Doherty, Monika (Hg.): Sprachspezifische Aspekte der Informationsverteilung. Berlin: Akademie-Verlag, pp. 14–41.
- Haider, Hubert (2000): Adverb placement convergence of structure and licencing. In: Theoretical Linguistics 26, pp. 95–134.
- Helbig, Gerhard (1983): Zur Verwendung der Infinitiv- und Partizipialkonstruktionen in der deutschen Gegenwartssprache. In: Helbig, Gerhard (Hg.): Studien zur deutschen Syntax. Bd. 1. Leipzig: Verlag Enzyklopädie, pp. 188–214.
- Helland, Hans Petter/Pitz, Anneliese (2012): Open adjuncts: participial syntax. In: Fabricius-Hansen, Cathrine/Haug, Dag (Hg.): Big events, small clauses. The grammar of elaboration. Berlin/Boston: De Gruyter, pp. 93–130.
- Høyem, Inghild Flaate (2018): Adjunktkontrolle im Deutschen. In: Linguistische Berichte 255, pp. 92–141.
- Kortmann, Bernd (1988): Freie Adjunkte und absolute Konstruktionen im Englischen und Deutschen. In: Papiere zur Linguistik 38, pp. 61–89.
- Landau, Idan (2000): Elements of control: Structure and meaning in infinitival constructions. Dordrecht: Kluwer Academic Publishers. (= Studies in Natural Language and Linguistic Theory 51).
- Landau, Idan (2013): Control in generative grammar. New York: Cambridge University Press.
- McFadden, Thomas/Sundaresan, Sandhya (2016): Failure to control is not a failure: it's *pro*. [Manuskript]. ZAS Berlin/Universität Leipzig.
- Pittner, Karin (1999): Adverbiale im Deutschen: Untersuchungen zu ihrer Stellung und Interpretation. Tübingen: Stauffenburg. (= Studien zur deutschen Grammatik 60).
- Rath, Rainer (1971): Die Partizipialgruppe in der deutschen Gegenwartssprache. Düsseldorf: Schwann. (= Schriften des Instituts für Deutsche Sprache 12).
- Starke, Günter (1996): Partizipialkonstruktionen und freie Fügungen am Satzanfang mit und ohne Subjektbezug. In: Deutsch als Fremdsprache. Zeitschrift zur Theorie und Praxis des Faches Deutsch als Fremdsprache 33, pp. 10–14.

- Wurmbrand, Susi (2011): On agree and merge. Revised course notes from Problems in Syntax (Spring 2011). University of Connecticut.
- Zeijlstra, Hedde (2012): There is only one way to agree. In: The Linguistic Review 29, pp. 491–539.
- Zifonun, Gisela/Hoffmann, Ludger/Strecker, Bruno (1997): Grammatik der deutschen Sprache. Bd. 3. Berlin/New York: De Gruyter. (= Schriften des Instituts für Deutsche Sprache 7).
- Zimmermann, Ilse (1999): Partizip II-Konstruktionen des Deutschen als Modifikatoren. In: ZAS Papers in Linguistics 14, pp. 123–146.