

# Manner Adverbs and Scope

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## 1 Introduction

In most event-based accounts of manner modification, manner adverbs are treated as predicates that predicate over the event variable, as in the representation of (1) given in (2).

(1) Marlowe ran quickly.

(2)  $\exists e[ RUN(m, e) \& QUICK(e) ]$

In this article, I will be concerned with the question of how far a sentence that contains two non-coordinated instances of manner modification can be represented in such a framework. Clearly, if the two manner adverbs are not coordinated, syntactically one will have scope over the other.

I will be looking at sentences where the relative scope of the two constituents influences their interpretation. A classic example where this seems to be the case is given in (3).

(3) John **painstakingly** wrote **illegibly**.

in Parsons (1972, p. 131)

Contrasting (3) with (4-a) and (4-b), Parsons notes that only (3) requires that “the illegibility of the writing was at least one of the things John was taking pains to do”.

(4) a. John wrote **painstakingly** and **illegibly**.

b. John wrote **painstakingly** and John wrote **illegibly**.

in Parsons (1972, p. 131)

A similar phenomenon is exhibited by the German sentence in (5).

(5) Hans hat **geschickt** die Frage **dumm** beantwortet.

Hans has skilfully the question stupidly answered.

Hans skilfully answered the question stupidly.

This sentence can be successfully interpreted only if the stupidity of the answer was one of the things in which Hans showed his skill.

A context that makes the intended reading of (5) clearer is given in (6).

(6) Auch nach sieben Tagen Einzelhaft hat Hans die Fragen so geschickt dumm beantwortet, daß niemand auf die Idee gekommen wäre, daß er die Antworten aus dem Effeff kannte.

Even after seven days of solitary confinement did Hans answer the questions so craftily stupidly, that no one could possibly suspect that he knew the answers by heart.

*Carefully* and its German equivalent *vorsichtig* are also manner adverbs that behave similarly, cf. (7) and (8).

(7) John **carefully** buttered the toast **quietly**.

=47 in Peterson (1997, p. 241)

(8) Fritz hat **vorsichtig** die Tür **leise** aufgemacht.

Fritz has carefully the door quietly opened.

Fritz carefully opened the door quietly.

Peterson argues that (7) has one interpretation which is synonymous with *John was careful in buttering/to butter the toast quietly*. Such an interpretation is possible, as Peterson argues, if we imagine that “John took care to be *quiet* while performing his task, but *not* that he took care in his buttering—i.e., that he buttered sloppily.” Peterson (1997, p. 241)

A similar argument can be made for (8).

Note that these instances of manner adverb doubling differ from those discussed in Ernst (2001), cf. (9)

(9) a. They play quietly well, but get rambunctious when we have more lively games.

b. She runs slowly correctly, but loses her form when she speeds up.

=6.91 in Ernst (2001)

In both examples, the first manner adverb presents a precondition for the application of the second. The sentences can be rephrased as *If she plays quietly, she plays well* etc., which is not possible for the examples cited above.

As the correct treatment of these examples is somewhat controversial, I will concentrate on a detailed discussion of (5), though the arguments apply in a similar way to the other examples.

## 2 Establishing *geschickt* ‘skilfully’ as a manner adverb

The first question raised by sentence (5) is whether both adverbs really have manner readings in this sentence. I will argue this first by using paraphrase tests, and second by investigating the behaviour of *geschickt* in combination with negation.

### 2.1 Paraphrase tests

First, note that both adverbs in (5) can be paraphrased with the help of the classic paraphrase for manner adverbs, *in X manner*, cf. (10).

- (10) a. Hans hat **auf geschickte Art und Weise** die Frage dumm beantwortet.  
Hans answered the question in a skilful manner stupidly.
- b. Hans hat geschickt die Frage **auf dumme Art und Weise** beantwortet.  
Hans answered the question skilfully in a stupid manner.

The subtler paraphrase *How . . . , that was X*, in contrast, can only be applied to the adverb with the greatest scope, *geschickt*, cf. (11-a).

- (11) Hans hat geschickt die Frage dumm beantwortet.
- a.  $\approx$  Wie Hans die Frage dumm beantwortet hat, das war geschickt.  
The way in that Hans answered the question stupidly was skilful.
- b.  $\not\approx$  ??Wie Hans geschickt die Frage beantwortet hat, das war dumm.

The application of other paraphrase tests shows that *geschickt* ‘skilfully’ is best classified as an agent oriented manner adverb (AOMA), cf. (12) and (13).

- (12) Hans hat die Frage dumm beantwortet, wobei er geschickt war/sich geschickt verhalten hat.  
Hans answered the question stupidly, in doing so, he acted skilfully.
- (13) Es war geschickt von Hans, wie er die Frage dumm beantwortet hat.  
It was skilful of Hans, how he answered the question stupidly.

The second adverb in the sentence, *dumm* ‘stupidly’, cannot be interpreted as an AOMA. This is evident from the application of the paraphrase test to the material of the original sentence stripped off the second adverb, *geschickt*, cf. (14).

(14) Hans hat die Frage dumm beantwortet.

Hans answered the question stupidly.

- a.  $\not\approx$  Hans hat die Frage beantwortet, wobei er dumm war/handelte.  
Hans answered the question, in doing so, he was/acted stupid(ly).
- b.  $\not\approx$  Es war dumm von Hans, wie er die Frage beantwortet hat.  
It was stupid of Hans, how he answered the question.
- c.  $\approx$  Es war dumm, wie . . .

That *dumm* cannot be understood as a resultative adverb is shown by the data given in (15), where it is contrasted with the clearly resultative *blau* ‘blue’.

(15) a. Peter hat die Wand blau gestrichen

Peter painted the wall blue.

$\not\approx$ \*Wie Peter die Wand gestrichen hat, das war blau.

The way in which Peter painted the wall was blue.

b. Peter hat die Frage dumm beantwortet.

$\approx$ Wie Peter die Frage beantwortet hat, das war dumm.

How Peter answered the question was stupid.

The same holds true for *illegible*, cf. (16).

(16) Peter hat unleserlich geschrieben.

Peter wrote illegibly.

$\approx$ Wie Peter geschrieben hat, das war unleserlich.

The manner in which Peter wrote was illegible.

### 2.1.1 Clausal readings and the negation test

Although the paraphrase tests show that *geschickt* in the examples above serves as a manner adverb, we find two examples in the literature where scope-taking manner adverbs are dismissed with the argument that the adverb that takes scope is not a manner adverb. In particular, Parsons (1990, p. 289f., fn 17,22) claims that *painstakingly* in (3) should be considered as a subject oriented or sentence modifier. Frey and Pittner (1999) argue for their example *Hans hat geschickt alle Fragen dumm beantwortet* ‘Hans skilfully answered all questions stupidly’ that *geschickt* ‘skilfully’ is an event-internal adverb and not a manner, or in their terminology, process adverb.

To do these criticisms justice, it is important to take a short look at the definitions and especially the semantics that Parsons and Frey and Pittner give for the classes of adverbs they propose.

Parsons (1990, p. 63f.) argues that sentence modifiers stand for properties of propositions. Subject oriented modifiers resemble, according to Parsons, sentence modifiers, except for their special sensitivity to the subject position. They stand for the relations between things and propositions.

This understanding of sentence and subject oriented modifiers makes it impossible to categorize *painstakingly* into either of these groups, cf. (17-a), where the common paraphrase test for modifiers relating to propositions is used on *painstakingly*.

(17) John **painstakingly** wrote **illegibly**.

⚡ \*It was painstaking that John wrote illegibly. [paraphrase sentence modifier]

⚡ \*It was painstaking of John that he wrote illegibly. [paraphrase subject-oriented modifier]

In contrast, this paraphrase works well for Parsons examples of Sentence or Subject oriented modifiers, cf. (18-a-b).

(18) a. John **necessarily** wrote **illegibly** [sentence modifier]

≈ It was necessary that John wrote illegibly.

b. John **rudely** wrote **illegibly** [subject-oriented modifier]

≈ It was rude of John that he wrote illegibly.

The same holds for the corresponding paraphrase of (5), cf. (19).

(19) Hans hat **geschickt** die Frage **dumm** beantwortet.

⚡ Es war geschickt, daß Hans die Frage dumm beantwortet hat.

It was skilful that Hans answered the question stupidly.

⚡ Es war geschickt von Hans, daß er die Frage dumm beantwortet hat.

It was skilful of Hans that he answered the question stupidly.

It should be kept in mind, though, that *geschickt* can receive a sentential reading, especially when it occurs with a so-called comma-intonation, as in (20).

(20) Hans hat, **geschickt**, die Frage **dumm** beantwortet.

Cleverly, Hans answered the question stupidly.

Without a comma-intonation, the sentential reading is usually indicated by using the sentence adverb cognate of *geschickt*, *geschickterweise*, cf. (21), which receives the same interpretation as (20).<sup>1</sup>

(21) Hans hat **geschickterweise** die Frage **dumm** beantwortet.

Cleverly, Hans answered the question stupidly.

This leaves us with the suggestion by Frey and Pittner to treat *geschickt* as an event-internal adverb. Event-internal adverbs are adverbs like *absichtlich* ‘willingly’ which differ from manner adverbs in that they can take scope over negation. To evaluate these tests, one has to differentiate between replacive negation (RN) and non-replacive negation (NRN) (cf. Jacobs (1991)). The defining characteristic of replacive negation is that it is necessarily connected with the replacement of at least part of the negated content.<sup>2</sup> A good diagnostic for whether something constitutes RN or not is the usage of German *sondern* vs. *aber* in follow-up phrases: *sondern*-phrases follow RN, *aber*-phrases cannot follow.

(22) a. Fritz hat das Lied nicht LAUT gesungen, sondern leise.

Fritz did not sing the song loudly, but quietly.

b. ??Fritz hat das Lied nicht LAUT gesungen, aber leise.

Fritz did not sing the song loudly, but quietly.

Prosody plays an important role in the evaluation of these sentences, as it allows the conversion of the linear order of words that can be used for NRN into a RN. On the other hand, some linear orders, such as the one given in (22), allow only RN.

The negation test is based on the assumption that a manner adverb cannot take scope over NRN.

The negation test cannot be applied directly to the sentences under investigation, since already the existence of one manner adverb leads to the incompatibility with sentence negation. This is shown in (23), where (23-a)-(23-b) lead to replacive negation or sentential readings of *geschickt*, (23-c) even to incomprehensibility. This is the case regardless of the prosody of the sentence.

<sup>1</sup> Where *-weise* is the standard German suffix to turn adjectives into clausal adverbs.

<sup>2</sup> Jacobs (1991, p. 586): “Replaziv ist eine Negation genau dann, wenn sie notwendig mit der Ersetzung mindestens eines Teiles des negierten Inhalts verknüpft ist.”

- (23) a. ?Hans hat **geschickt nicht** die Frage **dumm** beantwortet.  
→ Hans hat die Frage beantwortet.  
Hans answered the question.
- b. ?Hans hat **geschickt** die Frage **nicht dumm** beantwortet.  
→ Hans hat die Frage beantwortet.  
Hans answered the question
- c. \*Hans hat **geschickt** die Frage **dumm nicht** beantwortet.

In (23-a), *geschickt* only makes sense if it is interpreted as a sentential adverb. The sentence becomes perfect with comma intonation. (23-b) also needs a sentential reading of *geschickt*. Finally, (23-c) is totally out, because *geschickt* ‘skilfully’ and *dumm* ‘stupidly’ have to be evaluated at the same level, leading to a direct semantic conflict.

Since the negation test cannot be applied to the sentence in question, I will try to apply it to sentences containing *geschickt* ‘skilfully’ but to no further adverbs. Consider the examples in (24) and (25).

- (24) Heinz hat **geschickt** die Frage **nicht** beantwortet.  
Heinz has skilfully the question not answered.  
Heinz has skilfully not answered the question.
- (25) Heinz hat die Frage **geschickt nicht** beantwortet.  
Heinz has the question skilfully not answered.  
Heinz has skilfully not answered the question.

Sentence (24) can receive two interpretations. One is a reading of *geschickt* as a subject-oriented modifier, cf. (26).

- (26) It was clever of Heinz that he did not answer the question. [subject-oriented]

The other reading is given in (27-a) and conveys the same meaning as (27-b).

- (27) a. How Hans did not answer the question, that was clever.  
b. It was clever of Heinz how he talked without answering the question. [manner]

The reading (27-a) is clearly a sentential reading. On this usage, *geschickt* is synonymous with *geschickterweise* ‘cleverly’, its unambiguous sentential adverb cognate, cf. (28).

(28) Heinz hat **geschickterweise** die Frage **nicht** beantwortet.

Heinz has cleverly not answered the question.

Cleverly, Heinz did not answer the question.

The reading of (24) given in (27), on the other hand, is a manner reading. This reading seems also to be the preferred reading for (25). However, in contrast to the regular cases of manner modification, it is not the activity denoted by the verbal predicate whose manner is modified. What is modified by *geschickt* ‘skilfully’ seems to be the ‘not answering’, which itself denotes a specific activity. Or rather, there is some activity, which is executed skilfully, which allows the subject to uphold the state of not\_having\_answered. On this reading the sentence conveys the same meaning as the sentence in (29-b), containing lexically negative verbs, i.e. verbs that form converses with negated verbs (e.g. here *eine Frage nicht beantworten* ‘to not answer a question’ ⇔ *einer Frage ausweichen* ‘to dodge a question’).

(29) a. Hans hat **geschickt** die Frage nicht beantwortet.

b. Hans ist **geschickt** der Frage ausgewichen.

Hans skilfully dodged the question.

The semantics thus already suggests that this is a case of RN, and this is indeed confirmed through the use of the *sondern*- phrase diagnostic, cf. (30).

(30) a. Hans hat geschickt die Frage NICHT beANTWORTET, sondern um den heißen Brei herumgeredet.

..., but has evaded the topic.

b. Hans hat geschickt die Frage nicht beANTWORTET, sondern zurückgewiesen.

..., but has dismissed the question

c. ??Hans hat geSCHICKT die Frage nicht beantwortet.

d. ?Hans hat geschickt die FRAGE nicht beantwortet. [possible on a sentential reading of *geschickt*]

It becomes obvious that this is the correct interpretation when comparing the paraphrases possible for (30) to the paraphrase of sentences containing adverbs that clearly can outscope negation, e.g. mental attitude adverbs (MAA) such as *absichtlich* ‘on purpose’ in (31).

(31) Hans hat die Frage **absichtlich nicht** beantwortet.

Hans did not answer the question on purpose.

≈ Es war absichtlich von Hans, daß er die Frage nicht beantwortet hat.

It was on purpose that Hans did not answer the question.

(32) Hans hat die Frage **geschickt nicht** beantwortet.

Hans did skilfully not answer the question.

≠ It was skilful that Hans did not answer the question.

**BUT:** ≈ It was skilful how Hans did not answer the question.

While the MAA still allow the typical paraphrases for mental attitude adverbs, this paraphrase does not work for *geschickt*. Instead, the regular manner paraphrase can be applied.

More evidence for the analysis as simple constituent negation comes from cases where the negated verbal predicate is not usually associated with certain activities. For these sentences, a manner reading is not so readily available, cf. (33) and (34).

(33) a. Heinz hat **geschickt** den Knoten gelöst. [manner reading possible]

Heinz has skilfully untied the knot.

b. Heinz hat **geschickt nicht** den Knoten **nicht** gelöst. [manner reading not very plausible]

Cleverly, Heinz did not untie the knot.

(34) a. Heinz hat **geschickt** geschrieben.[manner]

Heinz wrote skilfully.

b. Hans hat **geschickt nicht** geschrieben. [subject oriented; manner reading extremely implausible]

Hans has cleverly not written.

For both (33) and (34), a manner reading is only possible if an activity is construed that is used to uphold the state of *not\_untying\_the\_knot* and *not\_writing*, respectively. Such a reading might be possible for (33-b) in situations where someone is supposed to untie a knot and in fact pretends to do so, but in reality does everything he can to not untie it. For (34-b), it is hard to imagine what a possible situation could be that makes this sentence a plausible description of an active covert avoidance of an action.

To sum up, this section has shown that *geschickt* in (5) in this interpretation does serve as a manner adverb. This is illustrated with the help of the paraphrase tests as well as the negation test.

### 3 What causes the scopal effects?

As Parsons (1990, p.289, fn. 17) correctly notes, it is difficult to find adverbs that display a behaviour parallel to that of *geschickt*. If a sentence contains two PMAs, for example, the effect seems absent, cf. (35), where no scope effects occur.

- (35) Hans hat **laut** die Frage **dumm** beantwortet.  
Hans has loudly the question stupidly answered.  
Hans answered the question loudly and stupidly.

This sentence is equivalent to both variants in (36).

- (36) a. Hans hat die Frage **laut** und **dumm** beantwortet.  
b. Hans hat die Frage **dumm** und **laut** beantwortet.

At first glance, especially when comparing the pair *laut-dumm* to the pair *geschickt-dumm*, one might think that the existence of adverbial scope as discussed in this section is somehow connected to the degree to which the adverbs used in a single sentence contrast directly with each other when used conjunctively. However, already the pair *painfully-illegible*, although contrastive to a certain degree, does not form a pair that gives such a sharp contrast. In addition, there is no contrast at all between *carefully* and *quietly* as used in examples (7) and (8).

#### 3.1 The adjective *geschickt* and the question of intersectivity

What is of such interest in this connection is whether *geschickt* should in general be treated as an intersective or non-intersective modifier. To investigate this question, it is insightful to start from its adjectival usage. In adjective semantics, especially in the combination with nouns, it is common to differentiate between intersective adjectives and non-intersective adjectives (This introduction follows closely Partee (n.d.), Partee (1995)). Typical intersective adjectives are given in (37).

- (37) two-legged, carnivorous, leaden, radioactive, sick, superconductive, German

They have the special property that when combined with a noun, both adjective and noun can be regarded as one-place predicates denoting sets. Their combination denotes the intersection of the two sets.

(38) *superconductive cable*

$$\begin{aligned} \llbracket \text{superconductive} \rrbracket &= \{x \mid x \text{ is superconductive}\} \\ \llbracket \text{cable} \rrbracket &= \{x \mid x \text{ is a cable}\} \\ \llbracket \text{superconductive cable} \rrbracket &= \llbracket \text{superconductive} \rrbracket \cap \llbracket \text{cable} \rrbracket \\ &= \{x \mid x \text{ is superconductive and } x \text{ is a cable}\} \end{aligned}$$

Nonintersective adjectives, in contrast, do not show this behaviour. A classic example is *former* in the phrase *former senator*, where intersectivity is not given, cf. (39).

(39) *former senator*

$$\llbracket \text{former senator} \rrbracket \neq \llbracket \text{former} \rrbracket \cap \llbracket \text{senator} \rrbracket$$

One of the reasons why *former* is such a clear case of nonintersective modification lies in the fact that it is not even subsective, cf. (40).

(40) *former senator*

$$\llbracket \text{former senator} \rrbracket \not\subseteq \llbracket \text{senator} \rrbracket$$

Between the adjectives such as *former* which are nonintersective and nonsubsective and intersective (and therefore as well subsective) adjectives such as *superconductive* lies the huge group of subsective adjectives which are not intersective at first sight. Thus, an adjective like *big* in *big boy* is clearly subsective, but it is not obviously intersective.

(41) *big boy*

$$\llbracket \text{big boy} \rrbracket \subseteq \llbracket \text{boy} \rrbracket$$

(42) Max is a big boy

Max is a wrestler

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$\not\rightarrow$  Max is a big wrestler.

If *big* were intersective in the same way as *superconductive* or *sick* is, the inference pattern in (42) would hold, cf. (43) for *sick*.

(43) Max is a sick man

Max is a linguist

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$\rightarrow$  Max is a sick linguist.

Nevertheless, the conclusiveness of this inference pattern as a test for intersectivity is often called into question because of the inherent vagueness of *big* (e.g. Kamp (1975), Kamp and Partee (1995), Partee (1995), Heim and Kratzer (1998), Chierchia and McConnell-Ginet (2000)). Something or someone can only be *big* in relation to other things or persons, and these other things or persons are given by the context. Thus, *groß* ‘big’ in (44-a) can be evaluated as setting the elephant into a relation with other elephants. With regard to these other elephants, the elephant is judged to be big. In (44-b), in contrast, the comparison class in relation to which the boy is judged to be big consists most likely of other boys, but not of elephants.<sup>3</sup>

- (44) a. ein großer Elephant  
           a big elephant  
           ≈ groß für einen Elephanten  
           big for an elephant
- b. ein großer Junge.  
           a big boy  
           ≈ groß für einen Jungen  
           big for a boy

The inference pattern in (43) thus fails because, given only the bare noun phrases, the interpretation of *big* is not kept constant. In the premise, *big* is naturally taken as describing the boy as big relative to the size standard set by boys, whereas in the conclusion, *big* in its most likely interpretation is evaluated against the size standard of wrestlers. As world knowledge tells us that the latter size standard, on an absolute scale of bigness, is located nearer to the upper end of the scale than the size standard for the former, the inference does not go through. If, however, the size standard is kept constant, the inference pattern holds, cf. (45), where the size standard is given by the lowered *for*-phrases.

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<sup>3</sup> More precisely, the elephants or boys, respectively, are judged against that size standard which is made salient by the utterance context. That we cannot simply let the size standard be determined by the noun that is modified is illustrated by examples such as (i).

- (i) a. My 2-year-old son built a really tall snowman yesterday.  
       b. The D.U. fraternity brothers built a really tall snowman last weekend.  
           =17 in Partee (1995)

In a similar way, information from previous utterances can influence which size standard is used in evaluation. If a context is assumed, it should be taken as one among many possible context specifications.

(45) Max is a big<sub>for boys</sub> boy

Max is a wrestler

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→ Max is a big<sub>for boys</sub> wrestler.

One way of incorporating this context dependency into the formal representation is through the addition of a contextual parameter to the lexical entry of the adverb and letting the context determine the size standard relevant for the context at hand. The lexical entry for *big* can then be given as (46), where C stands for this contextual parameter.

(46)  $\lambda x[BIG(x, C)]$

*BIG(x, C)* is to be read as *x is big judged against the size standard made salient by the utterance context*.

The noun phrases in (44) will then be formalized as in (47), where the lowered phrases on the context parameter should be taken as an example of a possible size standard that is used, e.g. *C<sub>elephants</sub>* refers to the size standard set by elephants.

(47) a.  $\lambda x[ELEPHANT(x) \ \& \ BIG(x, C_{elephants})]$

b.  $\lambda x[BOY(x) \ \& \ BIG(x, C_{boys})]$

If the context parameter is kept constant, the adjectives behave exactly like classical cases of intersective adjectives, cf. (48) for *two-legged*.

(48) two-legged boy

$\lambda x[BOY(x) \ \& \ TWO - LEGGED(x)]$

In the same way as *big*, *geschickt* ‘skilful’ also exhibits context sensitivity. This is shown by the examples in (49), which behave exactly parallel to those in (44).

(49) a. ein geschickter Elephant

a skilful elephant

≈ geschickt für einen Elephanten

skilful for an elephant

b. ein geschickter Junge.

a skilful boy

≈ geschickt für einen Jungen  
 skilful for a boy

In these examples, we are not judging elephants or boys against different size standards, but against different standards of skilfulness, but the general idea is exactly the same. Consequently, the formal representation of *geschickt* also contains a contextual parameter, cf. (50).

(50)  $\lambda x[SKILFUL(x, C)]$

Again,  $SKILFUL(x, C)$  must be read as *x is skilful judged against the standard of skilfulness made salient by the utterance context*. The NPs in (49) can then be represented as in (51).

(51) a.  $\lambda x[ELEPHANT(x) \ \& \ SKILFUL(x, C_{elephants})]$

b.  $\lambda x[BOY(x) \ \& \ SKILFUL(x, C_{boys})]$

In addition to this kind of context sensitivity, *geschickt* also exhibits a domain sensitivity, as the following examples show.

(52) a. ein geschickter Anwalt

a skilful lawyer

≈ geschickt als Anwalt

skilful as a lawyer

b. ein geschickter Taschendieb

a skilful pickpocket

≈ geschickt für einen Taschendieb

skilful as a pickpocket

*Geschickt* in (52-a) can be understood as being evaluated relative to a certain domain, in this case the domain of law. Whoever the NP is attributed to is only *geschickt* in this specific domain, not in any other domain (or better: nothing is said about any other domains). Similarly, the domain relevant for the evaluation of (52-b) is the domain of pickpocketing.

Domain sensitivity cannot be reduced to context sensitivity. A diagnostic of domain sensitivity is the use of *als-* phrases in German or *as-* phrases in English, respectively. If a modifier is domain-sensitive, the scales associated with that modifier do not form a continuum. That is, if we judge anything as big, this is, as remarked earlier, always relative to a context. But all these

contextually relativized usages can be mapped against one absolute scale, as indicated in figure 1 by the locations of contextually relativized small-big scales relative to an absolute small-big scale.

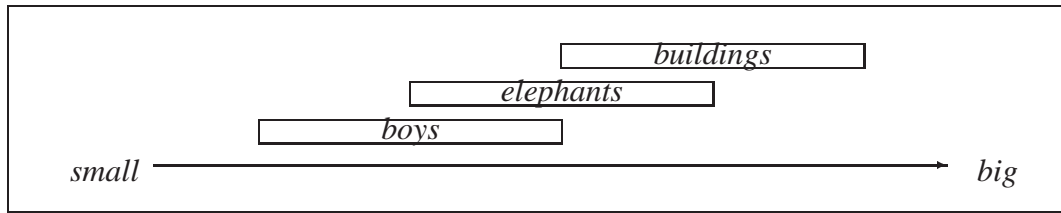


Figure 1: Scale for *big*

The usage of the *as*-phrases is only possible if we can look at one thing from different angles, or better as having some properties depending on certain domains.<sup>4</sup> The specific domain indicated by the modified noun works like a filter for the context dependency and has much the same effect as frame setting modifiers, cf. (53) and (54).

(53) Chomsky is a brilliant linguist but a lousy journalist.

(54) Linguistically, Chomsky is brilliant, but journalistically, he is lousy.

In contrast to the scale for *big*, there is no way in which these different judgements could be mapped onto an absolute scale, instead, every domain brings along its own scale, cf. eg. figure 2 for the scales relevant to (49).

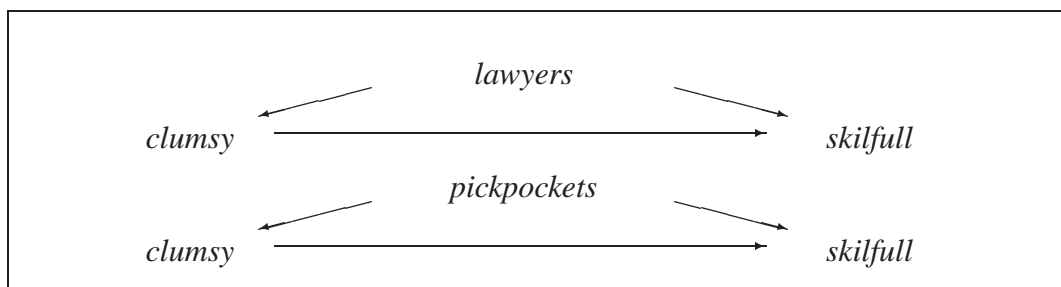


Figure 2: Scales for *skilfull*

Again, the domain sensitivity prevents a straightforward intersective inference pattern, cf. (55).

<sup>4</sup> This is not the only use of *as*-phrases, though. Even an adjective like *big* can be used in conjunction with *as*-phrases in certain contexts. Imagine for example a magician who has the ability to change between different types of live forms, e.g. he can be either a boy, a man, a donkey or an elephant. These different incarnations of him might be associated with different sizes. In this context, an utterance such as (i) makes sense.

(i) Fred the magician is big as a boy, small as a man, medium-sized as a donkey and large as an elephant.

Nevertheless, all these different sizes can still be mapped into a single absolute scale of bigness and do not constitute domain-sensitivity in the way exhibited by *skilfull* and other adjectives.

- (55) Max is a skilful lawyer  
 Max is a pickpocket  
 \_\_\_\_\_  
 ↯ Max is a skilful pickpocket.

This does not preclude an analysis of *skilful* as an intersective modifier. The domain sensitivity can be handled similarly, and intersectivity can be maintained, cf. (56).

- (56) Max is a skilful<sub>as a lawyer</sub> lawyer  
 Max is a pickpocket  
 \_\_\_\_\_  
 → Max is a skilful<sub>as a lawyer</sub> pickpocket.

That is, in judging someone as skilfull, not only the context but the domain has to be considered. The easiest way to formalize this is by introducing an additional parameter for the domain *D*, yielding the lexical entry for skilfull given in (57).

- (57)  $\lambda x[\text{GESCHICKT}(x, C, D)]$

*GESCHICKT*(*x*, *C*, *D*) is then to be read as *x* is judged to be skillfull in the domain of law against the standard of skilfullness in this domain set by the salient utterance context.

The modified NPs in (58-a-b) can then be represented as in (59-a-b), where, for the sake of the example, the most salient utterance context is simply taken to be that which is suggest by the subject NP.

- (58) a. This monkey is a skilful pickpocket.  
 b. This ten-year old is a skilful lawyer.
- (59) a.  $\lambda x[\text{PICKPOCKET}(x) \ \& \ \text{SKILFUL}(x, C_{\text{monkey}}, D_{\text{pickpocket}})]$   
 b.  $\lambda x[\text{LAWYER}(x) \ \& \ \text{SKILFUL}(x, C_{\text{10-year old}}, D_{\text{lawyer}})]$

Note that this view of *geschickt* stands in opposition to the view of Kamp (1975), Kamp and Partee (1995), Partee (1995) on the English equivalent of *geschickt*, *skilful*. The reasons these authors give for a treatment of *skilful* as nonintersective, as opposed to the context sensitive intersectivity of *tall* etc., are not wholly clear to me, nor to the authors themselves, as the following quotation shows:

“It is both difficult and important to sort out the effects of context-dependence on the interpretation of different sorts of adjectives and nouns occurring alone or in

combination. There are almost certainly some adjectives that are best analyzed as context-dependent intersective ones (probably including *tall*), and almost certainly some adjectives that are genuinely nonintersective (almost certainly including *former* and probably including *skillful*.)” Partee (1995, p. 331)

Partee (1995, p. 331), in explicitly discussing *tall* vs. *skillful*, treats the different paraphrases for the context and domain sensitivity (*for ...* vs. *as ...*, cf. the examples above) as further evidence for a difference between truly nonintersective subjective adjectives and intersective but vague and context-dependent ones. On my account, the applicability of an *as*-phrase simply is an indicator for whether or not an adjective is domain-sensitive or not, and not whether some adjectives are intersective and others nonintersective.<sup>5</sup>

### 3.2 Transferring the findings to the adverbial use of *geschickt*

The AAs that are context-sensitive in their adjectival usages are also context-sensitive in their adverbial usage, cf. (60) for *schnell* ‘quickly’ and (61) for *geschickt* ‘skilfully’.

- (60) a. Der Affe hat das Problem **schnell** gelöst.  
The monkey solved the problem quickly.  
b. Der Mann hat das Problem **schnell** gelöst.  
The man solved the problem quickly.
- (61) a. Der Affe hat das Problem **geschickt** gelöst.  
The monkey solved the problem skilfully.  
b. Der Mann hat das Problem **geschickt** gelöst.  
The man solved the problem skilfully.

Again, by looking only at the sentences in isolation we will assume that for the a-sentences the standard of speed/skill is relativized to the standard set by the respective subjects, that is, monkeys and men, respectively. The finding here than parallels that for the case of noun modification: we could for example assume that men are in general more adept at problem solving than monkeys, and that this means that they are not only more skilfull but also quicker than the

<sup>5</sup> It is not clear to me whether one can clearly divide adjectives into domain-sensitive and non-domain-sensitive types. An adjective like *quick*, for example, can also exhibit domain sensitivity, cf. (i).

(i) Tamara is a quick runner but a slow thinker.

In that sentence, Tamara is judged to be quick in the domain of running against the standard of quickness in this domain set by the salient utterance context. She is judged to be slow in the domain of thinking judged against the standard of quickness in this domain set by the salient utterance context.

monkeys. Thus the relativized standards for speed and skill for men are higher on the scale than that for monkeys.

Interestingly, the activity referred to by the VP, in this case the problem-solving, seems to have an influence on the interpretation of *geschickt* as well as *schnell*, which is similar to that of the domain relevant for the evaluation of the *geschickt* examples in the previous section. That is, we evaluate *quickly* in (60-a) not only relative to the standard of speed set by monkeys, but relative to the standard of speed set by monkeys in the domain of problem-solving.

A formal representation of (60-a) would thus look like (62).

$$(62) \quad \exists e [\text{SOLVE}(\textit{monkey}, \textit{the\_problem}, e) \ \& \\ \text{SKILFUL}(e, C_{\textit{monkey}}, D_{\textit{problem\_solving}})]$$

If we now return to our initial example, repeated here, we see that the adverb *stupidly* puts a further restriction on the domain in which *geschickt* holds.

[(5)] Hans hat **geschickt** die Frage **dumm** beantwortet.

The appropriate formalization of (5) is therefore (63).

$$(63) \quad \exists e [\text{ANSWER}(h, \textit{the\_question}, e) \ \& \\ \text{SKILFUL}(e, C_{\textit{grown-up\_males}}, D_{\textit{answering\_the\_question\_stupidly}}) \ \& \text{STUPID}(e, C_{\textit{grown-up\_males}})]$$

Syntactically, and parallel to the case of noun modification, those elements that play a role in choosing the correct specification for the domain parameter must be in the scope of the element requiring such a parameter. Thus, for the interpretation of (5) discussed here, the syntactic scope that *geschickt* has over *dumm* has a direct consequence on the correct interpretation of the sentence.

## 4 Conclusion

This paper discussed the phenomenon of scope-taking manner adverbs with the help of a detailed analysis of the behaviour of *geschickt*. I have shown that the adjective *geschickt* not only is context sensitive like e.g. *tall*, but is also domain sensitive. Nevertheless, *geschickt* can be analyzed as an intersective adjective, where the context and domain sensitivity are handled by two different free parameters in the lexical entry for *geschickt*. This context and domain sensitivity is carried over to the adverbial usage of *geschickt*. The scope phenomena exhibited by

sentences containing a second manner adverb in the syntactic scope of *geschickt* is explained by the influence this latter adverb has on the specification of the domain parameter of *geschickt*.

What remains an open question is whether the general ability to take scope over another manner adverb is linked to agent orientedness in any way. Thus, it was noted that *laut* ‘loudly’ is an adverb which does not in this way interact with manner adverbs in its syntactic scope, and *loudly* is also, just as *dumm*, not an agent oriented adverb. At the moment, however, I do not see what agent orientedness has to do with domain sensitivity, and have therefore not attempted to seek a solution in this direction. In fact, the agent orientedness as such is not even formalized in the representations used in this paper.

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