
RESEARCH

Participles: Form, use and meaning

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This paper serves as an introduction to a special collection on the form, use and meaning of past passive participles used in perfect and passive constructions. We discuss various issues which later become prominent in the papers of the volume, which include morphology and participle formation, the use of past passive participles in perfect forms, as well as in verbal and adjectival passives, and the interpretation of such participles. Given that participles in general are characterised as a mixed category with verbal and adjectival properties, we devote some time to address the source of the verbal and adjectival characteristics as well as the source of stativity and eventivity in the interpretation of past passive participles.

Keywords: past participle; verbal passive; adjectival passive; perfect

1 Introduction

This special collection is dedicated to various aspects of the form, meaning and use of past passive participles, both from a synchronic and a diachronic perspective. Recent literature, especially in the field of formal syntax and semantics, has focused primarily on the use, meaning and structure of past passive participles in passive constructions (e.g. Schoorlemmer 1995; Dubinsky & Simango 1996; Rapp 1997; Kratzer 2000; Anagnostopoulou 2003; Embick 2004; Travis 2005; Maienborn 2007; Alexiadou & Anagnostopoulou 2008; Gehrke 2011; 2015; Meltzer-Asscher 2011; Alexiadou & Schäfer 2013; McIntyre 2013; Borik 2014; Bruening 2014; Doron 2014; Alexiadou et al. 2015; Borik & Gehrke 2018). There is also ample research on the syntax and semantics of the perfect (see, e.g., Musan 2002; Portner 2003, and the contributions in Alexiadou et al. 2003, especially Pancheva 2003 and Iatridou et al. 2003), which, in many languages, uses an auxiliary in combination with a seemingly identical past passive participle. However, this literature rarely makes a clear connection between the uses of such participles in different constructions (passives, perfects, but also beyond). This collection is a first step to bridging this gap.

We bring together research on various issues regarding participle formation (their morphosyntax and possible restrictions), the use of past passive participles in different types of syntactic constructions (predicative participles, adjectival passives, verbal passives, perfects, double compound perfects), as well as semantic properties of participles (stativity, eventivity, perfectivity, experiential meaning). Apart from the theoretical diversity of the research questions discussed, this special collection will provide interesting empirical coverage: next to canonical Germanic and Romance participles the languages discussed include Basque and Alemannic.

The papers in this collection have their origin in the workshop “Participles: Form, Use and Meaning (PartFUM)”, which was organised by the authors of this contribution as part of the 50th Annual Meeting of the Societas Linguistica Europaea (SLE), held in September

2017 in Zurich. The theoretical frameworks employed include generative syntax and its interface with semantics (Berro This volume; Wegner This volume; Salzmann & Schaden This volume), as well as formal semantics with a bridge to Distributed Morphology approaches (Pross & Roßdeutscher This volume).

Traditionally, participles are often treated as a hybrid of a verb and an adjective. This simple characterisation already raises several important issues: What is “adjectival” and what is “verbal” in the grammatical makeup of participles? Do these “verbal” and “adjectival” properties characterise a participle itself or are they (partially) conditioned by the context in which a participle appears? The papers by Wegner (This volume), Salzmann & Schaden (This volume), and Berro (This volume) contribute to the discussion of this question, some of them directly connecting adjectival properties to the presence of adjectival inflection, on the one hand, or the absence of particular verbal inflectional properties on the other.

Formal literature in general does not pay that much attention to diachronic issues, and the formal literature on participles is not an exception. However, looking at the diachronic development of participles can reveal some important information about how the grammatical shape of modern participles has been taking shape over the years. The paper by Wegner (This volume) is particularly relevant in this respect and the findings reported there make a significant contribution to current research on participles both from a morphosyntactic and from a semantic perspective.

Empirical data from both well-studied and less studied languages can support, refute or change even some of the strongest theoretical claims made on the basis of limited empirical coverage. The papers in this collection provide challenges to well-established assumptions, either general theoretical or language-specific, and present findings which are directly relevant not only for the current theoretical research on participles but much more broadly for general syntactic, semantic or morphological theories of language. For instance Pross & Roßdeutscher (This volume) challenge a common assumption that *ge*-prefixation in German participles is purely phonologically conditioned and thus morphologically unimportant and semantically null. Instead, they argue that *ge*- has a clear semantic contribution and the presence of this prefix correlates with predicating an event property. Berro (This volume), on the basis of Basque data, claims that apart from the classification of adjectival participles into stative, target state and resultant state ones, commonly employed in the literature since the influential works by Kratzer (2000) and Embick (2004), a fourth class must be introduced, i.e. that of experiential adjectival participles. Salzmann & Schaden (This volume), in turn, show that data from Highest Alemannic provide support for a more fine-grained classification of adjectival participles, which under their account are also found in eventive passives and double compound perfects.

The current collection is of interest to a wide range of researchers working on participles or related constructions from different perspectives, even if most papers of this collection pursue formal analyses. Morphological (inflectional or derivational) properties of participles are discussed by Pross & Roßdeutscher (This volume). From a syntactic perspective, a wider range of constructions that participles appear in are studied: in addition to the quite familiar passives and perfects (Berro This volume; Wegner This volume), double compound perfects and HAVE-passives (Salzmann & Schaden This volume) are also discussed. Various semantic problems raised by participles are discussed in the papers by Wegner (This volume) and Pross & Roßdeutscher (This volume). The volume will also be of interest to typologists and to historical linguistics working on the development of participles.

In this paper we provide background information on past passive participles to embed the papers in this special collection in the broader research context. In §2 we will first

discuss general facts about the form, use and meaning of such participles in languages in which they are identical in perfect and passive constructions (§2.1). We will then zoom in on the perfect (§2.2), the verbal passive (§2.3) and the adjectival passive (§2.4). With this information in hand, we return to the question about the source of the verbal and adjectival characteristics as well as of the eventive and stative properties of past passive participles in §3. Finally, §4 provides short summaries of the papers in this special collection.

2 Past passive participles

The papers in this special collection mostly discuss questions related to the form, use and meaning of past passive participles in Germanic and Romance languages, whereas the paper by Ane Berro (Berro This volume) deals with adjectival past participles in Basque, an ergative-absolutive language. Even though these participles are active, they share a lot of properties with adjectival past passive participles in nominative-accusative languages. Therefore, this introduction summarises the main points that the literature converges on when talking about past passive participles.

We will use the term **past passive participle** for those participles that are formed from a verb with a particular participial morphology that, at least historically, expressed a past and a passive function, as opposed to, e.g., a present passive or a past active participle. Past passive participles from some of the languages discussed in this collection include the following:

- | | | |
|-----|--|---------|
| (1) | <i>Past passive participle derivation: Regular forms</i> | |
| | a. to open > open- ed | ENGLISH |
| | b. aller ‘to go’ > all- é | FRENCH |
| | c. öffnen ‘to open’ > ge -öffne- t | GERMAN |
| | be-malen ‘to paint (sth with sth)’ > be-mal- t | |
| | an-hängen ‘to attach’ > an- ge -häng- t | |
| (2) | <i>Past passive participle derivation: Irregular forms</i> | |
| | a. to go > gone | ENGLISH |
| | b. ouvrir ‘to open’ > ouvert | FRENCH |
| | c. vergeben ‘to forgive’ > ver-gebe- n | GERMAN |

The participles in (1) display regular past passive participle morphology in English and French. In German, past passive participles that are derived with a dental suffix *-t* can be considered similar to English regular participles. In the traditional terminology of German grammars the base verbs from which such participles are derived are called weak verbs. The examples in (2) contain irregular participles in English and French and an example of a comparable irregular morphology of a German participle formed from a strong verb, again, according to the terminology used in German grammars.

What the German examples further illustrate is that while some participles are formed with the additional prefix *ge-* (e.g. *geöffnet* and *angehängt* in (1-c)), others are not (e.g. *bemalt* in (1-c) and *vergeben* in (2-c)). This difference is commonly interpreted in relation to the stress pattern of the underlying verb. For example, if the verb already contains a prefix and this prefix is not stressed, then there is no additional *ge-* in the participle, as with the participle of *bemalen* but not with the participle of *Anhängen* (cf. the two prefixed verbs in (1-c)). The rather intricate differences between German participles with the prefix *ge-* vs. those with the prefix *be-* are further addressed in Pross & Roßdeutscher (This volume), but this time from a semantic point of view.

The choice of the term past passive participle does not mean that such participles are necessarily past in their tense information or passive in their voice information. In the following section, we address the forms that participles have together with the auxiliaries or copulas that they are used with and the meanings that these combinations express.

2.1 Past passive participles: Form, use and meaning

In many languages, past passive participles can appear in (active) perfect as well as in passive constructions, as shown in (3) for English.

- (3) *English: Perfect vs. passive participles*
- | | | |
|----|---|---------|
| a. | They have/had/will have/have had etc. opened the door. | PERFECT |
| b. | The door is/was/will be/has been etc. opened . | PASSIVE |

In other languages, the perfect participle is not identical to the past passive participle, as, for instance, in those Slavic languages that also (at least in form) have a perfect. For example, Bulgarian uses the so-called *l*-participle in the perfect (4-a) and the past passive participle in the passive (4-b).

- (4) *Bulgarian: Perfect vs. passive participles* (after Pancheva 2003: 296)
- | | |
|----|---|
| a. | Ivan e postroil pjasâčnata kula.
Ivan is build.LPTCP sand-the castle
'Ivan has built the sandcastle.' |
| b. | Pjasâčnata kula e postroena ot Ivan.
sand-the castle is built by Ivan
'The sandcastle is built by Ivan.' |

Wegner (This volume) briefly mentions the non-identity of perfect and passive participles in languages like Bulgarian, but mainly focuses on languages in which perfect and passive participles are identical in order to propose a uniform account of such participles.¹

It is also well-known that perfect constructions in languages that formally have a perfect do not always convey a perfect meaning, however we would want to characterise this meaning (for example as expressing the resultant state of an event, in the sense of Parsons 1990: see §2.2 for more details). This holds for both languages that employ the same participle for passives, such as German (5-a), as well as for languages that employ a different participle, such as Czech (5-b).

- (5) *Perfect forms with non-perfect meanings*
- | | |
|----|--|
| a. | <i>German</i>
Gestern habe ich den ganzen Tag deine Briefe gelesen .
yesterday have I the whole day your letters read.PPP
'Yesterday, I read / was reading your letters all day.' |
| b. | <i>Czech</i>
Já jsem celý den četl tvoje dopisy.
I am whole day read.LPTCP your letters
'I was reading your letters all day.' |

Neither example in (5) can be translated with a perfect into English, rather the past tense has to be used (in this case also preferably with the progressive), because the (formal)

¹ For an overall approach to the (non-)identity of passive and perfect(ive) participles in various languages and the relevant parametric variation, cf. Wegner (2019).

perfect in these languages is (often) used like a regular past tense; this is also reflected in Czech grammars which label this form a past tense.²

In addition, participles in passive constructions do not always convey the same meaning. It is common to distinguish between what we will call an **adjectival** and a **verbal passive**. The literature employs different terms for this distinction, such as stative vs. eventive, Zugangs- vs. Vorgangspassiv (in German), but we will use the terms adjectival vs. verbal in this paper (we will come back to this issue in §3). Verbal passives are commonly analysed as involving a syntactic operation on a verb's argument structure (e.g. Baker et al. 1989) (but see Bresnan 1982: for a lexicalist approach), whereby an active sentence is transformed into a passive one, where the external argument is demoted and can optionally appear in a BY-phrase, whereas the internal argument raises to subject position where it receives nominative case, as in (6).

- (6) *English: Active vs. passive*
 a. Mary is closing the door.
 b. The door is being **closed** (by Mary).

Adjectival participles, on the other hand, are not or at least not necessarily passive, in the sense that they would be syntactically derived from an active sentence with the suppression of the external argument and the promotion of the internal argument to subject. Rather, they commonly describe a stative property that resulted from a prior event or that is of the type that usually results from such an event, and this stative property is ascribed to/predicated over the underlying theme of the verb that the participle is related to (7).

- (7) *English: Adjectival passive*
 The door is **closed**.

Given that adjectival passives ascribe a stative property to an individual, the participle is standardly treated as an adjective or as involving the adjectivisation of a verb or verbal root, or of verbal structure, either in the lexicon (e.g. Wasow 1977; Levin & Rappaport 1986; Horvath & Siloni 2008; Meltzer-Asscher 2011) or in the syntax (e.g. Doron 2000; 2014; Anagnostopoulou 2003; Alexiadou & Anagnostopoulou 2008; McIntyre 2013; Bruening 2014; Alexiadou et al. 2015). The subject of an adjectival passive has been argued to behave like a true external argument so that many approaches take the theme to be externalised (in the lexicon or at some point of the derivation) (see, e.g., Williams 1981; Borer 1984; Levin & Rappaport 1986; Meltzer-Asscher 2011; McIntyre 2013; Bruening 2014).

The verbal passive combines an auxiliary with the participle; in English and many other languages, this is the auxiliary *be* (which we will type as BE as a common form for an auxiliary and a copula in English or in other languages), so that we get a potential ambiguity between a verbal passive (with the auxiliary BE) and an adjectival passive (with the copula BE), as in (8).

- (8) *English: Ambiguity in passives*
 The necklace **was stolen**.
 a. The necklace was recently stolen (by the raven). VERBAL
 b. The necklace was clearly stolen. ADJECTIVAL

² In most Slavic languages there is only one past tense form, the l-participle with (e.g. Czech) or without (e.g. Russian) the auxiliary *be*. Bulgarian and Macedonian (and to some extent Serbo-Croatian), as well as older stages of Slavic languages (e.g. Church Slavic), have a more elaborate system of past tenses, with the addition of the aorist and the imperfect, so that the perfect (as well as the pluperfect) is presumably still functioning like a perfect and not like a simple past tense.

The example in (8) is ambiguous between the two passive readings: the reading associated with a verbal passive (we might call it an eventive reading) is exemplified in (8-a) and the reading associated with an adjectival passive (we might call it a stative reading) is given in (8-b). The former is facilitated by the temporal adverb *recently*, which locates the event of stealing, and a referential BY-phrase naming the agent of the stealing event (we will come back to BY-phrases in §2.4), whereas the latter is made prominent by the adverb *clearly*, which cannot be interpreted as an event-related adverb in this example (on a par with *to speak clearly*) but instead conveys a speaker-attitude towards the state expressed in the sentence.

Further languages where the same verb is used in both verbal and adjectival passives include Bulgarian (4-b) or Russian (e.g. Schoorlemmer 1995; Paslawska & von Stechow 2003; Borik 2013; 2014). The same type of ambiguity of “bare” passives illustrated in (8) for English is observed in those languages as well, and the most common disambiguation strategy is also based on the use of adverbials.

In contrast, there are languages where the passive auxiliary is different from the copula BE, such as, for instance, German, with *werden* ‘to become’ (BECOME) in the verbal passive in (9-a), in contrast to the adjectival passive in (9-b).

- (9) *German: Verbal vs. adjectival passives*
- a. Die Tür **wird** **geöffnet**.
the door becomes opened
‘The door is (being) opened.’ VERBAL PASSIVE
- b. Die Tür **ist** **geöffnet**.
the door is opened
‘The door is open(ed).’ ADJECTIVAL PASSIVE

Further such languages are Dutch with *worden* ‘to become’ vs. *zijn* ‘to be’ (cf. Sleeman 2011), or Spanish with *estar* ‘to be.LOC’ as opposed to *ser* ‘to be’ (cf. Bosque 1990; 1999; Demonte 1991; Marín 2004; Gehrke & Marco 2014).

Adjectival participles, then, combine the participle with a copula; this is commonly the copula BE, as in (9-b), or AP-selecting verbs, such as English *seem*, *remain*, *become* (10) (see also Embick 2004), and their counterparts in other languages.

- (10) *English: Adjectival participles* (after McIntyre 2013)
It {seemed/remained/became} **damaged**.

Finally, some languages also resort to a non-participial passive and use synthetic reflexive verb forms (or non-active/mediopassive verb forms) to express something like a verbal or eventive passive meaning (alongside other meanings that reflexive constructions can have in these languages). We will come back to this in §2.3.

Perfect participles in English always combine with the auxiliary *have* (HAVE). In contrast, in languages like Italian, Dutch and German we find the auxiliaries HAVE and BE (11), the latter arguably being correlated with an unaccusative structure (e.g. Burzio 1981; Hoekstra 1984).

- (11) *German: Perfect auxiliaries*
- a. Maria **hat** einen Kuchen **gegessen**.
Mary has a cake eaten
‘Mary has eaten a cake.’
- b. Die Leute **sind** **angekommen**.
the people are arrived
‘The people have arrived.’

Thus, in languages like German there is a potential ambiguity with unaccusative verbs between the perfect, where the auxiliary BE combines with a participle, and the adjectival passive, where the copula BE combines with a participle. This ambiguity does not exist in English. We will come back to this point in §3.1.

2.2 The perfect

One of the most discussed issues in the literature on the perfect is the types of meaning that perfect tenses express. Traditionally (cf. Comrie 1976; McCawley 1971), the following three meanings of the perfect have been distinguished: the *universal* (continuative/perfect of persistent situations), the *existential/experiential* and the *resultative* meaning, exemplified in (12).

- | | | |
|------|--|--------------|
| (12) | <i>English: Different types of (present) perfect</i> | |
| a. | Mary has always lived in the city/has lived in the city since she was a child. | UNIVERSAL |
| b. | Have you ever read ‘War and Peace’? | EXPERIENTIAL |
| c. | Peter has lost his sunglasses. | RESULTATIVE |

As these examples show, the different readings can come about due to the interaction with various adverbs (e.g. *always* in (12-a) or *ever* in (12-b)) or temporal clauses (e.g. the *since*-clause in (12-a)). Moreover, particular verb types can also be more prone to one reading rather than the other: with stative verbs such as *live* in (12-a) we usually get the universal reading and with achievements like *lose* in (12-c) the resultative one.

A continuous debate is if the meanings of the perfect need to have distinct semantic representations and depending on whether the answer to this question is affirmative or not, whether the number of meanings of perfects can be reduced semantically to two. One of the most influential proposals, i.e. Iatridou et al. (2003), aims at doing exactly that, i.e., reducing the semantic representations associated with the perfect to two meanings: the *universal* and the *existential* meaning. On the other hand, there have also been proposals not to reduce but to expand the range of possible meanings of the perfect, including the one that is called *recent past* (cf. Comrie 1976) or *hot news perfect* (cf. McCawley 1971), which is facilitated by the additional adverb *just* (13).

- (13) *English: Recent past/hot news perfect*
Mary **has just arrived**.

In addition, perfect forms can obtain the function of a simple past. It often happens in languages that have lost a simple past, such as, for instance, Czech or Southern German dialects (recall the discussion around (5)), or in languages where a simple past has assumed a somewhat restricted function, such as French or Dutch. This is briefly discussed in Salzmann & Schaden (This volume) who label the simple past use of the perfect **actoristic perfect**.

While it is still a matter of discussion which one(s) of the perfect meanings should have a distinct semantic representations and which differences can be derived pragmatically (cf. McCoard 1978; Dowty 1979; Mittwoch 1988; Klein 1994; Iatridou et al. 2003; among many others), it is clear that the **resultative** meaning, which makes available a resultant state (in the sense of Parsons 1990) brought about by a prior event described by the lexical verb, is the one that links perfect constructions to passive ones in a most straightforward way. In fact, Kratzer (1994) argues that the perfect of result meaning is exactly the one that is encoded in the participle and those verbs that easily allow for a perfect of result reading also allow for the formation of (what we have labeled)

adjectival passives. Note that in order for the perfect sentence to be classified as resultative in meaning, the result of the event reported in a sentence should hold at the utterance time. Thus, (12-c) is classified as resultative only while the sunglasses are lost, the moment they are found the sentence will have an experiential meaning (cf. Iatridou et al. 2003). The **experiential** meaning illustrated in (12-b) merely asserts that a certain eventuality has taken place before the utterance time (during a period of time which can be left unspecified, as in our example) and that the subject has the relevant experience at the point when the sentence is uttered. Berro (This volume) argues that this meaning can also be expressed by Basque adjectival participles, which strengthens the link between perfects and passives.

A substantial part of the literature on perfect tenses has been focusing on the **present perfect**, whereas other perfect tenses (past and especially future) have been discussed somewhat less. However, it is far from obvious that everything that can be said about the present can be easily extended to the past or the future variety, and there is still a lot of discussion and not so much agreement on what exactly makes the present perfect a “special case”. To take one of the most obvious examples, in English the present perfect exhibits a clear restriction on the use of past and punctual temporal adverbials, which are compatible only with the simple past tense. The restriction is known as the present perfect puzzle (cf. McCoard 1978; Klein 1992) and is illustrated in (14).

(14) *English: Present perfect puzzle*

- a. Mary has arrived {*yesterday/*an hour ago/*at 10 o'clock}.
- b. Mary arrived {yesterday/an hour ago/at 10 o'clock}.

There is a lot of parametric variation between languages with respect to the compatibility of the past-oriented and/or punctual temporal adverbials with the present perfect: while in English and the majority of Scandinavian languages the restriction is very strict, it is completely absent in German, Dutch, French or Italian and somewhat restricted in Catalan and Spanish, which allow for the presence of punctual adverbials in the perfect (i.e., *at 10 o'clock*) but not for the past adverbial modifiers like *last year* (cf. Curell 1990; Klein 1992; Kamp & Reyle 1993; Giorgi & Pianesi 1997; Musan 2002; Rothstein 2008; Schaden 2009; Xiqués Garcia 2015).

The **past perfect** or **pluperfect** is generally analysed as expressing relative tense, i.e. anteriority to some other event or temporal interval, and it therefore has been discussed prominently in different approaches to the semantics and pragmatics of discourse and rhetorical relations (e.g. Kamp & Reyle 1993; Lascarides & Asher 1993). A similar function is also ascribed to so-called **double compound perfects (DCPs)**, which are discussed in detail in Salzmann & Schaden (This volume). DCPs can be found in various languages or dialects, such as Southern Dutch, Northern Italian, Colloquial Standard German. They consist of the combination of a finite form of the perfect auxiliary (which can be HAVE or BE, depending on the lexical verb), a past passive participle of HAVE/BE and a past passive participle of the lexical verb, as illustrated in (15).

(15) *Double compound perfects*

- a. *South-eastern Dutch* (Koeneman et al. 2011)
Ik **ben** twee keer **gevallen** geweest.
I am two times fallen been
'I have fallen twice.'

- b. *Northern Italian* (Poletto 2009)
 Co go bio magnà, ...
 when have.1SG had eaten
 ‘When I had finished eating, ...’
- c. *Colloquial German* (Salzmann & Schaden This volume)
 Ich habe das Buch gelesen gehabt.
 I have the book read.PPP had
 ‘I had read the book.’

According to Salzmann & Schaden (This volume), who provide an analysis of Highest Alemannic DCPs building on previous literature on the topic (see *op.cit.* for further references), the main function of the DCP is to express anteriority to another event, which can sometimes also be pragmatically enriched to express a two-way action, i.e. the reversal of the resultant (perfect) state.

We have limited the discussion of the perfect to issues that are particularly relevant for the papers of this special collection and refer the interested reader to the extensive literature focusing on perfect tenses, such as Kamp & Reyle (1993); de Swart (1998); Musan (2002); Alexiadou et al. (2003); Portner (2003); Schaden (2007; 2009); Rothstein (2008), for further details on the syntax and semantics of perfect tenses. As for the contribution of the past participle to perfect constructions, the diversity of theoretical proposals is perfectly reflected in our collection. Wegner (This volume) explicitly argues for the identity of passive and perfect participles, while the relevant differences between passive and perfect constructions are derived from other factors, including the contribution of the auxiliary verbs. Salzmann & Schaden (This volume), in turn, differentiate between adjectival/stative participles used in stative perfects (i.e. resultative perfects), DCPs, stative and eventive passives, on the one hand, and verbal/eventive participles used in eventive perfects (i.e. universal, existential, aoristic), on the other. To get a better understanding of passive participles, we will now turn to verbal and adjectival passives.

2.3 The verbal passive

As outlined in §2.1 verbal passives are commonly analysed as involving a syntactic operation on a verb’s argument structure, whereby an active sentence is transformed into a passive one; the external argument is demoted and can optionally appear in a BY-phrase, whereas the internal argument raises to subject position where it receives nominative case, as in (16).

- (16) *German: Active vs. passive*
- a. Maria öffnet die Tür.
 Maria.NOM opens the.ACC door.ACC
 ‘Maria opens / is opening the door.’
- b. Die Tür wird (von Maria) geöffnet.
 the.NOM door.NOM becomes by Maria.DAT opened
 ‘The door is (being) opened (by Mary).’

In languages like English and German, verbal passivisation involves the combination of a non-finite past passive participle with an auxiliary (*be* in English, *werden* ‘become’ in German), which carries phi-features and can be inflected for tense, and both together form a periphrastic verb form.

As briefly mentioned in §2.1, verbal passivisation can also be expressed by synthetic verb forms, i.e. by specialised inflectional forms for passives (e.g. Latin (17)) or by reflexive or non-active forms that do not just express passivisation but also other meanings associated with reflexives more generally (such as proper reflexive, reciprocal, anticausative/inchoative, impersonal).

(17) *Latin: Synthetic passive*

- a. Arbor **movebatur** vento.
tree.NOM.SG move.IPFCT.3SG.PASS wind.ABL.SG
'The tree was moved by the wind.'
- b. Pater **amatur** a filio.
father.NOM.SG love.PRES.3SG.PASS from son.ABL.SG
'The father is loved by the son.'

In particular, we find what we will call **reflexive passives** (as opposed to **participial passives**) in many Slavic languages (cf. Babby & Brecht 1975; Fehrmann et al. 2010), e.g. Russian (18), in some Romance languages, e.g. French (19),³ or in Greek (20).

(18) *Russian: Reflexive passive* (after Borik & Gehrke 2018)

- Vorota **otkryvalis'** (storožem).
gates opened.IPF.REFL watchman.INSTR
'The/a gate was (being) opened (by the/a watchman).'

(19) *French: Reflexive passive* (after Schäfer 2016)

- Trois maisons **se** sont **louées** (*par des touristes) hier.
three houses REFL are rented by some tourists yesterday
'Three houses were rented yesterday.'

(20) *Greek: Reflexive passive* (after Anagnostopoulou 2003)

- a. To grama **grafete**.
the letter.NOM write-NACT.IPF.3SG.NONPAST
'The letter is being written now.'
- b. To grama **graftike**.
the letter.NOM write-NACT.PF.3SG.NONPAST
'The letter was written.'

In addition to such reflexive passives, these languages also combine past passive participles with forms of BE, as in Russian (21), French (22), and Greek (23).

(21) *Russian: Participial passive* (after Borik & Gehrke 2018)

- Vorota **byli otkryty** (storožem).
gates were opened.PF.PPP watchman.INSTR
'The/a gate was opened (by the/a watchman).'

(22) *French: Participial passive* (after Schäfer 2016)

- Trois maisons ont **été louées** (par des touristes) hier.
three houses have been rented by some tourists yesterday
'Three houses were rented (by some tourists) yesterday.'

³ To avoid confusion, in (19) we happen to have a perfect of a reflexive passive, *se louer* 'to REFL rent', which is generally formed with the BE-auxiliary with reflexive verbs in French. This is not the passive auxiliary (or copula) BE, which we find in the participial passive, e.g. in (22).

- (23) *Greek: Participial passive* (after Anagnostopoulou 2003)
 To grama **ine** **grameno**.
 the letter.NOM.SG.NEU is.3SG written.NOM.SG.NEU
 ‘The letter is written.’

Not all reflexive passives allow for BY-phrases, cf. the contrast between Russian (18) and French (19), which might call into question the nature of such reflexive constructions as “true” verbal passives (see Fehrmann et al. 2010; Schäfer 2016: for further discussion and possible explanations). Furthermore, for Greek it is generally assumed that only the reflexive passive is a verbal passive, whereas the participle in the participial passive is standardly analysed as an adjectival one (e.g. Anagnostopoulou 2003). We will come back to Greek participial passives in §2.4.

While the co-existence of reflexive and participial passives in these languages raise many important questions, they are not directly relevant to the topic of this special collection, past passive participles, so we will not further dwell on these. Let us then turn to issues commonly addressed in the literature on adjectival participles.

2.4 *The adjectival passive*

The most general characterisation of adjectival passives, as we already mentioned in 2.1, is that they describe a stative property that results from a prior event described by the underlying verb (or root) that the participle is “derived” from, and this stative property is ascribed to or predicated over the subject of the adjectival passive construction. Common arguments in favour of treating the participles in adjectival passives as adjectival include the fact that they allow adjectival *un*-prefixation (24-a), comparative or superlative morphology and degree modification, and that they can be coordinated with genuine adjectives. The latter three properties are illustrated in (24-b).

- (24) *Adjectival diagnostics: Adjectival participles*
- a. *English* (Wasow 1977: 399)
 Her whereabouts may be **unknown**
 - b. *German* (after Maienborn 2007: 93)
 ... Autor, der viel **berühmter** **und** vor allem **weitaus**
 author which much famous.COMP and before all by far
gelesener war als Goethe
 read.PPP.COMP was than Goethe
 ‘... author that was much more famous and above all much more read than Goethe’

Verbal participles, as illustrated in (25) for perfects and eventive passives, do not exhibit any of the above properties:

- (25) *Adjectival diagnostics: Verbal participles*
- a. *English*
 *I have **unknown** her whereabouts.
 - b. *German*
 *Dieser Autor wurde (von den Kindern) (**weitaus**) **gelesener**.
 this author became by the children by far read.PPP.COMP
 - c. *German*
 *Dieser Autor wurde (von den Kindern) **gelesen** **und** berühmt.
 this author became by the children read.PPP and famous

It is generally assumed that there are various subtypes of participles in adjectival passives. For example, Kratzer (2000) argues that **target state participles** are formed from categoriless stems or phrases that contain both an event and a state variable, whereas **resultant state participles** involve a perfect operator that derives a resultant state (in the sense of Parsons 1990) from verb phrases. As a diagnostics to distinguish the two types of participles, she proposes the *still*-modification test to show that only target state participles can be modified by *still*, as in (26).

- (26) *German target vs. resultant state participles* (after Kratzer 2000)
- a. Die Reifen **sind** immer noch **aufgepumpt**.
 the tires are still up-pumped
 ‘The tires are still inflated.’ TARGET STATE
- b. *Das Theorem **ist** immer noch **bewiesen**.
 the theorem is still proven
 Intended: ‘The theorem is still proven.’ RESULTANT STATE

While this test is not without problems (for recent discussion, see Irmer & Mueller-Reichau 2018), it has been quite influential in the literature on participles, and it is still widely used in the literature (e.g. Berro This volume) to show that the class of adjectival participles is not homogenous. Pross & Roßdeutscher (This volume), who share the view that the *still*-modification test is problematic, claim that the distinction proposed by Kratzer (2000) can be recast in different terms and without relying on the questionable test. They argue that in German a semantic distinction between event properties expressed by participles with the prefix *ge-* (as in (26-a)) and individual properties expressed by participles with the prefix *be-* (as in (26-b)) reproduces a distinction between Kratzer’s target and resultant states.

Embick’s (2004) distinction between **stative and resultative participles**, in turn, is slightly different and concerns adjectives derived from roots (statives) vs. adjectives derived from VPs (resultatives) (see also §3.1); also this distinction is further discussed in Berro (This volume), who, in fact, proposes a four-way classification of Basque active adjectival participles into statives, target state, resultant state and experiential. Wegner (This volume), on the other hand, proposes that Embick’s stative participles are in fact not participles at all but are adjectives stored in the lexicon as such which are merely etymologically related to the verbs in question.

One prominent topic in the literature on adjectival participles is the presence or absence of an (at least implicit) external argument and the related issue of the presence or absence of a syntactic projection that introduces the external argument, i.e. VoiceP. While it is generally agreed upon that the external argument is present and semantically and syntactically active in verbal passives, earlier accounts of adjectival passives converged on the idea that they lack external arguments altogether, at least in English (e.g. Wasow 1977; Levin & Rappaport 1986). Common arguments for the absence of external arguments are the unacceptability of BY-phrases, the incompatibility of agent-related manner modifiers (which we will both subsume under the notion “event-related modification”), lack of control into purpose clauses, and the so-called disjoint reference effect (on which see Kratzer 2000). In this overview we will concentrate mainly on event-related modification; for a recent discussion of some other tests and possible problems related to them, see McIntyre (2013); Alexiadou et al. (2014; 2015); Bruening (2014).

Regarding the issue of event-related modifiers, it has been noted rather early on that some event-related modification is, in fact, possible with adjectival participles in German, but that this type of modification is much more restricted in comparison to verbal passives

(e.g. Rapp 1996; 1997; Kratzer 2000). The same holds for English (cf. McIntyre 2013). However, there are other languages for which it has been reported that there are no restrictions on event modification. The evidence has been provided for Greek *-menos*-participles (as opposed to *-tos*-participles; cf. Anagnostopoulou 2003), Russian (Paslawska & von Stechow 2003), or Hebrew⁴ (cf. Meltzer-Asscher 2011; Doron 2014) (see also discussion in Alexiadou et al. 2014). Berro (This volume) argues that there are some classes of adjectival (active) participles in Basque that do not show the restrictions. Thus, it appears that the absence of (or at least serious restrictions on) event-related modification is a prominent feature of adjectival passives in languages like English or German but is absent in other languages which potentially include Greek or Russian.

We will illustrate this difference with (event-related) **BY-phrases**;⁵ for differences in the availability of other modifiers the reader is invited to consult the literature cited in this section. While in English, German and Spanish, BY-phrases with fully referential complements (cf. Gehrke 2015) are not possible with adjectival participles (27), they are acceptable in Greek and Russian (28).

- (27) *Adjectival participles group I: No referential BY-phrases*
- a. *English* (McIntyre 2013)
The door **seemed** {**broken/opened/painted**} (*by Mary).
 - b. *German* (after Rapp 1996: 246)
Der Mülleimer **ist** (*von meiner Nichte) **geleert**.
the rubbish bin is by my niece emptied
Intended: ‘The rubbish bin was emptied by my niece.’
 - c. *Spanish* (after Gehrke & Marco 2014: 195)
*El cuadro **estaba pintado** por este niño.
the picture was.LOC painted by this child
‘The drawing was painted by a child.’
- (28) *Adjectival participles group II: Possible with referential BY-phrases*
- a. *Greek* (after Anagnostopoulou 2003)
To vivlio **ine grameno** apo tin Maria.
the book is written by the Mary
‘The book is written by Mary.’
 - b. *Russian* (after Paslawska & von Stechow 2003: 309)
Okno **zakryto** Mašej dva časa nazad.
window.NOM closed.PPP Mary.INSTR two hours behind
‘The window is closed by Mary two hours ago.’

The distinction between two groups of languages, however, gets blurred once we come across data showing that *some* BY-phrases are available with adjectival participles even in language of the first type, as illustrated in (29) (for English examples see, e.g., McIntyre 2013; Bruening 2014).

⁴ At least for the causative template, which does not involve a participial passive though.

⁵ The restrictions (in some languages) reported here hold for event-related BY-phrases only, where the BY-phrase relates to the (type of) underlying event that the state expressed by the adjectival participle is perceived to be the result of. Other BY-phrases, in particular those with participles derived from stative verbs (state-related BY-phrases in Gehrke 2015; Gehrke & Marco 2014), as in *unimpressed by the music* (see also Rapp 1997; Schlücker 2005: for German) or what McIntyre (2013) calls situation-in-progress-participles, e.g. *The road remained blocked by police*, do not show the restrictions discussed here.

- (29) *Adjectival participles in group I languages with BY-phrases*
- a. *German* (after Rapp 1997: 192)
Die Zeichnung **ist** von einem Kind **angefertigt**.
the drawing is by a child produced
'The drawing is produced by a child.'
 - b. *Spanish* (after Gehrke & Marco 2014: 195)
El cuadro **estaba pintado** por un niño.
the picture was.LOC painted by a child
'The drawing was painted by a child.'

Nevertheless, it still holds that there are restrictions on the availability of BY-phrases in some languages but not in others. The same grouping into two types of languages can also be made on the basis of other event-related modification. While all the languages discussed here seem to allow for (low) manner and state-related modification, the availability of (high) agent-oriented modifiers (including BY-phrases, purpose clauses, etc.) or instrumental modifiers is much more restricted in type I languages but not in type II languages.

Thus, it seems that adjectival passives exhibit different properties in different types of languages. Various accounts and explanations for this can be found in the literature. An early account is that of Anagnostopoulou (2003) who argues that German adjectival participles lack a VoiceP (following Kratzer 2000) but Greek adjectival participles do not. Similarly, Paslawska & von Stechow (2003) argue that Russian adjectival participles contain a VoiceP that German ones lack. To account for the parametric variation in adjectival passives, they propose a Result parameter (cf. Paslawska & von Stechow 2003: 347). This would also explain why lower event-related modifiers are available in both types of languages, whereas higher ones, which necessarily attach to a VoiceP, are only available in languages like Greek and Russian. In particular, Anagnostopoulou (2003) argues that only state-related modification is possible in languages like German (see also Rapp 1996; 1997: for a similar claim).

However, in more recent literature, the claim that adjectival participles in languages like English and German lack a VoiceP has been refuted based on various arguments from semantics, syntax and morphology (cf. McIntyre 2013; Bruening 2014; Alexiadou et al. 2014; 2015: for relevant examples). Most recent syntactic literature that proposes syntactic derivation mechanisms for adjectival participles seems to converge on the idea that there is a VoiceP in adjectival participles. On the other hand, there are accounts that do not build adjectival participles in the syntax but rather argue that they are simple APs without internal verbal structure (e.g. Meltzer-Asscher 2011) or event-based ad hoc properties (e.g. Maienborn 2007; 2009; 2011) so that some event-related modification is pragmatically licensed.

Furthermore, it is clear that the restrictions cannot be captured by stating that only state-related modification is possible in type I languages, given that the modifiers illustrated above are clearly event-related. To solve this issue, McIntyre (2015) provides the more precise hypothesis in (30).

- (30) *State Relevance Hypothesis* (McIntyre 2015)
Event-related satellites are unacceptable in (German, English, Hebrew) adjectival passives unless they contribute to the description of the state expressed by the participle or of the theme during the interval *i* during which this state holds. They are most acceptable if they provide information which can be inferred solely by inspection of the theme during interval *i*.

From a semantic perspective, it has been proposed in Gehrke (2011; 2013; 2015) that only an event kind (or type) is made available for modification in adjectival participles in type I languages, and a similar idea is also pursued in works by Maienborn and colleagues (Gese 2011; Maienborn & Geldermann 2013; Maienborn et al. 2016). In verbal participles, Gehrke argues, an event token, which is realised and instantiated in space and time, is available for modification, and no restrictions are imposed. In particular, she proposes that the verbal structure inside (German) adjectival participles lacks an Asp(ect) P needed to instantiate the event and to locate it in time and space. Therefore, only kind-related modification is possible but not modification that requires a spatiotemporally located event. This rules out temporal or (event-external) locative modifiers (see op.cit. for examples), as well as reference to actual event participants expressed by referential NPs in BY- and WITH-phrases.

3 What makes a participle verbal, adjectival, eventive, stative?

Up until now we have used the terminology of verbal vs. adjectival passives and called the participles in these constructions verbal and adjectival. This terminology also reflects the hybrid nature of participles, which is one of their main characteristics always mentioned in the literature on participles, independently of a particular theoretical approach: categorically, a participle is a “mix” of a verb and an adjective. In this section we go back to the question posed in §1, namely, what it means for a participle to be verbal or adjectival.

While various ideas can be found in the literature, a rather prominent trend in formal approaches to participles is to associate – or even equate (at least implicitly) – adjective-hood with a stative interpretation and verb-hood with an eventive interpretation. For example, it is common to employ a stativising head in the analysis of participles, although this head might either characterise the whole class of participles or, if it is postulated for a specific type, be used to differentiate between participles which are “more like” adjectives (i.e., our adjectival participles) and those which are “less like” adjectives (i.e., our verbal participles). Anagnostopoulou (2003), Paslawska & von Stechow (2003), Lundquist (2013), McIntyre (2013), Alexiadou et al. (2015), among others, all employ this strategy to a certain extent, although they differ in a particular implementation and details of their analyses.

There is not always agreement on the kinds of participles that we have labeled adjectival or verbal so far, and there are some past participles that have been analysed as adjectival in constructions that are commonly assumed to be verbal. Furthermore, there are participles in less studied constructions that have to be explored further to see if they are more like verbs or more like adjectives. For example, there is a construction labeled the HAVE-passive in German (31), discussed in Businger (2013); Gese (2013) and also in Highest Alemannic in Salzmann & Schaden (This volume).

(31) *German: HAVE-passive vs. perfect*

Ich **habe** die Haare **gefärbt**.

I have the hairs coloured

a. ‘My hair is in a coloured state.’

HAVE-PASSIVE

b. ‘I have coloured the hair.’

PERFECT

The HAVE-passive combines a form of HAVE with a past participle, which can also be interpreted as a perfect construction, as in (31-b) (which is possibly why Wegner This volume calls the HAVE-passive it a stative perfect). Under the HAVE-passive interpretation in (31-a), however, Businger (2013) analyses HAVE as the complex copula BE + WITH, expressing a meaning of possession, and the participle as the same adjectival participle

we find in adjectival passives. The latter claim is also made in Gese (2013) on semantic grounds, as she shows that we find the same restrictions on event-related modification with HAVE-passives that we find with adjectival passives (cf. §2.4).

In languages that distinguish verbal from adjectival passives already in the form of the construction, such as German, Dutch or Spanish (cf. §2.1), it might seem easier to know when a participle is verbal (e.g. with German/Dutch BECOME) or adjectival (e.g. with German/Dutch BE). However, the existence of perfect forms with BE in, for instance, German and Dutch, poses a problem, at least if we follow the standard assumption that perfects are always verbal. For other languages, it has been argued that participles are always adjectival/stative (e.g. for Greek, as discussed in the previous section, or for Basque participles ending in *-a*, as discussed by Berro This volume) or that they are ambiguous (e.g. for English) and can be disambiguated by particular morphemes, adverbs, syntactic environments, or copulas other than BE, which never combine with a verbal participle (e.g. SEEM). One popular way to seemingly disambiguate participles in English is to look at them in attributive vs. predicative position. In the following section, we will briefly discuss the problems this way of classifying participles can generate.

3.1 Attributive vs. predicative position

Besides in combination with auxiliaries and copulas and thus in predicative position, past passive participles can also appear in attributive position. In this position they are standardly treated as unambiguously involving adjectival participles (cf. Embick 2004: fn. 1); for example, Embick (2004) and McIntyre (2013) take this environment as a testing ground for adjectival participles more generally:

- (32) *English*
- a. Embick (2004: 357)
the recently **opened** door
 - b. after McIntyre (2013)
the (recently) {**departed/escaped**} people

Embick uses the adverb *recently* in (32-a) to show that adjectival participles like *opened* are ambiguous between a stative reading (the state of being opened held in the past but most likely does not hold anymore) and a resultative reading (the event of opening took place in the past) (recall the brief discussion in §2.4). McIntyre, in turn, uses (32-b) to show that (at least some) adjectival participles can also be derived from unaccusative verbs (see also Gese et al. 2011: for data from German), a viewpoint also shared by, e.g., Salzmänn & Schaden (This volume) but not by Wegner (This volume).⁶

In contrast, authors like Rapp (2001) and Sleeman (2011) argue that attributive participles are not necessarily identical to adjectival participles in predicative position, but that they can be reduced relatives including bigger verbal structures and are thus verbal

⁶ Gehrke (2015) argues against the view that unaccusative participles can be treated as adjectival ones, as McIntyre does for prenominal ones in English, as in (32-b). More generally, also for German, such a treatment should only go through if such participles could also combine with the copula BE, but this is not possible in English, for example:

- (i) *English* (Gehrke 2015: 907, fn. 13)
The people are (recently) {departed/escaped}.

Again, the German counterpart would be potentially ambiguous between an adjectival passive and a perfect with the auxiliary *be*, so for German this argument is not easy to make.

participles, at least in languages like German (Rapp), Dutch and English (Sleeman).⁷ For example, Rapp shows that German prenominal participles allow for modifiers such as (the referential) BY-phrase in (33-a) that are not compatible with adjectival participles, as shown in (33-b) (see also Kratzer 1994; Rapp 1997; von Stechow 1998).

- (33) *German: Attributive vs. predicative participle*
- a. Rapp (2001: 395)
 das von Maria **gemalte** Bild
 the by Mary drawn picture
 ‘the picture drawn by Mary’
 - b. *Das Bild ist von Maria **gemalt**.
 the picture is by Mary drawn
 Intended: ‘The picture was drawn by Mary.’

Another argument based on German data can be construed against Embick’s claim if the phenomenon illustrated in (32-a) is supposed to hold crosslinguistically (cf. Gehrke 2013: 181, fn. 7). As we have seen in §2.4, temporal modification is incompatible with unambiguously adjectival participles in predicative position in German, which otherwise display properties similar to English adjectival participles. In attributive position, however, temporal modification by *recently* is allowed. This is shown in (34).

- (34) *German: Attributive vs. predicative participle*
- a. *Die Tür ist kürzlich **geöffnet**.
 the door is recently opened
 Intended: ‘The door is recently opened.’
 - b. Die Tür war kürzlich **geöffnet**.
 the door was recently opened
 ‘The door was in an opened state recently.’
 - c. die kürzlich **geöffnete** Tür
 the recently opened door
 ‘the recently opened door’

As illustrated by (34-a), if a participle is used in predicative position, modification of the underlying event by *recently* is not possible with a present tense copula. The modifier is possible in (34-b), where the copula is in the past tense, but the only reading we get is one where *recently* modifies a state: (34-b) can mean that the door was in an opened state recently, but not that the door opening event took place recently. However, in the attributive position in (34-c), the modifier *recently* is possible and both an event- and a state-related reading of the modifier, which Embick describes for the English counterpart in (32-a), are also available in German.

Therefore, it is not clear that the attributive position of the participle should really be used as a testing ground for its adjectival nature. In some languages the kinds of auxiliaries or copulas that these participles combine with might be more useful to narrow down their function as a perfect, verbal or adjectival participle (e.g., German, Dutch, Spanish, or

⁷ A common counter-argument against treating prenominal participles as reduced relatives is that reduced relatives in English arguably only appear postnominally.

(i) *English* (after Sleeman 2011: 1569)
 the door opened by John

This is not true in languages like German and Dutch (see, e.g., (33-a)), and see arguments in Sleeman (2011) that the claim does not necessarily hold for English either.

also Basque, as discussed in Berro This volume). In addition, at least for some languages, restrictions on modifiability of the participles in question have proven to be a useful testing ground, as outlined in §2.4. Nevertheless, as we will see in the following section, the claim that the participles are always verbal in perfects and verbal passives, on the one hand, and always adjectival in adjectival passives, on the other hand, is not necessarily uncontroversial.

3.2 The source of stativity and eventivity

Generalising over a lot of literature on the syntax and semantics of passive participles, we can distinguish two main approaches as far as the source of stativity/eventivity and its correlation with the categorial status as an adjective or verb is concerned. The first approach is based on those proposals that seem to associate eventive properties with a verbal status, whereas stativity would, in turn, imply an adjectival status of the participle in question. This automatically makes eventive participles verbal and stative participles adjectival. A good example of this type of approach is Paslawska & von Stechow (2003), who propose an analysis of Russian past passive participles. In their account, they use a syntactic PartP head with the semantics of the TARGET operator taken from Kratzer (2000), and the terms *adjectival* and *stative* in the description of those participles are used interchangeably. This implies that they really treat *adjectival* and *stative* as synonyms.⁸ Similarly, Anagnostopoulou (2003) talks about *stative-adjectival* (German and Greek) participles and provides a syntactic structure for the passive participles which include A_{TARG} or A_{RES} as adjectivising heads, building on Kratzer's (2000) distinction between target and resultant state participles (see also Alexiadou & Anagnostopoulou 2008). Alexiadou et al. (2015), in turn, propose that all passive participles contain a, the adjectivising head in Distributed Morphology, on top of (stativising) Asp(ect)P. Lundquist (2013) argues that all participles, whether passive or perfect, are adjectival because they are stative.

The second approach is employed by authors who explicitly or implicitly dissociate stativity from an adjectival status and eventivity from a verbal status, leaving room for verbal stative participles as well as adjectival participles with (some) eventive properties. The proponents of this approach make a distinction between the syntactic category A and V, on the one hand, and the semantic notions of state and event, on the other. The analysis of particular participles as verbal or adjectival, then, is based on formal rather than semantic properties, in the sense that some participles behave more like adjectives (e.g. in allowing adjectival morphology or combining with copulas) and others more like verbs. A more careful inspection of Kratzer (2000) reveals that this view is actually closer to the one that is suggested in the paper. While Kratzer uses the term *adjectival passive* in the beginning as the established term for the German *Zustandspassiv*, (i.e. the combination of BE with a past passive participle) she consequently talks about *stative participles*. At the end of the paper (Kratzer 2000: 14) she writes:

Resultant state participles are expected to be less adjective-like than target state participles under the current analysis. This seems to be so, given that resultant state participles are never gradable, for example, and they never permit the degree modifier *very*. The analysis of target state and resultant state passives I explored in this short paper led me to posit three different types of passive participles in German that are all pronounced the same:

⁸ Another possible interpretation of Paslawska & von Stechow's (2003) proposal is that they intentionally remain unclear about the relation between *adjectival* and *stative*.

- (35) [= Kratzer's (31)]
- | | | |
|----|-------------------------|-----------------------|
| a. | [ge....-en]A | Adjectival |
| b. | [ge....-en]V | Verbal |
| c. | [[ge....-en]V Perfect] | Aspect Perfect Aspect |

As the reader might have guessed, the next step to take will be to find out whether the verbal participles of [(35-b)] are also used in verbal passives with the auxiliary *werden* ['become'], and whether the perfect participles of [(35-c)] are also used in active perfect constructions with the auxiliary *haben* ('have').

Thus, already this earlier reference did not equate stativity with adjectivehood, although some later approaches that explicitly build on Kratzer, such as those discussed above, seem to interpret her in this way. Similarly, Embick (2004) argues that the adjectival-verbal distinction might be "too coarse" as one needs to distinguish different types of stative participles that might in the end be adjectives but that also allow for eventive properties. In particular, he analyses his resultative participles as containing a resultative Asp head that "defines a state out of an eventive subcomponent".

In line with the idea of differentiating between A/V as a syntactic category and stativity/eventivity as a semantic property, Alexiadou et al. (2014) top up the stativising ASP involved in participle formation with PASSadj and PASSverb for adjectival and verbal participles, respectively. Similarly, Bruening (2014) proposes that adjectival and verbal passives are both derived from structures that involve a Voice projection, although adjectival passives merge AdjP, whereas verbal passives merge PassP on top of VoiceP. The syntax proposed for adjectival participles in Gehrke (2015) also has a corresponding adjectivising head A, as opposed to verbal participles used in, e.g., verbal passives, that do not contain an AP layer but continue their verbal spine syntax; both types of participles can still have a mix of stative and eventive properties. Eventivity, under these approaches, can come about due to the presence of syntactic structure inside the participle (such as VP, VoiceP), but there can be an adjectivising head turning that whole chunk of structure into what syntactically behaves like an adjective.

Stativity, in turn, can also have different sources. A verbal predicate can be lexically stative, in the sense of Vendler (1957) (e.g. *exist*, *be*), or it can be stative due to a special stativising head/operator, which does not necessarily have to be the same as the adjectivising head. For example, it is common to analyse the Perfect as a stativiser but the participle itself as verbal, as we have already seen in §2.2.⁹

This is not to say that the proposals discussed under the first approach do not also explain eventive properties by richer syntactic structures inside the participles. The main difference is that they explicitly equate stativity (and most of them also the participial status) with an adjectival status, which is not necessarily the conclusion one needs to draw. In light of this, some of the Greek "adjectival" participles with an ASP projection in Alexiadou & Anagnostopoulou (2008); Alexiadou et al. (2015) could also be re-interpreted as stativised perfect participles, as alluded to at the end of Alexiadou et al. (2014). This would not necessitate an analysis of such participles as adjectival and could explain why there are no restrictions on event-related modification with (some) Greek participles, as we have seen in §2.4.

Another example of a language with no restrictions on event-related modification is Russian, also briefly discussed in §2.4. As Borik (2014; 2019) argues for Russian, the

⁹ There are also accounts of the Progressive (cf. discussion in Portner 2011) and of negation (e.g. Horn 1989; de Swart & Molendijk 1999) as stativising operations, which, however, do not change the categorial (verbal in this case) status.

unrestricted availability of event-related modification with Russian participial passives is precisely the reason why the participles in this language are, in fact, ambiguous between a stative and an eventive interpretation, just like in English, a view that has also been defended by Schoorlemmer (1995). Both interpretations, as argued in Borik (2019), are derived from the same syntactic and semantic representation and can be facilitated by adverbial or other contextual means. Once again, the stative properties of the participles in question do not necessarily correlate with the syntactic category of adjective.

To sum up, there can be different sources for eventive or stative properties of participles. However, equating eventivity per se with verbhood and stativity per se with adjectivehood might not be the most enlightening approach to the mixed behaviour of participles in general. With these considerations in mind let us turn to the papers in this special collection, which all contribute further discussion to the issues raised here.

4 The papers in this collection

Berro (This volume) develops a syntactic analysis of active adjectival participles in Basque, an ergative language, in analytic verb forms in combination with *izan* 'be' and *egon* 'be.LOC', where BE bears all the necessary verbal inflection apart from aspect and the participle of the lexical verb is marked for aspect. Despite the morphological uniformity of all adjectival participles in Basque, Berro argues that both syntactically and semantically, several classes of adjectival participles should be distinguished. Building on Kratzer (2000) and Embick (2004), she proposes to distinguish four different types of participles: stative, target state, resultant state and experiential. All types of participles are derived syntactically, although their syntax is different. The aspectual head ASP is present in the syntax of all types, with stative and target state participles being derived with the stativising ASP and resultative and experiential types built on the perfect ASP. All participles apart from statives, which denote a characteristic state that does not result from any prior event, include a VoiceP in their syntactic representation, but in the case of target state participles this head is syntactically and semantically defective. Its defective nature is argued to account for the following set of properties of target state participles attested in Basque: they are incompatible with agent-oriented modifiers and ergative subjects interpreted as initiators of the event, and they do not admit spatial or temporal modifiers. These participles may or may not result from a prior event, but this event, if present, remains uninstantiated, i.e. it is an event kind/type, in the sense outlined in §2.4. On the other hand, both resultant state and experiential participles are syntactically rich and are built on top of extensive verbal structure that includes vP, VoiceP and AspP, ensuring therefore that all types of event modifiers, ergative subjects and agent-oriented modification are compatible with these two types of participles. Different licensing conditions are identified for the resultant state and the experiential participles: the latter interpretation arises if the underlying lexical verb is stative or if a particular binding configuration is established between the arguments introduced in PredP and in VoiceP.

Pross & Roßdeutscher (This volume) analyse different types of predicative participles in German. They use the term *predicative* to avoid connotations associated with the term *adjectival* in *adjectival passive*. They argue that there is nothing passive in the semantic interpretation of predicative participles and remain noncommittal with respect to the question whether the participles are derived syntactically or lexically and/or what kind of syntax is associated with them. German participles, according to Pross & Roßdeutscher, fall into two subclasses, based on the prefixes they contain: *be*-prefixed participles, which predicate individual properties and do not include any reference to an underlying event and, consequently, are not derived from verbs, and *ge*-prefixed participles, which are morphologically derived from verbs and predicate event properties. The authors suggest that

semantic differences between the two types are closely connected to their morphological structure and depend on the semantic contribution of particular morphemes, in particular, the prefixes *be-* and *ge-*, while the semantic contribution of the participial suffix *-t* (cf. §2), analysed as an intensionalising function remains uniform. The differences between the two classes are shown by means of two main tests: the availability of *ung*-nominalisations (e.g. *Behauptung* ‘claim’) and the superlative construction. *Be*-participles, just like regular adjectives, have both *ung*-nominalisations and superlative forms, whereas *ge*-participles do not. They furthermore argue that the proposed classification replicates the distinction between target and resultant state participles proposed by Kratzer (2000).

Salzmann & Schaden (This volume) argue that all Highest Alemannic predicative participles that are inflected, i.e. show agreement in phi-features and thus behave like genuine adjectives in this language, are adjectival in their external syntax and include a stativising head on top of root or verbal structures of different sizes (which can be as big as AspP). They show that agreement on such participles is found in BE- (adjectival) passives, HAVE-passives, resultative perfects, double compound perfects (DCPs) and stative (i.e. resultative) perfects, but not in eventive perfects (cf. §2.2); they take the latter participles to be verbal in their external syntax. Treating the participles in eventive passives and possibly also DCPs as adjectival is not standard, given that they show clear signs of eventivity. Salzmann & Schaden propose that the source for eventivity in eventive passives, which do not show restrictions on event-related modification, is the (as argued) dynamic copula BECOME in combination with verbal structure inside the adjectival participle that is as big as AspP. The source for eventivity in DCPs, in turn, which are assumed to involve a perfect auxiliary HAVE/BE in combination with a participle of the copula HAVE/BE and an adjectival participle of the lexical verb, is argued to come from the verbal structure inside the adjectival participle that is only as big as VoiceP (lacking AspP). Data to support this claim comes from the observation that event-external modification (e.g. habitual adverbs) is not possible with DCPs (whereas it is with eventive passives), whereas other event-related modifiers (also those that are not possible with adjectival passives; cf. §2.4) are allowed. Overall then, the authors argue for more fine-grained distinctions among various types of participles in both passives and perfects, based on empirical evidence from Highest Alemannic, and they defend the idea that there is a continuum between eventivity/verbhood and stativity/adjectivhood rather than a clear division between two categories. They suggest that this also goes hand in hand with an interpretative difference with respect to what is asserted and what is (possibly) presupposed: With fully adjectival forms a state is at issue and no event is presupposed (neither an event type/kind nor an event token); with BE-passives a state is at issue and an event type is presupposed; with eventive perfects a state is presupposed and an event token is asserted; with aoristic perfects no state is presupposed and only an event is asserted.

Wegner (This volume), while not taking a stand on participles being verbal or adjectival, proposes that the formal identity of perfect and passive participles in Germanic and Romance languages also correlates with an identity in structure and meaning. He maintains that diachronically the participles are derived from the same source, namely from a resultative deverbal adjective in which the external argument is absent. Synchronically, he argues, participles in both perfect and passive constructions involve the syntactic suppression of the external argument (if there is one) and a particular aspectual interpretation that takes into account the event structure licensed by the lexical verb and the overall context. While he treats BE(COME) as semantically vacuous (also in BE-perfects) he argues that HAVE overtly licenses an external argument which is then identified with the suppressed external argument via a mechanism similar to that of theta merger in Ackema & Neeleman (2012). Semantically, it is proposed that HAVE brings in a meaning of

posteriority and therefore establishes a perfect time span. Eventive participles are argued to be perfective (in some non-formal sense of event completion) only if the underlying verb is a simple change-of-state verb, which is argued to be the case with unaccusatives, so that these participles do not need HAVE to express a perfect meaning but select for the, as argued, semantically vacuous BE (at least in languages that show variability in auxiliary selection in perfects, cf. §2.1). With other verb classes and without HAVE a perfect(ive) meaning is argued not to arise so that passive participles generally do not correlate with a perfect(ive) semantics.

Abbreviations

ABL = ablative, ACC = accusative, COMP = comparative, DAT = dative, DCP = double compound perfect, IPF = imperfective, IPFCT = imperfect, INSTR = instrumental (case), LOC = locative (to mark Spanish *estar* ‘be.LOC’), LPTCP = *l*-participle, NEU = neuter, NACT = non-active, NOM = nominative, PASS = passive, PF = perfective, PL = plural, PPP = past passive participle, PRES = present, REFL = reflexive, SG = singular

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