

The syntax and semantics of inflected participles in Alemannic

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Abstract In this paper, we analyze predicative past participles in Highest Alemannic dialects of German. What is remarkable about these varieties is that unlike in the rest of the German speaking area, the participles can inflect, i.e. display agreement in phi-features. We will first show that inflection only occurs in stative/resultative perfect contexts, but not with eventive simple perfects. The participles thus pattern with predicative adjectives in these varieties. In the main part of the paper, we address two constructions, double compound perfects and eventive passives, which also display agreement on the lexical participle even though the constructions initially do not seem to be stative. We will show, however, that there is both syntactic and semantic evidence for a stative component in these constructions. At the same time, these constructions are also clearly eventive. We will model their behavior by treating the participles as adjectival heads that take a large amount of verbal structure as their complement (VoiceP/AspP). While recent work on German stative passives has argued that even those should be analyzed as containing a substantial amount of verbal structure, the behavior of participles in the double perfect and eventive passive in the varieties under consideration is clearly different. They thus contribute to the typology of adjectival passives in German and beyond and show that the familiar distinction between “adjectival” and “verbal” participles needs to be refined.

Keywords: past participles, Alemannic, agreement, stativity, resultativity, perfect, double perfect, stative passive, eventive passive, adjectival passive, non-verbal predication, verb clusters

1 Introduction

1.1 *Adjectival vs. verbal participles*

Traditionally, participles are regarded as a hybrid category with both verbal and adjectival properties. However, in many instances, even surface-identical forms can

be shown to be structurally different, with certain participles being more verbal and others more adjective-like. For instance, the participles of eventive passives in English as in (1a) have been classified as verbal, while participles that appear in stative contexts have been considered adjectival, cf. (1b).

- (1) a. The door was closed by John.
b. The door remained closed.

Recent years have seen considerable discussion on stative passives in languages like German and Greek (see, e.g., [Alexiadou, Anagnostopoulou & Schäfer 2015](#): chapter 5 for an overview). Contrary to English, German distinguishes the two different constructions by using two different auxiliaries:

- (2) a. Stative passive:
Der Computer **ist** { *von Maria/*vor drei Tagen } repariert.
the computer is by Mary/before three days repaired
'The computer is repaired (*by Mary/three days ago)'
b. Eventive passive:
Der Computer **wurde** { von Maria/vor drei Tagen } repariert.
the computer was by Mary/before three days repaired
'The computer was repaired by Mary/three days ago.'

Standard German

Intuitively, (2a) is about a current state (resulting from an event of closing), whereas (2b) is about a past event. In (2b), the agent or the time of the closing event can be specified by a PP (like in (1a)), whereas this is not (or only in limited form, cf. below) possible in (2a). Somehow, the event in (2a) seems to be inaccessible to such modifications.

One possible way of explaining the difference is to assume that the so-called stative passive is a combination of an adjectival participle and the copula *be* while the eventive passive involves an auxiliary embedding a fully-fledged verbal structure so that VP-related modifiers are licensed. Stative passives thus essentially involve the same structure as copula sentences with adjectival predicates as in *John is old*. Since there is no (or only very little) verbal structure (this type of participle is referred to as 'lexical' in [Kratzer 2000](#)), it is predicted that VP-related modifiers such as PP-agents or temporal adverbs that refer to the event should be unavailable, in line with what is observed in (2a) above. Such an analysis has been defended by [Rapp \(1996\)](#), [Gese, Stolterfoht & Maienborn \(2009\)](#) and [Gese, Maienborn & Stolterfoht \(2011\)](#). The (simplified) structures of adjectival and verbal participles thus look as follows, according to this view:



However, there is also another tradition of analysis of stative passives, inspired mainly by stative passives in Greek, where there are much fewer restrictions than in German. The examples in (4) are from [Anagnostopoulou \(2003: 18\)](#) and [Alexiadou, Gehrke & Schäfer \(2014: 127\)](#):

- (4) a. To psari itan tiganismeno apo tin Maria.
 The fish was fried by the Mary.
 ‘The fish was fried by Mary.’ [stative, that is: the fish was in a fried state, and the frying had been done by Mary]
- b. To pc itan diorthomeno prin tris meres.
 the pc was repaired before three days
 ‘The PC was repaired three days ago.’ [stative, that is: was in a repaired state, where the repair took place three days before]

Greek

In Greek, stative participles have therefore been argued to involve a substantial amount of verbal structure, i.e. a VoiceP, or even an AspP, embedded under a stativizing adjectival head (since the adjectival head applies to an entire verb phrase and not just a verbal root, such participles have become to be referred to as ‘phrasal’, cf. [Kratzer 2000](#)). In a series of articles (see [Alexiadou & Anagnostopoulou 2008](#); [Gehrke 2012](#); [McIntyre 2013](#); [Bruening 2014](#); [Alexiadou, Gehrke & Schäfer 2014](#); [Gehrke 2015](#); [Alexiadou, Anagnostopoulou & Schäfer 2015](#)), it has been argued that even in languages such as German or English, there is considerably more verbal structure than a simple verb coerced into an adjective; for instance, as shown in [Gehrke \(2015: 904, 921\)](#), PP-agents, instrumental-PPs, and locative-PPs are possible, as long as they only function as kind-modifiers (roughly being non-specific/non-referential), i.e. the event denoted by the participle is not actually instantiated, but remains in the kind-domain, which is why modifiers that ap-

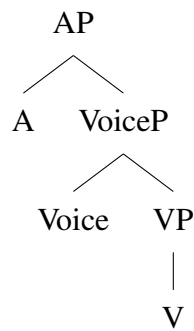
ply to the concrete event are ruled out.¹ The following example illustrates this for instrumental-PPs (from Gehrke 2015: 904):

- (5) Der Brief ist mit (*dem/einem) Bleistift geschrieben.
 the letter is with the/a pencil written
 ‘The letter is written with (*the/a) pencil.’ *Standard German*

Crucially, such modifiers are not possible with genuine adjectives (cf. Rapp 1996: 254). Thus, a certain amount of verbal structure seems motivated in German/English adjectival passives after all.

The difference between German/English stative participles on the one hand, and Greek stative participles, on the other, is modelled by postulating more structure for Greek participles: While in both languages, stative participles can contain VoiceP, only Greek stative participles involve an aspect-phrase on top, which is argued to be necessary to actually instantiate an event-token (and thus license event-related modifiers of all kinds). The structures of stative participles in German/English and Greek, respectively, thus look as follows according to this approach (many of the authors actually postulate category-neutral roots instead of V/VP; we will abstract away from this difference in what follows as it is orthogonal to our concerns and will simply adopt two layers for the verb phrase):

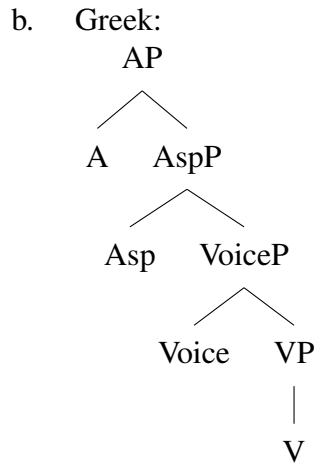
- (6) a. German/English:



¹ Part of this ongoing debate concerns the reliability of common adjectival-test, for instance, *un-*prefixation. Anagnostopoulou (2003) argues that participles with an *un-*prefix are lexical, but more recently, Alexiadou, Anagnostopoulou & Schäfer (2015: 166), following Bruening (2014), have proposed that even these participles should be analyzed as phrasal after all, based on examples like (i):

- (i) a. Invading Commander: I want the treasury left untouched!
 b. Underling: Untouched by anyone but you, you mean.

Given the presence of a by-phrase, it is concluded that a VoiceP must be present. We will not dwell upon such examples.



While we will not deal with stative passives in our article in much detail, our aim is to bring to bear new data on the question of how much verbal structure adjectival participles can contain. Crucially, we will present data from Highest Alemannic dialects spoken in Switzerland which suggest that double compound perfects (henceforth: DCPs) and eventive passives are also to some degree adjectival in nature, without however showing the very stringent restrictions displayed by stative passives in German. The main point of evidence for adjectivehood is that these constructions display obligatory agreement of the innermost, lexical participle as is illustrated in (7), i.e. they behave like predicate adjectives, which also inflect in these varieties (for a more precise characterization, see section 1.3).

- (7) a. Stative passive (Hodler 1969: 345)
 Jetzt isch' fertig, d' Rächni gi gschrib-nu, d' Gschicht gleärnt-i
 Now is ready, the bills.FEM.PL written-FEM.PL, the history learned-FEM.SG
 'Now it is over, the bills are written, the history is learned.'
Bernese German
- b. Double compound perfect (Hodler 1969: 346)
 win er der Namen Gottes het usgsprochn-a ghabe
 when he the name.M.SG God.GEN has pronounced-M.SG had
 'once he had pronounced the name of God'
Bernese German
- c. Eventive passive (Szadrowsky 1936: 453)
 ds Chorä chund im Settember g'hüwe-s
 the corn.N.SG comes in the September hit-N.SG
 'Wheat is harvested in September.'
Obersaxen (Grisons)

We will show that in these constructions an event-token is accessible so that event-related modification is not restricted to the kind-type (see, e.g. Gehrke 2015). As we will see, while there are no restrictions in the eventive passive, the double com-

pound perfect (henceforth, DCP) only allows event-modification by means of event-internal adverbials but not by higher adverbials like temporal adverbials. This thus implies that the typology of adjectival participles in German (and possibly beyond) should be enlarged.

The remainder of this paper is structured as follows: in the rest of this first section, we will introduce the empirical background, viz., agreement on adjectives and participles in Highest Alemannic dialects. In section two, we address the Double Compound Perfect, while section three is devoted to eventive passives. Section four concludes.

Before moving on, a few words on methodology. The data we base our main claims on come from dialects of Highest Alemannic, as spoken at the beginning of the 20th century, and documented in dialect grammars mainly in the first half of the 20th century. At the time, agreement was indeed obligatory. Perhaps due to influence of other Swiss German varieties, agreement has become optional for many speakers (in all constructions with agreement investigated here; see [Bucheli Berger & Glaser 2004](#), [Bucheli Berger 2005a](#), [Egger 1993](#), [Fuchs 1993](#) and [Baechler 2009](#) for sociolinguistic and dialectal details). Where necessary, examples have been double-checked with Raffaella Baechler, a native speaker of the dialect spoken in Fribourg. Since the syntactic and semantic properties of DCPs and the other constructions seem to be very much the same as in other Alemannic dialects - apart from agreement on the participle -, we have liberally completed the data with examples from non-agreeing varieties, or even from Colloquial German, where appropriate to make the data more accessible.²

1.2 Agreement on adjectives in German

In contemporary Standard German (as in most contemporary German dialects), only attributive adjectives agree in gender, number and case with the noun they modify (see (8)), whereas in predicative position, adjectives occur in uninflected form (see (9)).

- (8)
- | | | |
|----|-----------------------------|--------|
| a. | Hans sah ein schön-es | Haus. |
| | H. saw a beautiful-ACC.N.SG | house. |
| b. | Hans sah eine schön-e | Katze. |
| | H. saw a beautiful-ACC.F.SG | cat. |
| c. | Hans sah einen schön-en | Baum. |
| | H. saw a beautiful-ACC.M.SG | tree. |

² Examples without explicit reference were constructed by the authors, native speakers of Zurich and Vorarlberg German, respectively.

- (9) Das Haus | die Katze | der Baum ist schön- \emptyset .
 The house | the cat | the tree is beautiful.

In earlier stages of German (Old High German), however, predicative adjectives agree with the subject in gender, number and case (cf. Bucheli Berger & Glaser 2004: 193):

- (10) a. sâlig-e birut ir
 holy-NOM.PL.M are you.2.PL
 ‘You are holy.’ [Tatian, 22, 16]
- b. mîn gewalt ist sîht-er
 my power is small-NOM.SG.M
 ‘My power is small.’ [Parzival, 213, 14]

Some contemporary Highest Alemannic dialects in Switzerland have maintained predicative agreement; in (11a) from Bucheli Berger & Glaser (2004: 195), the adjective is the primary predicate, in (11b) from Bucheli Berger & Glaser (2004: 197), it functions as a depictive:³

- (11) a. Wül er nass-a isch
 because he wet-M.SG is
 ‘because he is wet’ *Giffers (Valais)*
- b. Dü müoscht d=Milch de heiss-i triichu.
 You must the=milk.F.SG PRT hot-F.SG drink.INF
 ‘You have to drink the milk hot.’ *Visperterminen (Valais)*

In both of these contexts, other German dialects (including the Standard language) would use the uninflected form, cf. Bucheli Berger & Glaser (2004) and Bucheli Berger (2005a) for details.

1.3 Agreement on participles

Given that participles are traditionally thought to form a mixed category with both verbal and adjectival properties, it is little surprising that in these Alemannic dialects, participles can inflect as well in non-attributive position. With predicative adjectives (including depictives), agreement is straightforward, as illustrated in (11)

³ As discussed in Fleischer (2007), the synchronic agreement system in Highest Alemannic dialects can neither be reduced to preservation of the Old High German system nor to language contact with the neighboring Romance languages since it differs from both agreement systems in relevant respects. Although both factors have arguably played a role in the development of the Highest Alemannic agreement pattern, it has to be analyzed in its own terms. See Hodler (1969: 473ff.) for further discussion.

above: The predicate agrees with its (semantic) subject. In the case of perfect constructions, however, participles agree with the underlying theme (that is: in case of a transitive verb, with the object, and in case of an unaccusative verb, with the subject, see [Hodler 1969: 345](#)):⁴

- (12) a. es isch entlig ygschlafe-s gsi
 it.N.SG is finally fallen.asleep-N.SG been
 ‘It was finally asleep.’
- b. Jetzt hiigi=s d=Mueter verlorn-i
 Now have.SBJV=it the=mother.F.SG lost-F.SG
 ‘Now it (i.e. the child) has lost her mother.’ ≈ ‘It was without her mother.’
Bernese German

However, while the pattern in (12) may initially seem reminiscent of participle agreement in Romance, as the minimal pair in (13) shows, the inflection of the participle is associated with meaning, see [Fuchs \(1993: 73\)](#):

- (13) a. ds rächt Bei het är üüsgschtreckt-s
 the right leg.N.SG has he extended-N.SG
 ≈ ‘He holds his right leg in extension.’ [Present Result]
- b. ds rächt Bei het är üüsgschtreckt
 the right leg has he extended.
 ‘He extended his right leg.’ [Past Event]
Steg (Valais)

⁴ Inflection also occurs with unergative verbs; however, since there is no underlying object, default agreement (neuter singular) obtains (cf. [Hodler 1969: 346](#)):

- (i) bis wer z’nachtet-s hei
 until we eat.supper-N.SG have
 ‘until we have finished supper’
Bernese German

[Hodler \(1969: 346\)](#) also provides examples with default agreement despite the presence of an underlying object: in (iia), one would expect *vergrab-na*; in (iib), one would expect *glad-nu*.

- (ii) a. Er ist under em TungelschuSS vergrabe-s
 He.M.SG is under the Tungelschuss buried-N.SG
 ‘He is buried under the T.’
- b. We si scho numen drüi, vier Burdeni glade-s hei
 if they already only three, four bundle.F.PL loaded-N.SG have
 ‘given that they have only loaded three, four bundles’
Bernese German

Importantly, though, default agreement seems to have the same distribution as proper agreement, i.e. only occurs in the semantic contexts discussed below.

In the simple present perfect, inflection is limited to resultative interpretations (as is also indicated by the translations in (12)). There is no agreement in standard, eventive perfects. This is an old observation that can be found in both traditional descriptions (in the form of dialect grammars) and more recent accounts as in [Bucheli Berger \(2005a: 150f.\)](#). The sources are also quite explicit that inflection indicates a true resultant state and not merely something weaker like telicity, perfectivity or the termination of the event. In what follows, we will provide some statements from the descriptive literature together with illustrative examples:

According to [Stucki \(1917: 288\)](#), agreement in the dialect of Jaun (canton of Fribourg) expresses a present or past state. He provides the following contrast:⁵

- (14) a. r hæt ts suntk kxüra:t
 he has the.GEN Sunday married
 ‘He (got) married on Sunday.’
 b. r hæk kxüra:t-s
 he.M.SG has married-N.SG
 ‘He is married.’ *Jaun (Fribourg)*

In the eventive perfect in (14a), the event is modified by a temporal adverbial. In the resultative perfect in (14b), however, the result of getting married is foregrounded.

For the dialect of Uri, [Clauss \(1929: 186\)](#) notes that the participle is apparently only inflected if the state resulting from the action is meant to be denoted. It is uninflected when the mere termination of an action is expressed. This becomes clear in (15), where as a result of eating the bread there is nothing left:

- (15) mr hent ts pro:k kæss-s
 we have the bread.N.SG eaten-N.SG
 ‘We have eaten the bread.’ (nothing is left in the house) *Uri*

The same characterization in terms of resultativity can be found in [Hodler \(1969: 345ff.\)](#) for the dialects spoken in the Bernese Oberland,⁶ in [Hotzenköcherle \(1934:](#)

⁵ Essentially the same characterization can be found in [Henzen \(1927: 204\)](#), who describes the variety spoken in the Sense district of the canton of Fribourg.

⁶ For the dialect spoken in the so-called Haslital of the Bernese Oberland, [Dauwalder \(1992: 50\)](#) offers a somewhat vaguer description in terms of termination of the event, but his example in (i)

- (i) I ha gsträält-s
 I have combed-N.SG
 ‘I have finished combing.’ *Haslitiitsch (Bernese)*

arguably means that someone is combed and thus ready to go, which would thus be compatible with the characterization in terms of resultativity.

407) for the dialect of Muttin (Canton of Grisons), and in Szadrowsky (1936: 457) for the Walser dialects (spoken in the Canton of Grisons).

As another indication of resultativity, in several of the examples very high current relevance seems to be involved and the state is often localized at the moment of utterance by an adverbial, cf. Hodler (1969: 346):

- (16) Jetzt hei mer 's gwunne-s
 now have we it.N.SG won-N.SG
 'Now we have won it.' *Bernese German*

The fact that inflection does not simply mark perfectivity can be seen in the fact that in narrative sequences, which are generally assumed to require perfective aspect (see Smith 1991), the inflected versions are inappropriate (cf. Bucheli Berger 2005a: 151):

- (17) Dr=Chorb ischt um-gg-falln (*-ä) und d=Epfl sind usa-gghid
 the=basket is over-PST.PTCP-tip (*-M.SG) and the=apple:PL are out-PST.PTCP-fall
 (*-i)
 (*-PL)
 'The basket tipped over and the apples fell out.' *Lötschental (Valais)*

Participle agreement in Alemannic is thus different from participle agreement in Romance in that movement of the Controller is not a prerequisite (cf., e.g., French) and because it is crucially associated with resultativity.⁷

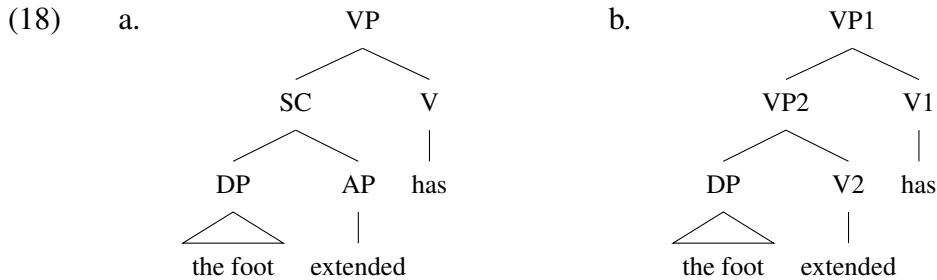
The pattern we obtain thus seems very straightforward: Participles agree when they are adjectival (resultative), but not when they are verbal (eventive perfect). The facts thus support the traditional classification into adjectival and verbal participles and the associated semantic difference between stativity and eventivity.

⁷ The same semantic asymmetry can be found in more complex verb clusters like the following, provided by Raffaella Baechler (p.c.):

- (i) a. dass de Student bis Endi Manet d Arbit muess gschrüb-n-i ha
 that the student until end.of month the essay must written-M.SG have.INF
 'that the student must have finished the essay by the end of the month'
 b. dass de Student d Arbit säuber muess geschrübe/*gschrüb-n-i ha
 that the student the essay self must written/written-M.SG have.INF
 'that the student must have written the essay himself' *Fribourg*

In (ia) with a deontic reading of the modal, the essay must be in a certain state at a specific point in the past (the reference point). (ib), however, which involves an epistemic reading of the modal, only denotes that an action in the past was carried out by the student himself.

The difference is (roughly) illustrated in (18), where the agreeing participle construction is analyzed as a copular construction with the participle as a secondary predicate, (18a), while the eventive perfect contains two VPs, (18b):



Independent support for the classification into verbal and adjectival participles comes from verb cluster orders: Perfect forms without inflection can generally occur in both ascending (the governing verb precedes the governed) and descending (the governed verb precedes the governing verb) order in these Highest Alemannic dialects. However, once the participle is inflected, only the descending 21-order is grammatical (Raffaella Baechler has confirmed this fact for the dialect of Fribourg):

- (19) a. dass er s Bei het₁ üüsgstreckt₂/ üüsgstreckt₂ het₁
 that he the leg has extended/ extended has
 b. dass er s Bei het₁ üüsgstreckt₂(*-s)/ üüsgstreckt₂-s het₁
 that he the leg has extended-M.SG/ extended-M.SG has

Given that predicative adjectives cannot occur after the right sentence bracket, i.e., after the clause-final verb in German, cf. (20), this is expected if inflected participles are adjectival:

- (20) dass er { *ist stolz } / { stolz ist }
 that he is proud proud is
 ‘that he is proud’ *Standard German*

Uninflected participles, on the other hand, are verbal, and therefore can occur in both orders that are generally possible in the verbal complex in these varieties.⁸

This simple solution will, however, turn out to be inadequate because there are two constructions in these dialects where agreement on the participle is obligatory even though the participle seems to have verbal properties, viz. double compound

⁸ Essentially the same contrast has been noted for the dialect spoken in Vienna by Abraham (2005: 274, 292), which also in principle allows both orders: While both eventive and resultative interpretations are possible in the descending 21-order, the 12-order only allows the eventive interpretation.

perfects and eventive passives, as in (7) above. We will discuss them in sections 2 and 3, respectively.

2 The double compound perfect

In the double compound perfect (DCP) a “simple” perfect is augmented by adding a further participle of *sein* ‘be’ or *haben* ‘have’ (see (21a) and (22a) vs. (21b) and (22b)).

- (21) a. Ich habe das Buch gelesen.
I have the book read.
‘I have read the book.’ [simple perfect]
- b. Ich habe das Buch gelesen gehabt.
I have the book read had
≈‘I had read the book.’ [double perfect]
- (22) a. Er ist schon abgereist.
He is already checked.out.
‘He has already checked out.’ [simple perfect]
- b. Er ist schon abgereist gewesen.
He has already checked.out been
‘He had already checked out.’ [double perfect]
Colloquial German

The DCP, which roughly corresponds to a pluperfect (see below for a more precise characterization), occurs in all German varieties, including the Colloquial Standard language, but it is more prominent in Southern German varieties because they lack the simple past tense so that the DCP is the only option to express a pluperfect-like meaning.

Crucially, in the Highest Alemannic dialects, the agreement on the lexical participle is obligatory, according to Hodler (1969: 346, 494):⁹

- (23) a. win er der Namen Gottes het usgsprochn-a ghabe
when he the name.M.SG God.GEN has pronounced-M.SG had
‘once he had pronounced the name of God’
- b. wo mir Zmorge gchochet-s u g’ässe-s hei gchaa
when we breakfast.N.SG cooked-N.SG and eaten-N.SG have had
‘after we had eaten breakfast’

⁹ In line with the general trend towards optionality of agreement, cf. fn. 8, the double perfect nowadays also appears without agreement in the relevant dialects, but without any effect on interpretation (Raffaella Baechler, p.c.).

- c. we der Att isch i ds Chötteli gschloffn-a gsii
 when the father.M.SG is in the vest slipped-M.SG been
 ‘after the father had put on his vest’ *Bernese German*

We will show in what follows that the DCP has both stative (and thus adjectival) and eventive (and thus verbal) properties. While the participle in this construction therefore displays the external syntax of predicative adjectives and resultative participles, its internal syntax will be shown to be significantly more complex (and more verbal), thereby providing evidence for a new type of adjectival participle (in German).

2.1 Stativity in DCPs in Alemannic

In this section, we will focus on the stative component in DCPs, which has given rise to a popular analysis of DCPs in terms of resultative aspect (see, e.g. Litvinov & Radcenko 1998; Rödel 2007). Notice that the relevant literature distinguishes several readings of DCPs, but we will operate under the assumption that these are different use-cases of the same underlying structure and semantics.

In a first use, the so-called anterior use, the DCP describes an event in the past as being complete/anterior to some reference point in the past ((24a) is from Bossard 1962: 94):

- (24) a. Wo s Anni der äärscht Walzer gmacht ghaa hed, isch em
 where the Anni the first waltz made had.PTCP had, is him
 schlächt wöorde.
 bad become.
 ‘He had written this letter with a ballpoint pen.’
 ‘When Anni had finished her first waltz, she became nauseous.’ *Zug*
- b. wia i huiku bi, hot d Anna ihre schuulsacha frsorgat ghet.
 like I home come am, has the anna her school-stuff cleaned up had.
 ‘When I came home, Anna had already cleaned up her material for
 school.’ *Vorarlberg German*

The DCP can occur in both subordinate and in (possibly independent) main clauses, but in any case, there is another event with respect to which the event marked by the DCP is interpreted as anterior. Now, to what degree is such a construction stative? First, it is stative as any other perfect construction is.¹⁰ Such evidence for a stative component comes from the compatibility of DCPs in anterior uses with “*how long*”

¹⁰ For a thorough argument for the presence of a state in (English) perfects, see Katz (2003).

(see Rothstein 2008: 41ff.), which is infelicitous with achievements in the preterite, but acceptable with perfects:

- (25) a. ?*Wie lange entdeckte Hans die Formel (schon)?
 how long discovered Hans the formula (already)?
 b. Wie lange hat Hans die Formel (schon) entdeckt?
 how long has Hans the formula (already) discovered?
Standard German

Since *discover* is a punctual event, it has no duration in itself; hence the incompatibility of the event itself with adverbials like *how long*. However, the state resulting from that event – the formula being discovered – has a duration, and can therefore be modified by such adjuncts. Unsurprisingly, the DCP also allows for such modifiers:

- (26) Wie lang hät de Einstein d Formle (dootsmaal) scho bewise ghaa,
 how long has the Einstein the formula at-the-time already proven had,
 wo ...?
 when ...?
Zurich German

However, it has to be pointed out that DCPs are more stative than ordinary perfects. This is evidenced by the fact that, although in many cases, the anterior use seems similar to the pluperfect in Standard German, it does not have the full range of pluperfect interpretations (see, e.g., Squartini 1999). Consider the English example in (27a) and its Alemannic translation in (27b):

- (27) a. Peter didn't go to work on Tuesday. He had resigned on Monday.
 b. de Peter isch am Ziischtig nöd go schaffe ggange. Er hät am
 the P. is on Tuesday not PRT work.INF gone. He has on
 Määntig kkünt ghaa.
 Monday resigned had.
Zurich German

The most obvious interpretation of (27a) is that Peter resigned *on Monday*; consequently, the adverbial *on Monday* can modify the event time of *resigning*. This is not a possible interpretation of the (Alemannic) DCP: (27b) can only mean that Peter resigned *before Monday*; thus, *on Monday* cannot modify the event time but only a perfect-/resultant/post-state, viz., the state of having resigned.¹¹ This thus crucially shows that the DCP contains a resultative/stative component, and that the

¹¹ Notice also that the vague temporal localizer *dootsmaal* in (26) modifies the state of the formula being discovered and not the event of the discovering the formula.

event is not as foregrounded or accessible as it would be in a full-blown pluperfect.¹²

The second interpretive possibility is the so-called *superperfect* or *two-way action* reading (see Thieroff 1994), as in (28):

- (28) des hob i jetz komplett fagäassa ghet
 that have I now completely forgotten had
 ‘I had completely forgotten that.’ *Vorarlberg German*

In this use there is no textually given reference point; it generally expresses a reversal of the resultant state/perfect state, with respect to the moment of utterance (cf. the presence of ‘now’). Thus, (28) would be typically uttered when what had been forgotten is remembered again by the speaker. In any case, no contextually salient past event is necessary in order to licence the DCP.

The superperfect interpretation can be related to the anterior reading as follows: Like the anterior, it expresses the fact that a state held prior/up to some reference point in the past. However, since no such reference point is given, the moment of utterance is used as the reference point. But if one wanted to express the fact that

¹² Further differences between the DCP and a full-fledged pluperfect concern the impossibility of embedding an eventive passive under a DCP (as was pointed out in Author (xxx)) which is perfectly grammatical with a pluperfect (as illustrated by the contrast in (i)), or also the impossibility of embedding a modal (like *must*) under the DCP which is once again grammatical with a run-of-the-mill pluperfect (see (ii)).

- (i) a. DCP, *Vorarlberg German*:
 *s bier isch ustrunka wora gsi
 the beer is out-drunk become been
 b. "Simple" perfect, *Vorarlberg German*:
 s bier isch ustrunka wora
 the beer is out-drunk become
 c. Pluperfect, *Standard German*:
 Das Bier war ausgetrunken worden.
 the beer was out-drunk been.
- (ii) a. DCP, *Vorarlberg German*:
 *ea hot abroisa müassa ghet
 he has depart must had.
 b. "Simple" perfect, *Vorarlberg German*:
 ea hot abroisa müassa
 he has depart must
 c. Pluperfect, *Standard German*:
 Er hatte abreisen müssen.
 He had depart must.

Notice that the sentences in (a) are perfectly acceptable in the simple perfect in Alemannic, as illustrated in the sentences in (b).

a state still holds at the moment of the utterance, one would have used a simple perfect instead. The use of a DCP thus leads to pragmatic reinterpretation: Given that the more complex form has been used, it is deduced that the state that held at some point in the past no longer holds at the moment of speaking. Thus, this second reading of DCPs in Alemannic also depends crucially on the presence of a state.

Importantly, both the anterior and the superperfect use require inflection in Highest Alemannic dialects (cf. Hodler 1969: 346), and given the stative component of the DCP, it comes as no surprise that it should inflect like predicative adjectives and resultative participles.¹³

2.2 Eventive properties of DCPs

While the DCP does share some stative properties, it clearly is not purely stative, and much less stative than the (adjectival) stative passive in German. The eventive

¹³ In their discussion of the DCP in Dutch dialects, Koenenman, Lekakou & Barbiers (2011) show that the lexical participle cannot occur in the last position in the verb cluster, unlike what is possible in regular Dutch cluster like ‘must have read’. They interpret this as evidence that the lexical participle is adjectival and therefore has to occur preverbally, exactly as in the Swiss German 2-verb clusters discussed above.

In Swiss German, a strictly ascending 123 order is not possible with DCPs either, whether inflected or not; the attested orders are 312, 321 and 132, see Hodler (1969: 684f.):

- (i) a. Es het is nid rächt gfalle, dass ihri Tochter am Tag vorhär verreiset₃ isch₁
it has us not quite pleased, that their daughter at the day before left is
gsi₂.
been
‘We didn’t like it that her daughter had left the day before.’
- b. Wenn me de ds Gschirr use gruomt₃ gha₂ het₁, so hei d Chinder d
when one then the dishes out moved had has, than have the children the
Ufgabe gmacht.
homework done
‘After we had carried the dishes outside, the children did their homework.’
- c. Es isch es Läbe gsi, wi me’ s no nie het₁ gseh₃ gha₂.
It is a life been, as one it still never has seen had.
‘That was a life like one had never seen it before.’ *Bernese German*

However, for reasons that are still poorly understood (but see Author, to appear), Swiss German (and arguably German dialects more generally) seem to disallow cluster-final lexical participles in 3-verb clusters. The only attested case we are aware of are the data from Bernese in Hodler (1969: 684), who provides examples for clusters like ‘want have said’ or ‘must be been’ with 123 orders, but most of the other examples of this cluster type in the grammar involve 132, 312 and (more rarely) 321 orders. Other sources on Bernese, cf. Burri & Imstepf (2002: 32), Kolmer (2011), only report the orders 132, 312 and 321 for both the double perfect and clusters like ‘must have read’. Thus, while the cluster order facts in the double perfect are compatible with a treatment of the lexical participle as an adjective, it is not quite clear that they provide conclusive evidence in favor of it.

component of the DCP can be diagnosed most easily by comparing it to a superficially similar construction, the (perfect version of the) so-called *haben*-passive, cf. Businger (2011; 2013), Gese (2013):

- (29) Ich habe die Haare gefärbt.
 I have the hairs colored
 a. ≈ ‘My hair is in a colored state’ [haben-passive]
 b. I have colored my hair [eventive present perfect]
- (30) Ich habe die Haare gefärbt gehabt.
 I have the hairs colored had
 a. ≈ ‘My hair was in a colored state.’ [Simple Perfect; stative]
 b. ≈ ‘I had colored the hair.’ [DCP; agentive & eventive]
Colloquial German

The examples in (29) and (30) are ambiguous as indicated by the translations. Under reading (29a)/(30a), the hair in question is the hair of the speaker, and the sentence asserts that they were in a colored state. There is no committal as to whether the speaker was the agent of the event of coloring or not, i.e. somebody else might have done the coloring. Under reading (29b)/(30b), the speaker has to be the agent of the coloring-event, but the hair may well be anaphoric to another person, mentioned in the preceding context, i.e. it need not be the subject’s hair (one could, e.g. also add a disjunct possessor to the direct object).

Crucially, the inflected participles in the simple perfect discussed in section 1.3 above are instances of the *haben*-passive. Their adjectival nature is confirmed by the properties discussed below.

It has been shown by [Businger \(2013\)](#) and [Gese \(2013\)](#) that the *haben*-passive is essentially the transitive equivalent of adjectival passives based on *sein* ‘be’ and thus patterns like bona fide adjectives with respect to a number of tests (while verbal participles fail these tests): The adjective can undergo *un*-prefixation, appear as a synthetic comparative, can be coordinated with bona fide adjectives and can be modified with the adverbial *genug* ‘enough’:

- (31) a. Ich ha s feischer hüüfig ung-göffnet ghaa.
 i have the window often un-opened had.
 ‘I often kept the window unopened.’
- b. Ich ha de baart immer pflägt-er ghaa als er.
 I have the beard always tended-COMP than he
 ‘My beard was always better groomed than his.’
- c. Ich ha s feischer putzt und offe ghaa.
 I have the window cleaned and open had
 ‘I kept the window cleaned and open.’
- d. Ich ha d Wonig uufgruumt gnueng ghaa.
 I have the flat tidied.up enough had
 ‘My flat was clean enough.’ *Zurich German*

Crucially, in these environments, the double perfect reading is automatically lost. (31c) becomes ungrammatical once an agentive reading of the participle (and thus a DCP-interpretation) is forced by means of an agentive adverbial:

- (32) *Ich ha s feischter sälber putzt und offe ghaa.
I have the window self cleaned and open had

As shown in Gese (2013), the *haben*-passive shares with the *sein*-passive (Gehrke 2015; McIntyre 2015) the property that the event denoted by the participle is generic and therefore not easily accessible to modification. As already briefly discussed in the introduction, Gehrke (2015: 904f., 921) has shown for the *sein*-passive that modification is possible as long the modification is kind-modification (a slightly different characterization is provided by McIntyre 2015, who argues that such modifiers are possible as long as they are still relevant for the result state). As a consequence, instrumental-PPs, locative PPs and passive agents are possible, but they are pseudo-incorporated and thus necessarily non-specific/non-referential and therefore cannot be picked up by anaphoric pronouns, i.e. the event participants are discourse-opaque, as the *haben*-passive in (33a) shows (the temporal adverbial triggers a stative interpretation). Crucially, in the DCP, there is no such restriction, and the PP can be referential, cf. (33b):

- (33) a. Standard German:
Er hat die Haare seit gestern {*mit dem Shampo seiner Mutter_i}/
he has the hairs since yesterday with the shampoo his.gen mother
{mit Henna_i} gefärbt gehabt. *Es_i war teuer.
with Henna colored had. It was expensive
'He had his hair colored since yesterday with his mother's shampoo.
It was expensive.'
- b. Zurich German:
Er hät d Haar mit [em Shampoo vo sinere Muetter]_i gefärbt ghaa.
he has his hairs with the shampoo of his mother colored had.
Si hät sich drüber uugregd, wil s_i tüür isch.
SE has self about got.annoyed because it is expensive.
'He had colored his hair with the shampoo of his mother. She was
upset about it because it was expensive.'

A similar asymmetry emerges with bridging to events, i.e. anaphora to the event itself (by means of a demonstrative), cf. Gese (2013: 177f.). This is again difficult with *haben*-passives but not with the DCP. Consequently, the following example is felicitous only under the DCP-reading where the prisoner is the agent of tattooing

(as noted by Gese, bridging is possible if the pronoun refers to an event kind rather than an event particular):

- (34) De Häftling häd de Ärm tätowiert ghaa; das hät wee taa.
 the prisoner has the arm tatoored had that has painful done
 ‘The prisoner had tatoored his arms; that was very painful.’ *Zurich German*

The inaccessibility of the event-token is further illustrated by the following minimal pair, which shows that manner adverbs are possible in the *haben*-passive only if they still hold during the post-state, but not when they only apply to the event (cf. also the notion of relevance to the state in McIntyre 2015); in the DCP, there is no such restriction (coordination with a bona fide adjective in (35a) forces the *haben*-passive reading):

- (35) a. Er hat die Haare *langsam/schlampig geschnitten und fettig gehabt.
 he has the hairs slowly/sloppily cut and greasy had
 ‘He had his hair slowly/sloppily cut and greasy.’
 b. Der Friseur hat die Haare langsam/schlampig geschnitten gehabt.
 The hairdresser has the hairs slowly/sloppily cut had
 ‘The hairdresser had cut the hair slowly/sloppily.’ *Colloquial German*

Thus, while there is only an event kind in the *haben*-passive, an event-token is instantiated in the DCP.

The difference in agentivity mentioned at the beginning can be made explicit by means of the following minimal pair illustrating Control into purpose clauses (inspired by Gese 2013: 177):

- (36) a. De Arzt hät s Bää amputiert ghaa, zum en Infektion vermiide.
 the doctor had the leg amputated had to an infection prevent
 ‘The doctor had amputated the leg to prevent an infection.’
 b. *De Patiänt hät s Bää amputiert ghaa, zum en Infektion vermiide.
 the patient has the leg amputated had to an infection prevent
Zurich German

Control is felicitous in (36a), because of the presence of the subject, which can function as the agent. (36a) thus only has the DCP-reading. The *haben*-passive reading is ruled out in a Control context, cf. (36b), suggesting that no implicit agent is present (of course, (36b) is grammatical if the patient carried out the amputation).¹⁴

¹⁴ Alexiadou, Gehrke & Schäfer (2014: 128f.) provide examples from the *sein*-passive with – putatively – acceptable cases of Control. While we are rather sceptical whether their examples represent proper instances of Control, what is crucial for the present discussion is that Control is clearly rather restricted in the *sein*- and also in the *haben*-passive but not in the DCP. Thus, even if Control turns

Another important difference between the *sein-/haben*-passive and the DCP concerns the kinds of verbs that can occur in the constructions. As shown in Gehrke (2015: 906ff.), only verbs with certain kinds of *Aktionsarten*, roughly verbs that denote a change of state, can be used out of context in the *sein*-passive. Other kinds of verbs like statives require pragmatic licensing. Consider the following pair ((37a) is from Kratzer (2000)):

- (37) a. ?*Die Antwort ist gewusst. *Standard German*
 The answer is known.
 b. des hob i doch gwisst ghet!
 that have I but known had.
 ≈‘I know the answer in principle (but I cannot remember it right now;
 a superperfect-reading, cf. section 2.1 above).’ *Vorarlberg German*

Kratzer (2000) takes the *sein*-passive (37a) to be ungrammatical, but it has been shown by Maienborn (2009) that in the right context, such sentences are acceptable (e.g. in a quiz-show setting). The DCP in (37b), however, is fully grammatical in isolation, i.e. does not require any special contextual support.¹⁵

Next to these semantic asymmetries, there are also clear structural asymmetries: The subject of an *sein*-passive/the object of a *haben*-passive occur in a position above the participle, i.e. they c-command it, while in the double perfect the object of the lexical participle occupies a position in the c-command domain of the adjective. This can be shown by means of their placement w.r.t. certain adverbial modifiers. As shown in Frey & Pittner (1998), instrumental-, comitative-, and locative-PP modifiers occur between the base-position of the subject and the direct object in unmarked order. The following triple shows that while the modifier occurs above the direct object in the DCP, it occurs below the object in the *haben*-passive (and, unsurprisingly, below the subject of a *sein*-passive in (38c)):

- (38) a. dass er [mit Henna] die Haare gefärbt gehabt hat
 that he with Henna the hair colored had has
 ‘that he had colored his hair with henna’

out to be acceptable with the *haben*-passive to some extent, there remains a clear asymmetry w.r.t. the DCP, which in our view is sufficient to show that they represent different constructions.

¹⁵ Adjectives that cannot easily be used in the *sein*-passive seem to be even more difficult to accommodate in the *haben*-passive. It seems to us that this may hold more generally, i.e. also affects instrumental- or agent-PPs. This is in line with the general tendency for the *sein*-passive to be more productive than the *haben*-passive, cf., e.g. Businger (2011; 2013).

- b. dass er seit gestern {*mit Henna} die Haare {mit Henna} gefärbt
 that he since yesterday with Henna the hair with Henna colored
 gehabt hat
 had has
 lit.: ‘that his hair has been colored with henna since yesterday’
- c. dass {??mit Henna} die Haare {mit Henna} gefärbt sind.
 that with Henna the hairs with henna colored are
 ‘that the hair is colored with henna’ *Colloquial German*

(38a) only allows the eventive/DCP-interpretation,¹⁶ while in (38b) the temporal modifier forces a *haben*-passive interpretation. In that case, the PP-modifier has to follow the object – just like it has to follow the subject in the *sein*-passive in (38c).¹⁷

2.3 The limits of event-modification in the DCP

So far we have clear evidence that the Double Perfect involves an event particular, unlike the *haben*-passive. In this subsection, we will discuss in detail which modifiers are licensed in the DCP. As we will see below, even though there is an event particular, event modification is more restricted than in a normal (active or passive) perfect. We will adopt the terminology of Frey & Pittner (1998), and show that only event-internal modifiers are possible, but not event-related ones. We will relate this restriction to the semantic type required by the stative adjectival head.

Contrary to Cinque (1999), Frey & Pittner do not assume that all adverbial positions are syntactically ordered, but conclude that, in German, there are five different classes of modifiers, whose position within a class is not syntactically ordered.

¹⁶ A DCP-interpretation is also available if the PP follows the object because the object can scramble across the PP; the order object-PP is then ambiguous between *haben*-passive and DCP.

¹⁷ Another diagnostic that has often been used in the literature to distinguish between stative participles and eventive participles concerns the possibility of a coreferential reading. In the adjectival passive a reflexive reading is sometimes possible where the theme-subject is coreferential with the implicit agent, cf. e.g. *the guests are registered*, where the guests can have registered themselves. The same holds for the *haben*-passive, cf.

- (i) Er hat die Haare seit zwei Tagen gefärbt gehabt. *Colloquial German*
 he has the hair since two days colored had

A coreferential reading is, however, absent with eventive participles as in the eventive passive. These facts have been interpreted as showing that there is no implicit agent in the adjectival passive (otherwise a Principle C effect should obtain). However, as noted by McIntyre (2013), Bruening (2014) and Alexiadou, Gehrke & Schäfer (2014), only naturally reflexive verbs can have a coreferential reading in adjectival passives, while most other verbs cannot. They thus conclude that even stative participles may contain implicit agents and do not significantly differ from eventive participles in this respect.

These classes are defined in terms of c-command relations of the adverbial with respect to other elements in the sentence. Simplifying somewhat, *event-internal* modifiers (like instrumentals, locatives, or subject-attitude modifiers like *willingly* or *deliberately*) are located below the base-position of the highest argument of the event, whereas *event-related* modifiers (such as localising temporal expressions, habitual adverbials, etc.) are located above the base-position of all arguments of the event including the Agent.

Example (35b) above has already shown that manner adverbs of various kinds (i.e. crucially not only result-oriented ones) are freely available in the DCP. The following examples show that instrumental, comitative, locative and subject-related adverbials are also licensed in the DCP and crucially can involve referential participants.

- (39)
- a. demonstrative local modifier
 ea hot da briaf i dera schtuba gschrieba ghet.
 he has the letter in this living-room written had.
 ‘He had written the letter in this living room.’
 - b. demonstrative instrument
 ea hot dean briaf mit deam kuli gschrieba ghet.
 he has this letter with this ballpoint written had.
 ‘He had written this letter with a ballpoint pen.’
 - c. definite comitative modifier
 ea hot s mätsch mit m Hans agluagat ghet.
 he has the match with the John watched had
 ‘He had watched the match with John.’
 - d. subject-related adverbial
 ea hot da gäscht mit fliSS s falsche zimmer zoigt ghet.
 he has the hosts deliberately the wrong room showed had.
 ‘He had deliberately shown the wrong room to the guests.’

Vorarlberg German

These are all event-internal modifiers whose base-position in German is below the base-position of the external argument and above the base position of the object according to Frey & Pittner (1998).

However, once we look at adverbials that occur higher in the structure, we can observe that they are not acceptable in the DCP (a restriction that, unsurprisingly, also holds for the *sein*- and the *haben*-passive, cf. Gesé 2013: 170f., 175f.). This has already been shown for temporal adverbials in (27b) above. The following example shows that with *wieder* ‘again’, only the result-oriented restitutive, but not the event-related repetitive reading is available:

- (40) De Arzt hät de Arm vo de Patientin wider verbunde ghaa.
 the doctor has the arm of the female.patient again bandaged had
 ‘The doctor had bandaged the arm of the patient again.’ *Zurich German*
 [ok restitutive, *repetitive]

In a simple- or plu-perfect-version of (40), both readings would be available. The lack of the repetitive reading becomes clear in the following example, where a restitutive reading is ruled out for independent reasons because amputation cannot be restitutive (one cannot restore a foot to an amputated state); the fact that the example is ungrammatical shows that the repetitive reading is not available in the DCP (since a person has two legs, the event ‘amputate’ can, in principle, be repetitive):

- (41) ?*wia dr doktr am Hans wider an Fuass amputiert ghet hot, ...
 when the doctor the.DAT Hans again a foot amputated had has, ...
 ‘when the doctor the.dat John again a foot amputated had has ...’
Vorarlberg German

Again, the repetitive reading is available under a simple perfect- or pluperfect version of (41).

An interesting case are frequency adverbials. They can occur in two different positions, with different consequences for scope, cf., e.g. [Cinque \(1999: 25–28, 91–93\)](#), [Frey & Pittner \(1998\)](#): In a high-position above the base-position of the subject, they quantify over the entire event. In the lower position, they quantify over the act/process denoted by the verb. Only in the latter case are they thus event-internal. As we would expect by now, only the event-internal reading is available in the double perfect. In (42), the entire event comprises three acts of knocking

- (42) Erscht won i drüümal klopft ghaa han, isch d Tüür uuufggange.
 only when I three.times knocked had have is the door opened
 ‘Only after I had knocked three times did the door open.’ *Zurich German*

If, however, the frequency adverbial quantifies over the entire event, the result is infelicitous (note that no such restrictions obtain with a regular pluperfect):¹⁸

- (43) Er hät siini Muetter im Altersheim (??regelmäßig) bsuecht ghaa.
 he had his mother in.the elderly.home regularly visited had
 (intended:) ‘He had visited his mother regularly in the elderly home.’
Zurich German

¹⁸ Habitual adverbials like ‘habitually’ ‘generally’ behave like high frequency adverbials in being incompatible with the DCP. Since they quantify over a fairly large time interval, cf. [Ernst \(2002: 350f.\)](#), they are never event-internal; in fact they usually take higher scope than high frequency adverbs such as ‘often’, cf. [Cinque \(1999: 106\)](#).

Something similar seems to hold for durative adverbials, which can also occur in higher positions with scope over tense and lower positions that are arguably event-internal, cf. Ernst (2002: 335, 339ff.). As (44) shows, they are acceptable under their event-internal interpretation:

- (44) Won er 20 Semeschter gstudiiert ghaa hät, hät er äntlich uufggëe.
 when he 20 semesters studied hadhas, has he finally given up
 ‘After he had studied for 20 semesters, he finally gave up.’ *Zurich German*

To summarize, only event-internal modifiers are possible in the DCP. They thus cover a contiguous segment of the functional hierarchy. In simplified structural terms, there is not only evidence for a VP, but, given the possibility of Control into purpose clauses and subject-related manner adverbs, also evidence for a VoiceP.

In terms of restrictions, the DCP is thus somewhere in between the Greek adjectival passive, where temporal modifiers are possible, and the German adjectival passive, where only kind-modification is possible. The question thus arises how to account for the restrictions in the DCP and the differences w.r.t. the other constructions.

The unavailability of localising temporal expressions for direct event modification in DCPs follows from the assumption that the AP in DCPs embeds a VoiceP, but no purely functional structure like an AspectP. Up to and including VoiceP, the denotation of the expression should be a predicate of events, as illustrated in (45):

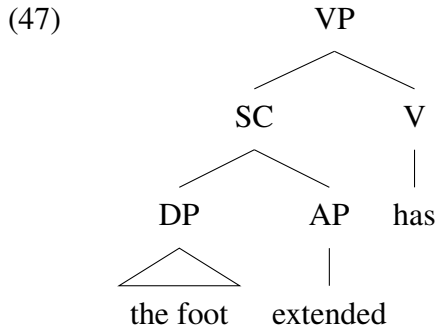
- (45) $\llbracket \text{saturated VoiceP} \rrbracket = \lambda e.[P(e) \& \text{Ag}(e)(j) \& \text{Theme}(e)(m)]$

At the same time, the most natural denotation one can assume for something like *yesterday* is a predicate of intervals:

- (46) $\llbracket \text{yesterday} \rrbracket = \lambda i.[\text{yesterday}(i)]$

Assuming once again the simplest method of combining these elements, namely predicate modification, the combination of (45) and (46) will produce a sort-mismatch between the event-predicate coming from VoiceP (or anything below), and the interval/time predicate *yesterday*. Higher up in the tree, after Aspect or Tense, the combination will be unproblematic, since these will be predicates of intervals as well.

We now turn to the structural analysis of the DCP. For comparison, we will first briefly address the structure of the *haben*-passive. There seems to be a consensus that it involves a small-clause structure with the accusative object as the subject and the adjectival participle as a predicate, as already roughly indicated in (18a) above, repeated in (47):

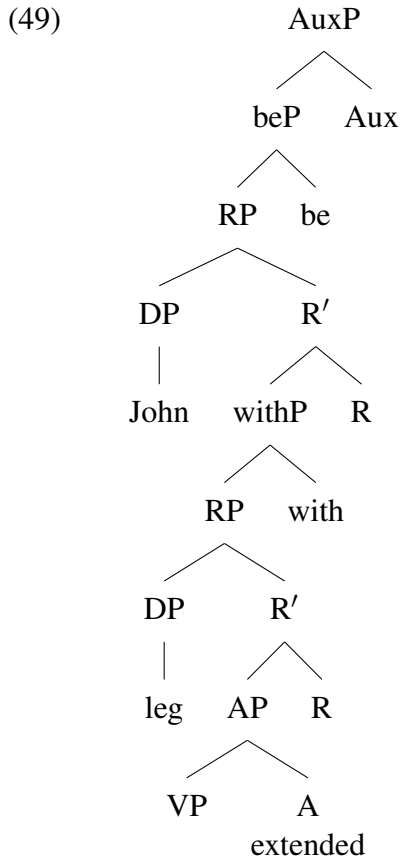


Given that a small clause is involved, the predicate position can also be occupied by a genuine adjective or a PP:

- (48) a. Er hat die Haare sauber. *Colloquial German*
 He has the hairs clean
- b. Er hat den Arm im Gips. *Colloquial German*
 he has the arm in.the cast

Instead of an exocentric SC-structure, postulating an endocentric PredP or RelatorP (with a silent head) is more standard nowadays. Furthermore, *have* is frequently decomposed; [Businger \(2011: chapter 2.6\)](#), [Businger \(2013: 153–155\)](#) proposes that it is decomposed into *be* + *mit* ‘with’-PP. The preposition in turn embeds a small clause, viz., an RP with the object as the specifier and the predicate as the complement (the motivation for the RP-structure under *with* is the existence of an absolute construction where *with* relates a subject and a predicate). The complex head resulting from head-movement of the preposition to *be* is then realized as *have*.¹⁹ Finally, when the *haben*-passive occurs in the simple perfect tense as in many examples in this section, there is another verbal projection above beP, viz., the projection of the auxiliary (we use the label Aux rather than V mainly for reasons of legibility).

¹⁹ The proposal thus differs from more prominent decomposition analyses like [Freeze \(1992\)](#), where it is the possessor that is introduced by a preposition, which in addition is locative in nature. As discussed in [Businger \(2011\)](#), there is no motivation for a locative structure in possessive structures in languages like German. The structure proposed by Businger is similar to the one in [Koenen, Lekakou & Barbiers \(2011: 52\)](#), where *have* is decomposed into *be* + *to*. They differ from Businger in assuming that the preposition can take a DP complement rather than always an RP-complement. Businger assumes that sentences with only a DP-object on the surface nevertheless involve an RP, but with a silent predicate.



The structure in (49) thus essentially means that John is with an extended leg; we represent the stative participle as an AP embedding a VP for expository purposes only; we remain non-committal whether the adjective embeds verbal structure at all (and if it does how much); we will come back to this issue at the end of this subsection. Importantly, under this structural analysis, the object is outside the c-command domain of the adjectival participle, in accordance with the word order facts discussed in (38) above: instrumental modifiers that attach to VP must therefore obligatorily follow the object. To precede the object, they would have to attach to projections that they cannot obviously modify. The structure also accounts for the agreement facts discussed in the introduction: Recall that the adjective agrees with the object, i.e. the DP in SpecRP. This can be captured if predicative adjectives/participles (or functional heads right above it) can undergo upward Agree (cf. Baker 2008: chapter 2). In the structure in (49), the DP in SpecRP is the closest goal so that its phi-features can be copied onto the adjective.²⁰

²⁰ Recall from section 1.3 above that unergative verbs also occur in the *haben*-passive construction. Since there is no goal for the probe on the adjective/participle, it undergoes default valuation.

We now turn to the double perfect. We have already established the hybrid nature of the lexical participle: While it is adjectival externally, it embeds a fully fledged VoiceP (but no AspP to account for the incompatibility with event-related adverbials). To encode the fact that in the double perfect the surface subject is identical to the agent of the lexical participle, we assume that a PRO is projected in SpecVoiceP.²¹ What is initially less clear is the nature of the two instances of ‘have’. We follow [Koeneman, Lekakou & Barbiers \(2011\)](#) in assuming that the double perfect does not involve genuine doubling but rather the combination of different variants of *have*. More precisely, the lower instance of *have* should be analyzed as the copula verb ‘have’, while the hierarchically highest verb is a perfect-auxiliary. If we combine these assumptions, we arrive at the following structure:²²

Unergatives are compatible with the RP-structure in the text if they are treated as hidden transitives. There would thus be a silent noun in SpecRP nevertheless (e.g. a cognate object), which, however, due to its deficiency, cannot trigger agreement on the participle.

²¹ [Koeneman, Lekakou & Barbiers \(2011\)](#) project PRO in SpecAP. It is not clear to us how this can be ensured given the selectional properties of Voice. Furthermore, as a subject/specifier of a predicative adjective, it should be interpreted as a theme that is ascribed a (stative) property. But this is crucially not what the construction expresses. Furthermore, under such a structure, it seems difficult to prevent case-marking of PRO by the prepositional head.

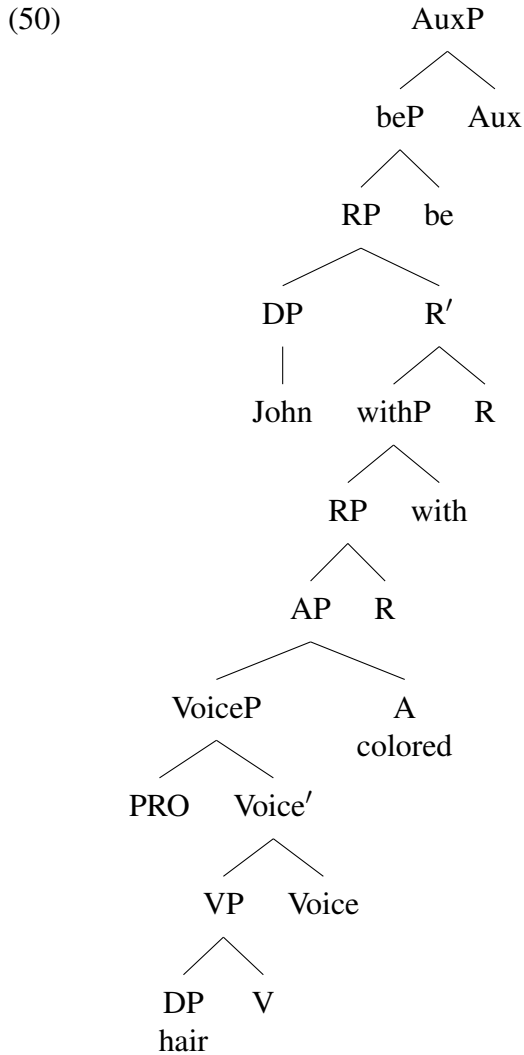
²² Even though on the surface there is only an AP in the complement of *have*, we follow [Businger \(2011\)](#) in assuming that *have* always embeds an RP. [Koeneman, Lekakou & Barbiers \(2011: 55\)](#) assume instead that *have* takes an AP as its complement in the double perfect, but since copular *have* normally only embeds RPs and perhaps DPs (unless they are reanalyzed as RPs with a silent predicate, cf. above), this strikes us as too construction-specific. One possibility is that SpecRP is occupied by a silent proform related to the object. This would then also be a possible goal for the accusative case normally assigned by *have*. Alternatively, the object moves to SpecRP at LF.

There is a construction in German where copular *have* only occurs with a predicate, cf., e.g., (i) from [Businger \(2011: 151–153\)](#):

- (i) Wir haben geöffnet.
we have opened
‘We are open.’

German

It seems plausible to postulate a silent object (i.e., something like “*our shop*”) in this construction as it could serve as the semantic subject of the participle. No such motivation is present in the double perfect, however.



What remains to be accounted for is the agreement pattern in the DCP; recall that the participle always agrees with the internal argument with transitive verbs, while with unergative verbs the participle appears with default agreement. For reasons that we currently do not understand, PRO is apparently not a possible goal for the phi-probe on the adjective, even though it is structurally closer to it than the direct object.²³ Perhaps, agreement is in fact triggered by a silent object-related element

²³ One cannot generally rule out agreement with PRO since it can agree with predicative adjectives in languages like German:

- (i) Er/sie hat versprochen, als erst-er/erst-e zu kommen
 he/she has promised as first-M.SG/first-F.SG to come.INF
 'He/she promised to come first.'

Standard German

in SpecRP (recall fn. 22), but this may create problems for Control (and potentially induce a Principle C effect). We have to leave this issue open for the moment, noting that in fact the very same problem arises with participle agreement in Romance: Agreement in *have*-perfects is usually thought to involve Spec-head agreement between the verb/participle and the fronted object. Since this intermediate position is usually identified with SpecvP and thus the base-position of the subject, one would expect the participle to actually agree with the subject (at least as a possibility, e.g. with unergative verbs). At least in Standard French and Italian, however, this is not the case and thus constitutes a non-trivial problem.²⁴

The structural differences between the *haben*-passive and the DCP account for their different semantic and syntactic behavior: First, since the external argument of the lexical participle (i.e. PRO) is controlled by the surface subject, it is obligatorily interpreted as the agent of the participle. Second, the object appears inside the VP and thus in a position in the c-command domain of the participle. This accounts for its position relative to instrumental adverbs, i.e. the fact that it can follow them, unlike the object in the *haben*-passive, recall example (38) (since the object can be scrambled within VoiceP, it can also precede the PP).

The syntactic difference is also reflected in the different intonation profiles of a sentence like (51), according to the two different interpretations. This is illustrated by the two different pitch-tracks in figure 1.

- (51) Ea hot d hooa gfäabt. Vorarlberg German
 He has the hair colored.
 a. He has colored his hair. [active; present perfect]
 b. His hair is in a colored state. [haben-passive; present tense]

The main difference between the two pitch profiles is the marked final rise on *hair* in the passive version, which is completely absent from the active version.

The structural asymmetry also accounts for the fact that a DCP cannot be coordinated with a *haben*-passive, recall example (32): for the object to have scope over both conjuncts, R'-coordination would be required. However, since the object occupies the required position (SpecRP) only in the *haben*-passive, coordination is ruled out. As for the two other contrasts, viz., *un*-prefixation and the lexical comparative, there are good reasons to assume that they cannot attach to adjectives embedding so much verbal structure. In the case of the comparative, the number of verbal participles readily allowing such modification is generally rather small. This can be explained by the fact that many states resulting from events do not provide for

²⁴ Interestingly, there are varieties of Romance where external arguments can trigger agreement in *have*-perfects, cf., e.g. the overview in Legendre (2017: 292).

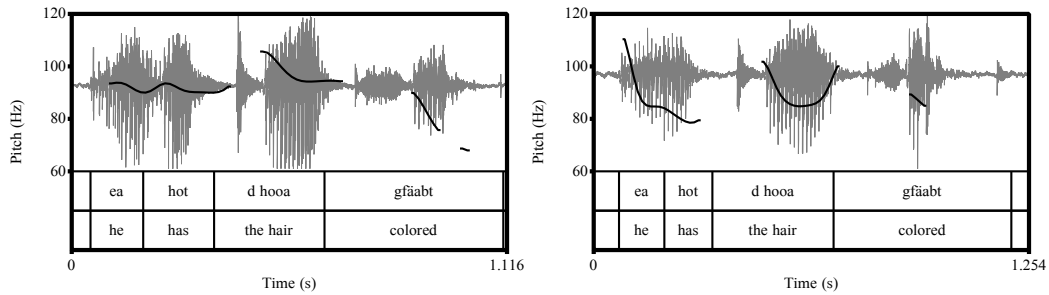


Figure 1: Pitch profiles of the active perfect (left) and the *haben*-passive (right) versions.

easily gradable structure, but rather form complementaries (see [Cruse 2000](#)). For instance, the state of being washed could in principle be coerced into a gradable property of \pm CLEAN. However, this does not seem to be accessible, and the participle *gewaschen* does not readily admit the comparative. Thus, the comparative is already limited in the *haben*-passive (cf. [Businger 2013: 150f.](#)) and consequently even more so in the DCP where a stative adjective embedding a fully fledged VoiceP would have to be coerced into a gradable property. As for *un*-prefixation, it has been shown that *un*-prefixed participles generally do not easily allow for modification, which is why [Anagnostopoulou \(2003\)](#) treats them as lexical (and thus without an embedded VP). Even though more recent work, cf. [Alexiadou, Anagnostopoulou & Schäfer \(2015: 166ff.\)](#), has shown that the restrictions are looser than originally envisaged, participles with *un*-prefixation are generally more limited than regular stative participles so that the incompatibility with the DCP does not come as a surprise.

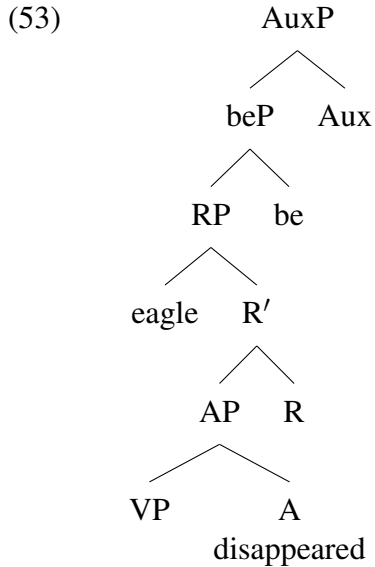
We now finally turn to unaccusatives in the DCP as in (12a) above and in (52):

- (52) Der Adler ist verschwunden gewesen.
 The eagle is disappeared been
 ‘The eagle had disappeared.’ *Standard/Colloquial German*

As with *haben*, the surface string is ambiguous between the simple past version of a stative construction and the DCP-reading. Crucially, both constructions require agreement on the adjective in Highest Alemannic dialects, recall section 1.3.²⁵ The stative version corresponds to an adjectival ‘passive’ based on an unaccusative verb, cf. [Gese, Maienborn & Stolterfoht \(2011\)](#), and thus will receive an analysis roughly

²⁵ Note that with only one instance of *be*, the sentence is ambiguous between a stative passive and an eventive simple perfect interpretation. The fact that inflection is only found in the former in dialects with inflection clearly shows that the two constructions must be distinguished, a fact that has been controversial in the literature for some while, cf., e.g. [Gese, Maienborn & Stolterfoht \(2011\)](#).

as in (53), where *be* embeds a small clause (again, we represent the participle as an adjective embedding a VP only for ease of legibility and remain non-committal as to the possible amount of verbal structure; see also the discussion at the end of this subsection):



It is not easy to distinguish the stative reading from the DCP-reading since, due to the absence of the external argument, many modifiers are ruled out on independent grounds. What is clear is that under both readings, result-oriented manner adverbs are possible (the temporal adverbial triggers the stative reading):

- (54) Er ist (seit gestern) spurlos verschwunden gewesen.
 he is since yesterday traceless disappeared been

Std./Coll. German

There is a difference, though, with respect to event-related manner adverbs like ‘secretly’, which are only acceptable under the DCP-reading:

- (55) Ich ha ghofft, dass i en no gsee, aber won i häicho bin, isch
 i have hoped, that I him still see, but when I home-come been, is
 niemert deet gsii, er isch (schiinbaar) heimlich verschwunde gsii.
 nobody there been, he is (apparently) secret disappeared been.
 ‘I had hoped that I would still be able to see him, but when I came home,
 nobody was there, and he had apparently secretly disappeared.’

ZurichGerman

As (56) shows, once a stative-reading is forced (by means of a temporal adverbial), event-related adverbials are no longer possible:

- (56) Er isch (*siit geschter) häimlich verschwunde gsii.
 He is since yesterday secretly disappeared been

Zurich German

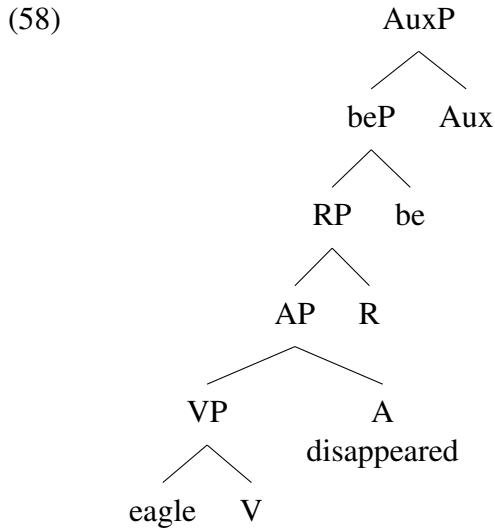
There is thus evidence for a verbal component in the DCP. There are also (somewhat subtle) ordering differences between the two constructions. In the stative passive, the subject has to precede manner adverbials, while in the DCP, the subject can occur after the adverbials:

- (57) a. dass seit heute Morgen {ein Gemälde} spurlos {*ein Gemälde}
 that since today morning a painting traceless a painting
 verschwunden gewesen ist stative passive
 disappeared been is
 b. nachdem {ein Gemälde} spurlos {?ein Gemälde} verschwunden
 after a painting traceless a painting disappeared
 gewesen ist DCP
 been is

Colloquial German

This suggests that the subject occupies different structural positions. The facts are in line with our structure for the stative unaccusative passive, where the subject is generated outside of the participle phrase. The DCP, on the other hand, is based on an unaccusative structure; the surface subject is generated as an object of V, where it may remain until the end of the derivation (externalization of subjects is generally optional in German). This accounts for why the subject can follow the manner adverb in (57b). Assuming that as in the DCP based on *haben*, one cannot stack perfective auxiliaries (cf. Koeneman, Lekakou & Barbiers 2011), the structure of the DCP-reading based on unaccusatives thus looks as in (58) with a perfective auxiliary *be* embedding copular *be*, which in turn embeds an RP (as with the double perfect based on *have*, the specifier of R is not overtly filled):²⁶

²⁶ In Koeneman, Lekakou & Barbiers (2011: 50f.), the unaccusative subject is generated outside the VP, in SpecAP (which is the complement of the copula in their analysis). They thus assign the same structure to adjectival passives and DCPs based on unaccusatives; given the difference w.r.t. event-related modification and word order discussed above, their proposal thus cannot be extended to the German data as these differences would remain unaccounted for.



The fact we find agreement in both the stative-passive and the DCP can be accounted for by means of the flexible probing nature of adjectives (cf. [Baker 2008](#)): Since they can both probe upwards and downwards, agreement with the theme is correctly predicted in both cases.

Let us summarize the main findings of this section and their broader theoretical implications. The tests we have considered concerning admissible event-related modifiers indicate that in a DCP, the structure embedded below the AP is a VoiceP. Note that this is exactly the same structure which [Alexiadou, Anagnostopoulou & Schäfer \(2015\)](#) or [Bruening \(2014\)](#) have proposed for the stative passive in German/English. Yet, stative passives show many more restrictions than DCPs and are much more afflicted by exceptions. Therefore, a solution assuming the same syntactic structure for two constructions that show such diverging behavior does not look very satisfactory. However, the assumption of an embedded VoiceP in DCPs would be much less astonishing against the background of the more traditional perspective on stative passives, as recently championed by [Claudia Maienborn](#) (see, e.g. [Maienborn 2007](#); [Gese, Stolterfoht & Maienborn 2009](#); [Maienborn, Gese & Stolterfoht 2016](#)). In essence, [Maienborn](#) argues that stative passives are cases of adjectival conversion, where the adjectival head simply selects a verb which expresses an event-kind. The adjective may inherit arguments from the verb, but there is no VP or more verbal structure embedded in the AP. We therefore believe that the phenomena we describe here for Alemannic can provide an indirect argument against postulating a rich verbal structure in stative passives in German.

Be that as it may, the big difference between DCPs and stative passives in German is that there clearly is an event-token in the former, whereas there seems to be general agreement that the latter only contains an event-kind. We see two possibil-

ities how this difference could be approached: either in stative passives, the event starts out as the familiar event-token (which is the main-stream assumption in the literature on tense and aspect as far as we know), and there is no event-kind to begin with; or the event begins its life as an event-kind, but is converted into a token (or: a token is instantiated) very early in the derivation, in any case, before any thematic role can be applied to the event. In the first case, the onus would be to explain how and why stative passives acquire their kind-denotation; in the second, the issue is to explain how and why the event-token takes over. Since event-kinds are orthogonal to the main points of our paper, we leave an exploration of this issue to further research.

3 Agreement in eventive passives

In the dialects under discussion, both stative (59a) and eventive passives (59b–e) show agreement on the lexical participle (cf. (59a) from [Hodler 1969: 346](#), (59b) from [Wipf 1910: 145](#), (59c) from [Fuchs 1993](#), (59d/e) from [Szadrowsky 1936: 453](#)):^{27,28}

²⁷ In these Highest Alemannic dialects, the auxiliary ‘*come*’ is used for the present eventive passive as well as for non-verbal predication, while Standard German and other Alemannic dialects use *werden* ‘become’ in these contexts (example from [Szadrowsky 1936: 453](#)):

- (i) i ist tunkl-i cho'
 she is dark-F.SG come
 ‘It (the pan) has become dark.’ *Avers (Grisons)*

As shown in [Bucheli Berger \(2005b\)](#), there is a very close connection between the use of this auxiliary and the presence of inflection in the passive and inflected adjectives/participles quite generally. While *werden* has been gaining ground in Highest Alemannic dialects, *cho* remains preferred and crucially, inflection is generally only observed with *choo*, but not with *werden*. A rare example of agreement with *werden* is provided in [Hodler \(1969: 354\)](#), who notes that it is not regular, which can be seen in the fact that only the last of the three adjectives bears agreement morphology:

- (ii) Er isch rächthaberisch-Ø, groSSHansig-Ø, vor allem zornmüetig-e **worde**
 he is bossy, loud-mouthed, before all angry-M.SG become
 ‘He became bossy, loud-mouthed, and principally angry.’ *Bernese German*

For detailed discussion about ‘come’ as an auxiliary, see also [Hodler \(1969: 473–477\)](#).

²⁸ This does not seem to hold for all dialects. [Szadrowsky \(1936: 454\)](#) notes the following opposition for the dialect of Safien:

- (i) a. stative passive:
 d'r Tisch it g'wäschn-e'
 the.M.SG table is washed-M.SG

- (59) a. Wen r ischd häichun, sii d Chind gsträält-i ung gwäschn-i
 when he is come.home, are the children.PL combed-PL and washed-PL
 gsiin.
 been
 ‘When he came home the children were combed and washed.’
Bernese German
- b. Wie chund daas gmacht-s?
 how comes that.N.SG made-N.SG
 ‘How is this done?’
Visperterminen (Valais)
- c. der chunnt dernaa va denä Gsellu im Regierigssaal gidreet-ä
 he.M.SG comes after of those guys in the government hall turned-M.SG
 und cheslut-ä.
 and manipulate-M.SG
 ‘Then, he is manipulated by those guys in the government hall.’
Steg (Valais)
- d. ds Choorä chund im Settember ghüüwe-s
 the grain comes in September harvested-N.SG
 ‘Grain is harvested in September.’
Obersaxen (Grisons)
- e. schi ischt bruucht-i cho
 she is used-FEM.SG come.PTCP
 ‘She (i.e. the bowl) has been used.’
Avers (Grisons)

As has already been shown in the introduction, the stative passive in (59a) does not contain any direct reference to the underlying event but only to the resultant/subsequent state. The fact that the participle inflects is in line with the adjectival (and thus stative) nature of the participle. In (59b–e), however, we find inflection even though the participle seems to be eventive. In (59c) there is an explicit agent, and in (59d), there is a temporal adverbial that refers to the event. Again, as in DCPs, it does initially not seem easily possible to relate adjectival inflection to stativity and thus the adjectival nature of the participle. The following subsections will show, however, that there is evidence for a stative/adjectival component in eventive passives after all.

-
- b. eventive passive:
 d'r Tisch chunt g'wäsche"
 the table comes washed

Safien (Grisons)

The stative passive in (ia) shows agreement of the participle with the subject, whereas in the eventive passive in (ib), the participle does not agree. However, this seems to be the exception confirming the rule.

3.1 Differences between stative and eventive passives

As was already briefly discussed in section 1.1 above, it is uncontroversial that the eventive passive and the stative passive differ with respect to event-related modification. Eventive passives are quite unrestricted in this respect in that both event-internal and event-related adverbials are possible. The stative passive, however, only allows event-internal modifiers and additionally restricts modification to kind-modification (cf. Gehrke 2015), which generally entails that any event-participants are non-referential. Manner adverbs are only possible if they apply to the resultant state. The following pair illustrates the contrast:

- (60) a. eventive passive:
 Diese Datei ist (von Inge) (vor drei Tagen) (absichtlich) (vorsichtig)
 This file is by Inge before three days deliberately carefully
 gelöscht worden.
 deleted become
 ‘This file was deliberately carefully deleted by Inge three days ago.’
- b. stative passive:
 Diese Datei ist (*von Inge) (*vor drei Tagen) (*absichtlich) (*vorsichtig)
 This file is by Inge before three days deliberately carefully
 gelöscht.
 deleted.

Colloquial/Standard German

In the eventive passive, agentive *by*-phrases, agent-oriented adverbs like *deliberately*, temporal adverbials that refer to the event time and manner adverbs that modify the event rather than just the result are all felicitous. The eventive passive also crucially involves an event token, which is why event-related participants can be referential and therefore be picked up by anaphoric pronouns (recall also the contrast between the *haben*-passive and the DCP, cf. example (33)).

- (61) Diese Notiz ist mit diesem roten Stift_i geschrieben worden. Er_i gehörte
 This note is with this red pen written become. He belonged
 dem Mörder.
 the.DAT murderer
 ‘This note has been written with this red pen. It belonged to the murderer.’

Colloquial/Standard German

This very much suggests that eventive passives not only contain VoiceP – given the possibility of voice-related modifiers like *by*-phrases and adverbs like *deliberately/carefully* –, but also AspP because of their compatibility with temporal ad-

verbials. In the stative passive, none of these modifiers are generally acceptable (*by*-phrases or instrumental-PPs may appear to some extent if the participants they introduce are non-referential, cf. section 1.1 above). In terms of restrictions, the eventive passive is thus closer to the DCP than to the stative passive, the major difference being the possibility of event-related temporal adverbials. Eventive passives containing inflected participles display the same behavior: as shown at the beginning of this section, they are compatible with temporal adverbials referring to the event time (see, e.g., (59d)) and referential *by*-phrase-agents (see, e.g., (59c)).

Eventive and stative passives also differ w.r.t. the structural position of the subject. As the following paradigm shows, while subjects of eventive passives can both precede and follow instrumental-PP-modifiers, subjects of stative passives have to precede the modifiers:

- (62) a. eventive passive:
 dass {mit einem Schraubenzieher} die Wohnungstür {mit einem
 that [with a screw-driver] the apartment.door with a
 Schraubenzieher} geöffnet wurde
 screwdriver opened became.
 ‘that the door of the apartment was opened by means of a screw-
 driver.’
- b. stative passive:
 dass {*mit einem Schraubenzieher} die Wohnungstür {mit einem
 that with a screw-driver the apartment.door with a
 Schraubenzieher} geöffnet ist
 screw-driver opened is

Colloquial German

As this section has shown, the eventive nature of eventive passives is uncontroversial. In the next subsection, we address the evidence for a stative component.

3.2 *Eventive passives as adjectival structures*

While there is thus solid evidence for a large amount of verbal structure in eventive passives, the only evidence we have provided in favor of their adjectivehood so far is the agreement on the participle. Since we have argued that inflection indicates stativity, we should be able to find a stative component in the eventive passive as well.

We believe that this is possible once we turn to non-verbal predication based on *werden/choo* ‘become’, the auxiliary that is also used in the eventive passive: In non-verbal predications with *bona fide* adjectives, globally eventive readings are possible:

- (63) a. Unsere Katze ist krank.
 Our cat is ill.
 b. Unsere Katze wird krank.
 Our cat becomes ill.

Standard German

Exchanging *sein* with *werden* leads to an eventive interpretation. We would like to propose that the pair in (64) should be analyzed in analogy to that in (63):

- (64) a. Dieses Foto ist gelöscht. [stative passive]
 This photo is deleted.
 b. Dieses Foto wird gelöscht. [eventive passive]
 This photo becomes deleted.

Standard German

The sentences in (64b) and (63b) are clearly eventive, but that does not preclude that the constituent headed by the participle can denote a state, which is then turned into an event by the addition of *werden/choo*. For non-verbal-predication, this is clearly desirable, since we would want to assign the same meaning to *ill* in both (63a) and (63b). In the same way, the eventive passive can very well be globally eventive, while the complement of the auxiliary is stative.

At first sight, there seems to be a problem for this view because coordinating a passive participle of an eventive passive with a genuine predicative adjective fails (cf. also [Businger 2013: 145](#)):

- (65) a. *Unsere Katze wird kastriert und krank.
 our cat becomes castrated and ill.
 b. *Das Auto wird gewaschen und sauber.
 The car becomes washed and clean.

Standard German

This is in opposition to stative passives, where coordination of a participle with an genuine adjective is unproblematic:

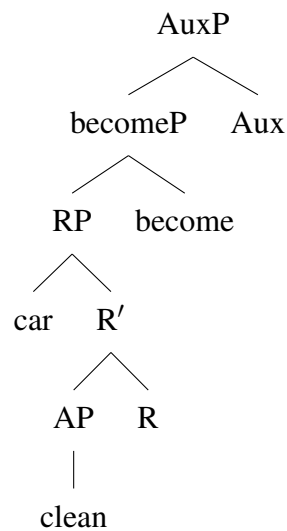
- (66) a. Unsere Katze ist kastriert und krank.
 our cat is castrated and ill.
 b. Das Auto ist gewaschen und sauber.
 The car is washed and clean.

Standard German

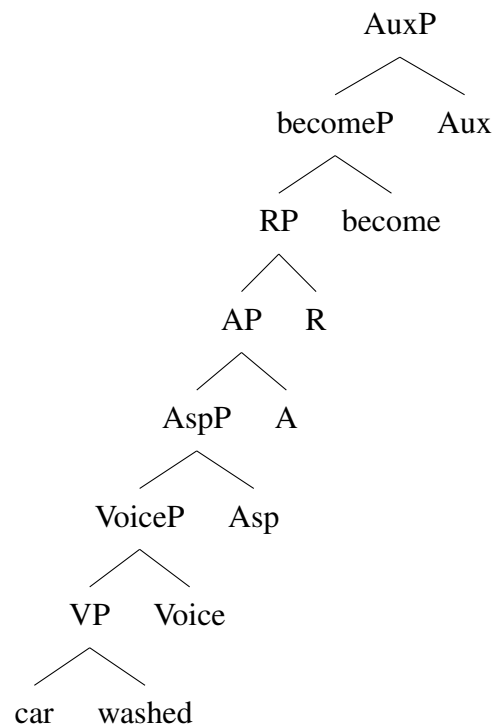
Notice that in both cases in (65), it would be perfectly possible to have either two participles of an eventive passive (that is, *kastriert/gewaschen*) or two genuine ad-

jectives (that is, *krank/sauber*), but the combination of eventive passive and genuine predicative adjective fails. The lack of coordinatability follows straightforwardly, however, once we look at the structures of the two constructions: Recall from example (62a) above that in the eventive passive, the subject can remain below instrumental adverbials. This suggests that it remains within VP, while in bona fide non-verbal predication, the subject occupies the specifier of RP, i.e. adjectives are unergative predicates (cf., e.g. Baker 2008). The contrast is illustrated in the following diagrams:²⁹

(67) a. non-verbal predication:



b. eventive passive:



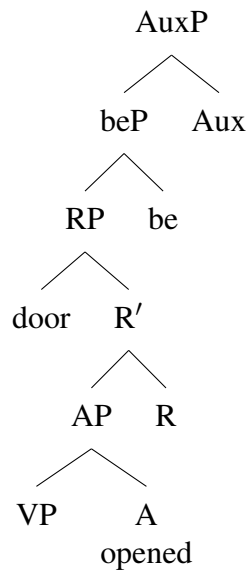
The problem with coordination in (65) above is unsurprising: For the subject to have scope over both conjuncts, this would have to involve R'-coordination, but since the subject in the eventive passive occurs in the object position (as with unaccusative

²⁹ In the diagrams we have assumed, in line with much of the literature, that *werden* 'become' also embeds an RP like other copulas. In the case of German *werden*, however, there may also be reasons to treat it as the head of RP since *werden* imposes certain restrictions on the kinds of predicates it can occur with that can be captured more straightforwardly if *werden* takes the predicate as its complement, cf. Härtl (2007: 134). The distinction is, however, orthogonal to the point we intend to make here. All that matters for us is that the subject occurs above the AP in non-verbal predication but in the c-command domain of the adjective in eventive passives. As in the double perfect, the specifier of R is not overtly filled.

subjects, externalization of the subject is optional in German, this does not work (reversing the conjuncts therefore does not help either, the sequence Adj+eventive passive also leads to ungrammaticality).

The word order asymmetry between stative passives and eventive passives w.r.t. instrumental PPs discussed above shows that stative passives have the same structure as genuine adjectives: The subject occurs outside the AP (cf. also [Bruening 2014](#)) so that it must precede instrumental-PPs. Their structure is thus roughly as follows (again, we represent the participle as an AP embedding a VP):

(68) stative passive:



Note that all these structures also successfully account for the agreement facts in the Highest Alemannic dialects: Since adjectives can probe both upwards and downwards, the phi-probe on the adjective will always target the subject, whether internal to the AP or external to it.

A final strong argument for the adjectival nature comes from word order: To the best of our knowledge, there are no contemporary Alemannic dialects that allow the 12 order in the eventive passive, not even those, including Bernese and the Highest Alemannic ones, that otherwise readily allow for the 12 order in the simple perfect. [Hodler \(1969\)](#) only provides examples with 21 order and, in more complex clusters, with 132, 312 or 321 order. The same goes for the more recent descriptions by [Burri & Imstepf \(2002\)](#) and [Kolmer \(2011\)](#). All these orders are readily compatible with

an adjectival treatment of the lexical participle and the impossibility of 12 orders strongly suggests that the participle in eventive passives projects an AP.^{30, 31}

To summarize this section, we have shown that stative and eventive passives differ significantly both with respect to the possibility of event-modification and the structural position of the subject. While event-related modification is very restricted in the stative passive, it is freely available in eventive passives, suggesting that the participle contains an AspP. While the stative component is immediately obvious in the stative passive, it must be diagnosed more indirectly in the eventive passive, through comparison with non-verbal predication based on *werden/choo* ‘become’ and word order restrictions that point towards an adjectival head. The participle in eventive passives thus has an adjectival/stative component after all, but it is clearly the most verbal adjectival participle in German we have studied in this paper.

4 Conclusion

We have shown that in Highest Alemannic dialects of German, where predicative adjectives are generally inflected, participles can be inflected as well. These inflected participles pose an interesting challenge for the syntax-semantics interface because the stative/resultative semantics that they are associated with in resultative *be-* and *have-*constructions are not equally obvious in two other constructions, the double perfect and eventive passives, where the lexical participle inflects as well. We have nevertheless pursued the hypothesis that adjectival inflection always indicates stativity. In the case of the double perfect, there is sufficient semantic evidence to justify an adjectival projection with stative/resultative semantics, in the eventive passive, the evidence for a stative component can be motivated more indirectly.

Both constructions make an important contribution to the typology of adjectival participles in German and possibly beyond: The adjectival participles in the double perfect and the eventive passive show significantly fewer restrictions on modification than the adjectival/stative passives (in German/English) that are usually discussed in the literature. In the double perfect, there is clear evidence for an

³⁰ Additional evidence for adjectivehood comes from the observation in Hodler (1969: 476) that in the dialect spoken in the Löttschental, the form of the participle in the eventive passive is different from the form used in the simple perfect and, crucially, clearly reveals its adjectival nature.

³¹ Since the eventive passive and the DCP involve different amounts of verbal structure, it has to be ensured that the adjectival head combines with the correct verbal projection in the respective constructions, i.e., one has to e.g. rule out that the adjective embeds an AspP in the DCP as one would otherwise expect the possibility of temporal adverbials. This is not trivial since, by assumption, the adjectival head is the same in the two constructions. One possibility we can think of is to base the selection on voice-related features after all, i.e. whether the verbal complement is active or passive. The passive-head would then additionally have to bear aspect-related features, while the active one does not.

event-token in that event-internal modifiers are freely available without there being any restrictions on the referentiality of event-participants. Interestingly, temporal adverbials referring to the event time are not possible in the double perfect, which we have argued follows if the adjectival head only embeds a VoiceP but not more structure like an AspP. In the eventive passive, there are no restrictions on event-related modification at all, suggesting that the adjectival head embeds even more verbal structure, viz., an AspP.

Finally, the facts discussed in this paper provide further evidence against a unified category of past participles, extending the familiar distinction between adjectival and verbal uses of the participle. According to our proposal, we obtain different structures for the participle appearing in (at least, and in decreasing order of "verbal-ity") the "simple" perfect, eventive passives, double compound perfects, and stative passives.

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