Depictive secondary predicates in crosslinguistic perspective

EVA SCHULTZE-BERNDT and NIKOLAUS P. Himmelmann

Abstract

Little is known about depictive secondary predicates such as raw in She ate the fish raw in languages other than a few European ones. The goal of this paper is to broaden the database for this grammatical construction by reviewing its recurring formal properties, introducing a crosslinguistically applicable definition and delimiting it from other, semantically and/or morphosyntactically similar constructions. In particular, we will show that the distinction between depictives and adverbials is much less clearcut, both in formal and semantic terms, than is often assumed. First, languages may not formally distinguish the two construction types. Second, in languages with genuine depictive constructions distinct from adverbials, expressions that have generally been analysed as adverbials (e.g., expressions of concomitance, manner, location, and even time) may exhibit the formal properties of depictives. As a consequence, we argue that adverbial and depictive constructions are in competition, in the sense that languages may have different cut-off points for the two construction types on an implicational hierarchy ranging from typical depictive content to typical adverbial content.

Keywords: adjunct, adverbial, agreement, case, complex predicate, control, converb, depictive, predicate complement, resultative, secondary predication, small clause, word class

1. Introduction

One of the essential characteristics of a secondary predicate construction is the fact that a single clause contains two predicative constituents, which do not form a complex predicate in the way serial verbs or periphrastic predicates do.
Thus, in (1), both left and angry predicate on George (the second predicative relation is indicated by co-indexing).¹

(1) George left the party angry

These two predicates differ with regard to a number of features. Most importantly, left is a finite verb form while angry is an adjectival predicate which syntactically depends on left. The term DEPICTIVE SECONDARY PREDICATE (or for short: DEPICTIVE) is the one which is by now most widely used for predicates such as angry in (1), and which will also be adopted in this paper. Other terms that have been used for these predicates are “praedicativum” (in Latin linguistics, see, e.g., Pinkster 1988), “predicative attribute” (e.g., Paul 1919, Halliday 1967), and “copredicate” or “copredicative” (a term adopted from Russian by, e.g., Nichols 1978b, Plank 1985, and Müller-Bardey 1990). The earlier term “predicative attribute” reflects the fact that depictive secondary predicates are functionally related to attributive modifiers in that they express an eventuality (e.g., a state) pertaining to one participant of the main predicate. We will use the term CONTROLLER to refer to this participant (see further Section 2.6).

The state of affairs expressed by a depictive holds true specifically at the time that the eventuality expressed by the main predicate takes place: the important point in (1) is that George was angry at the time that he left the party. Attributive modifiers, in contrast, are not linked in this way to the temporal frame set by the main predicate. Instead, their function is to enhance the reference of nominal expressions by making them more descriptive or more restrictive. This difference in function is formally reflected by constituent structure: modifiers are constituents of an NP while depictives are usually regarded as constituents of the VP² as examples (2) and (3) illustrate.

(2) Carol drinks [black coffee]NP

(3) Carol [drinks [her coffee]NP black]VP

In terms of the constituent structure of the clause containing them, depictives in fact resemble adverbials, a point which will be a major concern throughout this paper. As an initial characterisation, the difference between adverbials and

---

¹ Co-indexing will be used occasionally in this paper, in the interest of clarity, to indicate semantic orientation of a depictive. It should not necessarily be taken to represent a syntactic relationship of predication, as in predication theory (see Section 1).

² The precise syntactic position of depictives is a matter of controversy (see Section 1). Moreover, while the difference between adnominal modifiers and depictives is reasonably clear in languages with configurational noun phrase structures, it is less straightforward for languages which allow discontinuous noun phrases. This problem will be addressed in Section 1.
Depictive secondary predicates

Depictives is that adverbials modify a predication rather than assigning a specific property to one participant of the main predicate. Compare (1) with the following example:

(4)  George left the party angrily

In (1) there cannot be any doubt about the fact that George was angry at the time that he left the party. However, (1) is non-committal with regard to the way he left the party (perhaps his anger was obvious from the way he left, perhaps it wasn’t). The main focus in (4), on the other hand, is on the manner of his departure, i.e., George behaves in an angry fashion but may, or may not, be angry (cf. also Halliday 1967: 64, Nichols 1978b: 327–328, and Aarts 1995: 90).³

In English and many other languages, the semantic difference between depictives and adverbials has clear morphosyntactic correlates (such as the adverbial suffix -ly in English). But there are also many languages such as German where no clear formal difference between the two constructions exists. Thus, the German equivalent of (1), Georg hat die Party wütend verlassen, allows both a depictive reading (George was angry although his anger was not necessarily obvious in the manner of his departure) and an adverbial reading (George left in an angry manner).

Furthermore, the semantic distinction between depictives and adverbials is often much less clear than in the case of angry vs. angrily. Halliday (1967: 64) states “that in certain instances [the distinction] may be largely neutralized”, and adduces as an example She sells them cheap vs. She sells them cheaply – possibly a case of dialectal variation. To complicate matters even further, in some instances a formally clearly adverbial expression can be interpreted as participant-oriented, as for example in John opened the door enthusiastically.

In this paper, we will show that the formal and semantic overlap between adverbial and depictive constructions just illustrated from English and German is part of a much more comprehensive and pervasive overlap between the two constructions found crosslinguistically. Specifically, we will show that in some languages expressions which convey typical “adverbial” content such as manner (‘slowly’, ‘carefully’, etc.), location, and even time (‘yesterday’) are clearly depictive constructions in terms of their morphosyntactic make-up. Conversely, there are languages which do not appear to have genuine depictive constructions. In these languages, typical “depictive” content (e.g., a psychological state

³. English native speakers appear to differ with regard to this secondary implication (i.e., for some speakers leaving angrily in fact implies that the person who is leaving is angry), but this is not of major import to the point at hand.
as in (1)) is conveyed by a number of alternative constructions, including constructions that otherwise express typical “adverbial” content. That is, viewed crosslinguistically, adverbial and depictive constructions are in competition in the sense that the same type of content may be expressed by an adverbial construction in some languages, but by a depictive construction in other languages.

In order to defend this view, it is essential to have clear criteria for identifying genuine depictive constructions. In Section 2, we establish the basic features of depictive secondary predicate constructions, and propose a working definition which allows one to identify this construction type across a wide range of languages. In Section 3, we provide a typological grid for depictive constructions by reviewing the morphosyntactic properties of adjunct constructions which convey typical depictive content (as further defined in Section 2.1) in a broad sample of languages. The major task in these sections will be to establish a distinction between genuine depictive constructions, which may be considered translation equivalents of typical depictive expressions but do not meet our definition of a depictive construction.

Based on the working definition and the typological grid, we argue in Section 4 that in a number of languages certain expressions that are usually considered adverbials should in fact be analysed as depictive constructions. These include “adverbial” quantifiers, expressions of concomitance, similarity, and manner, and to some extent locative expressions. On closer examination, this analysis is justified not only on formal grounds but also with regard to the semantic properties of these expressions. However, in a few languages the use of depictive constructions even extends to the most typical “semantically adverbial” expressions, i.e., temporal expressions such as ‘yesterday’. Based on these findings, we propose an implicational hierarchy of semantic areas along which, from a typological perspective, adverbial and depictive expressions “compete”. In Section 5, we summarise our findings.

Since information on depictive constructions is rarely found in standard reference grammars, the data on which this paper is based comes from a relatively small set of languages for which we were able to consult text corpora (including corpora from our own field research) and/or specialists on the language in question, or for which depictive constructions have been discussed in the literature. In addition to well-studied European languages, Australian languages constitute the areal focus of the investigation. The German data partly consist of overheard utterances or examples from written texts collected by the authors, who are native speakers of German (in these cases, the source is indicated), or are from the Cologne corpus of spoken narratives, in which case the title of the narrative and the line number are indicated (e.g., Filipin_037). Other examples come from the corpus of spoken Cologne dialect narratives published by Bhatt & Lindlar (1998) in our own transcription based on the published audio files. Only examples for which no source is indicated have been constructed.
2. Some basic terms and definitions

In this section, we will start from those expressions that are widely discussed as typical depictives in the literature (Section 2.1), and will establish criteria for identifying depictive constructions by contrasting them with related constructions. Closely related to depictive constructions are other constructions containing a second predicative element, such as predicate complements (Section 2.2) and resultative secondary predicates (Section 2.3). Constructions can also be functionally related to depictive constructions in the sense that they may be used to encode semantically depictive expressions; this is the case for some types of biclausal constructions, including constructions with prosodically detached “free adjuncts” (Section 2.4), and for complex predicates (Section 2.5). We will also discuss the syntactic function of the controller of the depictive (Section 2.6), and the syntactic analysis of depictive constructions (Section 2.7). The criteria are summarised in a working definition in Section 2.8.

2.1. Typical semantics of main predicate and depictive predicate

Most of the examples of depictive secondary predicates discussed in the literature are comparable with respect to the semantics of both the main predicate and the secondary predicate. The main predicate is usually a verb of motion, ingestion, manipulation, or change of state. The secondary predicate most frequently encodes a physical or psychological state or condition (e.g., ‘alive’ – ‘dead’, ‘old’ – ‘young’/‘new’, ‘hungry’, ‘drunk’, ‘raw’ – ‘cooked’, ‘full’ – ‘empty’, ‘hot’ – ‘cold’), including bodily posture (e.g., ‘upright’, ‘sitting’, ‘barefoot’, ‘with one’s mouth open’). Examples from English were already given in (1) and (3) above; examples from a few other languages are provided in (5) to (7). Note that in both Italian (5) and Russian (6) the depictive agrees in number and gender with its controller, while Martuthunira (7) exhibits case agreement between the depictive and its controller (see Section 3.1.1.1). In Russian, in addition, the depictive is marked with the instrumental case (see Section 3.1.3.1), though Russian also allows the option of case agreement.

(5) Italian (Italic, Indo-European)
_Franca ha traversato il corridoio scalza_
Franca AUX cross.PRTC.PF DEF hall barefoot.F.SG
‘Franca crossed the hall barefoot.’ (Napoli 1975: 414)

(6) Russian (Slavic, Indo-European)
_on vypil čaj xolodnym_
3SG drink.PST.3SG tea cold.M.SG.INSTR
‘He drank the tea cold.’ (Nichols 1978a: 115)
Martuthunira (Pama-Nyungan, Australian)

\( \text{nhula miya mungka-rnuru wajupi-i} \)

near.you cat eat-PRES grasshopper-ACC

\( \text{wanka-a=l} \)

alive-ACC=THEN

‘That cat eats grasshoppers alive.’ (Dench 1995: 182)

A second class of expressions that are also frequently found as examples of depictives in the literature are expressions of a role, function or life stage, as in (8) to (10). The German example in (8) contains both an expression of life stage (\( \text{als kleïne Fetz} \) ‘as a little boy’) and of role (\( \text{als Page} \) ‘as a page’), both marked with \( \text{als} \) ‘as’.

(8) German, Cologne dialect (Germanic, Indo-European)

\( \text{minge Vater vor Präsident l (0.5)} \)

1SG.POSS father was president

\( \text{un do ben ich als kleïne Fetz als Page op de} \)

and then 1SG.NOM as little boy as page on DEF

Bühn jewäs \( \text\mid} \)

stage been

‘My father was (the) president (of the carnival society), and so I was on stage as a little boy as a page boy.’ (Bhatt & Lindlar 1998: 163)

Examples (9) and (10) illustrate expressions of life stage in Russian (\( \text{reben-kom} \) ‘as a child’, marked with the instrumental case) and in Martuthunira (\( \text{wirta-ngku=l} \) ‘as a young man’, marked by case agreement), respectively. (The Martuthunira example in addition contains a second depictive, \( \text{jalya} \) ‘bereaved’, which is in the unmarked absolutive in agreement with an unexpressed O.)

(9) Russian (Slavic, Indo-European)

\( \text{rebenkom on žil v Pariže} \)

child.M.SG.INSTR 3SG.NOM live.PST.3SG in Paris.LOC

‘As a child he lived in Paris.’ (Nichols 1978a: 115)

(10) Martuthunira (Pama-Nyungan, Australian)

\( \text{wirta-ngku=l pawu-ngku jalya wantha-rnu} \)

youth-EFF=THEN father-EFF useless/bereaved leave-PASS.PF

‘As a young man the father left them bereaved.’ (i.e., their father died as a young man) (Dench 1995: 182)

For expressions of these types, there is a general consensus that they contain elements which at least semantically, if not formally, are clearly participant-oriented, and in this sense differ from typical adverbials, which are clearly
event-oriented. In this paper, we therefore refer to expressions of a physical state or condition, or a role, function or life stage in translation equivalents of (5) to (10) and similar expressions as SEMANTICALLY DEPICTIVE ELEMENTS, and to the clauses in question as (TYPICAL) DEPICTIVE EXPRESSIONS. In the remainder of this section and in Section 3, we will rely almost exclusively on typical depictive expressions in establishing a typological grid for the morphosyntactic properties of depictive constructions.

2.2. Depictives vs. predicate complements

One of the major criteria that can be used to identify depictives is optionality. That is, depictives can always be omitted without rendering the remaining string ungrammatical or changing the structural relationships among the remaining constituents. This criterion distinguishes secondary predicates from predicate complements such as the subject complement in (11) and the object complement in (12), which are part of the argument frame of the main predicate, and are therefore more or less obligatory.

\[(11) \quad \text{a. Louisa seemed tired} \]
\[\text{b. \*Louisa seemed} \]

\[(12) \quad \text{Louisa considers Silvia intelligent} \]

Not all authors maintain this distinction. Halliday (1967) and Napoli (1989), for example, do not make a major distinction between depictives and predicate complements, that is, they consider ”Louisa seemed tired” and ”George left angry” as instantiations of the same basic construction type. Indeed, it cannot be denied that there are certain functional and formal relationships between predicate complements and depictives (for further discussion see Plank 1985 and Winkler 1997: 325–331). Most importantly, both depictives and predicate complements convey partially independent predications about one participant of the main predicate. This similarity is also at the heart of various proposals to analyse both constructions in terms of small clauses (see Section 2.7). Nevertheless, depictives and predicate complements differ in that the former are adjuncts (and thus optional) while the latter are complements. In order to restrict the scope of investigation, we exclude predicate complements from further consideration in this work.

2.3. Depictives vs. resultatives

Following Halliday (1967: 62–63), both depictive expressions and resultative expressions are usually regarded as secondary predicates in the literature. Semantically, they differ in that depictives designate a state of affairs which holds
at the same time as the eventuality encoded by the main predicate, while resultatives designate an eventuality which is a consequence, or result, of the eventuality encoded by the main predicate. As shown by the following examples, the same element can function both as a depictive (13a) and as a resultative secondary predicate (13b).

(13) German (Germanic, Indo-European)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>man</td>
<td>trug</td>
<td>ihn</td>
</tr>
<tr>
<td></td>
<td>3SG.NOM.IMPERS</td>
<td>carried</td>
<td>3SG.M.ACC</td>
</tr>
<tr>
<td></td>
<td>They carried him off half dead.</td>
<td>(Paul 1919: 49)</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>sie</td>
<td>schlugen</td>
<td>ihn</td>
</tr>
<tr>
<td></td>
<td>3PL</td>
<td>beat</td>
<td>3SG.M.ACC</td>
</tr>
<tr>
<td></td>
<td>They beat him half dead.</td>
<td>(Paul 1919: 49)</td>
<td></td>
</tr>
</tbody>
</table>

Although depictives and resultatives share a number of important characteristics, they also differ in their semantic and syntactic properties in such a way that no single basic analysis can be provided for them (cf., for example, Napoli 1992: 54–55). In fact, it has been argued that resultative expressions, at least in languages like English and German, do not constitute secondary predicates in the narrow sense, but rather complex predicates (see, for example, Dowty 1979: 219–224, 303–304, and Winkler 1997, perhaps the most elaborate account of this position). One of the arguments for a distinction between depictives and resultatives is the closer semantic relationship of resultatives to the main predicate. This is most obvious in those instances where the resultative element is obligatory, as in (14). (Depictives as defined in Section 2.2 are never obligatory.)

(14) German (Germanic, Indo-European)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>ich</td>
<td>schreibe</td>
<td>mir</td>
</tr>
<tr>
<td></td>
<td>1SG.NOM</td>
<td>write</td>
<td>1SG.DAT</td>
</tr>
<tr>
<td></td>
<td>(lit.)</td>
<td>‘I am writing my fingers sore.’</td>
<td>(Kunze 1997: 327)</td>
</tr>
<tr>
<td>b.</td>
<td>*ich</td>
<td>schreibe</td>
<td>mir</td>
</tr>
</tbody>
</table>

Resultative and depictive secondary predicates may also differ with respect to prosody. Prosody, in fact, appears to disambiguate between a depictive and a resultative meaning in the not uncommon instances where a given segmental string allows for both readings in languages like English and German (see Halliday 1967: 65 and Winkler 1997: 299–332 for examples and discussion). The experimental data of Winkler (1997: Ch. 5) show that at least in thetic (“all-new”) utterances in German and English, depictives such as *roh in (15a) regularly receive their own stress, while resultatives such as blank in (15b) remain unstressed.
Depictive secondary predicates

Given these striking differences between depictives and resultatives, it seems warranted to restrict the topic of this paper to the crosslinguistic exploration of depictive expressions.

2.4. Depictives vs. main predicates

Biclausal constructions consisting of a semantically depictive element as the main predicate and a finite subordinate clause, such as When George left, he was angry for the clause in (1), are often used as paraphrases of depictive constructions in the literature (cf. Nichols 1978a, Plank 1985). However, there is a clear difference. In the biclausal construction both the main clause and the subordinate clause allow tense and mood marking as well as expression of all verbal arguments. It is a defining feature of a genuine depictive construction that this is not possible.

Not in all instances can a construction be identified as biclausal by clear indicators of subordination or coordination, though. In this case it is crucial to pay close attention to the degree of prosodic integration, and other indications of clausal status. For example, at first sight, the Tagalog example in (16) appears to be an instance of a genuine depictive construction. However, the semantically depictive element buhay ‘alive’ not only appears in a prosodically independent unit, but its status as a main predicate is also unambiguously signalled by the clitic namán (a clause-level second position clitic). If buhay belonged to the same clause as ilagáy, the clitic namán would have to appear after ilagáy (or pumayag).

(16) Tagalog (Philippine, Austronesian)

\[
dahil\ ang\ asawa\ niyá’y\ pumayag\ na\\because\ SPEC\ spouse\ 3SG.POSS.PM\ AV.in.agreement\ LK\\i-lagáy\ sa\ kabaong,\ buhay\ namán\\CV-position\ LOC\ coffin\ alive\ too\\‘[Ka Maldang was afraid] because his wife had agreed to be put into the coffin, alive!’ (Wolff et al. 1991: 1235)
\]

Note that in Tagalog subjects are not obligatorily expressed. That is, buhay namán represents not only a possible, but in fact a frequent clause type (out of context it means ‘they/she/he are/is/were/was alive’). Thus, it would not be
quite correct to analyse this example as involving a “reduced” second main clause; rather, we are dealing with a truly biclausal expression.

So-called free adjuncts or absolutes (Stump 1985) are even more difficult to distinguish from depictives, as was already pointed out by Simpson (1983: 412, Footnote 28). Consider (17).

(17)   a. *he didn’t leave outraged
   b. he didn’t leave, outraged / outraged, he didn’t leave

In both examples, outraged assigns a property to the subject of leave holding true at the time of the event conveyed by the main predicate. However, the quite distinct implications associated with these two clauses make it clear that the relation between outraged and the main predicate in (17a) is in fact very different from the one found in (17b). In (17a), outraged is within the scope of negation as is clear from the fact that the preferred reading of this sentence is that he left in a calm mood (the other possible reading being that he did not leave at all). In (17b), however, outraged is clearly not in the scope of negation: the only possible interpretation of this sentence is that the subject didn’t leave at all, being outraged.

This difference with regard to the scope of negation appears to be related to the difference in prosodic integration of the “depictive” constituent. In (17b), but not in (17a), outraged is to be parsed as an independent prosodic unit, as indicated by the comma. Both the scope of negation and the lack of prosodic integration suggest that outraged in (17b) is much more of an independent clause-like constituent than in (17a). By definition, secondary predicates are part of the same clause as the main predicate on which they depend. Therefore, they should be in the scope of any clause-level negative element. Since this is not the case in (17b), we conclude that outraged here is not a depictive secondary predicate but instead some kind of reduced clausal constituent which shares one essential feature of a secondary predicate (i.e., it predicates on one of the participants of a preceding or following finite verb) but lacks another essential feature (i.e., it is not part of the same clause as the finite verb). This is also essentially the conclusion arrived at by Geuder (2000: 196).

In corpus data, examples such as (17b), with a depictive in a negative clause, appear to be a rather rare phenomenon. However, our corpus of textually attested depictives contains quite a number of examples of the type illustrated in (18), where a potentially depictive element (total besoffe) is realised as a prosodically independent constituent.

(18)   German, Cologne dialect (Germanic, Indo-European)
   dat Gigi kütt morjens om halver sechs noh Hüssl (0.5)
   DEF Gigi comes morning at half six to home
While a depictive reading of this example (i.e., Gigi is drunk at the time of her arrival at home) is possible, the fact that total besoffe is realised as a full, independent prosodic unit allows other readings as well. The prosodic packaging actually suggests that the speaker wants to make the point that three events coincided that morning, one more outrageous than the other: Gigi came home extremely late, and she was totally drunk, and – topping all of that – she didn’t even have her pants on (which is the punch line of the whole episode). Thus, despite the fact that only the first and the last line contain finite verbs and thus are clearly clauses, total besoffe is also clause-like in that it independently asserts one of a triad of outrageous events. This clause-like character of total besoffe is confirmed by the negation test. If a negation is added to the first line (dat Gigi kütt morjens om halver sechs nit noh Huss), total besoffe is not within the scope of this negation (exactly as in the case of outraged in (17b)).

In short, our preliminary inspection of a number of potentially depictive elements which are realised as prosodically independent units suggests that prosodic independence usually goes hand in hand with a more clause-like character of the potentially depictive constituent (see also example (59) in Section 3.2.5). We therefore exclude examples such as (17b) and (18) from consideration in this paper. That is, at least where information about the realisation is available, we only take into account depictives that are integrated into the prosodic unit containing the main predicate.

2.5. Depictives vs. complex predicates

It is widely acknowledged that depictives constitute a predication which is to some extent independent of that of the main predicate, and that depictive constructions should therefore be distinguished from complex predicates. This is reflected in constituency-based models by representing the depictive as a constituent dominated by a VP or an S node (see further Section 2.7), but not a V node. In terms of the juncture types proposed in Role and Reference Grammar (Foley & Van Valin 1984, Van Valin & LaPolla 1997), depictives can be considered core junctures. Unlike peripheral junctures (e.g., adverbial clauses), depictive constructions require that the two predicates share a central participant and all circumstantial information. Unlike predicates in a nuclear juncture (complex predicates), the two predicates are assigned to the shared argument independently from one another.
One criterion that can serve to distinguish depictives from complex predicates, viz. prosody, was already mentioned in the context of the distinction between depictives and resultatives in Section 2.3. In some, but by no means in all languages, morphological marking also allows a clear distinction between the two constructions. This can be seen most clearly where the semantically depictive element is part of the same phonological and grammatical word as the main predicate, and they are jointly flanked by affixes, as illustrated with the Mayali examples in (19). This example also shows that translation equivalents of typical depictive expressions may in fact be complex predicates. In (19a), the incorporated predicate nominal -rrarrkid ‘alive’ predicates on the undergoer of a transitive clause. As (19b) shows, the incorporating strategy in Mayali is not limited to predicates expressing a state or condition. Even nominals expressing a role or life stage can be part of a complex predicate.

(19) Mayali (Gunwinyguan, non-Pama-Nyungan, Australian)
   a. ka-rrarrkid kaluk nga-rrarrkid-ma-ng
      3-alive FUT 1.A/3.O-alive-pick.up-NPST
      ‘It’s alive, I’ll pick it up alive.’ (Evans 1997: 400)
   b. an-yau-bawo-ng kure bedda
      3.A/1.O-child-leave-PST.PF LOC 3PL
      ‘My mother left me with them as a child.’ (Evans 1997: 422)

Incorporation clearly deprives the semantically depictive element of features that we consider criterial for genuine depictive constructions: it is so closely linked to the main predicate that it lacks independent predicative force. Note, though, that at least in the languages we have surveyed it is not the case that all (or even a substantial number of) semantically depictive elements can be incorporated (i.e., it would be wrong to claim that all depictive content is conveyed by complex predicates). In the case of Mayali, genuine depictive constructions exist alongside complex predicates in a comparable function, as shown in (20), where nud is an independent adjective in secondary predicate function. The choice between the two construction types is lexically determined: only certain adjective roots may incorporate (Evans in press, Ch. 10.4.4.1).

(20) Mayali (Gunwinyguan, non-Pama-Nyungan, Australian)
    ga-bawo-n ga-nudme-n wanjh nud ga-ngu-n
    ‘[The crocodile] leaves [his victim] to rot, and then eats it rotten.’
    (Evans in press, Ch. 10.4.4.1)

Not in all languages can complex predicates be distinguished from depictive constructions in such a clear fashion as in Mayali. For example, in Turkish, adjectives in depictive reading such as so˘guk ‘cold’ in (21) appear in strictly

(21) Turkish
    so˘guk-ku-kula-kula
    3-rot-NPST 3-rot-NPST
    ‘The crocodile leaves his victim to rot.’
    (Evans in press, Ch. 10.4.4.1)
Depictive secondary predicates

pre-verbal position carrying the main phrasal stress and thus can be regarded as incorporated (cf. Boeder & Schroeder 1998, Schroeder 2000b).

(21) Turkish (Turkic, Altaic)

çay-ı soğuk iç-ti-k

tea-ACC cold drink-PST-1PL

‘We drank the tea cold.’ (Boeder & Schroeder 1998: 221)

As in the Mayali case, this strategy is not available for all semantically depictive elements, but only for a subset of them. Boeder & Schroeder (1998: 222) state that it is restricted to a few adjectives which express a “habitual” or “expected” specification of the eventuality expressed by the main verb. It remains to be investigated whether a similar difference in habituality and expectedness can also account for the difference between complex predicates and genuine depictive constructions in Mayali that was illustrated in (19) and (20). The prediction is that – notwithstanding the possibility of arbitrary and idiomatic restrictions – the more expected, conventionalised eventualities will be more likely to be expressed by complex predicates or incorporating structures (cf. Durie 1997: 320–330 for serial verbs, and Mithun 1984: 348–349 for incorporation). Correspondingly, depictive constructions should express more remarkable, unexpected eventualities. This prediction in fact seems to hold more widely. For example, in German, incorporation of a semantically depictive element is marginally possible in expressions like *kaltgepresstes Olivenöl* ‘olive oil pressed (when) cold’ representing a conventionalised state of affairs.

The distinction between depictive constructions and complex predicates becomes even more difficult in the case of isolating languages which, like many West African or South-East Asian languages, allow unmarked verbs to appear in a verb series. Especially where one of the verbs in a series has depictive or adverbial semantics, it is often difficult to decide whether it is part of a true serial verb construction (i.e., a complex predicate) or should be analysed as an adjunct (cf. Larson 1991, who argues for a parallel syntactic analysis of serial verb constructions and at least some types of depictives, and claims that serial verb languages only allow verbs as secondary predicates). See Ameka (to appear) and Enfield (to appear) for further discussion of this rather intricate issue.

The problem of distinguishing between a complex predicate and a genuine depictive construction is of course not confined to isolating languages. Although we believe that in principle it is possible (and useful) to distinguish between these two construction types, it is undeniable that a close functional

---

4. Otherwise, the formally marked constructions employing a dummy nominal or a converb have to be used; see Sections 3.2.2 and 3.2.5 for examples.
relationship exists between them. Thus, the development of periphrastic predicates (consisting of an auxiliary and a non-finite form of a verb) from con-verb constructions or depictive constructions is reported frequently (see, e.g., Haspelmath 1995: 43, Nedjalkov 1995: 99-100, Johanson 1995, Wilkins 1988, Müller-Bardey 1990: 7, Hengeveld 1992: 237–249). Paul (1919: 52) already notes with regard to the German example in (22) that the depictive “may move very closely to the main predicate if the latter is semantically bleached”.

(22) German (Germanic, Indo-European)
    *die Wohnungen steht leer*
    DEF apartment stands empty
    ‘The apartment is vacant.’

To summarise, we have argued that depictive constructions (where the semantically depictive element is an adjunct) should be strictly distinguished from complex predicate constructions. Wherever a clear formal distinction between the two is found, it iconically reflects distinctions in conceptual closeness between two states of affairs presented as cotemporaneous (depictive construction), and a single, conventionalised state of affairs encoded by a formally complex expression (complex predicate).

2.6. Syntactic function of the controller

Depictive secondary predicates are sometimes divided into subgroups on the basis of the syntactic function that the controller has in the main clause. Thus, depictives can be controlled by the single core argument of an intransitive predicate (S) and both the actor-like (A) and the undergoer-like (O) core arguments of transitive predicates. Examples of depictives of all three types can be found throughout this paper. For example, (8) and (9) are S-controlled, (1) and (5) are A-controlled, and (3) and (7) are O-controlled depictives. We avoid using the terms subject (for S and A) and object (for O) here since for some of the languages we discuss it is a matter of controversy whether these grammatical relations exist and if so, which constituents are to be considered subject and object.

An even more important reason for avoiding reference to syntactic relations lies in the fact that the controller does not have to be an overtly expressed argument of the main predicate. That is, the predicative relation does not hold between the depictive and a surface constituent of the clause, but between the depictive and a semantic participant of the main predicate. Even in languages like German and English, depictives without overt controllers can be found, for example when the controller is the demoted agent in a passive construction (cf. Paul 1919: 49–51), or a participant in an infinitival construction like that in (23).
Depictive secondary predicates

(23) German (Germanic, Indo-European)

bitte gespült und mit Verschluss zurückgeben
please rinsed and with lid give.back(INF)

[on a bottle:] 'Please return rinsed and with (its) lid.'

These observations, and the behaviour of depictives in reflexive clauses, also led Laughren (1992) to conclude that the controllers of depictives are semantic participants (in her terminology, arguments in Lexical Conceptual Structure), not syntactic arguments. Müller (2000) makes a similar suggestion. Therefore, the abbreviations S, A, and O should be understood here as standing for semantic macro-roles, not syntactic arguments.5

In many languages, depictives can have controllers other than S, A, and O, and languages differ in terms of which participants are easily accessible as controllers (see, e.g., Nichols 1978a: 120–121, Müller-Bardey 1990: 8). For example, in (24), from Martuthunira, the controller is a directional adjunct (see also the Martuthunira example in (10), where the controller is a demoted agent in a passive construction, and the Warlpiri examples in (34) and (90b), where the controller is a dative object).

(24) Martuthunira (Pama-Nyungan, Australian)

ngayu puni-wayara thawun-mulyarra kupuyu-mulyarra=1
1SG go-HABIT town-ALL little-ALL=THEN

'I used to go to town (when it was a) small (place).' (Dench 1995: 59)

Even in German, examples with an oblique controller or controllers that are embedded in a noun phrase can be found occasionally, a fact that was already noted by Paul (1919: 49–57) and Plank (1985: 175). Paul adduces, among others, the example in (25), where the controller is a possessive attribute.

(25) German (Germanic, Indo-European)

[als Nichtmilitär und allgemein verehrter Patriot], konnte
as non-military and generally admired patriot could

[seine, Wahl]NP keine der übrigen Kandidaten
3SG.M.POSS election none DEF.GEN other candidates

beleidigen
offend

'As a non-[member of the] military and generally admired patriot, his election could not offend any of the remaining candidates.' (Paul 1919: 55–56)

5. We do not wish to claim, however, that S, A, and O are unproblematic as primitives of analysis, nor that they exhaust the range of potential core grammatical relations. The distinctions are merely of a heuristic nature, sufficient for the purpose at hand. Our use of S, A and O thus deviates in a number of ways from the usage found in Dixon (1994).
In (26), the default interpretation of the depictive *nackig* ‘naked’ would involve subject control (i.e., the members of the speaker’s group were naked). However, the context – Matthias being a little boy who had just been splashed with water by his brother – makes it quite clear that the intended controller is *Matthias*, embedded in a PP. Although expressions like these would not be judged acceptable in written German, several examples of this type were found in our corpus of spontaneous spoken German.

\[(26) \text{German (Germanic, Indo-European)}\]

\[
\begin{align*}
da & \quad \text{musten} \quad \text{wir} \quad \text{dann} \quad [\text{mit} \quad \text{Matthias}]_1 \quad [\text{quasi} \\
\text{nackig}]_i \quad \text{nach} \quad \text{Hause} \quad \text{laufen}
\end{align*}
\]

‘We then had to walk home with Matthias naked, so to speak.’ (overheard utterance)

The typological correlates of the ability of participants in various thematic roles and syntactic functions to act as controllers remain a matter of further investigation. It seems plausible, though, that the potential for functioning as a controller follows the accessibility hierarchy for grammatical relations (Keenan & Comrie 1977), as has been suggested by Nichols (1978a: 120) and Müller (2000). It does not seem fruitful, therefore, to introduce a crosslinguistically valid criterion restricting depictives to controllers in certain syntactic functions.

Languages also differ in terms of whether or not the controller can be identified solely on morphosyntactic grounds. In German and English, the controller can sometimes only be identified on semantic and pragmatic grounds; syntactically, the examples may be ambiguous, as was just noted with regard to example (26). Many languages, on the other hand, have strategies for an unambiguous identification of the controller (e.g., by agreement); these will be discussed in Section 3.1.1. We will employ the terms RESTRICTED REFERENCE and OPEN REFERENCE (as used in descriptions of switch-reference systems, e.g., Nichols 1983) to distinguish depictives which signal a restriction in the role of their controller by morphosyntactic means from those which do not.

2.7. *The syntax of depictives (and adverbials)*

The syntactic analysis of depictive constructions has been a matter of considerable debate in the literature. Depictives constitute a challenge for syntactic theory because they partake in two (potentially syntactic) relationships which have to be represented. The first relationship, which is widely considered to be an instance of adjunction, holds between the depictive and the main predicate. The second relationship, the one holding between the depictive and its controller, is usually held to be an instance of predication.
Within constituency-based accounts, two main solutions have been proposed for handling this particular status of depictives. The first is the small clause analysis, which has been defended, e.g., by Chomsky (1981: 110–111), Stowell (1983), and Hoekstra (1988). The depictive is here represented as a separate subordinate clause with an empty category (PRO) as its subject, as shown in (27) (from Chomsky 1981: 111).

(27) \textit{John [left the room]_vp [PRO angry]_sc}

In the small clause analysis, the relationship of the depictive to the main predicate is represented in terms of adjunction, and the relationship of the depictive to its controller is represented in terms of obligatory control of an empty PRO subject by an argument of the matrix clause (see Winkler 1997: 18–50 for a detailed review of this position and counter-arguments).

A widely accepted alternative to the small clause analysis, within so-called predication theory, treats depictives as simple adjuncts. The predicative relation between controller and depictive is represented by co-indexing, just like the relation between the subject and the main predicate (an analysis pioneered by Williams 1980). This is illustrated in (28) (from Winkler 1997: 51).

(28) \textit{Ray ate the meat, raw_i}

Both approaches face an additional difficulty concerning the structural position of depictive adjuncts. The alternatives in this case are to regard depictives as immediate constituents of the clause, or as constituents of the VP (in languages that have a VP). O-controlled depictives are analysed as VP-adjuncts in most accounts. S- and A-controlled depictives are today also usually analysed as VP-adjuncts, following Andrews (1982). However, they are regarded as immediate constituents of the clause, e.g., by Williams (1980), Rothstein (1985), and Nakajima (1990) for English, and by Evans (1995) for one type of S/A depictives in Kayardild. The different structural positions that have been proposed for depictives in part depend on different assumptions about the basic clausal phrase structure, especially where the authors make use of different levels in syntactic derivations (see, among others, Roberts 1988 for a discussion of depictives within the framework of the VP-internal subject hypothesis). Moreover, as Kuno & Takami (1993: 130–134) have shown, some of the tests for the constituency of depictives that have been adduced in the literature are sensitive to pragmatic factors rather than to syntactic constituency. For the purposes of this paper, we will consider depictives to be VP adjuncts.

Dependency-based accounts run into similar difficulties as constituency-based accounts, as has been pointed out very clearly in Nichols (1978b). At the semantic level, the depictive depends both on the main predicate and on the
controller. At the syntactic level, such a double dependency cannot be represented in the standard dependency models (Tesnière 1959: 14; but see McGregor 1997: 54–56 for an alternative suggestion). Thus, in discussing examples such as (29), Tesnière (1959: 160) assumes a SYNTACTIC dependency relation to hold only between the depictive and the main predicate while at the same time also recognising a purely SEMANTIC dependency relation between the depictive and its controller (cf. also Nichols 1978a: 118).

(29) French (Italic, Indo-European)

\[\text{nous vivons cachés}\]

1PL live.PRS.1PL hidden.M.PL

‘We live hidden.’ (Tesnière 1959: 160)

These problems in the syntactic analysis of depictives are reminiscent of those associated with adverbial expressions.6 Depictives not only tend to have the same or a similar position in constituent structure as predicate adverbials, but also often allow for different positions associated with subtle differences in scope and interpretation (cf., e.g., Frey & Pittner 1998, Ernst 2000, Geuder 2000). Moreover, some adverbial expressions, such as certain English adverbs in -ly, do exhibit a semantic orientation towards one of the participants of the main predicate (see Section 4.4 for further discussion and references). Thus, depictives and adverbials are often very difficult to distinguish even in semantic terms.

Given these essential similarities between adverbials and depictives, the question arises whether these two expression types should be distinguished syntactically at all. A number of authors, including Plank (1985: 183) and Steube (1994), have argued that depictives should be syntactically represented like adverbials, and that the relationship to the controller is merely one of semantic orientation (which is reminiscent of Tesnière’s notion of semantic dependency mentioned above). This position appears to be well supported in cases such as German where no morphosyntactic differences exist between depictive expressions of the type Georg lief wütend weg ‘George ran away angry’ and manner adverbials such as schnell in Georg lief schnell weg ‘George ran away quickly’.

However, reducing the distinction between adverbials and depictives to a purely semantic difference in “dependency” or “orientation” does not allow one to account for those languages where the difference has clearcut formal (i.e., morphosyntactic) consequences. Formal differences can manifest themselves

---

6. Throughout this paper, when speaking of adverbial expressions we refer to predicate adverbials which are adjuncts to the VP. So-called sentence adverbials are excluded from consideration.
Depictive secondary predicates

in either of the two construction types: either adverbial expressions, as opposed to depictives, are overtly marked (e.g., by the -ly suffix in English, or by specific conjunctions), or depictive expressions are marked, e.g., by agreement (as in the French example in (29)). Mel’čuk introduces the notion of “morphological dependency” (in addition to, and not necessarily corresponding to, syntactic and semantic dependency) precisely to account for phenomena of this kind (cf. Mel’čuk 1988: 24–25, 105–111, and also Nichols 1978a: 120).

Whether the predicative relation between a depictive and its controller is best represented by an extended dependency model of the type developed by Mel’čuk (1988) or McGregor (1997) or by co-indexing is of no concern for the purpose of this paper. The main point is that wherever clearcut morphosyntactic differences exist it is necessary to distinguish two different constructions, one adverbial and one depictive, which differ semantically AND syntactically. It would be wrong, however, to expect a clearcut distinction between the two construction types in ALL languages, as further elaborated in the following subsection.

2.8. A working definition

The working definition proposed below is designed to assist in the identification of depictive constructions crosslinguistically and thus to function as the basis of the typology of depictives outlined in the subsequent sections. It mainly summarises the characteristics of depictive constructions that are usually acknowledged in the literature (and that were briefly discussed in the previous subsections).

A depictive secondary predicate construction is a clause-level construction which meets the following seven criteria:

i. It contains two separate predicative elements, the main predicate and the depictive, where the state of affairs expressed by the depictive holds within the time frame of the eventuality expressed by the main predicate.

ii. The depictive is obligatorily controlled, i.e., there exists a formal relation to one participant of the main predicate, the controller, which is usually interpreted as a predicative relationship (i.e., the depictive predicates an eventuality of the controller). The controller is not expressed separately as an argument of the depictive (see Section 2.7).

iii. The depictive makes a predication about its controller which is at least in part independent of the predication conveyed by the main predicate, i.e., the depictive does not form a complex or periphrastic predicate with the main predicate (see Section 2.5).

iv. The depictive is not an argument of the main predicate, i.e., it is not obligatory (see Section 2.2).

v. The depictive does not form a low-level constituent with the controller,
Eva Schultze-Berndt and Nikolaus P. Himmelmann

i.e., it does not function as a modifier of the controller (see Section 1).

vi. The depictive is non-finite (to be understood as: not marked for tense or mood categories), or the dependency of the depictive on the main predicate is indicated in other formal ways (see Section 2.4).

vii. The depictive is part of the same prosodic unit as the main predicate (see Section 2.4).

The definition specifies that a depictive construction, minimally, has to be a subtype of an adjunct construction, but should be distinguishable from other adjunct constructions on formal grounds. Moreover, the adjunct has to be interpreted as a semantically depictive element (at least in the majority of instantiations of the construction).

The restrictions on depictive constructions expressed in this working definition have two major consequences. First, not all semantically depictive expressions (i.e., translation equivalents of the kinds of “typical” depictives described in Section 2.1) are also depictive constructions. Thus it is possible that a language does not have any depictive construction at all, but instead relies on alternative construction types for rendering depictive content. This holds for all constructions where the semantically depictive element is not an adjunct. There are essentially two directions in which these non-adjunct constructions may be found lacking. First, the semantically depictive element may be so closely linked to the main predicate that it lacks independent predicative force. This is the case when the semantically depictive element forms a complex predicate with the main predicate (Section 2.5). Second, the semantically depictive element can be expressed as an independent main predicate. In this case, it is clearly predicative but lacks the cotemporal nexus to another predicate (Section 2.4).

If a language has adjunct constructions conveying depictive content, the following two basic scenarios are possible:

(a) Depictive content is rendered by the same construction type as adverbial content. Differences between the two expression types exist, if at all, only on the semantic level. In this scenario, it only makes sense to speak of (general) adjunct constructions rather than of specifically depictive or adverbial constructions. (This does not preclude the existence of several adjunct constructions in a language, some of which may be specifically adverbial – the important point for our purposes is that there is no genuine depictive construction.)

(b) Adverbial and depictive content are rendered by syntactically different construction types (again, there may be more than one construction of each type). In this scenario, it makes sense to distinguish between depictive and adverbial constructions. These may be related to each other in the sense that they all instantiate a more abstractly definable adjunct construction, but each of them has its unique morphosyntactic properties.
In order to distinguish constructions that meet our working definition from alternative constructions, in the remainder of this paper we will adhere to the following terminological conventions. The terms ADVERB/ADVERBIAL and DEPICTIVE are used to refer to the adjunct constituent in an adverbial and a depictive construction, respectively. As already indicated in Section 2.1, we will use the terms SEMATICALLY DEPICTIVE (or PARTICIPANT-ORIENTED) ELEMENT and SEMANTICALLY ADVERBIAL (or EVENT-ORIENTED) ELEMENT, respectively, in order to specify the semantic type of the relevant element irrespective of the construction type it is found in. The term CONSTRUCTION is used only in reference to morphosyntactically definable units while EXPRESSION is used primarily in reference to semantically definable units. The term ADJUNCT CONSTRUCTION is used as a cover term for all kinds of clausal constructions involving a modifier on the VP level, including both adverbial and depictive constructions. If an adjunct construction can have both a depictive and an adverbial interpretation, it will be termed GENERAL ADJUNCT CONSTRUCTION. A (GENUINE) DEPICTIVE CONSTRUCTION is an adjunct construction which is participant-oriented (i.e., which clearly meets condition (ii) of the working definition proposed above), and is formally distinguished from ADVERBIAL CONSTRUCTIONS in the same language, defined as adjunct constructions which are event-oriented rather than participant-oriented.

In the interest of clarity, the relationships between the terms that were just introduced are schematically represented in Figure 1. Adverbial, depictive, and general adjunct constructions are morphosyntactically defined construction types that may be used to represent adverbial and/or depictive content. On the semantic level, the distinction between participant-oriented expressions (“de- pictive content”) and event-oriented expressions (“adverbial content”) is represented as gradual rather than clearcut. On the morphosyntactic level, though, the distinction between depictive and adverbial constructions (if made at all) is more or less clearcut in a given language. However, languages may differ in the cut-off point between the two constructions (as represented by the multiple dotted lines in Figure 1), that is, they may assign different portions of the semantic expression types to the two construction types.
The possibility of language-specific cut-off points between depictive and adverbial constructions takes us to the second consequence of applying the working definition proposed above. It turns out that candidates for genuine depictive constructions – which have been identified on the basis of morphosyntactic evidence and are distinct from adverbial constructions in the same language – may have uses which go beyond what has been commonly recognised as depictive content. This issue will be addressed in Section 4, which deals with the semantic range of depictive constructions. For example, when temporal expressions such as ‘yesterday’ agree with an argument of the main predicate and thus look very depictive-like, the depictive construction “intrudes” into presumably adverbial territory (see Section 4.6 for exemplification and discussion). We will argue that one can regard these instances as motivated extensions of depictive constructions. The argument is based on the hypothesis that there is a semantic space common to both adverbial and depictive expressions. The picture presented in Figure 1 will be refined in Section 4.7 by introducing an implicational hierarchy which extends from prototypically depictive content to prototypically adverbial content. In this semantic space, the two construction types “compete” in the sense that a language may opt either for a depictive or an adverbial construction, and that the preferred construction type is often extended beyond the semantic domains for which it appears to be semantically well motivated. (In those instances where one construction type is completely generalised we are of course dealing with a general adjunct construction.)

3. The morphosyntax of typical depictive adjuncts

In this section, we review constructions where a semantically depictive element syntactically appears as an adjunct and which in this respect meet the definition proposed in Section 2.8. However, they may differ in whether they meet criterion (ii) of the working definition, i.e., whether the construction always conveys a predicative relation between the adjunct and a controller, and whether in addition the adjunct is obligatorily controlled, i.e., cannot take its own subject. Here, we will examine the crosslinguistically recurring morphosyntactic features of these adjunct constructions, and attempt to decide for each case whether we are dealing with a general adjunct construction (which may convey both depictive and adverbial content) or a genuine depictive construction (which meets all our criteria).

Adjunct constructions conveying depictive content will be approached from two angles. In Section 3.1, we examine types of morphological marking of semantically depictive elements. In Section 3.2, we discuss their word class and internal structure. This distinction is maintained here for purely expository reasons, since in each case of course both the morphological marking
and the internal structure contribute to the morphosyntactic properties of the construction as a whole. It will also be obvious that there are certain interdependencies between the two. For example, only noun phrases and adpositional phrases (Section 3.2.2) exhibit relational marking (Section 3.1.3), and certain deverbal depictives (Section 3.2.5) in themselves signal restricted reference (Section 3.1.1).

3.1. **Morphological marking**

As many of the English and German examples in Section 1 show, depictive elements can be completely unmarked in terms of overt morphology. For those that are marked, three main types can be distinguished. The first type of marking signals “restricted reference”, i.e., restrictions on the controller of the depictive; the most widespread strategy of this kind is agreement (Section 3.1.1). The second type of marking consists of a predicative marker, such as the essive case in Finnic languages (Section 3.1.2). In addition to these two types of markers which may be analysed as more or less directly reflecting the predicative relation between depictive and controller, we also discuss the crosslinguistically common occurrence of relational markers such as comitative or locative cases or adpositions which do not directly reflect a relation between a semantically depictive element and a controller (Section 3.1.3). The occurrence of genitive markers and linking elements as found in Philippine languages is described in Sections 3.1.4 and 3.1.5, respectively. In Section 3.1.6 we briefly look at cotemporal or restrictive markers on depictives.

It should be noted at the outset that some of these basic types of overt morphological marking can co-occur in principle. For example, in the data surveyed here we find depictives which carry a relational marker combined with an agreement marker, as in the Russian example in (38), or an agreement marker followed by a cotemporal or restrictive marker, as in the Martuthunira example in (48).

3.1.1. **Strategies of signalling restricted reference**

3.1.1.1. **Agreement.** The phenomenon of agreement of a depictive with its controller in case and/or number and gender is well known from classical Greek and Latin, and is also found to some extent in modern Indo-European languages including Modern Greek and Slavic and Romance languages (see examples (5) and (29) above). Many Australian languages also show extensive agreement of depictives with their controllers. Agreement is illustrated in (30) for a depictive expressing a condition, and in (31) for a depictive expressing a life stage.
In ergative languages like Gooniyandi or Yankunytjatjara, the depictive agrees with an S or O controller in the absolutive,\(^7\) as in (30a), and with an A controller in the ergative, as in (30b) and (31).

(30) Gooniyandi (Bunuban, non-Pama-Nyungan, Australian)
   a. wangmarra *wardji*
      mad he.went
      ‘He went away angry.’ (McGregor 1990: 345)
   b. *gardlooni* wangmarra-ngga
      I.hit.him mad-ERG
      ‘I hit him (being) angry.’ (McGregor 1990: 345)

(31) Yankunytjatjara (Pama-Nyungan, Australian)
    nganarna tjitji-ngku nyaku-payi
    1PL child-ERG see-HABIT
    ‘We used to see it as children.’ (Goddard 1985: 60)

Agreement is also attested for depictives with controllers in oblique cases (see Section 2.6 for examples). As already indicated, agreement of the type described here is not a surface phenomenon resulting in identical case marking of two surface constituents. Instead, since the controller is a semantic participant rather than a surface constituent, the case marking on the depictive reflects the semantic role of the controller rather than the marking of the corresponding NP constituent. Therefore it is possible for a depictive to take “agreement” marking even if the controller is not overtly expressed, as for example in (10) and (86), or if the NP representing the controller takes a case marker which is different from that of the depictive. For example, while the depictive in (31) takes ergative marking, the NP representing the controller, *nganarna* ‘we (PL)’, is in the (unmarked) nominative case, because Yankunytjatjara has an ergative split based on animacy, and free personal pronouns take nominative-accusative case marking (but note the alternative analysis suggested by Goddard 1985: 42–44).

Constructions involving agreement between a depictive and a controller constitute the paradigm case of genuine depictive constructions, because the relationship between the two constituents is overtly reflected in the morphosyntactic structure. In languages which have this characteristic, agreement is thus a very important heuristic for delimiting depictives from adverbials, and for identifying the full range of depictive expressions. Therefore, in Sections 3.2 and 4 we will rely primarily on languages with agreement in order to establish a more comprehensive picture of depictive secondary predication than the one usually found in the literature.

\(^7\) Since the absolutive is unmarked in the languages under discussion, it will not be glossed.
Depictive secondary predicates

Two caveats should be noted here, however. The first is that in most languages that allow agreement of depictive constituents, modifiers in a noun phrase also obligatorily agree with their head noun. The distinction between depictives and attributive modifiers, which can usually be drawn in terms of word order (see Section 1), becomes more difficult in languages – widely regarded as belonging to the “non-configurational” type – which allow for so-called discontinuous noun phrases (cf. also Müller-Bardey 1990, Bickel 1991:170). The problem is illustrated with the pair of Jaminjung examples in (32).

(32) Jaminjung (Mindi, non-Pama-Nyungan, Australian)
   a. jalag=biyang jag ga-ndha-ny mangarra
      good=now go.down 3SG.S-fall-PST plant.food
      ‘Good now (i.e., ripe) the fruit fell down.’ (Eva Schultze-Berndt, fieldnotes)
   b. wirib gujugu ngarrgina ga-ram
      dog big 1SG.POSS 3SG.S-come.PRS
      Darwin-ngunyi mulanggirr
      [place.name]-ABL aggressive
      ‘An aggressive big dog of mine is coming from Darwin.’ (Eva Schultze-Berndt, fieldnotes)

Since Jaminjung allows attributes that are separated from the modified nominal, out of context (32a) could read ‘the good fruit fell down’. However, the context (and also the presence of the temporal clitic =biyang) suggests the reading of jalag as ‘ripe’, and the overall interpretation that the fruit fell down when it was ripe. In contrast, mulanggirr ‘aggressive’ in (32b) does not designate the dog’s state at the time of coming from Darwin, but rather restricts the possible referents of wirib ‘dog’: from the context, it is clear that the dog which the speaker has ordered from Darwin is supposed to have the properties of being both big and aggressive. Judging from the semantic interpretation, thus, (32a) is an example of a depictive, while (32b) is an example of a modifier in a discontinuous noun phrase.

It has occasionally been suggested in the literature that there is in fact no syntactic difference between non-restrictive modifiers and depictive secondary predicates. This is claimed by van der Auwera (1992) with regard to non-restrictive relative clauses. It is also at the heart of the distinction proposed by Hale (1981) between a ‘merged’ (i.e., restrictive) and an ‘unmerged’ (i.e., non-restrictive) reading of attributes in a discontinuous noun phrase in Australian languages like Warlpiri. Based on Hale (1981), a number of authors analyse

---

such non-restrictive attributes just like secondary predicates (e.g., Nash 1986, Simpson 1991, Nordlinger 1998).

It is however quite possible that the two types of constructions can be distinguished by prosodic means. With regard to the Diyari clause in (33), Austin (1981a: 108) notes: “[…] with sentence stress on nganhthi [it] means ‘this rotten meat smells’. However, with a slight intonation break after nganhthi and stress on thungka, the reading is ‘this meat smells rotten’.”

(33) Diyari (Pama-Nyungan, Australian)

\[
\begin{array}{l}
\text{nhawuya nganhthi thungka parni-yi} \\
\text{DEM.3SG.NF meat rotten smell-PRS}
\end{array}
\]

‘This meat smells rotten / This rotten meat smells.’ (Austin 1981a: 108)

Similar suggestions are made by McGregor (1992b: 316) and Hale (1994: 193). The prosodic properties of discontinuous modifiers in comparison with depictives, and the distinction between non-restrictive modifiers and depictives, remain a matter of further investigation.

The second problem with agreeing constituents is that in some languages, such as the East Caucasian language Archi, practically all adjuncts (including locative, temporal, and benefactive expressions) agree with the pivot of the clause (Kibrik 1979). Depending on the tense/aspect/mood marking and information structure of a transitive clause, the adjunct may agree with the (ergative or absolutive) A or the (absolutive) O. We can therefore speak of “automatic” adjunct agreement for languages of this type. There are two reasons for regarding automatic agreement constructions as general adjunct constructions rather than depictive constructions. First, in Archi, unlike in the other languages discussed here, there do not seem to be non-agreeing adverbials – in other words, there is no formal distinction between depictive and adverbial constructions. Second, agreement in Archi seems to be triggered by the status of an argument as the syntactic pivot rather than by the existence of a semantic link between the adjunct and the argument. However, the shift from a clear semantic link to pivotal status as a trigger of agreement may be considered a further generalisation and extension of an originally genuine depictive construction which simply becomes the unmarked general adjunct construction.

Although we will not comment on these problems any further, it should be clearly understood that whenever we make reference to agreement facts in the following sections, the language also has non-agreeing, adverbial adjuncts, and a purely attributive reading and function for the agreeing constituent is clearly ruled out by the context.

3.1.1.2. Other strategies for indicating restricted reference. Apart from agreement, other strategies exist to indicate restricted reference. One of them,
the use of specific deverbal forms, will be discussed in Section 3.2.5. Others come from miscellaneous sources. For example, in a number of Northern Australian languages including Wardaman (Merlan 1994: 287–289), Jamindung (Schultze-Berndt 2000: 112–113), Kaititj (Austin 1981b: 326), and Bilinarra (Nordlinger 1998: 165), a marker on depictives which is identical to the Allative case clearly indicates that their controller is an O (see also Section 3.2.4). In these languages, thus, a case marker unambiguously identifies the controller of the depictive although we are not dealing with an instance of agreement. For Warlpiri, this construction has been discussed by Hale (1982: 290–294), Simpson & Bresnan (1983), and Simpson (1988). As (34) shows, the depictive takes the dative in addition to the allative in agreement with a dative object.

(34) Warlpiri (Pama-Nyungan, Australian)

\[
\text{punta-rni ka-rla tala-patu [jaja-nyanu-ku}
\]

\[
take.away-NPST NPST-3.IO money-PL grandmother-self-DAT
\]

\[
\text{wiyarrpa-ku_l [jarda-nguna-nja-kurra-ku],}
\]

\[
poor.thing-DAT sleep-lie-INF-ALL-DAT
\]

\`He takes money from his poor grandmother (while she is) asleep.'

(Simpson 1991: 394)

In the data surveyed, the allative case on O depictives was the only instance of a case marker signalling restricted reference (other than in agreement), but other types of markers also exist. In Warlpiri, the suffix \text{-karra}, illustrated in (35), indicates simultaneity and, at the same time, restricts potential controllers of the depictive to participants in S/A (“same-subject”) function. Depictives marked with \text{-karra} also exhibit case agreement with their controller.

(35) Warlpiri (Pama-Nyungan, Australian)

\begin{enumerate}
\item [a.] ngarrka ka wangka-mi nyina-nja-karra
\end{enumerate}

\[
\text{man NPST talk-NPST sit-INF-S/A=S/A}
\]

\`The man is talking (while) sitting.’ (Simpson 1988: 215)

\begin{enumerate}
\item [b.] wati-ngki marlu nya-ngu parnka-nja-karra-rlu
\end{enumerate}

\[
\text{man-ERG kangaroo see-PST run-INF-S/A=S/A-ERG}
\]

\`The man saw the kangaroo (while the man was) running.’ (Hale et al. 1995: 1442)

The \text{-karra} suffix is thus in direct functional opposition to the allative case, and the two have been analysed as parts of a switch-reference system by Austin (1981b), Simpson & Bresnan (1983), and Hale (1982, 1994) (see also Section 3.2.5).

3.1.2. Predicative (“essive”) marking. In a number of languages, a special “predicative” case, adposition or particle marks expressions of function, role
or life stage. The English and German forms, as and als, were already illustrated in examples (8) and (25) in Section 2. Perhaps the best-known predicative marker is the so-called “essive case” in Finnic languages, here illustrated with examples from Estonian. Here, the essive can be used on expressions of function or role (36a), life stage (36b), or condition (36c), as well as on expressions of manner or comparison (see example (82)).

(36) Estonian (Finno-Ugric, Uralic)
   a. *minu mees töötab arsti-na*
      1SG.GEN husband.NOM work.PRS.3SG doctor-ESS
      ‘My husband works as a doctor.’ (Lutkat & Hasselblatt 1993: 192)
   b. *poisi-na mängisin jalgpalli*
      boy-ESS play.PST.1SG football.PART
      ‘As a boy I played soccer.’ (Lutkat & Hasselblatt 1993: 192)
   c. *ta läks koju rõõmsa-na*
      3SG go.PST.3SG house.ILLAT happy-ESS
      ‘She went home happy.’ (Lutkat & Hasselblatt 1993: 192)

Predicative or essive markers often occur not only on depictives, but also mark predicate complements and non-verbal main predicates (cf. Nichols 1978a). However, whenever the essive-marked constituents are clearly adjuncts, the constructions in question count as genuine depictive (rather than adverbial or general adjunct) constructions, because the marker explicitly signals the predicative relationship between the adjunct and the controller.

Sometimes the boundary between predicative marking and relational marking, to be discussed in Section 3.1.3, may be difficult to draw. For example, the essive in the Finnic languages originates from a local case (Hakulinen 1957: 3–4), and the instrumental in Russian, in addition to its “relational” function, also has the functions of an essive in that it marks nominals serving both as main predicates and as depictives (Jakobson 1936, Janda 1993: 175).

3.1.3. Relational marking. In cases where the semantically depictive element receives some kind of relational marking which also occurs on semantically adverbial elements, it is particularly difficult to decide whether the constructions in question are depictive or general adjunct constructions. This can be illustrated with the Jaminjung examples in (37):

(37) Jaminjung (Mindi, non-Pama-Nyungan, Australian)
   a. *[jalig wuthiny-mindij yirr-anthama-ny]*
      child small-TEMP 1PL.EXCL.A.3SG.O-bring-PST
      ‘We brought him as a small child.’ (Eva Schultze-Berndt, field-notes)
Depictive secondary predicates

b. jalang=guji na-ruma-ny, buru na-jga-ny
   now=first 2SG.S-come-PST return 2SG.S-go-PST
gugu-mindij na
   water-TEMP now
   ‘You only came now, you went back in the rain time then.’ (Eva Schultze-Berndt, fieldnotes)

At first sight, i.e., considering only (37a), Jaminjung appears to have a specific marker of depictive expressions of life stage, the suffix -mindij. However, as (37b) shows, -mindij has to be analysed as a general temporal marker which also follows semantically adverbial elements.

Only the two most frequent types of relational marking are discussed in more detail below; these are comitative or instrumental marking (Section 3.1.3.1) and marking with a locative case or adposition (Section 3.1.3.2).

3.1.3.1. Comitative or instrumental marking. In many languages, typical semantically depictive elements (expressing a condition or posture) take a comitative or instrumental case marker or adposition.9 Examples are given in (38) and (39). The use of the instrumental case to mark depictives in Russian has been widely noted (cf. Jakobson 1936, Nichols 1978a, Janda 1993). Note that it is found both on depictives expressing a condition or state, such as (38a), and on depictives expressing a function or role, such as (38b), and that it is combined with agreement marking (see also examples (6) and (9)).

(38) Russian (Slavic, Indo-European)
   a. on umer molodym
       3SG die.PST.3SG young.M.SG.INSTR
       ‘He died young.’ (Nichols 1978a: 115)
   b. on pomnit menja gusarom
       3SG.NOM remember.PRS.3SG 1SG.ACC hussar.M.SG.INSTR
       ‘He remembers me as a hussar.’ (Janda 1993: 178)

Comitative/instrumental phrases constitute one of the main strategies for encoding semantically depictive elements in many other languages, including German (cf. Schultze-Berndt & Dawuda 2001) and Ewe.

9. Comitative (with a prototypical function of marking animates accompanying other animates) and instrumental (with a prototypical function of marking inanimate instruments) overlap in many languages and are clearly separated in many others; see Stolz (1996) for a typological overview.
Comitative or instrumental markers, in their basic function, express the presence of a further participant (either as a concomitant or as an instrument) in a state of affairs. The motivation behind their widespread use on semantically depictive elements could be seen as an extension of this basic function to the function of signalling the “characterising presence of an attribute” during the state of affairs expressed by the main predicate. In Section 4.2, we will show that comitative expressions in general can have a depictive interpretation, and are explicitly marked as depictives in some languages. However, in languages without such additional marking there appears to be no evidence for claiming that all comitative and instrumental expressions should be analysed as instances of depictive constructions. Therefore, the comitative-marked noun phrases in the languages discussed in this subsection are analysed as general adjunct constructions which may have a depictive or an adverbial reading.

3.1.3.2. Locative marking. Locative case markers or adpositions are also widespread as markers on depictives (cf. Müller-Bardey 1990: 4, Aarts 1995: 79). In German, for example, this type of marking is found on depictives encoding size, material, and colour. The construction illustrated in (40) has a special status in that the adjective of colour (or size) occurs here in its predicative (i.e., bare stem) form which otherwise is not possible in noun phrases or prepositional phrases. In this instance we seem to be dealing with a genuine depictive construction consisting of the locative preposition in plus the bare stem of an adjective.

(40) German (Germanic, Indo-European)

ich habe das Kleid in blau gekauft

1SG.NOM AUX DEF dress in blue bought

‘I bought the dress in blue.’

Locative prepositional phrases in German may also express a condition. This is achieved through modification of a general noun meaning, e.g., ‘mood’, as in (41), or in a number of idiomatic depictive phrases such as bei vollem Bewusstsein ‘fully conscious’ or bei lebendigem Leibe ‘alive’.
Depictive secondary predicates

(41) German (Germanic, Indo-European)
sie kommt immer in guter Laune zurück von der
tagesfamilie
She always comes back in a good mood from \textit{DEF day.family}
‘She always comes back from daycare in a good mood.’ (from an e-mail message)

Similarly, the locative preposition \textit{le} in Ewe is found on depictives of posture and bodily condition, as in (42). This example is an alternative to the comitative-marked expression of a condition (‘hungry’) in (39).

(42) Ewe (Kwa, Niger-Congo)
éw-e le yöme-ví me
3SG.SBJ-do-3SG.OBJ \textit{LOC stomach-white containing.region}
‘She did it hungry.’ (lit.: ‘... in a white [i.e., empty] stomach’) (F. Ameka & J. Essegbey, personal communication)

Locative phrases may also be used to express a role or life stage. For example, Austin (1981a: 126) points out that in Diyari, “nouns which refer to human beings at various ages can also specify a temporal setting when inflected for locative case”.

(43) Diyari (Pama-Nyungan, Australian)
nhawu ngama-rna \textit{wanthi-yi nhaka} kanku
3SG.NF.SBJ sit-PRTC AUX -PRS there.LOC boy
waka-nhi
small-LOC
‘He lived there as a small boy.’ (Austin 1981a: 126)

In Japanese, finally, a case marker which has both locative and instrumental functions also marks all depictives formed with nominal adjectives, a word class whose members encode properties and states (Takezawa 1993).

(44) Japanese
John-ga sakana-o hadaka-de tabe-ta
John-NOM fish-ACC nude-LOC/INSTR eat-PST
‘John ate the fish nude.’ (Takezawa 1993: 50)

In all the languages examined here, the locative marker is not restricted to occurrence with semantically depictive elements. Instead, its main function is to mark the location where a state of affairs takes place, and the resulting expression is in most cases – though not always, as we will see in Section 4.5 – clearly semantically adverbial. As in the case of comitatives and instrumentals
discussed above, whenever a construction involving a locative-marked adjunct may convey both adverbial and depictive content, it should be analysed as a general adjunct construction, unless there is additional formal evidence for distinguishing a genuine depictive construction, as was claimed for the German adjectives of colour and size exemplified in (40).

3.1.4. *Genitive marking.* Among the languages surveyed, marking of participant-oriented adjuncts with the genitive – i.e., with a case that is typically used adnominally and marks a possessor – was only found in Latin (cf. Pinkster 1988: 221–222) and German (cf. Paul 1919: 322–324). In German, this construction is clearly archaic; a paraphrase with the comitative adposition mit is more common (e.g., *mit ruhigem Gewissen* for the genitive phrase in (45)). However, some idiomatic expressions, for example *ruhigen Gewissens* ‘with a good conscience’ in (45), and *schweren Herzens* ‘heavy-hearted’, are still widely used.

(45) German (Germanic, Indo-European)

\[
\begin{array}{llll}
dann & können & wir & jetzt
\\
& & & ruhigen Gewissens
\\
zurückgehen
\end{array}
\]

‘Then we can now return with a good conscience.’ (overheard utterance)

These genitive expressions are clearly distinguished by their position from adnominal modifiers. They are also optional and thus have to be distinguished from genitive complements which are required with a few verbs in both Latin and German. However, genitive-marked adjuncts are not restricted to conveying clearly depictive content. In German, the other major genitive-marked class of adjuncts, which are also somewhat archaic and not productive, are temporal expressions such as *des Morgens* ‘in the morning’ or *des andern Tags* ‘the next day’. Thus, in the absence of further evidence to the contrary, we would hold that we are dealing here with a general adjunct construction rather than with a genuine depictive construction.

3.1.5. *Linkers.* In Tagalog, one way of deploying a semantically depictive element is to use it in a linker construction with the main predicate. It may either immediately precede or follow the main predicate, and both constituents are joined by a linker element (*na* after most consonants, *-ng* after vowels and the nasal /n/). This is illustrated in (46), where the main predicate *abutan* is followed by the enclitic linker and the semantically depictive *buháy* ‘alive’ (com-
Depictive secondary predicates

pare also (16) in Section 2.4, where the same lexeme occurs as a semantically depictive element in an independent main clause).

(46) Tagalog (Philippine, Austronesian)

\[
\begin{align*}
\text{baká} & \quad \text{hindí} & \quad \text{nya} & \quad \text{abutang} & \quad \text{buháy} & \quad \text{ang} \\
\text{baká'} & \quad \text{hindí'} & \quad \text{niyá} & \quad \text{abot-an:1.K} & \quad \text{buháy} & \quad \text{ang} \\
\text{maybe} & \quad \text{NEG} & \quad \text{3SG.POSS} & \quad \text{reach-LV:1.K} & \quad \text{alive} & \quad \text{SPEC} \\
\text{kanyang} & \quad \text{iniìbīg} \\
\text{kanya-ng} & \quad \text{in-RDP-ibīg} \\
\text{3SG.DAT-LK} & \quad \text{RLS(UG)-RDP-love}
\end{align*}
\]

‘[But he was also much afraid that] he might not find his loved one alive.’ (Bloomfield 1917: 92)

The same freedom of order and the same linking element is found in Tagalog in all kinds of modifying constructions, including those with adjectival attributes, quantifiers, and demonstratives (see Himmelmann 1997: 160–165 for examples and more discussion). Most importantly in the present context, it is also employed for prototypical semantically adverbial elements, as in (47).

(47) Tagalog (Philippine, Austronesian)

\[
\begin{align*}
\text{t-um-ayó-ng} & \quad \text{biglā’} & \quad \text{si} & \quad \text{Lolo} & \quad \text{Tasyo} \\
\text{AV-erect-LK} & \quad \text{sudden} & \quad \text{PN} & \quad \text{grandpa} & \quad \text{Tasyo}
\end{align*}
\]

‘Grandpa Tasyo suddenly stood up…’ (Wolff, Centeno, & Rau 1991: 1269)

There is no syntactic evidence that would distinguish the expression involving \textit{buháy} ‘alive’ in (46) from the expression with \textit{biglā’} ‘sudden’ in (47). All of them instantiate the general linking construction which is best analysed as conveying modification. In the case of an unspecific linker like that found in Tagalog, it is most obvious that we are dealing with a general adjunct construction which is not restricted to either adverbial or depictive content.

3.1.6. Cotemporal and restrictive marking. It has occasionally been noted that depictives are the focus (or at least part of the focus) of an utterance (see, e.g., Nichols 1978a: 121–122 and especially Winkler 1997). This was not included explicitly in the definition proposed in Section 2.8, but is consistent with the condition that depictives make a predication which is partially independent of the predication conveyed by the main predicate. It is also consistent with the observation that depictives are often semantically more specific than the main predicate, and thus make the main contribution to the information conveyed by the clause.

The predicative (as opposed to attributive) character of depictives is often underlined by certain particles or clitics which are associated with the focus of
Eva Schultze-Berndt and Nikolaus P. Himmelmann

an utterance, and are usually not restricted to occurrence in depictive expressions (see also König & van der Auwera 1990: 344). One possibility is that the depictive carries a particle or clitic, often glossed as ‘then’ or ‘now’, which also serves to link clauses by indicating a temporal relationship between them. Cotemporal markers of this type are common in Australian languages (Dench & Evans 1988: 14). An example can be found in (48), from Martuthunira (further examples showing the use of the clitic =l in this language are (7) and (10)). This example also shows that cotemporal markers may unambiguously indicate that the expression in question is a depictive rather than a constituent of a noun phrase.

(48) Martuthunira (Pama-Nyungan, Australian)

\[\begin{array}{llll}
nganarna & thani-lalha & ngurnu-ngara-a & muyi-ngara-a \\
1PL.EXCL.NOM & hit-PST & DEM-PL-ACC & dog-PL-ACC \\
kupiyaji-i=l & little.PL-ACC=THEN \\
\end{array}\]

‘We hit those dogs [when they were] little.’ (not: ‘We hit those little dogs.’) (Dench 1995: 59)

In addition to cotemporal particles or clitics, particles or clitics with primarily restrictive function (e.g., ‘just’, ‘only’) are also found on depictives. Their use is discussed in depth in Schultze-Berndt (2002), where it is argued that depictives narrow down the predication conveyed by the main predicate by introducing a second – usually more specific – predicate. The restrictive marker, as it were, makes explicit that only the specific eventuality expressed by the depictive occurs, to the exclusion of other possible alternatives. This can be illustrated with the following example from Gurindji. The depictive (marked with locative case followed by a restrictive clitic) restricts the eventuality conveyed by the main predicate (of being left behind) to a more specific eventuality, of being left in a specific condition, asleep (and not in any other condition or position, e.g., standing in the door).

(49) Gurindji (Pama-Nyungan, Australian)

\[\begin{array}{llll}
ngu=ngku & parik & wamyja-ni & makin-ta=rni \\
AUX=2SG.O & leave.behind & leave-PST & asleep-LOC=RESTR \\
\end{array}\]

‘He left you (still) asleep.’ (McConvell 1983: 20)

In the languages surveyed for this study, cotemporal or restrictive clitics were never restricted to depictive constituents, but are usually also found on other adjuncts and on main predicates. They therefore do not constitute unambiguous markers of depictive constructions. It seems, however, that cotemporal or restrictive markers may be obligatory or near-obligatory with depictives in some languages. In Jaminjung, a restrictive clitic is obligatory with quantifiers
Depictive secondary predicates

in depictive function (see Section 4.1). Bucheli Berger (to appear) reports that in the Swiss German dialect of Diepoldsau, the restrictive particle *asa* 'so, so much' appears to be obligatory, while in the surrounding dialects it is merely frequent with depictives.

(50) Swiss German, dialect of Diepoldsau (Germanic, Indo-European)

\[
\begin{align*}
\text{du} & \quad \text{moascht} & \quad \text{d=Milch} & \quad \text{aber} & \quad \text{asa} & \quad \text{hoass-a} \\
2\text{SG.NOM} & \quad \text{must} & \quad \text{DEF=milk.F.SG} & \quad \text{but} & \quad \text{so.much} & \quad \text{hot-DEPIC} \\
\text{trinken}! & \quad \text{drink(INF)} \\
\end{align*}
\]

‘You have to drink the milk hot.’ (Bucheli Berger to appear)

In any case, cotemporal and restrictive markers may assist in delimiting depictives from other agreeing constituents, specifically modifiers in a discontinuous noun phrase, and in distinguishing depictives from constituents of a complex predicate (see also Sections 2.5 and 3.2.4).

3.1.7. Summary. In this section, we have distinguished six main types of morphological marking on adjuncts which are semantically typical depictives. The first type of marking serves to relate the depictive to a controller in a specific role. The most frequent strategy of this kind is agreement, but other types of markers, such as the allative case on O-controlled depictives in some Northern Australian languages, are also attested. We have argued that adjuncts with this type of marking, at least where they contrast with adjuncts lacking this marking, are constituents of genuine depictive constructions.

Unlike agreement, predicative markers like the ‘essive case’, when occurring on semantically depictive adjuncts, do not unambiguously identify the controller (nor do they seem to be restricted to controllers in a specific syntactic function in the languages surveyed). Nevertheless, they clearly signal a predicative relationship between the depictive and the controller, and are generally found only in adjunct expressions which clearly convey depictive content. They can therefore also be regarded as constitutive of genuine depictive constructions.

All the other kinds of morphological markers found on participant-oriented elements are also found in semantically adverbial expressions. These comprise genitives, linkers, cotemporal and restrictive particles and clitics, and various types of relational cases or adpositions such as temporal, comitative, instrumental, and locative markers. It is very likely that a survey of a larger sample of languages would reveal the existence of other markers of this type. To mention just one further example: in Dzongkha, an “adverbialiser” suffix *-be*, deriving from a verb ‘do, perform’, marks semantically adverbial elements (51a) as well as semantically depictive elements (51b).
Dzongkha (Central Bodish, Tibeto-Burman)

a. chö-g'i pchen dr'i-d'i läzhim-be-ra pchen dr'i-d'i läzhim-be-ra you-ERG fart aroma-DEF good-ADV-EMPH smell-EXP.PRS-QU

‘Can you smell that fart really well [i.e., as well as I can]?’ (van Driem 1998: 234)

b. b’utshu-d’a-b’um-d’i-tshu chu-i-nang gêmu-be chûchu-do-wä b’utshu-d’a b’um-d’i tshu chu-i-nang gêmu-be boy-and-girl-DEF-PL river-GEN-IN naked-ADV bathe-PROG-EVID

‘The boys and girls are bathing naked in the river.’ (van Driem 1998: 317)

For all these markers, additional morphosyntactic features have to be involved in a given construction in order to unambiguously identify it as a genuine depictive construction. This was briefly exemplified for the locative adposition in in German. When this preposition occurs with adjectives of colour and size in adjunct position, the overall construction is not only always clearly depictive semantically but the adjectives also have to appear in their bare stem form, thereby rendering the overall construction unique in morphosyntactic terms as well.

Note that even though we have been able to identify genuine depictive constructions in some languages by a unique combination of morphological marking, syntactic constituency, and possibly restrictions on lexical fillers, none of the morphological markers discussed here are restricted to marking depictives. In other words, depictive marking always capitalises on strategies which also have other functions in the language in question, such as agreement, predicative marking, relational marking, or cotemporal and restrictive particles or clitics. So far, we only know of one case of a genuine morphological marker of depictives, in the Swiss German dialect of Appenzell and surroundings (see (50) for an example). This is discussed by Bucheli Berger (to appear), who convincingly demonstrates that the depictive marker is a generalised agreement marker in a dialect that has otherwise lost agreement on predicative constituents.

In the next section, this preliminary survey of morphological marking on semantically depictive elements will be complemented by a survey of their word class and internal structure.

3.2. Word class and internal structure

The definition of depictive constructions proposed in Section 2.8 does not impose any restrictions on the word class that the depictive can belong to, nor on its internal complexity. Rather, it only includes the restriction that the depict-
Depictive secondary predicates

tive should not be associated with tense, aspect, or mood marking. Candidates for depictive status therefore come both from word classes that do not allow such marking (i.e., which could be termed “inherently non-finite”), and from word classes which can derive non-finite forms (i.e., non-finite deverbal forms). Most authors agree that depictives can be adjectives or adjective phrases (Section 3.2.1) and noun phrases or adpositional phrases (Section 3.2.2). To these we add two classes of inherently non-finite predicates, i.e., word classes which do not allow tense, aspect or mood marking, but which are still inherently predicative. (Sections 3.2.3 and 3.2.4). Section 3.2.5 deals with converbs and other deverbal predicates that can be analysed as depictives when they are obligatorily controlled. The issue of distinguishing genuine depictive constructions from general adjunct constructions is taken up again in the summary in Section 3.2.6.

3.2.1. Adjectives. Just for the sake of completeness we mention adjectival depictives here. These have already been amply exemplified in Sections 1 and 2. Most of the “prototypical” depictives that are usually discussed for European languages are adjectival. In these languages, adjectives are primarily defined by their attributive function, but may usually also function as the main predicate with a copula, or as a depictive secondary predicate with a non-copular main predicate. “Adjectives” which are only used predicatively are discussed in Section 3.2.3.

3.2.2. Noun phrases and adpositional phrases. Where underived (common) nouns are used as depictives, they are usually interpreted as expressions of a temporary role or life stage. In some languages, including (to some extent) English, unmarked noun phrases can be used in this function (consider, e.g., Alex arrived at the station a complete wreck).

Usually however, in English as in Modern German, expressions of function or role take the predicative marker as (the German translation equivalent is als, see example (8)). Instead of predicative marking, we also find agreement with the controller (see example (31)) or relational marking (see, e.g., examples (37), (41), and (43)) on depictive noun phrases or adpositional phrases.

In languages which do not allow adjectives to occur freely in predicative function, depictives expressing a condition or state sometimes involve a dummy noun meaning, e.g., ‘state’, to which the adjective denoting the condition or state functions as a modifier. This is a major strategy for encoding A-controlled depictives in Turkish (Boeder & Schroeder 1998: 221, Schroeder 2000a).
(52) Turkish (Turkic, Altaic)
\[ \text{çay-i [yorgen bir biçim-de] iç-ti-m} \]
\[ \text{tea-ACC tired one state-LOC drink-PST-1SG} \]
‘I drank the tea tired.’ (lit.: ‘I drank the tea in a tired state’) (Schroeder 2000a)

For Japanese, this strategy is obligatory with adjectives such as karai ‘salty’ in (53), which, unlike the so-called nominal adjectives illustrated with hadaka ‘nude’ in (44), cannot appear on their own in depictive function (Takezawa 1993: 70).

(53) Japanese
\[ \text{John-ga sakana-o karai azi-de tabe-ta} \]
\[ \text{John-NOM fish-ACC salted/salty taste-LOC/INSTR eat-PST} \]
‘John ate the fish salted.’ (lit. John ate the fish in a salty taste) (Takezawa 1993: 71)

Even in languages such as German which usually do allow adjectives as depictives, the noun phrase strategy may be used for clarity, as in (54).

(54) German (Germanic, Indo-European)
\[ \text{Auf den Film – der anschließend in zensierter Form im} \]
\[ \text{on DEF film REL afterwards in censored form in} \]
\[ \text{unverschlüsselten Fernsehen lief – folgte eine} \]
\[ \text{unencoded TV ran followed INDEF} \]
\[ \text{Entrüstungswelle in den Medien} \]
\[ \text{outrage.wave in DEF media} \]
‘The film – which was afterwards shown in a censored form in free TV – was followed by a wave of outrage in the media.’ (Frankfurter Allgemeine Zeitung, May 2000)

3.2.3. Predicative adjectives and word classes restricted to depictive function. Many languages have a class of words — usually quite small — which may not be used as attributes, but only as predicates, without showing the formal characteristics of verbs. These are often termed “predicative adjectives”, especially when they take nominal inflections in agreement with a controller, and are typically used as depictives; often, they can also be used as the main predicate in a clause (with or without a copula). An example from German is barfuß ‘barefoot’ and its dialectal variants, which can be used as a main predicate (e.g., sie war barfuß ‘she was barefoot’) or as a depictive, as in (55), but not as a modifier (*die barfuße Frau ‘the barefoot woman’).
Depictive secondary predicates

(55) German, Cologne dialect (Germanic, Indo-European)
un alle Kinder durfte früher bläckfß loufe,
and all children may.FST.3PL formerly barefoot walk
nur ich nit
only 1SG.NOM NEG
‘And in those days all children were allowed to walk barefoot, except for me.’ (Bhatt & Lindlar 1998: 173)

Similar non-verbal word classes restricted to predicative function have been described for some Australian languages, e.g., Kayardild (Evans 1995: 231), Martuthunira (Dench 1995: 53), and Yankunytjatjara (Goddard 1985: 57–58). Most of these predicates express a condition or a posture. An example from Kayardild is mibulka ‘asleep’ in (56).10

(56) Kayardild (Tangkic, non-Pama-Nyungan, Australian)
mibulk-i kurdala-tha kajakaja-y, malangarrba-y
asleep-OBJ spear-ACT daddy-OBJ drunk-OBJ
‘He speared your daddy (who was) asleep and drunk.’ (Evans 1995: 333)

Kayardild, in addition, has a small class of lexemes which are not only inherently predicative, but restricted to depictive function. This has a clear formal correlate: these forms always show case agreement with one argument of the clause (Evans 1995: 227–229). Semantically, they comprise notions of posture and quantification (see example (74) in Section 4.1), but also of manner (see further Section 4.4).

Lexical items with similar properties have been described for Warlpiri (Hale 1982: 279–280) and Diyari (Austin 1981a: 107–108). Word classes restricted to depictive function are, however, also found outside Australia. For example, Pinkster (1988: 224–226) discusses Latin forms such as invitus ‘reluctant’ which are traditionally classified as adjectives because of case agreement, but which can function neither as attributes nor as main predicates, but only as depictives. In the absence of obligatory agreement, members of a word class restricted to adjunct function would of course traditionally be termed “adverbs”, even if they allow for participant-related readings. In this case, we are again dealing with general adjunct constructions.

3.2.4. Other inherently non-finite predicates. A second type of inherently non-finite predicate is also found in Australian languages. Predicates of this

---

10. In this example, the adjectival nominal malangarrba ‘drunk’ also has a depictive-like function although it is not prosodically integrated. In contrast to mibulka ‘asleep’, this form may also be used attributively.
type, termed “coverbs”, “preverbs”, or “verbal particles” in the literature, constitute an open class. Its members differ in morphology and distribution from inflecting verbs (the latter form a closed class in most of these languages). They usually cannot form the main predicate of a clause, and primarily occur as part of complex predicates together with an inflecting verb. In addition, they may also function as depictives.

In Jaminjung, coverbs as part of complex predicates are usually completely unmarked, as illustrated in (57) for the positional coverb *gurdij* ‘stand, be upright’, which combines with the inflecting verb *gagba* ‘be’ to form a complex verb translating as ‘stand’. However, coverbs may also take a subset of the nominal case markers (even though they constitute a lexical category distinct from nominals). The resulting expressions are subordinate clauses, some of which clearly function as depictives. For example, coverbs marked with the allative case function as depictives controlled by O, as shown for the coverb *mugurn* ‘lie, sleep’ in (57) (see also Section 3.1.1.2).

(57) Jaminjung (Mindi, non-Pama-Nyungan, Australian)

\[
gurdij \quad \text{ga-gba=rnu}, \quad \text{gani-ma}\n\]

\[
\text{stand} \quad 3\text{SG.S-be.PST}=3\text{SG.OBL} \quad 3\text{SG.A.3SG.O-hit.PST}
\]

\[
[janyungbari \quad mayi], \quad [mugurn-bina],
\]

\[
\text{another man lie-ALL}
\]

‘He was standing up on him and hit another man (who was) lying down.’ (Eva Schultze-Berndt, fieldnotes)

It is to be expected that uninflecting predicates of the Jaminjung coverb type in depictive function can also be found outside the Northern Australian area. Potential candidates are some types of those uninflecting elements variously known as ideophones, “expressives”, or “sound-symbolic adverbs”, found, e.g., in many African languages (cf. Schultze-Berndt 2001).

3.2.5. **Deverbal predicates.** The use of deverbal predicates as depictives is well attested for European languages, where the so-called participle forms can be used just like adjectives. Past participles such as *drunk* figure prominently in many discussions of secondary predication, whereas authors generally avoid including English present participles among the examples of depictives. However, there is no evidence for analysing the role of *singing* in *George left the room singing* any differently from that of *drunk* in *George left the room drunk*.

In most Indo-European languages, these “participles” fulfill both true participial (i.e., attributive) and converb (i.e., adverbial) functions. Following Haspelmath (1995), we will subsume all non-finite deverbal predicates in adjunct function under the term “converbs” here but will also use the traditional terms where necessary. We will argue that those converbs with restricted reference
Depictive secondary predicates

Haspelmath’s (1995: 9) “implicit subject” converbs – should be regarded as depictives rather than adverbials, since they meet the criteria proposed in Section 2.8, i.e., they are not only non-finite, but also obligatorily controlled. This possibility has been noted by Müller-Bardey (1990: 2–3), König & van der Auwera (1990: 346–348), and also Haspelmath (1995: 17–20). Both Haspelmath’s “explicit subject” converbs and “free subject” converbs (with the latter, the subject may or may not be expressed) do not meet criterion (ii) in our definition (Section 2.8) and therefore have to be regarded as constituents of general adjunct constructions.

The most problematic aspect of the proposal that converbs with restricted reference should be regarded as depictives is the fact that once simple converbs are included, there is no principled reason to exclude complex deverbal predicate constructions, i.e., those in which the deverbal predicate is accompanied by one or more of its complements (other than the subject), as in the (still fairly simple) Turkish example in (58). (Note that in Turkish, converb clauses of this type are among those expression types that correspond to “typical” depictives of function/role.)

(58) Turkish (Turkic, Altaic)
[mühendis  ol-arak] çalıṣt-yor
engineer be-SIM work-PRS.3SG
‘He works as an engineer.’ (lit.: ‘he works being engineer’) (Boeder & Schroeder 1998: 221)

The problems involved in this extension concern four aspects. First, the more complex a deverbal predicate construction gets the more likely it is that it forms a prosodic unit of its own and therefore does not meet criterion (vii) in our definition of depictives (see Sections 2.4 and 2.8). Thus, we would not consider the phrase vollbesetzt mit Schulkindern in (59) a depictive constituent.

(59) German (Germanic, Indo-European)
der Bus (0.5) raste auf mich zu \( (1.7) \)
DEF bus raced on 1SG.ACC towards
vollbesetzt mit Schulkindern
fully.occupied with school.children
‘The bus shot towards me, full of school children.’
(Blutbeschmiert_034)

Second, depending on the data that form the basis of the investigation, it may be difficult to decide whether a specific type of deverbal predicate in a given language is obligatorily controlled (and should therefore be considered a depictive). For example, Nichols (1983) shows for the North East Caucasian languages Chechen and Dargi that even if certain converbs are typically controlled in spontaneous texts, they may marginally allow explicit subjects. In this
section, we will only consider converbs which have been described as obligatorily controlled.

A third problem for the identification of deverbal clauses as depictives is the fact that, in many languages, “implicit subject” converbs with an S/A controller are in functional opposition with converbs which are not obligatorily controlled (or which even obligatorily express their own subject) and which typically have a different-subject interpretation (cf. Haiman 1983, Nichols 1983). In Warlpiri and Martuthunira, there is even a three-way contrast between forms with an S/A controller, forms with an O controller, and forms which are not obligatorily controlled (see Section 3.1.1.2 for examples of the first two types). Since functionally, in those cases, the contrasting forms are part of a switch-reference system (cf. Austin 1981b, Hale 1982, 1994, Simpson & Bresnan 1983, Dench 1988), there has been a tendency of analysing them as adjuncts of the same type, i.e., adverbials. Formally, however, same-subject clauses may constitute depictives in genuine depictive constructions, while different-subject clauses are adjuncts in a general adjunct construction (in our terminology). This is consistent with Nichols’ (1983: 263) observation that converb constructions with same-subject interpretation are typically “more phrase-like, more closely bound to the main verb”, while those with different-subject interpretation are “more clause-like”.

A depictive construction involving a converb may in fact develop into a general adjunct construction with same-subject marking, as illustrated by the following Arrernte examples. Considering only (60a), one might be tempted to analyse the subordinate predicate as a true depictive which is followed by the ergative marker -le in agreement with the A argument of the clause, just as in the neighbouring language Warlpiri (see, e.g., example (35) in Section 3.1.1.2). However, example (60b) shows that the subordinate predicate is not obligatorily controlled, since in the first line of (60b) it appears with its own S argument. The suffix -le is a true same-subject marker (which, however, is homophonous with the ergative marker; see further Section 4.7) and not a case marker indicating agreement, since it appears on a subordinate predicate with an S subject.

(60) Mparntwe Arrernte (Pama-Nyungan, Australian)
    a. artwe-le [alye-lhe-me-le] kere  ite-ke
        man-ERG  sing-DETR-SIM S/A=S/A meat  cook-PST.PF
        ‘The man cooked the meat while singing.’ (Wilkins 1988: 147)
b. [ayenge urrkape-tyekenhe ne-me-le], the
1SG.NOM work-NEG be-SIM=S/A=SG 1SG.ERG
[pmere-le ne-rlane-me-le] ampe kweke
camp-LOC be-CONTIN-SIM=S/A=SG child small
amntarnare-tyerte
look.after-PST.HABIT
‘When I wasn’t working, I used to stay at home and look after the baby.’ (Wilkins 1988: 153)

Despite the problems just mentioned, it is thus theoretically possible to identify converbs and converb clauses which are part of a genuine depictive construction, and to distinguish them from those that are not obligatorily controlled or prosodically detached. There remains one fourth respect in which it might be regarded as problematic to analyse obligatorily controlled converbs and converb clauses as depictive constructions. Many languages have specialised deverbal forms expressing semantic differences in what is often called taxis or “relative tense”, or even specialised converbs expressing, e.g., manner, purpose, or similarity (cf., e.g., Nedjalkov 1998: 427). This may make it difficult to determine whether the temporal frame of the deverbal predicate fully overlaps with that of the main predicate, as demanded by criterion (i) in the definition in Section 2.8. A few types of specialised converbs are discussed in the remainder of this section. In Section 3.2.5.1, we deal with simultaneous converbs, which are semantically unproblematic in that they denote eventualities which are clearly cotemporaneous to the main predicate. In Section 3.2.5.2, we discuss anterior-resultative deverbal predicates, arguing that they encode a post-state which holds simultaneously to the state of affairs encoded by the main predicate. In Section 3.2.5.3, we deal with prospective deverbal forms which refer to an intended action or purpose, and argue that they in fact encode a pre-state which is cotemporaneous to the eventuality encoded by the main predicate. Agreement phenomena found in Australian and other languages provide additional formal evidence for regarding the constructions in question as genuine depictive constructions at least in these languages.

3.2.5.1. Simultaneous deverbal depictives. Examples of obligatorily controlled deverbal predicates in simultaneous interpretation are the so-called present participle in German and English, the Turkish converb in -arak/-erek (see example (58)), deverbal predicates followed by the -karra form in Warlpiri (see example (35)), and the French gérondif illustrated in (61).

(61) French (Italic, Indo-European)
le bébé est tombé [en]
def.m.sg baby aux.3sg fall.prtc.pst.m.sg prp
essayant de marcher]
attempt.PRTC.PRS PRP walk
‘The baby fell down (while) trying to walk.’ (Legendre 1990: 108)

Often, simultaneous converbs have a same-subject interpretation (in our terminology: are controlled by S or A). However, as is generally the case with depictive predicates (see Section 2.6), the controller appears to be not necessarily determined by strictly syntactic criteria, but sometimes by pragmatic salience (cf. Haspelmath 1995: 32). Deverbal depictives in a simultaneous interpretation may also have default controllers other than S and A (i.e., they do not necessarily have a same-subject interpretation). This is true, for example, for deverbal predicates which take the allative as a marker on O depictives in a number of Northern Australian languages (see Section 3.1.1.2).

Obligatorily controlled deverbal predicates (or clauses) with a simultaneous interpretation may exhibit agreement with their controller, as was already illustrated in Section 3.1.1.2 with regard to the Warlpiri same-subject suffix -karra. It is also well known from Latin that present participles in the “participium coniunctum” construction agree with their controller in case (cf. Pinkster 1988: 218). The agreement facts strongly support (or, are easily explained by) the view that adjunct constructions involving obligatorily controlled deverbal predicates in simultaneous interpretation should be analysed as depictive constructions, at least in these languages.

Deverbal depictives may also negate the simultaneous occurrence of an eventuality. For French, Legendre (1990: 106) notes the parallel behaviour of obligatorily controlled sans ‘without’ plus infinitive and the gérondif in en (compare (62) with (61)).

(62) French (Italic, Indo-European)
Pierre a embrassé Marie sans dire un mot
‘Peter kissed Mary without saying a word.’ (Legendre 1990: 106)

In some languages with agreement, e.g., Warlpiri, negative simultaneous converb forms are clearly depictives. In (63), a negative-marked non-finite verb takes ergative case in agreement with the A.

(63) Warlpiri (Pama-Nyungan, Australian)
J.-rlu ka wawirri yampi-mi luwa-rinja-wangu-rlu
J.-ERG NPST kangaroo leave-NPST shoot-INF-NEG-ERG
‘J. is leaving the kangaroo without shooting it.’ (Hale 1994: 201)
3.2.5.2. *Anterior-resultative deverbal depictives.* At the beginning of this section we already pointed out that the past participles of English and German can be used as depictives just like underived adjectives. It is also well known from Greek and Latin that participial (or better, converbal) clauses headed by a form of this type agree in case with a controller.

(64) Latin (Italic, Indo-European)

\textit{atque ibi vehementissime perturbatus Lentulus}

and there \textit{vehement.SUPERL disturb.PRTC.PF Lentulus}

\textit{tamen et signum et manum suam}

still and \textit{signet.ACC and hand.ACC 3SG.POSS.ACC cognovit}

\textit{recognise.PST.3SG}

‘And there Lentulus, (though) utterly disturbed, still recognised his signet and his hand(writing).’ (Cicero; Bickel 1991: 140)

On the other hand, it is often said that converbs of this type encode “relative tense” or “anteriority” (see, e.g., Pinkster 1988: 218, Nedjalkov 1998: 427). At first sight, they therefore do not seem to meet our criterion (i), i.e., the criterion of cotemporality of depictive and main predicate (see Section 3.2.8). This apparent paradox is resolved by recognising that the past perfect participles or “anterior” converbs in question encode a post-state of the eventuality which is denoted by the lexeme from which it derives. In other words, the form focuses not on the eventuality itself, but its resultant state (see, e.g., Comrie 1976: 56–61 and Smith 1991: 146–151 on the perfect; also Bohnemeyer 1998: 76–78). This is of course the reason why \textit{vehementissime perturbatus} ‘utterly disturbed’ in (64) and also \textit{dara-thirri-n-ji} ‘circumcised’ in the Kayardild example in (65) are understood as expressing a state of the controller, rather than an event in a sequence. In Kayardild, anterior-resultative deverbal predicates are formed by adding both a resultative suffix and a nominalising suffix to the verb stem. The resulting forms can be used as main predicates, but also as simple depictives, as in (65), and as heads of non-finite clauses functioning as depictives (Evans 1995: 476–480). Their depictive status is shown by agreement.

(65) Kayardild (Tangkic, non-Pama-Nyungan, Australian)

\textit{nga-l-da wara-tha niwan-ji dara-thirri-n-ji}

1-PL-NOM send-ACT 3SG-OBJ break-RES-NR-OBJ

‘We sent him away circumcised (lit. ‘broken’).’ (Evans 1995: 333)

---

11. The term *anterior-resultative* is used here to avoid confusion with the use of *resultative* for a type of secondary predicate (see Section 2.3).
In Yankunytjatjara, the “sequential” suffix – which indicates the post-state of an eventuality – can be attached both to nominalised verb forms as in (66a), and to underived nominals as in (66b). The latter metonymically encode an eventuality by implying a certain activity associated with its referent. Again the resulting form agrees in case with its controller: it takes the ergative in (66a) and the (unmarked) absolutive in (66b). The fact that both deverbal forms and underived nominals take the same markers constitutes further evidence for considering these deverbal predicates as depictives.

(66) Yankunytjatjara (Pama-Nyungan, Australian)

a. kaltarrapunga-nyi=rna [tii tjiki-njja-tjanu-ngku]
   belch-PRS =1SG tea drink-INF-SEQ-ERG
   ‘I’m belching from drinking tea.’ (Goddard 1985: 134)

b. nyuntu ukiri-tjanu kata kuya-rrri-ngu
   2SG native.tobacco-SEQ head bad-INCH-PST
   ‘Your head’s gone useless from the native tobacco.’ (Goddard 1985: 134)

3.2.5.3. Prospective deverbal depictives. Even though purposive clauses of the type illustrated in (67) for German are obligatorily controlled, they are not usually analysed as depictives, since they appear to encode an eventuality that is not cotemporaneous with, but follows the eventuality referred to by the main predicate.

(67) German (Germanic, Indo-European)

und anschließend sind die Leute von der Nachbarschaft noch bei uns geblieben [um etwas zu trinken]
   and afterwards AUX DEF people from DEF neighbourhood still by/with 1PL.DAT stayed PURP
to drink (INF)
   ‘And afterwards the people from the neighbourhood stayed with us in order to drink something.’ (Trauung 077_079)

However, it is possible to analyse deverbal clauses of this type as encoding a prospective viewpoint, i.e., a pre-state (see, e.g., Comrie 1976: 64–65, Bohnemeyer 1998: 77). A similar point is made by Dik et al. (1990: 34), who define purposive adjuncts as adverbials of “Cognitive Setting”, which “provide a motivation for the occurrence of a (necessarily +control) SoA1 [State of Affairs, ESB & NPH] by specifying a future SoA2 that the controller wishes to achieve through SoA1”. In other words, the purposive clause expresses an intention, and it is the intention that is cotemporaneous to (and at the same time the reason or motivation for) the eventuality expressed by the main predicate.
Expressions of the type ‘with the intention of V-ing’, ‘in the hope of V-ing’, ‘out of fear of V-ing’ quite explicitly denote the mental state of the controller at the time that the main predicate eventuality takes place.

In some Australian languages, noun phrases expressing a purpose or intention exhibit agreement with an S or A controller. Most of these languages – including Kayardild (Evans 1995: 419–420), Yukulta (Keen 1983: 247), Warlpiri (Hale 1982: 281–289, Nash 1986: 261), and Yankunytjatjara – distinguish a purposive form marking personal intent (which shows agreement) from a general purposive (without agreement), which is used to indicate a conventional, socially recognised purpose (and which is also used in different-subject expressions). The difference is illustrated below for Yankunytjatjara. The general purposive marker -ku is shown in (68a) in different-subject function (the people who pour the petrol are not identical with the people who intend to return). In (68b), a conventionally recognised purpose, that of going for water, is ascribed to an S controller. In both instances there is no agreement.

(68) Yankunytjatjara (Pama-Nyungan, Australian)
   a. munu tjiti-ra yunga-nyi kurlpa-nytja-ku
      and pour-SERIAL give-PRS return-INF-PURP
      ‘And he will pour [us] some [petrol] for returning (i.e., so that we can go home).’ (Goddard 1985: 164)
   b. ngayulu kapi-ku yana-nyi
      1SG water-PURP go-PRS
      ‘I’m going for water.’ (Goddard 1985: 68)

In contrast, adjuncts with the “intentive” marker -kitja always agree with an S or A controller in absolutive or ergative case, respectively. The “intentive” is used when the purpose of an activity is not obvious, i.e., when it is not conventionally recognised, but rather ascribed to the personal motivation of the S or A. Thus, it indicates that getting firewood (69a) and shooting a kangaroo (69b) is the agent’s personal intention, non-obvious for others (similarly, the intentive case could also be used in (68b) to stress the motivation of the agent; cf. Goddard 1985: 68). Note that the same marking is used on nominalised verbs (68a, 69a) and underived nominals (68b, 69b); this lends further support to a parallel analysis of nominal and deverbal depictives.

(69) Yankunytjatjara (Pama-Nyungan, Australian)
   a. wati ya-nu waru urra-ntji-kitja
      man go-PST fire get-INF-INTENT
      ‘The man went off (because he wanted) to get firewood.’ (Goddard 1985: 159)
b. wati-ngku makarti kati-ngu marlu-kitja-ngku
    man-ERG rifle take-PST kangaroo-INTENT-ERG
    ‘The man took the rifle, for (shooting) kangaroo.’ (Goddard 1985: 59)

The semantic contrast expressed by the specific “intention” markers in these languages clearly shows that, while the state of affairs expressed by the subordinate clause is in a sense posterior to the eventuality represented by the main predicate, it is the intention (or hope) to bring about this eventuality that is predicated on the S or A controller. The intention clearly holds simultaneously with the eventuality expressed by the main predicate. We suggest that the same reasoning – a purposive clause may ascribe a pre-state of intention to a controller and can therefore be regarded as a depictive – may also explain the agreement of the future participle in Latin with its controller (cf. Pinkster 1988: 218).

However, since in most languages purposive expressions do not distinguish between intention of a participant and a general purpose, and do not show agreement, constructions like that involving the German infinitive in um ... zu, illustrated in (67) above, should be analysed as general adjunct constructions and not as genuine depictive constructions.

3.2.6. Summary. In this subsection, we have been concerned with the word class and internal structure of semantically depictive elements in the syntactic function of adjuncts. As already indicated above, there is some interdependence between the word class and internal structure and the types of morphological marking of the depictive element discussed in Section 3.1. Depending on the status of the depictive constituent, different problems arise in delimiting clearly depictive constructions from other construction types. Adjectives used predicatively (Section 3.2.1) are often considered as “typical depictives”, and can usually be distinguished from adjectives in attributive function by their syntactic position (see also Section 3.1.1.1). In languages such as German, where neither depictive adjectives nor adverbs are formally marked, it may, however, be difficult to draw a clearcut boundary between the two (see further Section 4). Depictive noun phrases and adpositional phrases (Section 3.2.2), likewise, may be difficult to distinguish from adverbials, especially if they carry relational markers (see Section 3.1.3) rather than predicative markers (see Section 3.1.2) or agreement markers (see Section 3.1.1).

If we are dealing with word classes restricted to predicative function, on the other hand, the problem of delimiting depictive from either attributive or adverbial constructions does not arise. Inherently predicative, but non-verbal word classes of the first type (Section 3.2.3), often termed “predicative adjectives”, may be used either as main predicates or as depictives; some languages may
even have a class of words which can only be used as depictives. Inherently predicative lexemes of a second type, discussed in Section 3.2.4, may function both as constituents of complex predicates and as depictives (thus the delimitation problem here concerns only these two construction types; see also Section 2.5).

The greatest problems arise when we are dealing with semantically depictive deverbal predicates, also known as converbs, which may function as adjuncts or heads of adjunct clauses (Section 3.2.5). These not only frequently show some prosodic independence of the main predicate, but it is also not always clear whether they should be considered as obligatorily controlled (in which case they are clear candidates for a depictive status) or not (in which case they are adverbials). Nevertheless, for a number of languages where converb clauses show agreement with their controller it can be demonstrated that converbs in simultaneous, anterior-resultative, and also prospective interpretation are depictives rather than adverbials (at least if they are prosodically integrated). We have argued that we do not need to extend the definition proposed in Section 2.8 to accommodate these cases, since all these deverbal forms express event-related states which are presented as cotemporal with the eventuality expressed by the main predicate.

4. The semantic range of depictive constructions

In Section 3, we discussed semantically depictive elements which are expressed as adjuncts. We argued that the constructions that they occur in may be analysed either as general adjunct constructions or as genuine depictive constructions, depending on their formal make-up. In this section, the perspective will be reversed. Taking clearly depictive constructions as the starting point (in particular those identified by agreement of the depictive with its controller), we will examine their semantic range, i.e., the types of expressions that can instantiate a depictive construction in at least some (and importantly, unrelated) languages. These include expressions of quantity (Section 4.1), concomitance (Section 4.2), comparison (Section 4.3), manner (Section 4.4), location and direction (Section 4.5), and time (Section 4.6). The adjuncts in the majority of these expressions are generally analysed as adverbials, not as depictives in the literature. We will argue here that their formal properties are readily explained on the assumption that, in the languages under consideration, we are not dealing with adverbial but with genuine depictive constructions (exhibiting all the defining characteristics proposed in Section 2.8). However, we do not wish to claim that their translation equivalents are necessarily depictive constructions in all languages. Rather, we hold that the semantic space investigated here may in principle be covered by either adverbial constructions or depictive constructions or general adjunct constructions, and more specifically, that adverbial and
depictive constructions are in competition in the sense that each may extend to expression types where it is not fully motivated semantically. In Section 4.7, we propose an implicational hierarchy along which this semantic space is organised.

Most examples in this section involve adjuncts which agree with a controller (and hence are considered depictive constructions by us). Whenever reference is made to agreement facts the two caveats mentioned at the end of Section 3.1.1.1 have been kept in mind. First, the context clearly precludes an interpretation as a modifier in a discontinuous noun phrase. Second, we are also not dealing with instances of “automatic agreement” (i.e., a language where all adjuncts in a clause agree with a syntactically determined controller); rather, non-agreeing adjuncts exist alongside the ones showing agreement.

4.1. Quantity

Numerals and other quantifiers outside a noun phrase are generally analysed either as adverbials or as “floated” quantifiers. These quantifiers usually exhibit a clear semantic relationship to one participant of the main predicate, in that they indicate the size of the set of entities involved as a participant in an eventuality. In other words, they are semantically depictive. In this section, we will concentrate on constructions involving numerals, since these present the clearest evidence for a depictive analysis. (Note that English does not have a corresponding construction type involving numerals, and therefore has no good translation equivalents for the expressions in question.) Strong support for the analysis of these numerals as depictives comes from languages where depictives can be identified by agreement (see McGregor to appear for a detailed discussion of quantifying expressions in Australian languages). For example, in Jaminjung numerals and other quantifying expressions in predicative function exhibit agreement with their controller and in addition always carry the restrictive clitic =wung, as illustrated in (70) (see also Section 3.1.6).

(70) Jaminjung (Mindi, non-Pama-Nyungan, Australian)  
\[
\text{mindi-ngayi-m jirrama-ni=wung mung} \\
1&2.\, \text{S-see-PRS two-ERG=RESTR look.at} \\
\text{‘You and me will watch it, both of us.’} \quad \text{(Eva Schultze-Berndt, field-notes)}
\]

A number of European languages have special idiomatic constructions involving numerals in depictive function. In German, depictives of this kind can be marked by the preposition zu ‘to’. The numeral itself has the form of an uninflected ordinal number (not attested in any other construction), not of a cardinal number. A typical example is (71).
Depictive secondary predicates

(71) German (Germanic, Indo-European)

... und saßen nun da zu dritt
  and sat now there to three.ORD
  ‘... and (we) were then sitting there (as) three (people)’ (Filipin_091)

The corresponding construction in Dutch is even more striking. For numerals higher than one, Dutch uses the comitative preposition met. The numeral itself either assumes a special invariable form in -en, or appears in the diminutive. In addition, the construction involves an attributive possessive pronoun, which may either be coreferential with the controller, as in (72a), or invariable (3rd person singular), as in (72b).

(72) Dutch (Germanic, Indo-European)

a. we gingen [met ons tweetjes] uit eten
   1PL.NOM went COM 1PL.OBL two.DIM out eat.INF
   ‘We went out eating out, the two of us.’

b. we gingen [met z’n tween] uit eten
   1PL.NOM went COM 3SG.POSS two out eat.INF
   ‘We went out eating out, the two of us.’ (Vera Kamphuis, personal communication)

Although the prepositions involved in the German and Dutch constructions illustrated in (71) and (72) (directional and comitative, respectively) are employed in a broad range of adjunct constructions, the construction as a whole, with its additional components of a special form of the numeral and, in Dutch, a possessive pronoun, can be formally distinguished from these other adjunct constructions. And since these constructions always have a depictive (participant-oriented) interpretation, it seems well warranted to consider them genuine depictive constructions.

Quantifiers distinct from numerals, such as ‘all’, ‘both’, and ‘many’, may also be analysed as depictives when they occur outside a noun phrase. Depictives in a partitive interpretation have been discussed for German by Paul (1919: 57–58) and Plank (1985: 165–168); an example is viele ‘many’ in (73a). For examples like (73b), Müller-Bardey (1990: 11) concludes from the fact that beide ‘both’ agrees with its controller in dative case that it has depictive status.

(73) German (Germanic, Indo-European)

a. Appenzeller kamen viele
   people.from.Appenzell(NOM) came many.NOM
   ‘(As for) people from the canton of Appenzell, many came.’
   (Plank 1985: 166)

b. den Schülern hat er beiden geholfen
   DEF.DAT pupils AUX 3SG.NOM both.DAT helped
   ‘The pupils he helped both.’ (Müller-Bardey 1990: 11)
The same holds for quantifiers like ‘alone’, which are, likewise, often analysed as adverbials, but arguably allow a depictive interpretation as well. This is confirmed by the formal properties of their translation equivalents in many languages. In Kayardild, for example, \textit{kantharrkuru} ‘alone’ is a member of a word class restricted to depictive function (see Section 3.2.3) and obligatorily agrees in case with one of the arguments of the main predicate, as shown in (74).\footnote{12}

(74) Kayardild (Tangkic, non-Pama-Nyungan, Australian)  
\begin{tabular}{llll}
ban-da & nyingka & kantharrkuru & kala-thu \\
now-NOM & 2SG.NOM & alone.NOM & cut-POT \\
\end{tabular}  
‘Now you can cut (the spearhead) on your own.’ (Evans 1995: 229)

4.2. Concomitance

Although they are usually treated as adverbials in the literature, expressions of concomitance – marked with a comitative or a comparable case or adposition – exhibit a relationship to one of the arguments of the main predicate, in that the latter is said to be accompanied by the referent of the comitative phrase, within the temporal frame set by the main predicate (cf. Frey & Pittner 1998 and Pittner 1999: 101). For example, in German, a comitative prepositional phrase can appear in the same position – as shown by coordination – as an adjective (or participle) in depictive function. In (75), the comitative expression \textit{mit Verschluss} clearly relates only to the O participant of the main predicate (which is not overtly expressed), and is coordinated with a depictive past participle.

(75) German (Germanic, Indo-European)  
\begin{tabular}{llll}
bitte & gespült & und & mit Verschluss zurückgeben \\
please & rinsed & and & with lid return(INF) \\
\end{tabular}  
[on a bottle:] ‘Please return rinsed and with (its) lid.’

Evidence for a depictive analysis of comitative expressions also comes from languages where comitative expressions agree in case with the noun phrase whose referent is the participant that is accompanied. In (76), the comitative expression – which in Yankunytjatjara is marked with a proprietive suffix – is in addition ergative-marked in agreement with the A controller.

(76) Yankunytjatjara (Pama-Nyungan, Australian)  
\begin{tabular}{llll}
paluru & tjana & papa-tjarra-ngku & ngurri-ningi \\
DEM & 3PL & dog-PROP-ERG & seek-PST,IMPF \\
\end{tabular}  
‘They were seeking (something) with dogs.’ (Goddard 1985: 136)

\footnote{12. The form \textit{kantharrkuru} also contains a frozen proprietive suffix -\textit{uru}, which is productively used in comitative function, among others.}
In Kayardild, one of the cases used in comitative expressions is the associative; in (77), the associative-marked phrase takes nominative case in agreement with the S.

(77)  Kayardild (Tangkic, non-Pama-Nyungan, Australian)
bi-l-da  dali-n-da  ngi-nurru-wa  kewan-marra-nth
3-PL-NOM  come-NR-NOM  wood-ASSOC-NOM  fire-UTIL-OBL
‘They are coming with wood for the fire.’ (Evans 1995: 362)

For Kayardild (Evans 1995: 420) and the related language Yukulta (Keen 1983: 247–248, Evans 1995: 421), agreement even extends to the “theme” participant of verbs of transfer (i.e., the transferred entity) in some cases. The verbs of giving and deprivation in these languages allow for a number of case frames, among them one where the “theme” takes proprietive case (another marker of concomitance). As shown in (78), this is followed by ergative marking in agreement with the A controller. According to Evans (1995: 420), this case frame “stresses the ownership by SUBJ of the thing transferred, either before (‘give’) or after (‘deprive’) the transfer”.

(78)  Yukulta (Tangkic, non-Pama-Nyungan, Australian)
kunawuna=nganda  wuu-ja  kulthangarr-urlu-ya
child.ACC=1SG.A.PST  give-ACT  flying.fox-PROP-ERG
‘I gave the child a flying fox.’ (lit.: ‘I presented the child with a flying fox’) (Keen 1983: 248)

Likewise, expressions describing the lack of an accompanying entity can be regarded as depictives, as demonstrated again by agreement in some languages. An example is (79) from Martuthunira, where lack of accompaniment is indicated by a privative suffix followed by accusative case in agreement with an O controller.

(79)  Martuthunira (Pama-Nyungan, Australian)
ngunhu  wartinra  wiru  thanowa-a  thurnta-minyji
that.NOM  woman.NOM  wanting  damper-ACC  knead-FUT
kayulu-wirriwa-a,  pinkarranyu-u
water-PRIV-ACC  dry-ACC
‘That woman wants to knead damper without water, dry.’ (Dench 1995: 90)

As already pointed out in Section 3.1.3.1, comitative expressions are often used to express a condition or temporary characteristic of a participant. The essentially participant-oriented nature of comitative expressions (regardless of whether or not the resulting construction is formally identifiable as a genuine depictive construction) is probably the explanation for the fact that in many languages “typical” depictives also take comitative marking.
4.3. Comparison

The type of comparison of interest here is one where the simulative expression is not a main predicate (e.g., *She is like a rose*), but where the similarity of a participant to something else is related to an eventuality performed (e.g., *She fights like a lion*). According to Haspelmath & Buchholz (1998: 313), simulative expressions in examples like these function as manner adverbials. However, they also meet the definition of depictives proposed in Section 2.8: the similarity to something else can be analysed as a condition which is ascribed to one of the participants in a state of affairs, and which holds simultaneously with this state of affairs. In other words, simulative expressions oscillate between event-orientation and participant-orientation, and may even exhibit both types of orientation at the same time. An example of a participant-oriented simulative expression in German is (80). The context of this example is that the speaker does not feel comfortable in the uniform that he has to wear for work. He states that he was walking around as if in disguise, not that he was walking around in a disguised manner.

(80) German, Cologne dialect (Germanic, Indo-European)

\[ \text{da leef ich da su röm wie maskiert} \]

Then I was running around like in disguise (lit.: masked).’ (Bhatt & Lindlar 1998: 105)

We should not be too surprised, therefore, to find that simulative expressions show agreement with a controller in a number of languages. This is illustrated in (81) for Jaru. While the manner of performing an action is described here by comparing it to the manner in which another agent would perform it (the man eats [as much] food as a horse would eat), ergative marking on the simulative expression relates it to the A participant. A paraphrase that captures this relationship is ‘the man eats as if he was a horse (at the time of eating)’.

(81) Jaru (Pama-Nyungan, Australian)

\[ \text{jalu mawun-du mangarri ngany-an dimana-marraj-ju} \]

That man-ERG plant.food eat-PRS horse-SIMIL-ERG

‘That man eats food like a horse.’ (Tsunoda 1981: 231)

Moreover, in many languages expressions of comparison are formally related to expressions of role, function, and life stage which have already been identified as “typical” depictives (cf. Haspelmath & Buchholz 1998: 322). Thus, both the essive in Estonian (see Section 3.1.2) and the instrumental in Russian (see Section 3.1.3.1) are also used in expressions which are to be interpreted as a comparison, as illustrated in (82) and (83).
Depictive secondary predicates

(82) Estonian (Finno-Ugric, Uralic)

rong möödus välgu-na
train.NOM go.along.PST.3SG flash-ESS
‘The train passed like a flash.’ (Lutkat & Hasselblatt 1993: 193)

(83) Russian (Slavic, Indo-European)

kazak bujnym sokolom
coassack.NOM wild.M.SG.INSTR hawk.M.SG.INSTR
rinul'sja na vraga
pounce.PST.3SG.REFL PRP enemy.ACC
‘The cossack pounced on his enemy like a wild hawk.’ (Jakobson 1936: 50)

4.4. Manner

Although expressions of manner are usually analysed as adverbials rather than depictives, it has often been noted that they may have a special semantic relationship to the subject (or agent) of a clause, i.e., exhibit “subject-orientation”. The distinction between event-oriented adverbs and subject-oriented adverbs is made very clear in the following statement by Jackendoff (1972: 58–59):

Incidentally, we should note that manner adverbs also exhibit differences of orientation. For example, John opened the door slowly asserts that the motion of the door is slow (contrast with Slowly John opened the door); but John opened the door enthusiastically attributes enthusiasm to John. The orientation seems to be tied to the deep structure grammatical relations in the sentence, hence to the thematic relations.

There are numerous other statements recognising “subject-orientation” of manner expressions in the literature on adverbials, for example in Platt & Platt (1972), Bartsch (1976: 144), Dik et al. (1990: 31), McConnell-Ginet (1982), Renz (1993: 29), Frey & Pittner (1998), Ernst (2000), and Geuder (2000). Usually, adverbials of this type are distinguished from depictives. Renz (1993: 29), for example, classifies verzweifelt in (84a) as a subject-oriented manner adverb but lebendig in (84b) as a predicative adjective (i.e., a depictive) without further argumentation and despite the fact that she notes their similarity in form and distribution.

(84) German (Germanic, Indo-European)

a. die Maus wehrt sich verzweifelt gegen die
   DEF mouse defends REFL desperate against DEF
   Katze
cat
   ‘The mouse defends itself against the cat desperate(ly).’ (Renz 1993: 29)
b. die Katze verschlingt die Maus lebendig
   DEF cat devours DEF mouse alive
   ‘The cat devours the mouse alive.’ (Renz 1993: 29)

As already indicated at several points in this paper, we would hold that “subject-orientation” in these German examples indeed is a purely semantic fact. As opposed to Renz and others, however, we would also hold that it does not make sense to distinguish syntactically between different constructions here. Instead, as already discussed in Sections 2.7 and 2.8, a construction which systematically allows event-related as well as participant-related interpretations should be analysed as a general adjunct construction.

But this analysis cannot be generalised for all languages. The following examples from several Australian languages show that typical manner expressions show case agreement, which identifies them as depictives. Thus, manner expressions in Yankunytjatjara, such as wala ‘quick’, take the ergative case in agreement with A in transitive clauses like (85). Note that some manner expressions in languages like Yankunytjatjara, Warlpiri, and Kayardild belong to a lexical class restricted to depictive function (see Section 3.2.3 and the references there).

(85) Yankunytjatjara (Pama-Nyungan, Australian)
   wala-ngku=ya karlarl-itja-ngku ngurra
   quickly-ERG=3PL.SBJ daylight-ASSOC-ERG camp
   ilawiti-nma
   set.off.to-IMP.IMPF
   ‘You should set off to camp quickly, while it is still light.’ (Goddard 1985: 61)

Example (86) from Martuthunira shows that it is more appropriate to speak of agent-orientation than “subject”-orientation (cf. also Jackendoff 1972: 83). The controller of the manner depictive is the demoted (and unexpressed) agent in a passive construction, marked with “effector” case (historically an ergative case).

(86) Martuthunira (Pama-Nyungan, Australian)
   nhiyu thuurta kanyja-ruju juwayu-la kartarr-u paju
   this.NOM fruit hold-PASSP hand-LOC tight-EFF really
   ‘This fruit has been held in hand really tightly.’ (Dench 1995: 234)

In a number of languages which distinguish adverbial and depictive constructions, manner expressions may have both possibilities. The variation may correspond to a meaning distinction or constitute dialectal or even idiolectal variation, or even depend on other morphosyntactic properties of the clause. A particularly striking case of manner expressions that oscillate between an
adverbial construction (without agreement, in invariable masculine singular form) and a depictive construction (with agreement) has been described for Italian by Napoli (1975). She observes that at least some speakers of Italian use both constructions interchangeably with items like *svelto* ‘fast, swiftly’ or *alto* ‘high’ (while expressions of a condition such as *scalza* ‘barefoot’ in (5) always exhibit agreement).

(87) Italian (Italic, Indo-European)
   a. *Maria corre svelta*
      Maria run.PRS.3SG fast.F.SG
      ‘Maria runs fast.’ (Napoli 1975: 423)
   a’. *Maria corre svelto*
      Maria run.PRS.3SG fast.M.SG(=ADV)
      ‘Maria runs fast.’ (Napoli 1975: 423)
   b. *la rondine vola alta*
      DEF.F.SG swallow fly.PRS.3SG high.F.SG
      ‘The swallow flies high.’ (Napoli 1975: 423)
   b’. *la rondine vola alto*
      DEF.F.SG swallow fly.PRS.3SG high.M.SG(=ADV)
      ‘The swallow flies high.’ (Napoli 1975: 423)

The choice of the depictive over the adverbial construction can be influenced by what Napoli terms “sympathetic agreement”, i.e., the presence of another agreeing element in the clause. Most frequently this is the case where the main predicate is a periphrastic form, as in (88).

(88) Italian (Italic, Indo-European)
   a. *Maria è dovuta correre svelta*
      Maria AUX must.PTCP.PF.F.SG run.INF fast.F.SG
      ‘Maria had to run fast.’ (Napoli 1975: 425)
   b. *Maria è dovuta correre svelto*
      Maria AUX must.PTCP.PF.F.SG run.INF fast.M.SG(=ADV)
      ‘Maria had to run fast.’ (Napoli 1975: 425)

Moreover, Napoli (1975: 415) notes that the same lexical items are consistently treated as adverbs by some speakers, but as depictives by others. These observations, in our view, constitute evidence for the “competition” between adverbial and depictive constructions not only in a crosslinguistic perspective, but also between varieties of a single language (see further Section 4.7).

4.5. *Location and Direction*

It has been repeatedly noted (e.g., Müller-Bardey 1990, Maienborn 2000; cf. also Takezawa 1993: 55) that locative phrases in many languages allow two interpretations: the location can be related to the state of affairs as a whole, or primarily to one of the participants. The latter clearly holds in (89), where the
locative phrase in ihren Schlittschuhen ‘in her skates’ refers to items of clothing that the controller wears.

(89) German (Germanic, Indo-European)
wie in dem Lied von dem Mädchen aus B., (...) das
as in DEF song of DEF girl from B. REL
dann in ihren Schlittschuhen am Ufer gefunden
then in 3SG.F.POSS skates on.DEF bank found
wurde
AUX
‘As in the song about the girl from B. who (...) was then found in her skates on the bank.’ (ZEIT, 30 March 2000)

As in the case of comitative expressions, the possibility of regarding a subset of locative expressions as depictives may constitute the explanation for the widespread use of a locative marker as a general marker on (typical) depictives (see Section 3.1.3.2). Still, in most languages, semantically depictive locative expressions are not formally distinguished from semantically adverbial locative expressions, but are rather encoded by a general adjunct construction. In a number of Australian languages, however, it is possible to unambiguously mark locative expressions that function as depictives by agreement with the controller. The controller can have one of a number of syntactic relations to the main predicate.

Example (90a) from Warlpiri contains an A-controlled locative depictive: ergative agreement following the perlative case indicates that the hunters are on their way at the time of killing the animal. In (90b), the controller is a dative-marked indirect object. While the English translation of this example is ambiguous (the food or the baby could be in the coolamon), agreement in Warlpiri specifies that the location is that of the baby.

(90) Warlpiri (Pama-Nyungan, Australian)

a. ngalipa-rlu kapi-rlipa kuyu
   1PL.INCL-ERG FUT-1PL.INCL meat/animal
   paka-rninja-ya-ni yurutu-wana-rlu
   strike-INF-go-NPST road-PERL-ERG
   ‘We will kill meat (on our way) along the road.’ (Hale 1982: 268)

b. karnta-ngku ka-rla kurdu-ku miyi yi-nyi
   woman-ERG PRS-3.IO baby-DAT food give-NPST
   parraja-rla-ku coolamon-LOC-DAT
   ‘The woman gives the baby food in the coolamon (carrier dish).’
   (Simpson 1991: 206)
The location of an S or A can also be the starting point of a trajectory of motion or gaze. In this case, the (stationary) location of an agent from whom the trajectory emanates is indicated by an expression marked with the ablative or a comparable case or adposition. In languages like Warlpiri and Kayardild, we find, again, agreement on source expressions of this kind.

(91) Warlpiri (Pama-Nyungan, Australian)

\text{wirriya-rlu \ ka \ kiji-ri \ wa} \text{tiya \ pirli-ngiri-rli} \\
\text{boy-ERG \ NPST \ throw-NPST \ stick \ hill-ABL-ERG}

‘The boy is throwing a stick from the hill.’ (Hale 1982: 269)

(92) Kayardild (Tangkic, non-Pama-Nyungan, Australian)

\text{walmathi-wan-da \ dangka-a \ dumi-wan-da \ kurri-ja} \\
\text{up.high-ORIG-NOM \ person-NOM \ dune-ORIG-NOM \ look-ACT}

\text{natha-wan-d} \\
\text{camp-ORIG-NOM}

‘The people from up high looked from the sandhills, from their camp.’

(Evans 1995: 580)

Not only locative expressions, but also directional expressions can be understood as predicating on one of the participants of the main predicate. Here, the interpretation is that this participant is in the state of being oriented in the direction in question. However, it appears that overt marking of the relation between a directional noun phrase and a specific participant is very rare crosslinguistically. To date, at least, we are not aware of this type of marking outside a few Australian languages, including Warlpiri. According to Hale (1982: 266), the utterance in (93a), where the directional phrase is a depictive carrying agreement, but not in (93b) entails that the agent moves the same distance as the patient, i.e., all the way to the camp.

(93) Warlpiri (Pama-Nyungan, Australian)

\text{a. kurdu-ngku \ ka \ maliki \ ngurra-kurma-rlu \ wajilipi-nyi} \\
\text{child-ERG \ NPST \ dog \ camp-ALL-ERG \ chase-NPST}

\text{b. kurdu-ngku \ ka \ maliki \ ngurra-kurma \ wajilipi-nyi} \\
\text{child-ERG \ NPST \ dog \ camp-ALL \ chase-NPST}

‘The child is chasing the dog to the camp.’ (Hale 1982: 266–267)

In Kayardild, at least some directional phrases generally show agreement and have to be analysed as secondary predicates on the moving participant. These include compass directionals marked with the proprietive of anticipation and derived compass directionals in the meaning of ‘continuously moving in one direction’ (Evans 1995: 218–220).
Temporal expressions constitute the perhaps most puzzling case of expressions whose formal make-up, in at least some languages, suggests an analysis as depictives. Temporal expressions are generally considered a paradigm case of event-oriented adverbials. Still, it is well-known that they may agree with a participant of the main predicate in Ancient Greek and in Latin. Thus, Pinkster (1988) classifies temporal nominals such as *nocturnus* in (94) as *praedicativa*, i.e., depictives.

(94) Latin (Italic, Indo-European)

\[
\text{neg} \quad \text{gregibus} \quad \text{nocturnus} \quad \text{obambulat}
\]

‘It (a wolf) does not walk around the herds at night.’ (Vergil; Pinkster 1988: 226)

Some Australian languages, too, have a class of temporal nominals which, at least optionally, agree with A or S in (ergative or absolutive) case. For Warlpiri, this class includes *jalangu* ‘today’, *jukurra* ‘tomorrow, the next day’, *pirrarni* ‘yesterday’, *yangkurra* ‘some days ago’, *tarnnga* ‘always, for good’, and *wurra* ‘still, not yet’ (Hale 1982: 281). An example of a temporal nominal bearing ergative case in agreement with the A is given in (95).

(95) Warlpiri (Pama-Nyungan, Australian)

\[
\text{jalangu-rlu} \quad \text{ka-lu-} \quad \text{puluku} \quad \text{turnu-mani}
\]

‘The people are mustering the cattle today.’ (Hale 1982: 281)

In Yankunytjatjara, most temporal nominals are invariable, i.e., do not agree in case (Goddard 1985: 256–259), but there are some notable exceptions, including *ngarnmany* ‘beforehand’ in (96) (a further example is *karlarl-itja* ‘with daylight’, i.e., ‘while it is light’ in (85)). In all instances that we are aware of, the argument triggering agreement is an S or A.

(96) Yankunytjatjara (Pama-Nyungan, Australian)

\[
\text{ngayulu} \quad \text{ngarnmany-tju} \quad \text{nya-ngu}
\]

‘I’ve seen it previously.’ (Goddard 1985: 58)

With regard to Warlpiri examples such as (95), Simpson (1991: 208–209) and also Nordlinger (1998: 118–121) maintain that the temporal expressions are adjuncts which modify the whole clause and do not stand in a depictive relation to S or A. These authors claim that the ergative case on expressions like
Deptive secondary predicates

jalangu merely indicates that the clause as a whole contains an ergative subject. Hale (1982: 281), on the other hand, suggests that temporal expressions of this type could be analysed as depectives:

Here again, there is the possibility of viewing the time adverb as being predicated of the subject [...] And this would make sense in view of the Warlpiri usage [of the locative, ESB & NPH] [...] i.e., an entity can be located in a time as well as in a place.

Although in most of the preceding examples it seems difficult to construe a direct predicative relation between controller and temporal expression (**The people are today and they are mustering cattle**), there are some contexts in which such a relation is not totally inconceivable, especially when the controller is an action nominal (i.e., it denotes an eventuality rather than an entity). This has been pointed out by Müller-Bardey (1990: 4) with regard to the example in (97). Note also that time adverbials can sometimes be used like (post-head) modifiers, e.g., *the meeting yesterday* in the English translation of (97).

(97) German (Germanic, Indo-European)

\[
\begin{align*}
\text{die} & \quad \text{DEF} \\
\text{Sitzung} & \quad \text{meeting} \\
\text{zog} & \quad \text{dragged} \\
\text{sich} & \quad \text{REFL} \\
\text{gestern} & \quad \text{yesterday} \\
\text{sehr} & \quad \text{very} \\
\text{in} & \quad \text{in} \\
\text{die} & \quad \text{DEF} \\
\text{Länge} & \quad \text{length}
\end{align*}
\]

‘The meeting yesterday dragged on for a very long time.’ (Müller-Bardey 1990: 4)

With the hypothesis in mind that crosslinguistically, adverbial and depective constructions are in competition in a rather wide semantic area, it is possible to regard case agreement on temporal nominals as a rather extreme extension of the “depective strategy”, especially considering that this phenomenon is found in languages as unrelated as Latin and Warlpiri.

4.7. A hierarchy

Throughout this section, it has become apparent that many expressions that are traditionally analysed as adverbials (e.g., expressions of quantity, concomitance, comparison, manner, location, and time) can also be analysed as depective secondary predicates. For some of these expressions, a depective analysis on semantic grounds alone is more plausible than for others: adjuncts of quantity always indicate the size of the set of participants involved in the eventuality, and expressions of concomitance always encode an additional entity accompanying one of the participants, but expressions of manner or comparison, and even less temporal expressions, are rarely purely participant-oriented. However, in some languages all the expression types just listed are encoded by genuine depective constructions, that is constructions that meet all criteria listed in Section 2.8, at least if we accept non-automatic agreement as a clear diagnostic of depective status.
For languages where adverbial and depictive constructions are distinguished by morphosyntactic means, the findings presented here suggest that these two construction types are in competition within the semantic range extending from expressions of condition or state (typical participant-oriented expressions) to temporal expressions (typical event-oriented expressions which nevertheless, in some languages, are formally depictives). Expressions of manner and comparison occupy a middle ground. We can thus refine Figure 1 from Section 2.8 by introducing, in Figure 2, an implicational hierarchy of expression types that populate this semantic space. Our findings suggest that the use of a depictive construction for a semantic expression type on the right side of the hierarchy implies the use of a depictive construction for a type on the left side of the hierarchy, and vice versa for adverbial constructions. The multiple dotted lines in Figure 2 represent the different possible cut-off points between the two construction types. General adjunct constructions, by definition, may span the whole range of semantic expressions.

This implicational hierarchy is, admittedly, tentative in that it is mainly based on agreement phenomena in a small number of Australian languages which have a rich case system and allow double case marking (see Dench & Evans 1988, and the contributions in Plank 1995). The picture looks different, for example, in languages like Latin which have agreement on adjectival and nominal depictives, but express comparison and location by means of prepositional phrases where the case of the nominal is governed by the preposition and not by agreement. Such prepositional phrases are unspecific as to a depictive or adverbial status.

The presence or absence of agreement on expressions of each of the semantic types is shown in Table 1 for eight Australian languages, Wardaman (WARD), Jaminjung (JAM), Gooniyandi (GOON), Diyari (DIY), Martuthunira (MART),
Table 1 shows that, as already indicated in Sections 4.5 and 4.6, agreement on expressions of location and direction as well as on temporal expressions is only found in a few languages, which also have agreement for all other expression types. Expressions of location – where the location only holds for one of the participants of the main predicate – show agreement in four languages, still fewer languages than those with depictive status of manner expressions. (All languages also express location of the event as a whole with the same case marker and without agreement; in other words, there is no language where all locative adjuncts are depictives.) The data from Jaminjung, where expressions of comparison and concomitance show agreement but manner expressions do not, suggest that manner ranks lower on the hierarchy than the first two semantic types. Finally, expressions of condition or state – the “typical” depictives – but also quantity adjuncts seem to agree with a controller in all languages that have agreement, although there are some gaps in the available data with respect to quantity expressions.

The position of expressions of life stage, function, and role in the hierarchy is unclear at the moment (they are therefore not included in Figure 2). Although translation equivalents of these expressions have been regarded as typical depictive expressions in many European languages (see Section 2.1), in a number of the Australian languages surveyed and represented in Table 1, including Jaminjung (see example (37)) and Diyari (see example (43)), they are represented by general adjunct constructions (among other things, they do not show case agreement).
The hypothesis that adverbial and depictive constructions are in competition within the semantic range indicated in Figure 2, and that their distribution is variable as long as it is consistent with the implicational hierarchy outlined here, is also supported by the observation that we find a lot of intra-linguistic variation – either synchronically or diachronically – especially at the lower end of the hierarchy. Thus, in all three Australian languages that allow agreement of temporal expressions with an S or A controller, this either only holds for a subset of these expressions, as in Yankunytjatjara, or agreement appears to be optional, as in Warlpiri (Section 4.6). Likewise, in Latin, agreement of temporal expressions with an S or A is only attested in the post-Augustan period (Pinkster 1988: 225–226). Pinkster (1988: 225–237) explicitly comments on the general extension of depictive constructions (at the expense of adverbial constructions) in the Latin of the post-Ciceronean period. A case of synchronic variation was already mentioned in Section 4.4: in Italian, a small class of manner expressions show agreement, but only variably, depending partly on the speaker’s idiolect, and partly on the realisation of other potentially agreeing elements in the clause (Napoli 1975).

In this paper we have only considered the distribution of genuine depictive marking but not the distribution of specific adverbial marking which would also clearly distinguish adverbials from depictives, as in English (-ly) and the Romance languages (-mente). If our hypothesis and the implicational hierarchy in Figure 2 is basically correct, we would predict that these markers may cover a continuous stretch of the hierarchy, but not several “adverbial” expression types that are not contiguous on the hierarchy.

There is, in fact, some evidence that adverb markers may diachronically develop from forms used in more depictive-like expressions (that is, in expressions on the left of the hierarchy), by extension to contiguous portions to the right of the hierarchy, resulting in realanalysis and semantic shift. For example, the English manner adverb suffix -ly developed from a more specific marker of comparison (‘like’), and ultimately from the noun for ‘body’. The fact that adverbs in -ly may exhibit a strong agent-orientation semantically (see Section 4.4) may be linked to this historical origin. Similarly, the suffix -mente and its variants on manner adverbs in Romance languages originated as the ablative form of mens ‘mind, spirit’, that is, it was found in expressions of the type ‘do something in X spirit’ which show a clear semantic relationship to a participant of the main predicate.

Furthermore, there is some evidence that a case marker that originally appeared on an adjunct in agreement with an argument of the main predicate may be generalised to an invariable marker of manner adverbials and adverbial clauses. In the Australian language Mparntwe Arrernte, the adverbial suffix -le is identical in form to the ergative case (which also, because of diachronic phonological shifts, is identical to the locative case). Wilkins (1989: 176–177)
proposes the following explanation for the use of -le as an adverbial marker (see example (60) in Section 3.2.5):

The possible link with Ergative becomes clear when languages nearby are examined and it is found that a number of them have ergative marking on manner adverbials in transitive sentences, in agreement with the transitive subject […] If a similar analysis is to be proposed for Mparntwe Arrernte, a diachronic step must be postulated whereby ergative cross-reference of manner forms was generalised to all subjects, transitive or intransitive […] This hypothetical change may have been pushed along by the fact that -le already marked temporal adverbials, as well as marking the semantically related instrumental.

The assumption of a diachronic shift is further supported by the fact that there is also synchronic variation in Arrernte: The suffix -le is obligatory on nominal adjectives (such as lhwarpe ‘sad’ or nterte ‘quiet’, which are more typically participant-oriented semantically) when they function as manner adverbials, but optional on true manner adverbs such as mwantye ‘careful, slow’ (Wilkins 1989: 176).

5. Conclusions

With this paper, we hope to have laid the foundations for a more systematic crosslinguistic study of depictive constructions, and for their delimitation from other construction types. In Section 2, we distinguished depictive secondary predicates from a variety of other phenomena, including predicate complements, resultative secondary predicates, depictive-like clauses, and complex predicates. We proposed a crosslinguistically applicable definition of depictive constructions which includes both formal and semantic criteria, but is general enough to allow for a wide range of both formal and semantic subtypes. The definition specifies that depictives should be adjuncts, and that a depictive construction should convey both the relation of the depictive to the main predicate (the relations of adjunction and cotemporality) and the relation of the depictive to its controller (the predicative relation) by formal means. The latter relationship can be indicated either overtly, e.g., in that the depictive is marked for agreement with its controller, or covertly, i.e., in that the depictive construction in question is clearly distinguished from adverbial constructions in the same language in other ways. We also allow for the possibility that depictive and adverbial constructions may not be formally distinguished in a given language, or for a subtype of expressions in that language, and employ the term GENERAL ADJUNCT CONSTRUCTION to refer to constructions which cover both expression types.

In Section 3, we examined the types of formal manifestations of adjunct constructions with a depictive interpretation, with the proposed distinction between depictive constructions, adverbial constructions, and general adjunct con-
structions in view. With respect to the formal marking of the depictive element (Section 3.1), we can identify, first, strategies of signalling restricted reference, i.e., formal marking of the relationship between the depictive and its controller (most commonly by agreement). Second, constructions where the depictive carries a specific predicative marker can also be regarded as genuine depictive constructions. The question whether we are dealing with a depictive or an adverbial construction is more difficult to decide if the depictive takes genitive (i.e., attributive) marking or a relational marker such as the comitative, instrumental, or locative case. In the absence of further evidence to the contrary, though, such constructions usually have to be regarded as general adjunct constructions rather than genuine depictive constructions. In many languages semantically depictive and semantically adverbial elements quite clearly carry the same type of non-specific adjunct marking (or are unmarked), as in the case of the Tagalog linker construction; in these cases, it is not possible to identify either depictives or adverbials by formal means. Finally, depictives may be followed by cotemporal or restrictive clitics, which contribute to their predicative force and may therefore serve to distinguish depictives from modifiers in a discontinuous noun phrase or constituents of complex predicates, but which are usually not restricted to this function.

With respect to the word class and internal structure of the depictive (Section 3.2), we argued that depictives can come from all word classes that can serve as non-finite (or otherwise formally dependent) predicates. This includes not only adjectives, noun phrases, and adpositional phrases, but also non-verbal lexical elements limited to predicative and sometimes even depictive function, such as the so-called predicative adjectives or predicative nominals. The non-inflecting “preverbs” or “coverbs” in some Northern Australian languages, which primarily function as constituents of complex predicates, may also appear as depictives. Moreover, the definition also allows for deverbal predicates (converbs) and verb clauses in adjunct function, as long as they are obligatorily controlled and express a condition or state which holds within the time frame set by the main predicate. We have shown that this criterion may hold even for verb clauses supposedly expressing “relative tense”, and have illustrated this for simultaneous, anterior-resultative (=post-state), and prospective (=pre-state) converbs, which in many languages show agreement with a controller and can therefore be argued to be genuine depictives.

For languages where depictives are not formally distinguished from adverbials, the decision between an analysis as a depictive and as an adverbial is often made on semantic grounds alone in the literature. In Section 4, we have argued that adjuncts of quantity, concomitance, comparison, manner, and location usually, or at least sometimes, exhibit a semantic relationship to a participant of the main predicate. We have also presented evidence – mainly from Australian languages which make extensive use of agreement marking – that
expressions in these semantic areas can be identified as depictives on morphosyntactic grounds in some languages. Evidence from agreement, however, may also be in conflict with the semantic analysis. This is most evident if temporal expressions show agreement. We have suggested that these phenomena should be seen in a broader typological perspective, according to which adverbial and depictive constructions are in competition for a number of semantic expression types which may be arranged on an implicational hierarchy. Evidence for this competition comes both from synchronic variation and diachronic change within a single language, and from the crosslinguistic distribution of depictive and adverbial constructions. “Depictive-prominent” languages may extend the depictive strategy (e.g., agreement) even to expression types lower on the hierarchy, i.e., where a clear semantic relationship between the adjunct and the controller is absent, such as temporal expressions. On the other hand, “adverbial-prominent” languages extend adverbial marking even to expressions higher on the hierarchy, which semantically are not only event-oriented but also participant-oriented (as in the participant-oriented uses of -ly adverbs in English). Finally, the close functional relationship between adverbials and depictives is confirmed by the existence of languages where the two expression types are not formally distinguished at all, but where general adjunct constructions are employed instead.

Received: 18 April 2001  
Revised: 10 December 2001  
Ruhr-Universität Bochum

Correspondence address: Sprachwissenschaftliches Institut, Ruhr-Universität Bochum, 44780 Bochum, Germany; e-mail: es1@soas.ac.uk, himmelmann@linguistics.ruhr-uni-bochum.de

Acknowledgements: We would like to thank the following people for providing and/or advising on examples from specific languages: Felix Ameka and James Essegbey (Ewe), Silvia Kutscher (Estonian), Nick Evans (Mayali and Kayardild), Alan Dench (Martuthunira), Jane Simpson and David Nash (Warlpiri), Bill McGregor (Gooniyandi), Christoph Schroeder and Geoffrey Haig (Turkish), Claudia Bucheli Berger (Swiss German), and Vera Kamphuis (Dutch). Special thanks are due to Carmen Dawuda, for compiling the corpus from which most German examples are taken, and for her assistance with the Russian data. For helpful comments on draft versions of this paper we would like to thank Felix Ameka, Carmen Dawuda, Alan Dench, Gerrit Dimmendaal, Nick Enfield, Nick Evans, Markus Greif, Silvia Kutscher, Utz Maas, Christoph Schroeder, Angela Terrill, and three anonymous reviewers for Linguistic Typology. The research presented in this paper was undertaken as part of the Research Project “Typologie koprädikativer Strukturen”, funded by the Deutsche Forschungsgemeinschaft.

Abbreviations: The orthographical conventions and glosses of the original sources are sometimes slightly modified. Examples from the corpus of spoken narratives are presented in intonation units, each intonation unit being delimited by a symbol representing the unit-final pitch contour. A slash (/) indicates clearly rising pitch, a semicolon (;) level or only slightly rising pitch, a backslash (\) a fall to the speaker’s lower base line, and a dash (-) an incomplete intonation unit. Numbers within parentheses show pause length in seconds. An equal sign (=) at the end of an intonation unit
indicates that no perceptible pause occurs between two units. Otherwise, an equal sign stands for a clitic boundary (and is also used in glossing switch-reference morphology), while a dash separates morphemes within a single word.

The abbreviations used in interlinear glosses are:

- A transitive subject, ABL ablative, ABS absolute, ACT actual tense / mood, ADV adverbialiser, ALL allative, ASSOC associative, AUX auxiliary, AV actor voice, CAUS causative verbaliser, COM comitative, CONTIN continuous aspect, CV conveyance voice, DAT dative, DEF definite article, DEM demonstrative, DEPIC depictive marker, DETR detransitiviser, DIM diminutive, EFF effector (agent marker), EMPH emphatic, ERG ergative, ESS essive, EVID evidential, EXCL exclusive, EXP experiential, F feminine, FUT future, GEN genitive, HABIT habitual, ILLAT illative, IMP imperative, IMPERS impersonal 3rd person, IMPF imperfective, INCH inchoative verbaliser, INCL inclusive, INDEF indefinite article, INF infinitive, INSTR instrumental, INTENT intensive (personal purposive), IO indirect object, LK linker, LOC locative, LV locative voice, M masculine, NEG negative, NF non-feminine, NOM nominative, NPST non-past, NR nominaliser, O object / undergoer, OBJ object / object case, OBL oblique, ORD ordinal (form of numeral), ORIG origin (case), PART partitive, PASS passive, PERL perlicative, PF perfective, PL plural, PM predicate marker, PN personal name marker, POSS possessive, POT potential, PRIV privative (‘without’), PROG progressive, PROP proprietive (‘having’), PRP preposition,PRS present, PRTC participle, PST past, PURP purposive, PV patient voice, QU question marker, RDP reduplication, REFL reflexive, REL relative pronoun, RES resultative, RESTR restrictive marker, RLS realis, S intransitive subject, SBJ subject, SEQ sequentive relator, SG singular, SIM simultaneous converb/participle, SIMIL similative, SPEC specific (article), SUPERL superlative, TEMP temporal (case), UG undergoer, UTIL utilitive.

References


Depictive secondary predicates


Bucheli Berger, Claudia (to appear). Copredicative agreement and the development of a copredicative marker in Swiss German dialects. In Himmelmann & Schultze-Berndt (eds.).


Eva Schultze-Berndt and Nikolaus P. Himmelmann


Depictive secondary predicates


  tion*. Ithaca: Southeast Asia Program, Cornell University.