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# An Experimental Investigation of Agent Prototypicality and Agent Prominence in German

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## 1 Introduction

Agenticity is a central category in human language and cognition and it has sparked an enduring debate about the adequate definition and empirical adequacy of the agent notion in sentence interpretation (e.g., Levin & Rappaport Hovav, 2005; Van Valin & LaPolla, 1997). On one influential view, the agent is conceived of as a prototype category that is decomposed into different semantic role features (e.g., Dowty, 1991; Lakoff, 1977). In this paper, we will focus on Dowty's work (1991) as one proponent of agent prototypicality. The appeal of Dowty's approach is that it explains different degrees of agenticity by feature interaction. Dowty's central type of feature interaction yielding an agenticity cline is the summing-up of features from a pre-defined list of agentive features of equal rank. The prototypical agent accumulates the highest number of agentive features from the list and is assumed to be the preferred candidate for subject selection (Dowty, 1991: 576) and for agent demotion in impersonal passives (Primus, 2011: 97). Another type of feature interaction only marginally discussed by Dowty (1991) is feature prioritisation. Of particular concern is Dowty's idea that feature prioritisation may depend on particular verb classes. Summing up features of equal rank independently from the verb class or construction at hand is compatible with the prototype view, yet construction or verb class dependent feature prioritisation is at odds with it. As far as we know, nobody claims that volitional agents, for instance, are prototypical agents in one construction and more peripheral members of the same cluster concept in another construction. Our claim is that construction or verb class dependent feature prioritisation is better explained by the notion of agent prominence as introduced by Himmelmann & Primus (2015). Given that much of the debate on agenticity has been based on introspective judgements, we provide first empirical data on the issue of agent prototypicality versus agent prominence in German. We present two acceptability-rating experiments testing three different constructions: active, personal passive and DO-clefts involving the same type of transitive verbs that differ with respect to the agentive features they select.

The outline of the paper is as follows. In Section 2 we present the relevant aspects of Dowty's (1991) approach to agent prototypicality and contrast it with the concept of agent prominence (Himmelmann & Primus, 2015) in Section 3. From these two lines of research we extrapolate the general predictions for our experimental investigation. More specific predictions for DO-clefts and personal passives are formulated in Section 4. The experimental study for DO-clefts is presented in Section 5, that for personal passives in Section 6. The final two sections offer a general discussion and a brief conclusion.

## 2 Agent prototypicality

Dowty defines two superordinate proto-roles, proto-agent and proto-patient, by bundles of entailments generated by the verb's meaning with respect to one of its arguments. The agent proto-role is characterised by the following five entailments (alternatively features) on the part of the subject participant (1991: 572): the participant (i) does a volitional act, (ii) is sen-

tient of or perceives another participant, (iii) causes an event or change of state in another participant, (iv) is moving autonomously, and (v) exists independently of the event named by the predicate. We will leave this last feature aside in our paper, since nothing hinges on its presence or absence in our experimental studies. Even Dowty (1991) is hesitant about the inclusion of (v) as a role semantic property. Although most verbs select more than one proto-agent feature for their subject argument, each of these features may occur in isolation.

The proto-agent features are not defined by Dowty, but some of his comments help to identify and test the three features under study: volition, movement, and sentience. As to volition, the following comment about the subjects (*x*) of *murder*, *nominate* and *interrogate* clarifies the way he intends to use this concept: “*x* does a volitional act, [...] *x* moreover intends this to be the kind of act named by the verb” (1991: 552). Movement needs further qualifications, as suggested by Dowty himself. It is a proto-agent property only when it is not caused by another participant in the event named by the verb. This means that if a participant moves autonomously using its own source of energy this entailment falls under proto-agent. If movement is caused by another participant, it is a proto-patient property (e.g., *John threw the ball*). Therefore Dowty assumes that causation has priority over movement for distinguishing agents from patients (1991: 574). Movement is attributed by Dowty to any form of activity of the participant in question, also for the subtle activity entailed by *look at* (1991: 552). Therefore, we will use the more comprehensive term “motion” in the following. Dowty’s sentience notion subsumes perception (e.g., *see*), emotion (e.g., *be disappointed*, *fear*) and cognition (e.g., *know*) as manifest from his examples for sentience in isolation (1991: 573): *John knows/believes/is disappointed at the statement, John sees/fears Mary*.

In order to be able to clearly identify and accumulate agentive features, we focused on German transitive verbs entailing volition, autonomous motion and/or sentience in different combinations for the subject argument and – to minimise intervening patient effects – a uniform low number of patient entailments for the object argument. The three above-mentioned agentive features can be congenially tested for accumulation with minimal variation with respect to patient features (see Section 6.2 below for differences in affectedness).

The first type of verbs we used in our studies includes *betrachten*, *anschauen* ‘look at’ and *beobachten* ‘watch’ and entails volition, autonomous motion, and sentience (cf. Dowty, 1991: 552). This analysis is in line with that provided by other approaches (e.g., Dowty, 1979; Fillmore, 1968; Rogers, 1974; Rothmayr, 2009; Viberg, 2001). Example (1) illustrates this verb class:

- (1) *Manche schauten die Mondlandung an.*  
some looked the landing-on-the-moon at  
'Some looked at the moon landing.'

The non-volitional experiencer verbs illustrated in (2) – (4) select only sentience (or perception) for their subject argument according to Dowty (1991: 573). However, other approaches suggest to further differentiate Dowty’s class of sentience verbs into perception (see (2)), emotion (see (3)) and cognition verbs (see (4)) (cf. Lehmann et al., 2004; Van Valin, 1999; Viberg, 2001). We take these distinctions into consideration because perception and emotion verbs are assumed to be acceptable in the passive in German while cognition verbs are claimed to be barred from this construction, an assumption that we will further discuss in Section 4 below.

- (2) *Einige sahen den Sturmschaden.*  
some saw the storm-loss  
'Some saw the storm loss.'
- (3) *Mehrere hassten die Steuererhöhung.*  
many hated the tax-increase  
'Many hated the tax increase.'

- (4) *Mehrere kannten die Impfvorschrift.*  
 many knew the vaccination-rule  
 ‘Many knew the vaccination rule.’

Finally, the fifth verb type in our studies – illustrated in (5) by *aufweisen* ‘exhibit’ – does not entail any of the agentive features under discussion. This type of verbs denotes the ascription of an attribute or function to the subject participant (cf. Halliday, 1968).

- (5) *Einige wiesen den Grippevirus auf.*  
 some exhibited the influenza-virus PARTICLE  
 ‘Some exhibited the influenza virus.’

In Dowty’s (1991) framework, feature accumulation is the key factor for ranking agentive roles along a prototypicality cline. The prototype accumulates the highest number of agentive features and is assumed to be the preferred candidate for subject selection (Dowty 1991: 576):

In predicates with grammatical subject and object, the argument for which the predicate entails the greatest number of proto-agent properties will be lexicalized as the subject of the predicate.

For the verb classes under study, the role of the subject argument of *anschauen* ‘look at’ is closer to the agent prototype (volition, sentience and motion) than the role of the subject argument (experiencer) of *sehen* ‘see’, *hassen* ‘hate’ and *kennen* ‘know’ (sentience alone), which in turn is closer to the prototype than the role of the subject argument of *aufweisen* ‘exhibit’ (none of the proto-agent features under discussion).

Dowty (1991) is not concerned with acceptability judgements but we can extrapolate the following prediction for our experiments from his prototype treatment of agentivity:

- (6) PROTO: Proto-agent features of equal rank are summed up and arguments with a greater number of proto-agent features are rated as more acceptable across different constructions compared to those with a smaller number of proto-agent features.

More precisely, PROTO leads us to expect that items with volitional, moving and sentient agents such as selected by *look at* and *watch* will be rated better than items with non-volitional experiencers (*sehen* ‘see’, *hassen* ‘hate’ and *kennen* ‘know’) across the constructions under investigation. And items with non-volitional experiencers are expected to be more acceptable than items including verbs that only ascribe a property or function to the subject such as *aufweisen* ‘exhibit’. The expected acceptability cline and the feature analysis for the different verb classes presented above are summarised in (7):

- |                     |           |                   |         |   |
|---------------------|-----------|-------------------|---------|---|
| (7) PROTO           | WATCH >   | SEE, HATE, KNOW > | EXHIBIT |   |
| in our experiments: | volition  |                   |         |   |
|                     | motion    |                   |         |   |
|                     | sentience | sentience         |         | ø |

In (7) and subsequently, the capitalised verbs entailing the features under discussion represent the different verb classes under investigation and “>” means ‘is more acceptable / rated better than’.

### 3 Agent prominence

Despite its applicability to a considerable number of agentivity effects, Dowty’s proposal to accumulate features of equal rank is not uncontested in the literature. For example, Koenig & Davis (2001) claim for English that causation takes priority over all other agentive entailments for subject selection in the active voice. In contrast, (entailed or inferred) volition is assumed to be the only agentive property that is sufficient for nominative subject selection in the active voice of German (Primus, 2012). This cross-linguistic divergence apparently challenges a uniform accumulation account. It is, however, compatible with an alternative view

positing that agent prominence and, especially, feature prioritisation account for agentivity effects in sentence interpretation.

Dowty himself considers feature prioritisation. For example, he mentions in passing that “causation has priority over movement for distinguishing agents from patients” (1991: 574), as already described above. An agent moves autonomously using its own source of energy but if movement is caused by another participant, it is a patient property. However, this prioritisation is fixed: it is meant to hold for all constructions and languages since it distinguishes and thus defines proto-agent vs. proto-patient.

Of particular concern for us is Dowty’s more elaborated idea that feature prioritisation may depend on particular verb classes (1991: 596). Dowty uses feature prioritisation to explain object selection for a particular verb class including *smack*, *wallop* and *clobber*: *John swat the boy with the stick / \*the stick at/against the boy*. What needs to be explained is that although the instrument (e.g., *the stick*) has the proto-patient property of caused motion it cannot be selected as a direct object with this type of verbs. By contrast, verbs like *hit* allow its selection as a direct object: *John hit the stick against the fence / the fence with the stick*. According to Dowty (1991: 596), non-alternating verbs “imply a pain-inflicting or punishing action.”

[...] they do [...] typically effect at least a certain mental state in the victim and producing this effect is typically the motivation for the agent’s performing the action; it is of more concern than the movement in the Instrument argument per se.

Dowty (1991: 597) assumes:

[...] the characteristic significance of change-of-state entailments in the context of the verb’s overall meaning in part determines how it is counted (or weighted). Only the more important change entailments count toward the Proto-Patient entailments of the argument in question, as they are added to other patient entailments to determine the allowable syntactic configuration(s).

If these change entailments are equally weighted the verb may alternate, as *hit* does. The relevant point for us is that some features may have priority over others or, alternatively in cognitive terms, some features may be of more concern than others for some but not all types of verbs.

The problem is that verb class dependent feature prioritisation is at odds with a prototype view on semantic roles. Returning to proto-agent features, as far as we know, nobody claims that volition, for instance, counts as a proto-agent entailment in one verb class thereby making its agent more prototypical, while it does not count in another verb class, where volitional agents would lose their prototype status. This problem is aggravated if construction dependent prioritisation occurs within the same verb class. Our claim is that construction dependent feature prioritisation is better explained by the notion of agent prominence as introduced by Himmelmann & Primus (2015).

The core assumption of the prominence view is that some features are selected as being prominent in a given linguistic construction and thereby take priority over others and that this selection depends on the choice of construction and language. On this account, agentivity effects may not only exhibit cross-linguistic differences, but also different manifestations for one and the same verb used in different constructions in the same language. This proposal is embedded in a more comprehensive approach to prominence in language ([sfb1252.uni-koeln.de](http://sfb1252.uni-koeln.de)). Himmelmann & Primus (2015) have identified three criteria for linguistic prominence. First, linguistic structures at different levels are organised in such a way that some units ‘stand out’ among other units of the same type. In our case, among different agentive features one stands out relative to the others. Second, one unit serves as a licensor (“structural attractor” in a wide sense in Himmelmann & Primus, 2015). In the case at hand, one agentive feature may serve as licensor for an argument alternation such as active vs. passive. And third, what is standing out may shift during the running discourse. Thus, for example, an agentive

feature that is prominent in the passive voice may not be relevant in the active voice, since argument structure alternations are one means to adapt sentence structures to the changing attentional focus of the interlocutors in the running discourse (cf. Bresnan et al., 2001). It is particularly this changing highlighting that sets prominence asymmetries apart from other asymmetries such as markedness and prototypicality. This opens a new promising way of connecting the role prominence effects we have observed for a construction to its main discourse function, as we will show in Section 7 of this paper. The core idea of a prominence approach to agentivity is formulated in (8):

- (8) PROMINENCE: In different constructions different agentive features may be prioritised leading to a changing highlighting of agentive features.

Following this lead, the present paper aims to address the question whether agent prominence and feature prioritisation can provide a more adequate account for agentivity effects as compared with a prototype approach and feature accumulation. In order to test the two approaches we have conducted two acceptability-rating experiments in German using an identical set of transitive verbs with similar co-constituents in different constructions: DO-clefts and personal passives in relation to corresponding actives. In addition, the verb types selected in these constructions allow us to test different agentivity features and their interaction, as mentioned above.

The two approaches outlined above make different predictions. Thus, while the acceptability cline stated in (7) is expected to remain identical for all constructions as extrapolated from Dowty's prototypicality account in (6), (8) results in possibly distinct predictions for each construction investigated in our study.

In the following, we will introduce these more specific predictions for DO-clefts and personal passives in German, each of them extracted from the research literature about the construction under discussion. These constructions were chosen as they are claimed to have agentivity-related restrictions in previous research.

#### 4 Agentivity-related preferences in DO-clefts and personal passives

*Wh*-cleft constructions using *tun* 'do', as illustrated in (9), are a well-established test for agentivity.

- (9) *Was die Schaulustige tat, war die Mondlandung anzuschauen.*  
what the spectator did was the landing-on-the-moon to-look-at  
'What the spectator did was look at the moon landing.'

As repeatedly shown in the pertinent literature (e.g., Cruse, 1973; Halliday, 1968; Jackendoff, 1993, 2007; Lakoff, 1966), the use of DO-clefts is not limited to volitional agents in English. For instance, Cruse's early feature-based approach does not address the issue of feature interaction and suggests that any agentive feature suffices to license the construction. Unfortunately, sentience is neglected in previous research on DO-clefts with the exception of Jackendoff. He uses the test to differentiate the two superordinate roles actor vs. undergoer without being explicit about the type of actor that is acceptable in this sentence frame. Jackendoff only bans verbs lacking the actor role from the construction (2007: 198, 204), e.g., \**what the ball did was be in the corner*, \**what Bill did was own a VW* and \**what I did was see the tree*. Since all non-volitional sentience verbs including perception, emotion and cognition verbs lack an actor in his view, we can extrapolate the prediction summarised in (10) for our DO-cleft test in German:

- (10) DO-cleft-Actor (Jackendoff, 2007)  
WATCH > SEE, HATE, KNOW, EXHIBIT  
Actor Non-Actor (e.g. experiencer)

By contrast, Dowty's (1991) prototype approach and a feature accumulation procedure lead to the more fine-grained prediction given in (7) above for all constructions under investigation, including DO-clefts. (7) is repeated here for convenience in (11):

- (11) PROTO: WATCH > SEE, HATE, KNOW > EXHIBIT  
                  volition  
                  motion  
                  sentience     sentience                       ø

The differences in the predictions (10) and (11) can be explained by two relevant aspects that distinguish Jackendoff's (1993, 2007) approach from that of Dowty (1991). First, all non-volitional sentience verbs lack an actor in Jackendoff's view. By contrast, for Dowty, this type of verbs entails the proto-agent property of sentience. Second, by explicitly adopting prototype theory, Dowty is able to capture degrees of agentivity (see Section 2), while Jackendoff's actor notion is indiscriminate in this respect. These two differences explain why the non-volitional sentience verbs occupy an intermediate position between the volitional perception verbs (WATCH) and the ascription verbs (EXHIBIT) in (11) but not in (10).

Now let us turn to personal passives. This pattern is illustrated in (12):

- (12) *Die Mondlandung wurde angeschaut.*  
      the landing-on-the-moon AUX PASS                       looked-at  
      'The moon landing was looked at.'

If personal passives are sensitive to agent prototypicality (e.g., Eisenberg, 2013: 121ff.; Primus, 1999: 219; Zifonun et al., 1997: 1796f.) and if Dowty's proto-agent entailments are sufficient, we expect the acceptability cline shown in (7), repeated in (11) above. Zifonun et al. (1997: 1796f.) go one step further and use a semantic transitivity prototype combining agent prototypicality with patient prototypicality, notably affectedness, as a facilitating factor for personal passives in German.

A different view is defended by Rapp (1997: 144). She only bans cognition verbs (i.e., KNOW in our experiments) from passivisation, suggesting that WATCH, SEE and HATE are equally acceptable in personal passives. From her analysis we extrapolate the following prediction for the verbs under investigation:

- (13) Personal passive in German (Rapp, 1997: 144)  
      WATCH, SEE, HATE > KNOW

Hence, Rapp (1997) assumes that volition does not play a role in personal passives in German. This would lead to a neutralisation of the distinction between volitional and non-volitional verbs in personal passives, as stated in (13). The proposal in (13) introduces a distinction between emotion and perception verbs on the one hand, and cognition verbs on the other that is not covered by Dowty's sentience notion, as explained in Section 2 above. These are the two differences between the cline in PROTO in (7) = (11) and that in (13).

In summary, while a prototype approach making use of feature accumulation predicts identical acceptability clines across the constructions under study (see (7) = (11)), the prominence approach predicts varying acceptability clines due to construction-dependent differential feature prioritisation. Previous research of the constructions under investigation indicates the plausibility of the latter assumption but needs empirical substantiation by a comparative analysis of the different constructions. Previous analyses proposed for DO-clefts and personal passives have been developed on the basis of introspective judgments that have so far not been tested against quantitative data (see Sprouse et al. (2013) for an attempt to integrate introspection with quantitative data). The two experiments to be presented in the following sections are meant to fill this gap.

## 5 Experiment 1: DO-cleft

In Section 4 we extrapolated two agentivity-related predictions for DO-clefts from previous research. Jackendoff's (2007) claim that only actors are acceptable in this construction yielded the acceptability cline WATCH > SEE, HATE, KNOW, EXHIBIT for our experiment (see DO-cleft-Actor in (10) above). Dowty's feature system and an accumulation procedure leads us to expect the more differentiated cline WATCH > SEE, HATE, KNOW > EXHIBIT (see PROTO in (7) = (11) above).

### 5.1 Methods

#### 5.1.1 Participants

60 students (54 females; mean age: 22 years, range: 16-35 years) from the University of Cologne participated in this rating study voluntarily for course credit. Participants were monolingual native speakers of German. Three further bilingual participants were excluded from analysis.

#### 5.1.2 Materials

For each of the five verb classes, we identified six transitive verbs with uniform semantic and syntactic behaviour such that each verb class entailed a different set of agentive features, as discussed for (1) – (5) above (see Table 1).

**Table 1.** Verb classes with agentive features and verb lexemes for each verb class under study

WATCH [volition, sentience motion]	SEE [sentience]	HATE [sentience]	KNOW [sentience]	EXHIBIT [Ø]
<i>beobachten</i> 'watch'	<i>sehen</i> 'see'	<i>hassen</i> 'hate'	<i>beherrschen</i> 'know completely'	<i>aufweisen</i> 'exhibit'
<i>anschauen</i> 'look at'	<i> hören</i> 'hear'	<i>lieben</i> 'love'	<i>erahnen</i> 'have a conjecture'	<i>haben</i> 'have'
<i>betrachten</i> 'look at'	<i>riechen</i> 'smell'	<i>mögen</i> 'like'	<i>fürchten</i> 'fear'	<i>dabeihaben</i> 'have sth. with one'
<i>betasten</i> 'feel (by touching)'	<i>spüren</i> 'sense'	<i>verabscheuen</i>	<i>glauben</i> 'believe'	<i>dahaben</i> 'have sth. with one'
<i>beschnuppern</i> 'sniff at'	<i>perceive</i>	<i>'detest'</i>	<i>kennen</i> 'know'	<i>haben</i> 'have here/there'
<i>verfolgen</i> 'follow (with the senses)'	<i>wahrnehmen</i>	<i>verachten</i>	<i>vermuten</i> 'suppose'	<i>bekleiden</i> 'hold/be in a position'
	<i>'perceive'</i>	<i>'despise'</i>	<i>wissen</i> 'know'	<i>innehaben</i> 'hold, occupy (a function)'

The proto-agent features of the verb lexemes were checked by six independent raters (naïve with respect to our research question) with a logical contradiction test assuming that negating the feature in a complex sentence involving one of the critical verbs should yield an unacceptable semantic contradiction. For sentience in cognition verbs, for example, we used: *Er kannte die Impfvorschrift, aber hatte keine Vorstellung davon* 'He knew the vaccination rule, but had no idea of it'. For volition we used: *Sie schauten die Mondlandung an und zwar unabsichtlich* 'They looked at the landing on the moon, unintentionally.' Verbs were chosen for our study only when the six raters agreed on the felicity of the verb in these pretests.

For item construction, the nominative subject of the WH-clause, e.g., the agent or experiencer, was human, singular and definite. The theme<sup>1</sup> argument was always inanimate, singular, definite and always the accusative object of the infinitival clause. Both arguments were chosen such that they would be plausible arguments of the verb (as judged by six independent raters). Note that even though some of the critical verbs are lexically ambiguous, e.g., *be-*

<sup>1</sup> For convenience, we call the second semantic role of the verbs under investigation theme.

*herrschen* ‘rule over, dominate’ vs. ‘know something completely’, the theme lexeme resolved the ambiguity in our test items, because it always preceded the verb and was chosen according to the intended reading. Also, some of the cognition verbs preferably select a clausal argument, e.g., *sie weiß, dass ...* ‘she knows that ...’ and other verbs an NP complement, e.g., *sie kennt die Antwort* ‘she knows the answer’. Here, we always used a nominal argument in order to keep sentence structures uniform and because the theme argument would have to surface as the subject in the personal passives in Experiment 2. The verb lexemes within a verb class as well as the theme lexemes are identical in the two experiments. Table 2 illustrates an example set of items per condition (including negative control items) as used in Experiment 1:

**Table 2.** Example test items in Experiment 1

Verb class	German example test items and English translation
WATCH	<i>Was die Schaulustige tat, war die Mondlandung anzuschauen.</i> ‘What the spectator did was look at the landing on the moon.’
SEE	<i>Was die Gutachterin tat, war den Sturmschaden zu sehen.</i> ‘What the insurance inspector did was see the storm loss.’
HATE	<i>Was die Steuerzahlerin tat, war die Steuererhöhung zu hassen.</i> ‘What the tax payer did was hate the tax increase.’
KNOW	<i>Was der Tropenarzt tat, war die Impfvorschrift zu kennen.</i> ‘What the tropical doctor did was know the vaccination rule.’
EXHIBIT	<i>Was der Kranke tat, war den Grippevirus aufzuweisen.</i> ‘What the sick person did was exhibit the influenza virus.’
NEGATIVE	<i>Was der Schüler tat, war benotet zu werden.</i>
CONTROL	‘What the pupil did was be graded.’

The critical sentences were constructed following a one-factorial design with five levels for the factor verb class (WATCH vs. SEE vs. HATE vs. KNOW vs. EXHIBIT). For each individual verb lexeme we constructed ten different sentences by varying the lexemes for the two NP co-constituents, resulting in 60 lexically different items per verb class condition. This resulted in a total of 300 critical sentences. In addition, we constructed six ungrammatical negative control sentences with DO-clefts in which the subject in the cleft clause was the patient argument of the following infinitival passive clause (see Table 2 for an example). Since the DO-cleft is ruled out for passive subjects in German, these filler sentences should be completely unacceptable. The full list of items can be found in Appendix B.

In order to assess possible frequency differences in our test items (see, e.g., Crocker & Brants (2000); Jurafsky (1996); MacDonald et al. (1994), for the role of frequency in language processing), we investigated whether frequency of occurrence for the verb lexemes (30 tokens), the NPs used as agentive argument and the NPs used as theme argument (300 tokens each) differed as a function of the five verb classes under study. Raw frequencies for each verb and NP token were automatically retrieved from a German news corpus from 2012 (including one million sentences) that is part of the project [wortschatz.uni-leipzig.de](http://wortschatz.uni-leipzig.de) (Goldhahn, Eckart & Quasthoff, 2012) and that was the most recent version at the time of item construction. The script for frequency retrieval is freely available at: <https://github.com/tgraf0/wortschatzR>. Raw frequencies were log-transformed prior to analysis. Note that because several tokens had a zero frequency in the corpus, we added 1 to all frequency counts before log-transformation. Next, we fitted separate linear regression models with verb class as predictor for the frequency distribution, using the lme4 package for R (Bates et al., 2014). Verb class entered the models with contrast sum coding to investigate it as a main effect rather than as a simple effect. In what follows, we report Type-II F-tests for significance of the main effect of verb class. In case of a significant main effect, we indicate significant individual contrasts by reporting *t*-values (with  $|t| > 2$  corresponding to  $p < .05$ ; cf. Baayen et al., 2008). Importantly, there was no significant effect of verb class on the frequency of verb lexemes ( $F(4,25) = 1.0868, p >$

.38). In other words, lexical frequency of the verb lexemes selected here did not differ between the five verb classes under study. Therefore, frequency is highly unlikely to be the sole explaining variable for the acceptability clines of the different verb classes reported below for DO-clefts (Section 5.1.4) and personal passives (Section 6.1.4).

Turning to the frequency of the NP co-constituents, the subject lexemes in DO-clefts showed a significant effect of verb class ( $F(4,295) = 3.4727, p < .01$ ), because the NP lexemes in the EXHIBIT class ( $t > 2.5$ ) and in the SEE class ( $t > 2$ ) were more frequent than the NP lexemes in the remaining verb classes. As for theme lexemes, the effect of verb class approached significance ( $F(4,295) = 1.9658, p > .099$ ), because the NP lexemes in the HATE class were most frequent overall ( $t > 2.6$ ). These frequency differences for the two NP positions are at odds with the acceptability ratings to be reported below for DO-cleft (Section 5.1.4), active and personal passive (Section 6.1.4).

### 5.1.3 Procedure and analysis

The critical sentences were distributed across ten experimental lists following a Latin Square design so that each participant saw one sentence for each verb lexeme, six lexically different sentences for each verb class, and no sentence more than once within a list. Hence, items were allocated in a fully balanced way (i.e., without lexical repetitions) so that the occurrence of verb lexemes in specific lexicalisations was not predictable for our participants. Each list contained 30 critical sentences and six ungrammatical negative control items (identical across lists), which is well below the recommendation of 100 items per list in order to minimise effects of fatigue or strategic responses (Sprouse et al., 2013). Negative control items and DO-clefts with WATCH verbs should in principle allow participants to use the end points of the rating scale to an equal extent. Each list was pseudorandomized for presentation. Note that we did not use distractor fillers in this experiment because DO-clefts are salient compared with other constructions (e.g., declaratives in active voice), and laymen may then confuse it with DO-insertion (*er tut immer morgens malen* ‘he always paints in the morning’) that is normatively marked in written Standard German (e.g., Brinckmann & Bubenhofer, 2012). This may have artificially lowered ratings for DO-clefts. If, by contrast, participants know they rate different lexicalisations of the same construction, we can ensure that what the questionnaire measures is in fact related to the critical verb classes occurring in DO-clefts. This logic follows a similar approach that used salient constructions without additional non-salient distractors (Sprouse et al., 2013).

Using a paper-and-pencil questionnaire, we randomly assigned each participant to one of the experimental lists and asked them to rate sentences on a six-point Likert scale ranging from very acceptable to very unacceptable (see Figure 1 for details). For categorical ratings, non-binary scales have recently been advocated as they do not tend to skew responses towards the positive end point of the scale, even though results from different scales are still comparable to one another (cf. Häussler & Juzek, 2017; Weskott & Fanselow, 2011). Moreover, between five to seven levels are advocated for non-binary scales in psychometrics (Döring & Bortz, 2016). We chose an even number of rating categories to force participants to at least indicate a tendency in their rating, and did not provide an additional category for indifferent (“I don’t know”) answers. This avoids the problem of too many indifferent responses and the ambivalent midpoint of scales with uneven levels (see Döring & Bortz (2016) for extended discussion).

As can be seen in Figure 1 below, we instructed participants to use the end points of the rating scale as a starting point to determine their response for each individual sentence (as is common for Likert scales; Döring & Bortz, 2016). For participants, rating categories were indicated with letters with neutral value (A-F) to facilitate easy responses, because numbers may have led to confusion with German numerical school grades (ranging from 1 to 6). In addition, emoticons helped participants to determine the degree of (un)acceptability.

Original task instructions in German

*Lesen Sie sich nun bitte die Anweisungen auf dieser Seite genau durch und beginnen Sie dann mit dem Ausfüllen des Fragebogens:*

*Im Folgenden lesen Sie jeweils einen Satz. Bitte bewerten Sie diesen bezüglich seiner sprachlichen Akzeptabilität.*

*Orthographie und Zeichensetzung spielen dabei keine Rolle.*

*Die Bewertung erfolgt auf einer Skala von A-F, wobei Sie sich an den folgenden Endpunkten orientieren.*

- Sätze, die nur Formulierungen enthalten, die Sie für vollständig akzeptabel halten, erhalten die Bewertung 'A'.*
- Sätze, die Formulierungen enthalten, die Sie für vollständig inakzeptabel halten, bewerten Sie mit 'F'.*

A ☺☺☺	B ☺☺	C ☺	D ☺	E ☺☺	F ☺☺☺☺
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*Die Smileys helfen Ihnen bei der Orientierung.*

*Bitte kreuzen Sie nur einen Wert an und benutzen Sie nur die vorgegebenen Werte (kreuzen Sie z.B. nicht die Linien an, wenn Sie einen Wert zwischen A und B markieren wollen).*

**Wichtig: Bitte urteilen Sie nach Ihrem Sprachgefühl. Es gibt kein Richtig oder Falsch!**

English translation of the task instructions

Please read carefully the instructions on this page, before you begin to answer the questionnaire.

In the following, you will read single sentences and rate them with regard to their linguistic acceptability.

Orthography and punctuation do not matter for the task.

The rating is based upon a scale ranging from A to F and you should take the end points as a starting point for determining your judgement.

- Sentences that only contain phrases you consider completely acceptable are rated with "A".
- Sentences that contain phrases you consider completely unacceptable are rated with "F".

A ☺☺☺	B ☺☺	C ☺	D ☺	E ☺☺	F ☺☺☺☺
-------	------	-----	-----	------	--------

Emoticons serve to help you determining your judgement.

Please only give one rating (per sentence) and only use the categories provided (e.g. do not mark lines with a cross if you want to rate a category between A and B).

**Important: Please provide ratings based on your speaker intuition. There is no right or wrong!**

**Figure 1.** Task instructions as given in the questionnaire

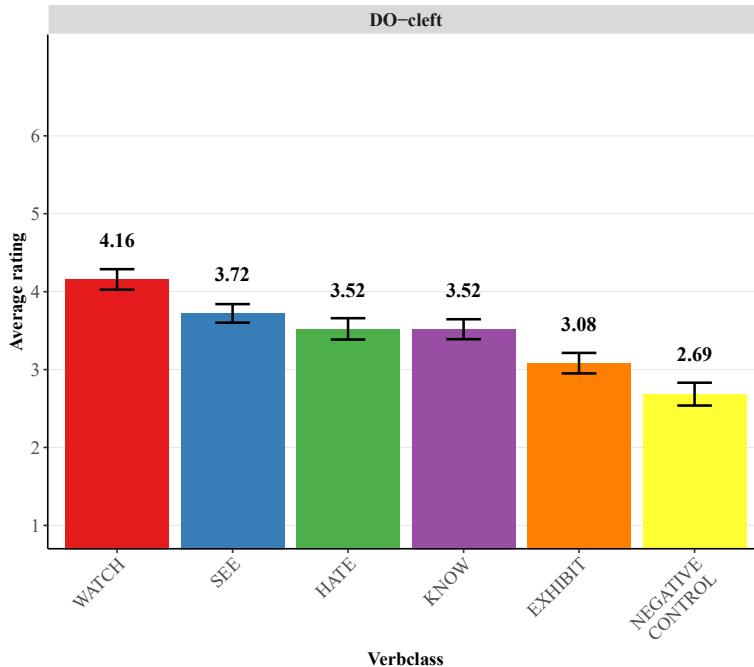
Prior to analysis, we excluded missing values and responses that could not be unambiguously assigned to one of the six rating categories (0.14 % of all responses). For statistical analysis, we recoded the valid responses categories so that A ('very acceptable') corresponded to 6 and F ('very unacceptable') to 1.

We fitted a multi-level cumulative logit regression model (for details see Agresti, 2002; Bürkner & Vuorre, 2018) to account for the ordinal scale of our response variable and to avoid inflated Type I and Type II errors and distorted estimates of effect size (for a recent discussion see Liddell & Kruschke, 2017). The analysis was performed in R (Version 3.4.1, R Development Core Team, 2017) with the package ordinal (Christensen, 2015). We fitted a maximum model with verb class as fixed effect, participants and items as crossed random intercepts and by-participants random slope for verb class (see Barr et al., 2013). As we assumed that verb classes should be ordinally ranked for agentivity, the verb class factor was used with forward-difference coding, which compares the mean rating for one level of the verb class factor with the mean rating of the immediate next level. Forward-difference coding is suitable for ordinal variables, and we implemented it so as to test pairwise contrasts from the most agentive to the least agentive verb class as follows: WATCH vs. SEE, SEE vs. HATE, HATE vs. KNOW, KNOW vs. EXHIBIT. A great advantage of this coding scheme is that we can investigate the hypothesised acceptability clines (see PROTO in (7) = (11) and DO-cleft-Actor in (10) in Section 4) in one and the same statistical model. Depending on where the pairwise contrasts reveal significant differences, the statistical model can provide evidence for or against one of the hypothesised clines and renders it unnecessary to run further models for pairwise comparisons. This avoids multiple testing for pairwise contrasts (with the associated increase of false positives).

### 5.1.4 Results

The mean acceptability ratings are given in Figure 2, and model results in Table 3. WATCH verbs were rated higher than SEE verbs (mean difference: 0.5,  $\beta = 1.02$ ), which in turn were

numerically higher than HATE verbs (mean difference: 0.2,  $\beta = 0.32$ ). HATE and KNOW did not differ from each other, whereas KNOW received higher ratings than EXHIBIT (mean difference: 0.4,  $\beta = 0.93$ ). Only the contrasts between WATCH and SEE on the one hand and between KNOW and EXHIBIT on the other yielded significant differences ( $zs > 2$ ,  $ps < .05$ ). Non-volitional sentience verbs, by contrast, did not differ from one another.



**Figure 2.** Mean acceptability ratings for DO-clefts

**Table 3.** Parameter estimates for the fixed effect and the threshold coefficients of the regression model in Experiment 1

Fixed effect	Estimate	Standard error	z-value	p-value
Diff1: WATCH vs. SEE	1.024	0.225	4.545	< .001
Diff2: SEE vs. HATE	0.326	0.172	1.894	< .06
Diff3: HATE vs. KNOW	0.027	0.173	0.160	.873
Diff4: KNOW vs. EXHIBIT	0.938	0.180	5.186	< .001

Threshold coefficients				
Threshold	Estimate	Standard error	z-value	
1 2	-3.952	0.247	-15.962	
2 3	-2.150	0.226	-9.485	
3 4	-0.343	0.220	-1.560	
4 5	1.569	0.224	6.988	
5 6	3.734	0.249	14.941	

Abbreviations. Diff1 through Diff4: contrasts between the verb classes as defined via forward difference coding.

## 5.2 Discussion

Experiment 1 revealed that the tested verbs in DO-clefts yield the following acceptability cline:

- (14) Acceptability cline for verb classes in the DO-cleft construction in Experiment 1  
 WATCH > SEE, HATE, KNOW > EXHIBIT

This result challenges the prediction we have extrapolated from Jackendoff's (2007) assumptions that only actors are acceptable in this construction and that non-volitional sentience verbs do not select an actor. Recall DO-cleft-Actor in (10) above: WATCH > SEE, HATE,

KNOW, EXHIBIT. Our results seem to support the prediction PROTO in (7) = (11) above that we extrapolated from Dowty's approach (1991). WATCH with three agentive features according to Dowty (volition, autonomous motion and sentience) is rated higher than verb classes with sentience as the only agentive feature (SEE, HATE, KNOW), which in turn are better than EXHIBIT entailing neither volition nor motion nor sentience (WATCH > SEE, HATE, KNOW > EXHIBIT). This cline is compatible with Dowty's (1991) prototype approach. The relation between prototypicality and feature accumulation can be stated as follows: A more prototypical agent accumulates a greater number of agentive features (i.e., volition, motion and sentience) than a less prototypical agent (sentience only or none of the tested features) and is therefore most privileged in DO-clefts.

These findings are corroborated by a follow-up experiment with intransitive verbs in DO-clefts (Kretzschmar & Brilmayer, in prep.). This experiment tested volitional action verbs such as *arbeiten* 'work' and *tanzen* 'dance' against non-volitional sentience verbs such as *bangen* 'fear' and *trauern* 'mourn', against non-volitional process verbs such as *schwitzen* 'sweat' and *bluten* 'bleed', and finally against non-volitional states such as *glänzen* 'glisten' and *schimmern* 'glimmer'. The statistically significant acceptability cline is WORK (volition, autonomous motion, sentience) > FEAR (sentience only), SWEAT (autonomous motion only) > GLISTEN (none of these features). The subject argument of an intransitive verb is judged better when it accumulates a greater number of proto-agent features compared with a subject argument of an intransitive verb with a smaller number of proto-agent features. This is comparable to what we observed for transitive DO-clefts.

Let us return to transitive DO-clefts. Even if our results are compatible with a prototype approach that sums up all agentivity features entailed by the various types of verb lexemes, they do not suffice as decisive evidence for this kind of approach. Recall that such an approach predicts the same acceptability cline for all constructions under investigation (see (6) and (7) = (11) above). Conclusive evidence can only be provided when results from the other constructions tested in Experiment 2 are also taken into consideration: active and passive sentences with the same verbs and as far as possible with the same accompanying NPs.

Importantly, the results of Experiment 1 are also compatible with the prominence-based approach to agentivity if we assume that volition is prioritised in DO-clefts in German with one of the other agentive features as a sufficient condition. Following this assumption, volitional WATCH is rated higher than verb classes with sentience as the only agentive feature (SEE, HATE, KNOW), which in turn are better than EXHIBIT entailing neither volition nor motion nor sentience. The difference between the prominence-based explanation and the prototype approach is that the former leads us to expect that the other tested constructions, i.e., active and personal passive, either do not prioritise particular features or prioritise other features. Therefore, we have to consult the results of Experiment 2 in order to find out which approach is more adequate.

## 6 Experiment 2: Personal passive vs. active voice

Pertinent literature on German personal passives, notably Rapp (1997: 144), has lead us to extrapolate the prediction (see (13) above) that WATCH, SEE and HATE are equally acceptable in personal passives while KNOW is less acceptable: WATCH, SEE, HATE > KNOW. By contrast, prototype approaches (e.g., Eisenberg, 2013: 121-123; Primus, 1999: 219) prompted us to assume the acceptability cline WATCH > SEE, HATE, KNOW > EXHIBIT (see PROTO in (7) = (11) above) for all constructions, including DO-clefts and passives. Prototype approaches to transitivity, notably Zifonun et al. (1997: 1796f.), additionally assume that affectedness of the proto-patient in conjunction with agent prototypicality is a facilitating condition for personal passives.

## 6.1 Methods

### 6.1.1 Participants

69 students (40 females; mean age: 25 years, range: 18-63 years) from the University of Cologne participated in this rating study for payment (4 € per questionnaire). Participants were monolingual native speakers of German. We excluded 12 further participants for one of the following reasons: participant (1) grew up bilingual, (2) did not provide information on their native language, (3) was not a German native speaker, (4) already participated in a pre-test, or (5) did not complete the questionnaire.

### 6.1.2 Materials

We used the same verb classes, verb lexemes and theme lexemes as in Experiment 1, as described in Section 5.1.2 above. The critical sentences were constructed following a 2 x 5 factorial design with the factors construction (active vs. passive) and verb class (WATCH vs. SEE vs. HATE vs. KNOW vs. EXHIBIT). Table 4 presents an example test item for each of the verb classes in both voices as well as an example for the negative controls.

**Table 4.** Example test items in Experiment 2

Verb class	Voice	German example test items and English translation
WATCH	Active	<i>Dass manche die Mondlandung angeschaut haben, erfreute Max.</i> ‘That some have looked at the moon landing, pleased Max.’
	Passive	<i>Dass die Mondlandung angeschaut wurde, erfreute Max.</i> ‘That the moon landing was looked at, pleased Max.’
SEE	Active	<i>Dass einige den Sturmschaden gesehen haben, ...</i> ‘That some have seen the storm loss, ...’
	Passive	<i>Dass der Sturmschaden gesehen wurde, ...</i> ‘That the storm loss was seen, ...’
HATE	Active	<i>Dass mehrere die Steuererhöhung gehasst haben, ...</i> ‘That many have hated the tax increase, ...’
	Passive	<i>Dass die Steuererhöhung gehasst wurde, ...</i> ‘That the tax increase was hated, ...’
KNOW	Active	<i>Dass mehrere die Impfvorschrift gekannt haben, ...</i> ‘That many have known the vaccination rule, ...’
	Passive	<i>Dass die Impfvorschrift gekannt wurde, ...</i> ‘That the vaccination rule was known ...’
EXHIBIT	Active	<i>Dass einige den Grippevirus aufgewiesen haben, ...</i> ‘That some have exhibited the influenza virus, ...’
	Passive	<i>Dass der Grippevirus aufgewiesen wurde, ...</i> ‘That the influenza virus was exhibited, ...’
NEGATIVE CONTROL	Passive	<i>Dass die Rockmusik gefallen wurde, ...</i> ‘That the rock music was pleased, ...’

There were 60 lexically different items per verb class condition. Active constructions included an indefinite pronoun in subject function (e.g., *einige* ‘some’, *wenige* ‘few’, *mehrere* ‘many’). The corresponding passive constructions were formed with the inanimate definite description as passive subject and passive verb morphology, and the agent *by*-phrase was omitted. There were 600 critical sentences in total. In addition, we constructed 12 ungrammatical negative control sentences, by using dative experiencer verbs in passive, which are completely ruled out in the passive (e.g., Rapp 1997) (see Table 4 for an example). The full list of items can be found in Appendix C.

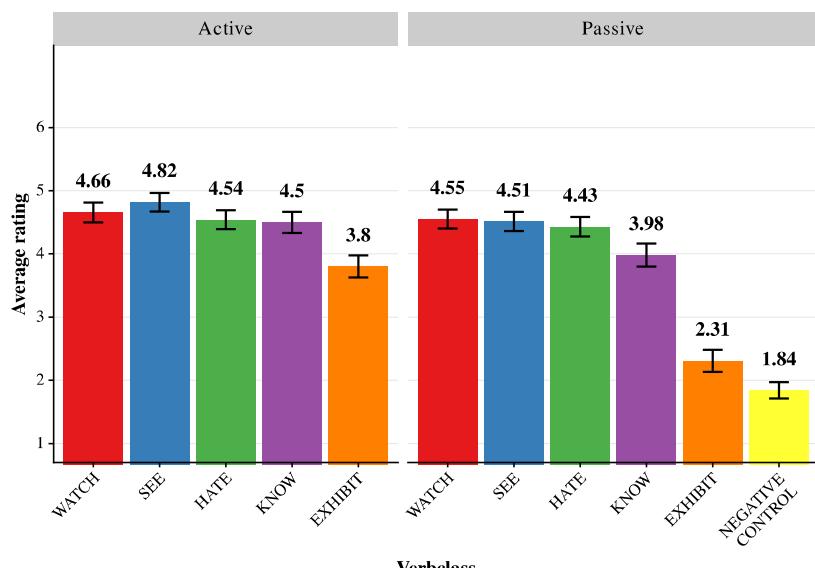
### 6.1.3 Procedure and analysis

The critical sentences were allocated to ten experimental lists following a Latin Square design so that each participant saw one sentence for each verb lexeme and six lexically different sentences for each verb class in active or passive, respectively. Active and passive versions of the same items occurred in different lists. Hence, items were allocated in a fully balanced way so that the occurrence of verb lexemes in specific lexicalisations or in active vs. passive voice was not predictable for our participants. Each list contained 60 critical sentences and twelve ungrammatical negative control items (identical across lists), and was pseudorandomized for presentation. Negative control items and active sentences should in principle allow participants to use the end points of the rating scale to an equal extent.

Questionnaire distribution, instructions to participants and criteria for exclusion of erroneous responses (0.08 % of all responses) were the same as in Experiment 1. Using the analysis approach described for Experiment 1, we fitted a maximum model with the fixed effects construction and verb class and their interaction term and a maximum random effects structure. Both fixed effects were modelled with forward-difference coding. In addition to testing differences between verb classes, the model tests whether the verb-class differences in the passive significantly differ from the ones in the active cline. We did not run further follow-up tests to investigate the active cline in greater detail, as our focus lies on clines in argument alternations such as active vs. passive. We therefore do not have firm results for the active in isolation.

### 6.1.4 Results

The mean acceptability ratings are given in Figure 3, and model results in Table 5. The analysis reveals main effects of construction (active > passive, mean difference: 0.5,  $\beta = 1.14$ ) and of verb class: WATCH = SEE (mean difference: 0,  $\beta = -0.2$ ), SEE > HATE (mean difference: 0.2,  $\beta = 0.57$ ), HATE > KNOW (mean difference: 0.2,  $\beta = 0.41$ ), KNOW > EXHIBIT (mean difference: 1.2,  $\beta = 2.42$ ). Importantly, the interaction between both factors also showed reliable differences between verb classes depending on construction type. Specifically, WATCH, SEE and HATE behave differently in passive than in active: While SEE is rated better than both WATCH and HATE in the active, the three verb classes receive indistinguishable ratings in the passive ( $\beta_s = -0.67, 0.81$ ). This neutralisation in the passive is due to SEE verbs exhibiting the largest drop in ratings, while WATCH and HATE decline modestly. Contrary to this neutralisation, both the difference between HATE and KNOW ( $\beta = -0.86$ ) and the contrast between KNOW and EXHIBIT ( $\beta = -1.85$ ) increase in the passive.



**Figure 3.** Mean acceptability ratings for active and passive voice

**Table 5.** Parameter estimates for the fixed effects and the threshold coefficients of the regression model in Experiment 2

Fixed effect	Estimate	Standard error	z-value	p-value
vDiff: Active vs. Passive	1.138	0.171	6.640	< .001
Diff1: WATCH vs. SEE	-0.200	0.188	-1.061	.288
Diff2: SEE vs. HATE	0.565	0.202	2.786	< .006
Diff3: HATE vs. KNOW	0.408	0.186	2.193	< .029
Diff4: KNOW vs. EXHIBIT	2.420	0.225	10.738	< .001
vDiff x Diff1	-0.669	0.320	-2.088	< .037
vDiff x Diff2	0.810	0.329	2.462	< .014
vDiff x Diff3	-0.860	0.312	-2.755	< .006
vDiff x Diff4	-1.847	0.350	-5.267	< .001

Threshold coefficients				
Threshold	Estimate	Standard error	z-value	
1 2	-4.719	0.239	-19.680	
2 3	-3.188	0.227	-14.040	
3 4	-1.641	0.221	-7.412	
4 5	0.122	0.219	0.556	
5 6	1.968	0.222	8.860	

Abbreviations. vDiff: contrast between active and passive; Diff1 through Diff4: contrasts between the verb classes as defined via forward difference coding.

## 6.2 Discussion

Experiment 2 revealed that the verb classes under investigation yield different acceptability clines in active and passive. In the active voice, we observed the following numerical trends: non-volitional perception verbs (SEE) are rated slightly better than volitional perception verbs (WATCH) on the one hand and emotion verbs (HATE) and cognition verbs (KNOW) on the other, while ascription verbs (EXHIBIT) fall behind all the other verb classes. As explained in Section 6.1.3, we cannot draw a firm conclusion from these numerical trends. However, we can confidently assume that they do not support an agent prototypicality cline and a prototype approach based on feature accumulation. To account for the pattern in the active voice versus the other constructions, a prototype approach would have to assume that volitional, motional and sentient agents, as in the WATCH class, are more prototypical in DO-clefts (see Section 5.2 above), where they are rated best, than in the unmarked active voice, where they did not form an acceptability peak. Alternatively, one may state that the agent prototype is favoured in DO-clefts but not in the unmarked active construction. Evidently, this is not how the agent prototype is conceived of in pertinent research on agent prototypicality. The advantage of a prominence approach, by contrast, is that it ties agent prominence to the running discourse (see Section 3 above). This opens a way of explaining prominence effects or their absence by the presence or absence of a specific discourse function of the construction under investigation, as will be explained in Section 7.

In the passive, volitional verbs, non-volitional perception and non-volitional emotion verbs are rated equally better than non-volitional cognition verbs. The cognition verbs in turn are rated higher than the ascription verbs. This yields the following acceptability cline for personal passives:

- (15) Acceptability cline for verb classes in the personal passive in Experiment 2  
 WATCH, SEE, HATE > KNOW > EXHIBIT

This cline is not explicable by a prototype approach based on the accumulation of proto-agent features either. Recall that this type of approach predicts the cline WATCH > SEE, HATE, KNOW > EXHIBIT (see PROTO in (7) = (11) above) for all constructions, including DO-cleft, passive and active.

Our findings for the passive provide evidence for the claim that WATCH, SEE and HATE cluster against KNOW in personal passives, as extrapolated from Rapp's analysis in prediction (13) above. What is missing in (13) is that the ascription verbs fall behind the cognition verbs, i.e., KNOW > EXHIBIT. This difference cannot be predicted from Rapp's account (1997: 144) as she excludes all statives from personal passives, as will be explained below.

The whole cline we have found in the passive can be adequately explained by semantic role prominence if we take a closer look at the relation between the inchoative use of the verbs under discussion and the affectedness of their theme argument. So let us elaborate this idea in greater detail. As is generally assumed (e.g., Dowty, 1979: 132), statives have a commonly used inchoative reading. The verbs in the WATCH class can also refer to an inchoative event in an appropriate context: *I have not started looking at your term paper* (cf. Dowty (1979: 61) for their ability to refer to a change of state). Closer to our issue, Rapp (1997: 43-44) claims that emotion and perception verbs can be successfully embedded under the phase verbs *anfangen* 'start' or *beginnen* 'begin', respectively (see (14a), (14b)), while she assumes that cognition verbs are unacceptable in this sentence frame (see (14c)):

(14) Inchoativity with sentience verbs according to Rapp (1997: 43-44)

- a. *In diesem Moment fing ich an, ihn zu hassen.*  
in this moment start I PARTICLE him to hate  
'In that moment, I began to hate him.'
- b. *Da begann ich, eine innere Stimme zu hören.*  
there began I a inner voice to hear  
'Then I began to hear an inner voice.'
- c. *\*Er begann die Antwort zu kennen.*  
He began the answer to know  
'He began to know the answer.'

Rapp's claim that cognition verbs do not acquire an inchoative reading in German has been challenged by Nicolay (2007: 90f.) and Rothmayr (2009: 100f.): *Paul fängt an, Maria zu kennen / die Geschichte zu glauben* 'Paul starts knowing Mary / believing the story'. In our opinion, cognition verbs do not behave uniformly in this respect, depending on the verb and object lexeme. Some of our tested verbs, notably *glauben* 'believe', *erahnen* 'make a conjecture' and *beherrschen* 'master, know well' may acquire an inchoative reading more readily than *kennen* 'know', *vermuten* 'presume' and *wissen* 'know'. With the theme NPs used in our experiment the latter three verbs need considerable contextual enrichment in order to accommodate an inchoative reading, e.g., *Paul fängt an, die Impfvorschrift zu kennen / das Einreiseverbot zu vermuten / das Lösungswort zu wissen* ('Peter begins to know the vaccination rule / to presume the travel ban / to know the solution (word)'). Pending a solid empirical investigation of this issue, we assume that cognition verbs do not acquire an inchoative reading as easily as volitional and non-volitional perception verbs (WATCH, SEE) and non-volitional emotion verbs (HATE). The ascription verbs (EXHIBIT) that we tested are least likely to acquire an inchoative reading in comparison with the other verb types: ??*Paul begann, den Grippevirus aufzuweisen* 'Paul started to exhibit the influenza virus' (see example (5) above); ??*Peter begann, die Tauchausrüstung dabei zu haben* 'Peter started to have the diving equipment with him'.

Now let us consider how inchoativity relates to passivisation. For Rapp (1997), the inchoative reading indicates that emotion and perception verbs denote events that can be split up in phases. Accordingly, she classifies these verbs as activities and assumes that only activities are acceptable in the personal passive in German (Rapp, 1997: 144), as already mentioned. However, several authors challenge the claim that activity vs. state is what distinguishes non-volitional perception and emotion verbs from non-volitional cognition verbs (e.g., Dowty, 1979, 1991; Nicolay, 2007; Rothmayr, 2009). Therefore, Rapp's constraint on passivisation

has to be taken with caution. Let us look at another possible connection between passivisation and the availability of the tested verbs to acquire an inchoative reading.

Inchoativity implies a verb specific change.<sup>2</sup> Thus, for example, if x starts seeing or liking the picture, then x changes his/her mental state from not-seeing to seeing or from not-liking to liking the picture. In parallel, the theme also changes from not-being-seen or not-being-liked to being-seen or being-liked, respectively. Entities that undergo a change fulfil the criterion of affectedness in the broader sense of Beavers (2011) and fall under the (proto-)patient role (e.g., Dowty, 1991) or undergoer role in all semantic-role approaches. The appeal of Beavers' (2011) cluster notion of affectedness is that it is able to capture degrees of affectedness, from core cases that involve changes in an observable property (e.g., *becoming clean*) to peripheral cases for changes in mental states and events (mentioned in a footnote by Beavers (2011:340), cf. also Cooreman, 1994: 59-60). All sentience verbs under discussion, including those in the WATCH class, have a theme that is not affected in the strong sense. However, in their change-of-state reading their theme may be classified as being affected in the weak sense.

Affectedness is generally acknowledged as a factor directly facilitating passivisation (e.g., Fiengo, 1980: 37f.; Jaeggli, 1986: 607f.; Truswell, 2009: 164f.) or as one partial factor in a cluster concept of semantic transitivity (Meints, 1999: 45f.; Rice, 1987: 428 for English; Zifonun et al., 1997: 1796f. for German). According to Truswell (2009: 164f.), for instance, the affectedness constraint plausibly explains why many statives are barred from passivisation (\**This table is resembled by that table*; \**French is known by John*, unacceptability judgements by Truswell). The acceptability cline we observed in the personal passive (cf. (15): WATCH, SEE, HATE > KNOW > EXHIBIT) seems to parallel the liability of these verbs to acquire an inchoative reading (see Appendix A for supportive results from an additional rating test on inchoativity readings with the critical verbs), as explained above. In this reading, the theme undergoes a change of state and can be classified as being affected in a weak sense. So the acceptability cline under discussion is plausibly tied to the availability of a reading in which the theme is weakly affected. These observations lead us to conclude that affectedness is a prominent proto-patient feature that facilitates personal passivisation in German.<sup>3</sup> In the next section we will show that affectedness can be connected to the main discourse function of this construction. Such a connection between discourse function and semantic role prominence is a key assumption of the prominence account.

Finally, note that our explanation in terms of affectedness is equally compatible with patient prototypicality and patient prominence. In order to settle this issue experimentally, a test is needed in which verb classes with the same proto-agent features are manipulated with respect to a varying number of proto-patient features. Since proto-patient features are harder to isolate entirely (Dowty, 1991: 573), this is a difficult enterprise. Taken with caution, the prominence view is supported by our test in so far as affectedness only showed an effect in personal passives, where it can be tied to the main discourse function of this construction, as will be explained in the next section.

## 7 General discussion

The present paper addressed the question whether agent prominence and feature prioritisation can provide an account for agentivity effects that is more adequate than a prototype approach and feature accumulation. In order to be able to isolate and accumulate agentive features, we focused on German transitive verbs entailing volition, autonomous motion and/or sentience in

<sup>2</sup> A terminative reading, e.g., *Paul stopped loving his wife*, implies a change of state as well. As the inchoative reading of sentience verbs is addressed more often in the pertinent literature, we focus our discussion on inchoativity.

<sup>3</sup> We have stressed change of state, i.e., affectedness, as a relevant feature in passivisation since role prominence is our main topic of research. However, it is plausible to assume that the theme argument of sentience verbs can be made prominent by different means, i.e., context, definiteness and animacy. Note that for this reason we have kept definiteness and animacy constant in our items.

different combinations for the subject argument and, as far as possible, a uniform low number of patient entailments for the object argument. The three above-mentioned agentive entailments can be congenially tested for feature accumulation. The verbs in the WATCH class (e.g., *betrachten*, *anschauen* ‘look at’ and *beobachten* ‘watch’) entail all these agentive features according to unanimous opinion. On the other end, the verbs in the EXHIBIT class (e.g., *aufweisen* ‘exhibit’, *haben* ‘have’) uncontroversially entail none of these agentive features. In between are the non-volitional sentience verbs in the classes SEE, HATE and KNOW (e.g., *hören* ‘hear’, *hassen* ‘hate’, *kennen* ‘know’).

In two rating experiments, we investigated transitive verbs in DO-clefts, personal passives and corresponding actives. A prototype approach in the spirit of Dowty (1991) predicts identical acceptability clines across these constructions based on feature accumulation of all agentive features entailed by the verb lexemes under investigation, since feature accumulation is the central type of feature interaction in his approach (see Section 2 above). Specifically, such an approach predicts that the verbs in the WATCH class, which entail the highest number of agentive features (volition, motion and sentience), will be privileged in all constructions vis-à-vis SEE, HATE and KNOW with only sentience as an agentive feature. EXHIBIT verbs that entail none of these features are expected to fall behind all other verb classes (WATCH > SEE, HATE, KNOW > EXHIBIT). This acceptability cline has only been confirmed for DO-clefts in German (cf. (14) above).

Personal passives and corresponding actives each yielded different results. In the active, we did not find any firm evidence for an acceptability cline. However, even if we take the observed numerical trends into consideration (SEE judged slightly better than the other verb classes, EXHIBIT rated lower than the other verb classes), we can confidently assume that they do not support an agent prototypicality cline and a prototype approach, which leads us to expect the cline WATCH > SEE, HATE, KNOW > EXHIBIT. This cline is not what we have observed in the personal passive either. Instead, we have found WATCH, SEE, HATE > KNOW > EXHIBIT (cf. (15) above).

A prototype approach would have to assume that volitional, motional and sentient agents, as in the WATCH class, are more prototypical in DO-clefts than in the unmarked active voice and in the personal passive. Alternatively, one may state that the agent prototype is favoured in DO-clefts and disregarded in the unmarked active and the personal passive construction. This is highly stipulative and merely a description of the data. The advantage of the prominence approach outlined in Himmelmann & Primus (2015) is that it ties agent prominence to the running discourse (see Section 3 above). This opens a way of explaining prominence effects or their absence by the presence or absence of a specific discourse function of the construction under investigation. So let us take a closer look at the discourse status of the tested constructions and at our prominence-based account of the data.

The active voice with basic subject-object word order, as in our experiment, is the unmarked construction in discourse, which means that it is not constrained by specific discourse factors (e.g., for German Lenerz, 1977; Höhle, 1982). Therefore, it is plausible to assume that no particular proto-agent feature is prioritised. Indeed, we did not find any firm evidence for role feature prioritisation.

Since the basic construction is not constrained in terms of discourse and hence, as argued above, not in terms of role prominence either, frequency may kick in as a possible explanation for the numerical acceptability trends we have observed in Experiment 2: in the active, non-volitional perception verbs (SEE) are rated slightly better than volitional perception verbs (WATCH), non-volitional emotion verbs (HATE) and non-volitional cognition verbs (KNOW), while ascription verbs (EXHIBIT) fall behind all the other verb classes. As mentioned in Section 6.1.3, our statistical model cannot back these numerical trends. But let us discuss for the sake of the argument that frequency might explain these acceptability differences. Importantly, there was no significant effect of verb class on the frequency of verb lexemes. This rules out verb lexeme frequency as the sole explanation of the observed numerical

acceptability trends. So let us turn to the frequency of the NP co-constituents. The indefinite pronouns used as a subject in the active voice were evenly balanced, but for theme lexemes, the effect of verb class approached significance because the theme lexemes in the HATE class were most frequent overall. This numerical difference in frequency clearly cannot explain the verb class effects observed as a numerical acceptability trend in the basic construction, which showed a slight advantage for SEE and a clear disadvantage for EXHIBIT.

Let us turn to personal passives, where we found the acceptability cline WATCH, SEE, HATE > KNOW > EXHIBIT (cf. (15) above). This acceptability profile is compatible with Rapp's claims as regards volitional and non-volitional sentience verbs. However, our explanation differs from hers. Recall that Rapp (1997: 144) explains personal passivisation by a divide between activities, including non-volitional emotion and perception verbs, and states. We have taken Rapp's criterion for activities, namely embedding under phase verbs such as 'begin, start', more seriously. In such constructions, verbs acquire an inchoative reading. This reading entails a change of state in the theme participant and change of (mental or physical) state falls under a generalized notion of affectedness. A change-of-state and hence affectedness reading is readily available for the volitional perception verbs and the non-volitional perception and emotion verbs tested here, but this reading is more difficult to obtain for the non-volitional cognition verbs and virtually impossible for the ascription verbs. This observation and the generally acknowledged affectedness constraint for personal passives would explain the cline we have found for this construction. These arguments lead us to conclude that affectedness is a prominent proto-patient feature that facilitates personal passivisation in German.

Patient prominence fits in well with the general discourse function of personal passives. Personal passives have a strongly marked role-to-syntax mapping: they have a non-agentive role in subject function and at the same time the agentive role in a facultative oblique function. This marked constellation needs discourse licensing. The widely acknowledged discourse function of personal passives is pertinently formulated by Keenan & Dryer (2007: 325) as follows: "they 'topicalize' ('foreground', 'draw our attention to') an element, [...], which is not normally presented as topical in the active." In terms of discourse prominence, a 'topicalised' non-agentive role is more prominent in discourse than a backgrounded proto-agent – especially if the agent is omitted as in our test materials. This assumption is supported by experimental evidence that attention orienting by a visual cue towards the patient leads to enhanced selection of passive clauses (e.g., Gleitman et al. (2007); Myachykov et al. (2010); see Himmelmann & Primus (2015) for the connection between prominence and attention centring). Returning to affectedness, it is plausible to assume that affected proto-patients, i.e., entities that undergo a change in the situation denoted by the verb, capture attention more readily than unaffected proto-patients. In terms of prominence, all other things being equal, affected entities 'stand out', i.e., capture more attention, vis-à-vis unaffected ones and are thus better candidates to become prominent in discourse via passivisation. In more general terms, our explanation assumes a harmonic correlation between role prominence and discourse prominence.

A harmonic correlation between role prominence and discourse prominence can also be assumed for DO-clefts, where volitional agents proved to be privileged in our Experiment 1. It is plausible to assume that a volitional agent engaged in an action has an enhanced prominence in discourse if the event itself is in the centre of attention as a discourse topic, i.e., question under discussion, as in DO-clefts (e.g., Carlson (1983: 225f.); Gast & Wiechmann (2012); Weinert (1995) for WH-clefts in general). For Carlson, the WH-clause, e.g., *What the spectator did* in our Experiment 1, introduces "a topical question worthy of interest" in discourse, to which the cleft complement, e.g., *was looking at the landing on the moon*, offers an answer "as a main rheme" (1983: 225). In terms of discourse prominence, this means that *what x did* and its elaboration in the cleft part, i.e., the particular event in which x is engaged, is more prominent in discourse than an event used in the basic active construction. Actions performed by volitional agents are more prominent in terms of event and role semantics than

states of experiencers, as argued by Himmelmann & Primus (2015). This is, in our view, a plausible explanation that actions performed by volitional agents are preferred in constructions where events are discourse prominent. Generally speaking, our explanation ties role and event prominence to discourse prominence. The appeal of the prominence-based account is that it paves the way towards an explanation that connects two independent strands of research: work on DO-clefts focussed solely on agentivity, research on WH-clefts took only their discourse function into consideration. Our prominence account is still preliminary; however, it points towards a way to connect the agentivity restriction to the discourse function of DO-clefts.

Volition proved irrelevant for the verb types tested in our experiments in the personal passive and the unmarked active voice and, correspondingly, affectedness did not influence DO-clefts and the active voice. But it would be premature to conclude that this is a final result for German or for another language. Our approach needs complementary data from additional experimental work including various other types of verbs and corpus-based discourse analyses in order to consolidate our claims. However, by testing the same type of verbs in three different constructions – active, personal passive and DO-clefts – we have offered preliminary evidence that these constructions exhibit a differential highlighting of role features: no particular role feature seems to be prominent in the active voice with basic subject-object order, subtle differences in affectedness play a role in personal passivisation, and finally, volition is prominent in DO-clefts. The differential highlighting of role features depending on the construction and ultimately on the preferred discourse function of these constructions is the main appeal of a prominence-based account and a serious drawback of a prototype-based approach.

## 8 Conclusion and outlook

We have presented data from two acceptability-rating experiments in German in which we contrasted the prototypicality/feature accumulation account with the prominence/feature prioritisation account of semantic role effects in sentence comprehension. While prototypicality predicts identical acceptability clines across different constructions, prominence predicts variable clines depending on which role feature a given construction highlights. Each of the tested constructions (actives vs. personal passives, DO-clefts) has been previously discussed with respect to semantic roles, yet a systematic empirical examination has been missing from the literature. Our results show diverging acceptability clines for the three constructions, hence disconfirming role prototypicality. Instead, our results support the notion of role prominence: acceptability clines vary across constructions as these highlight different role features (personal passives, DO-clefts) or no particular role feature (unmarked active construction) depending on their status in discourse. We proposed that feature prioritisation might be a promising approach to study semantic role effects, but also admit that this novel proposal is in need for further systematic investigation.

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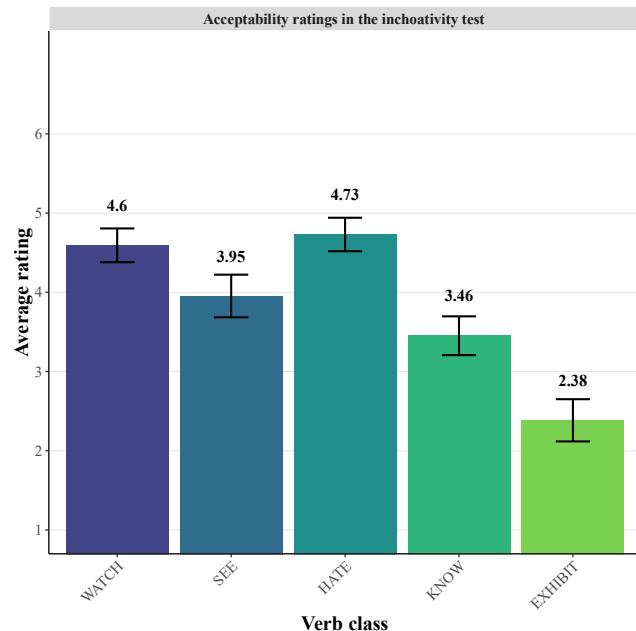
### Appendix A – The inchoativity test

In the discussion of Experiment 2 (Section 6.2), we conjectured that the acceptability cline for personal passives (WATCH, SEE, HATE > KNOW > EXHIBIT) can be explained by different degrees of affectedness on the part of the patient participant. We tied this assumed affectedness gradience to the liability of the critical verbs to acquire an inchoative, i.e. change of state, reading. Therefore, we ran a follow-up study in which we tested the critical verb classes for their ability to acquire an inchoative reading.

We used the same critical verb lexemes and NPs as in Experiment 2. Verbs and their patient arguments were embedded in subordinate clauses with the phase verb *beginnen* ‘to begin’ in the main clause (example A1). The subject of the main clause was always a two-syllable proper name (balanced across male/female names).

- (A1) *Peter begann, die Mondlandung anzuschauen.*  
 Peter began, the landing-on-the-moon to-look-at  
 ‘Peter began to look at the moon landing.’

Twenty monolingual native speakers of German (16 females, mean age: 23 years, range: 19–40 years) who did not take part in Experiments 1 or 2 rated these sentences for acceptability on a 6-point Likert scale (for an example of the task instruction, see Figure 1 in Section 5.1.3 in the main text). Preparation of experimental lists, data preprocessing and statistical model specifications were the same as those described for Experiment 1 (as the current follow-up study used a one-factorial design as well). There were no negative control fillers in the current test. We removed one erroneous response prior to analysis. Mean acceptability ratings for the five critical verb classes in the inchoativity test are presented in Figure A1.



**Figure A1.** Mean acceptability ratings for verbs in the inchoativity test

As can be seen, the verb classes WATCH, SEE and HATE are rated higher in the current inchoativity test than KNOW and EXHIBIT. SEE is rated worse than both WATCH and HATE. EXHIBIT is rated worse than KNOW. A cumulative linked mixed-effects logistic regression model revealed that all pairwise contrasts were significant (Table A1).

In summary, we find the following cline for the inchoativity test: WATCH > SEE < HATE > KNOW > EXHIBIT. This cline mirrors what we have found for passive voice in Experiment 2 (WATCH, SEE, HATE > KNOW > EXHIBIT, see Sections 6.1.4 and 6.2) except for SEE, which ranks lower than WATCH and HATE in the current test. This can be reconciled with the passive cline if we take into consideration that SEE also showed a larger drop in ratings from active to passive voice than both WATCH and HATE (see Section 6.1.4). This drop in passive ratings may then be linked to the lower score of SEE on an inchoativity and affectedness scale.

Overall, this follow-up study supports our conjecture that the passive cline in Experiment 2 can be explained by different degrees of affectedness on the part of the patient argument, and that this is associated with the verbs’ liability for an inchoative, i.e. state of change, reading.

**Table A1.** Parameter estimates for the fixed effect and the threshold coefficients of the regression model in the inchoativity rating study

Fixed effect	Estimate	Standard error	z-value	p-value
Diff1: WATCH vs. SEE	1.131	0.333	3.400	< .001
Diff2: SEE vs. HATE	-1.484	0.425	-3.494	< .001
Diff3: HATE vs. KNOW	2.316	0.460	5.033	< .001
Diff4: KNOW vs. EXHIBIT	1.863	0.359	5.184	< .001

Threshold coefficients				
Threshold	Estimate	Standard error	z-value	
1 2	-3.388	0.339	-9.998	
2 3	-1.995	0.290	-6.872	
3 4	-0.654	0.268	-2.444	
4 5	0.938	0.271	3.464	
5 6	2.101	0.293	7.166	

Abbreviations. Diff1 through Diff4: contrasts between the verb classes as defined via forward difference coding.

## Appendix B

The following list in Table B1 contains the items (60 sentences per verb class, ten sentences per verb) used in Experiment 1.

**Table B1.** List of items for Experiment 1

Item	Verb class	Verb	Sentence
1	WATCH	anschauen	Was die Schaulustige tat, war die Mondlandung anzuschauen.
2	WATCH	anschauen	Was der Zuschauer tat, war die Uraufführung anzuschauen.
3	WATCH	anschauen	Was die Esoterikerin tat, war die Mondfinsternis anzuschauen.
4	WATCH	anschauen	Was der Wachmann tat, war das Überwachungsvideo anzuschauen.
5	WATCH	anschauen	Was die Untertanin tat, war die Krönungszeremonie anzuschauen.
6	WATCH	anschauen	Was der Romantiker tat, war den Sonnenuntergang anzuschauen.
7	WATCH	anschauen	Was die Astronomin tat, war den Sternenhimmel anzuschauen.
8	WATCH	anschauen	Was der Gast tat, war den Weihnachtsbaum anzuschauen.
9	WATCH	anschauen	Was die Archäologin tat, war die Davidstatue anzuschauen.
10	WATCH	anschauen	Was der Fan tat, war das Endspiel anzuschauen.
11	WATCH	beobachten	Was die Rettungshelferin tat, war die Gerölllawine zu beobachten.
12	WATCH	beobachten	Was der Forscher tat, war die Klimaveränderung zu beobachten.
13	WATCH	beobachten	Was die Biologin tat, war die Zellmutation zu beobachten.
14	WATCH	beobachten	Was der Wahlleiter tat, war die Wahldurchführung zu beobachten.
15	WATCH	beobachten	Was die Expertin tat, war den Teilchenbeschleuniger zu beobachten.
16	WATCH	beobachten	Was der Bierbrauer tat, war den Gärungsprozess zu beobachten.
17	WATCH	beobachten	Was die Architektin tat, war den Turmbau zu beobachten.
18	WATCH	beobachten	Was der Romantiker tat, war den Sonnenuntergang zu beobachten.
19	WATCH	beobachten	Was die Meteorologin tat, war die Sonnenfinsternis zu beobachten.
20	WATCH	beobachten	Was der Pyrotechniker tat, war das Silvesterfeuerwerk zu beobachten.
21	WATCH	beschnuppern	Was die Laborantin tat, war das Chemikaliengemisch zu beschnuppern.
22	WATCH	beschnuppern	Was der Restaurantbesucher tat, war die Suppenauswahl zu beschnuppern.
23	WATCH	beschnuppern	Was die Genießerin tat, war die neueste Duftkerze zu beschnuppern.
24	WATCH	beschnuppern	Was der Hausmann tat, war das Waschmittelangebot zu beschnuppern.
25	WATCH	beschnuppern	Was die Käuferin tat, war das Seifensortiment zu beschnuppern.
26	WATCH	beschnuppern	Was der Florist tat, war die Orchideenkreuzung zu beschnuppern.
27	WATCH	beschnuppern	Was die Barista tat, war das Röstergebnis zu beschnuppern.
28	WATCH	beschnuppern	Was der Drogist tat, war das Parfumangebot zu beschnuppern.
29	WATCH	beschnuppern	Was die Züchterin tat, war die Edelrose zu beschnuppern.
30	WATCH	beschnuppern	Was der Kochgehilfe tat, war das Zitronengras zu beschnuppern.
31	WATCH	betrachten	Was der Notar tat, war die Verfassungsurkunde zu betrachten.
32	WATCH	betrachten	Was die Fotografin tat, war den Bildabzug zu betrachten.
33	WATCH	betrachten	Was der Künstler tat, war die Kohleskizze zu betrachten.

34	WATCH	betrachten	Was die Sommelière tat, war das Wein-etikett zu betrachten.
35	WATCH	betrachten	Was der Kunde tat, war die Warenauslage zu betrachten.
36	WATCH	betrachten	Was die Bäuerin tat, war den Viehbestand zu betrachten.
37	WATCH	betrachten	Was der Verkaufsleiter tat, war die Produktpalette zu betrachten.
38	WATCH	betrachten	Was die Museumsangestellte tat, war die Kunstinstallation zu betrachten.
39	WATCH	betrachten	Was der Kunstliebhaber tat, war die Kuppelarchitektur zu betrachten.
40	WATCH	betrachten	Was die Reisende tat, war die Freiheitsstatue zu betrachten.
41	WATCH	betasten	Was der Modezar tat, war die Stoffstruktur zu betasten.
42	WATCH	betasten	Was die Uhrmacherin tat, war das Ziffernblatt zu betasten.
43	WATCH	betasten	Was der Töpfer tat, war die Krugscherbe zu betasten.
44	WATCH	betasten	Was die Ingenieurin tat, war die Materialkörnung zu betasten.
45	WATCH	betasten	Was der Fachmann tat, war die Matratzenfüllung zu betasten.
46	WATCH	betasten	Was die Geliebte tat, war den Briefumschlag zu betasten.
47	WATCH	betasten	Was der Gemüsehändler tat, war die Gemüseauslage zu betasten.
48	WATCH	betasten	Was die Herzogin tat, war den Pelzmantel zu betasten.
49	WATCH	betasten	Was der Athlet tat, war die Muskelverhärtung zu betasten.
50	WATCH	betasten	Was die Historikerin tat, war die Papyrusrolle zu betasten.
51	WATCH	verfolgen	Was der Zoologe tat, war das Artensterben zu verfolgen.
52	WATCH	verfolgen	Was die Börsenmaklerin tat, war den Aktienkurs zu verfolgen.
53	WATCH	verfolgen	Was der Kameramann tat, war die Neujahrsansprache zu verfolgen.
54	WATCH	verfolgen	Was die Journalistin tat, war die Antrittsrede zu verfolgen.
55	WATCH	verfolgen	Was der Polarforscher tat, war die Eisschmelze zu verfolgen.
56	WATCH	verfolgen	Was die KFZ-Mechanikerin tat, war das Autorennen zu verfolgen.
57	WATCH	verfolgen	Was der Sportfan tat, war die Weltmeisterschaft zu verfolgen.
58	WATCH	verfolgen	Was die Erstwählerin tat, war die Stimmenauszählung zu verfolgen.
59	WATCH	verfolgen	Was der Ölmogul tat, war den Energiemarkt zu verfolgen.
60	WATCH	verfolgen	Was die Analystin tat, war die Preisentwicklung zu verfolgen.
61	HATE	fürchten	Was die Abiturientin tat, war die Abschlussklausur zu fürchten.
62	HATE	fürchten	Was der Angsthase tat, war die Abenddämmerung zu fürchten.
63	HATE	fürchten	Was die Klassensprecherin tat, war die Notenkonferenz zu fürchten.
64	HATE	fürchten	Was der Jugendliche tat, war die Drogenabhängigkeit zu fürchten.
65	HATE	fürchten	Was die Rentnerin tat, war die Altersarmut zu fürchten.
66	HATE	fürchten	Was der Veteran tat, war den Atomkrieg zu fürchten.
67	HATE	fürchten	Was die Geschäftsführerin tat, war die Finanzprüfung zu fürchten.
68	HATE	fürchten	Was der Regisseur tat, war die Kritikermeinung zu fürchten.
69	HATE	fürchten	Was die Freizeitparkliebhaberin tat, war die Geisterbahn zu fürchten.
70	HATE	fürchten	Was der Rettungswagenfahrer tat, war das Verkehrschaos zu fürchten.
71	HATE	hassen	Was die Witwe tat, war das Alleinsein zu hassen.
72	HATE	hassen	Was der Verkehrspolizist tat, war das Hupkonzert zu hassen.
73	HATE	hassen	Was die Stewardess tat, war den Fluglärm zu hassen.
74	HATE	hassen	Was der Schützenkönig tat, war die Blasmusik zu hassen.
75	HATE	hassen	Was die Schnäppchenjägerin tat, war die Warteschlange zu hassen.
76	HATE	hassen	Was der Achterbahnfreak tat, war die Wartezeit zu hassen.
77	HATE	hassen	Was die Steuerzahlerin tat, war die Steuererhöhung zu hassen.
78	HATE	hassen	Was der Philosoph tat, war den Mathematikunterricht zu hassen.
79	HATE	hassen	Was die Alleinverdienerin tat, war die Versicherungspolitik zu hassen.
80	HATE	hassen	Was der Rentner tat, war die Winterkälte zu hassen.
81	HATE	lieben	Was die Schauspielstudentin tat, war die Theateraufführung zu lieben.
82	HATE	lieben	Was der Kaiser tat, war den Wiener Walzer zu lieben.
83	HATE	lieben	Was die Schiffsköchin tat, war die Seeluft zu lieben.
84	HATE	lieben	Was der Spitzensportler tat, war den Skilanglauf zu lieben.
85	HATE	lieben	Was die Hobbywanderin tat, war die Bergkulisse zu lieben.
86	HATE	lieben	Was der Grundschüler tat, war den Reitunterricht zu lieben.
87	HATE	lieben	Was die Dirigentin tat, war die Elbphilharmonie zu lieben.
88	HATE	lieben	Was der Erzieher tat, war das Puppentheater zu lieben.
89	HATE	lieben	Was die Berufseinsteigerin tat, war den Lehrerberuf zu lieben.
90	HATE	lieben	Was der Kulturinteressierte tat, war die Schauspielkunst zu lieben.
91	HATE	mögen	Was der Sohn tat, war das Mittagessen zu mögen.
92	HATE	mögen	Was die Innenausstatterin tat, war die Osterdekoration zu mögen.

93	HATE	mögen	Was der Gläubige tat, war die Weihnachtsdekoration zu mögen.
94	HATE	mögen	Was die Oma tat, war das Krippenspiel zu mögen.
95	HATE	mögen	Was der Konzernleiter tat, war das Restaurantessen zu mögen.
96	HATE	mögen	Was die Blondine tat, war das Frühlingswetter zu mögen.
97	HATE	mögen	Was der Zirkusjunge tat, war die Clowns bemalung zu mögen.
98	HATE	mögen	Was die Souffleuse tat, war das Theaterstück zu mögen.
99	HATE	mögen	Was der Hauseigentümer tat, war die Fototapete zu mögen.
100	HATE	mögen	Was die Produzentin tat, war die Popmusik zu mögen.
101	HATE	verabscheuen	Was der Bankkaufmann tat, war den Korruptionsskandal zu verabscheuen.
102	HATE	verabscheuen	Was die Geschäftsinhaberin tat, war den Ladendiebstahl zu verabscheuen.
103	HATE	verabscheuen	Was der Fabrikherr tat, war die Ökosteuer zu verabscheuen.
104	HATE	verabscheuen	Was die Ermittlerin tat, war das Kapitalverbrechen zu verabscheuen.
105	HATE	verabscheuen	Was der Jurist tat, war den Justizskandal zu verabscheuen.
106	HATE	verabscheuen	Was die Hundehalterin tat, war die Tierquälerei zu verabscheuen.
107	HATE	verabscheuen	Was der Familievater tat, war den Gewaltexzess zu verabscheuen.
108	HATE	verabscheuen	Was die Pazifistin tat, war die Kriegstreiberei zu verabscheuen.
109	HATE	verabscheuen	Was der Zeitungsleser tat, war die Boulevardpresse zu verabscheuen.
110	HATE	verabscheuen	Was die Parteivorsitzende tat, war die Europapolitik zu verabscheuen.
111	HATE	verachten	Was der Demonstrant tat, war die Todesstrafe zu verachten.
112	HATE	verachten	Was die Betroffene tat, war den Raubüberfall zu verachten.
113	HATE	verachten	Was der Minijobber tat, war die Steuerhinterziehung zu verachten.
114	HATE	verachten	Was die Republikanerin tat, war die Erbmonarchie zu verachten.
115	HATE	verachten	Was der Augenzeuge tat, war die Gräueltat zu verachten.
116	HATE	verachten	Was die Rechtsanwältin tat, war den Finanzbetrug zu verachten.
117	HATE	verachten	Was der Priester tat, war den Ehebetrug zu verachten.
118	HATE	verachten	Was die Gefängniswärterin tat, war die Gefangenfolter zu verachten.
119	HATE	verachten	Was der Pazifist tat, war die Henkerszunft zu verachten.
120	HATE	verachten	Was die Bürgermeisterin tat, war die Personalpolitik zu verachten.
121	KNOW	beherrschen	Was die Fahranfängerin tat, war die Schaltautomatik zu beherrschen.
122	KNOW	beherrschen	Was der Olympiasieger tat, war den Handstand zu beherrschen.
123	KNOW	beherrschen	Was die Sportstudentin tat, war den Rückwärtssalto zu beherrschen.
124	KNOW	beherrschen	Was der Übungsleiter tat, war die Turnübung zu beherrschen.
125	KNOW	beherrschen	Was die Nachhilfelehrerin tat, war die Prozentrechnung zu beherrschen.
126	KNOW	beherrschen	Was der Opernsänger tat, war die Kopfstimme zu beherrschen.
127	KNOW	beherrschen	Was die Blumenladenbesitzerin tat, war die Kranzbinderei zu beherrschen.
128	KNOW	beherrschen	Was der Gitarrenschüler tat, war das Notenlesen zu beherrschen.
129	KNOW	beherrschen	Was die Maskenbildnerin tat, war das Kunsthhandwerk zu beherrschen.
130	KNOW	beherrschen	Was der Geisteswissenschaftler tat, war die Literaturrecherche zu beherrschen.
131	KNOW	erahnen	Was die Wahlhelferin tat, war das Wahlergebnis zu erahnen.
132	KNOW	erahnen	Was der Wettkönig tat, war die Erfolgsschance zu erahnen.
133	KNOW	erahnen	Was die Ortskundige tat, war das Katastrophenausmaß zu erahnen.
134	KNOW	erahnen	Was der Parteisprecher tat, war die Kampfkandidatur zu erahnen.
135	KNOW	erahnen	Was die Pressesprecherin tat, war den Ministerrücktritt zu erahnen.
136	KNOW	erahnen	Was der Journalist tat, war den Parteiniedergang zu erahnen.
137	KNOW	erahnen	Was die Wählerin tat, war den Wahlsieg zu erahnen.
138	KNOW	erahnen	Was der Grundstücksbesitzer tat, war die Nutzungsmöglichkeit zu erahnen.
139	KNOW	erahnen	Was die Finanzwirtin tat, war den Wirtschaftsaufschwung zu erahnen.
140	KNOW	erahnen	Was der Germanist tat, war den Handlungsverlauf zu erahnen.
141	KNOW	glauben	Was die Radiohörerin tat, war die Falschnachricht zu glauben.
142	KNOW	glauben	Was der Kirchgänger tat, war die Marienlegende zu glauben.
143	KNOW	glauben	Was die Fahrradbegeisterte tat, war den Dopingbericht zu glauben.
144	KNOW	glauben	Was der Wissenschaftler tat, war das Testergebnis zu glauben.
145	KNOW	glauben	Was die Probandin tat, war das Statistikergebnis zu glauben.
146	KNOW	glauben	Was der Mathematikstudent tat, war den Rechenkniff zu glauben.
147	KNOW	glauben	Was die Magierassistentin tat, war den Zaubertrick zu glauben.
148	KNOW	glauben	Was der Religiöse tat, war die Heiligenlegende zu glauben.
149	KNOW	glauben	Was die Polizeibeamte tat, war die Falschaussage zu glauben.
150	KNOW	glauben	Was der Protokollant tat, war die Zeugenaussage zu glauben.
151	KNOW	kennen	Was der Autofahrer tat, war das Unfallrisiko zu kennen.

152	KNOW	kennen	Was die Dozentin tat, war das Plagiatsrisiko zu kennen.
153	KNOW	kennen	Was der Marktforscher tat, war die Ausfallquote zu kennen.
154	KNOW	kennen	Was die Juristin tat, war die Paragraphenänderung zu kennen.
155	KNOW	kennen	Was der Ministerpräsident tat, war das Müllproblem zu kennen.
156	KNOW	kennen	Was die Bundespolizistin tat, war das Einreiseverbot zu kennen.
157	KNOW	kennen	Was der Tropenarzt tat, war die Impfvorschrift zu kennen.
158	KNOW	kennen	Was die Hausherrin tat, war den Hintereingang zu kennen.
159	KNOW	kennen	Was der Pfarrer tat, war den Bibeltext zu kennen.
160	KNOW	kennen	Was die Rechtsanwaltsgehilfin tat, war die Sonderregelung zu kennen.
161	KNOW	vermuten	Was der Sozialwissenschaftler tat, war den Staatsbankrott zu vermuten.
162	KNOW	vermuten	Was die BWL-Studentin tat, war die Firmeninsolvenz zu vermuten.
163	KNOW	vermuten	Was der Ermittler tat, war das Tatmotiv zu vermuten.
164	KNOW	vermuten	Was die Polizistin tat, war die Brandursache zu vermuten.
165	KNOW	vermuten	Was der Kommissar tat, war den Tathintergrund zu vermuten.
166	KNOW	vermuten	Was die Konzernchefin tat, war die Firmenfusion zu vermuten.
167	KNOW	vermuten	Was der Staatsanwalt tat, war den Beweggrund zu vermuten.
168	KNOW	vermuten	Was die Skeptikerin tat, war die Staatsverschwörung zu vermuten.
169	KNOW	vermuten	Was der Polizeichef tat, war die Unfallursache zu vermuten.
170	KNOW	vermuten	Was die Mitarbeiterin tat, war den Bilanzfehler zu vermuten.
171	KNOW	wissen	Was der Konzertbesucher tat, war den Liedtext zu wissen.
172	KNOW	wissen	Was die Gläubige tat, war den Bilbelvers zu wissen.
173	KNOW	wissen	Was der Koch tat, war das Geheimrezept zu wissen.
174	KNOW	wissen	Was die Frau tat, war die Patentlösung zu wissen.
175	KNOW	wissen	Was der Fussballfan tat, war die Abseitsregel zu wissen.
176	KNOW	wissen	Was die Reiseleiterin tat, war den Geheimweg zu wissen.
177	KNOW	wissen	Was der Festivalbesucher tat, war den Notausgang zu wissen.
178	KNOW	wissen	Was die Zuschauerin tat, war das Lösungswort zu wissen.
179	KNOW	wissen	Was der Gelehrte tat, war die Fachterminologie zu wissen.
180	KNOW	wissen	Was die Lehramtsstudentin tat, war die Verbflexion zu wissen.
181	SEE	hören	Was die Wanderin tat, war das Jagdhorn zu hören.
182	SEE	hören	Was der Taxifahrer tat, war die Verkehrsmeldung zu hören.
183	SEE	hören	Was die Schülerin tat, war die Pausenglocke zu hören.
184	SEE	hören	Was der Landwirt tat, war den Hahnenschrei zu hören.
185	SEE	hören	Was die Mieterin tat, war den Autolärm zu hören.
186	SEE	hören	Was der Sänger tat, war das Gitarrensolo zu hören.
187	SEE	hören	Was die Spaziergängerin tat, war das Meeresrauschen zu hören.
188	SEE	hören	Was der Messdiener tat, war die Kirchenglocke zu hören.
189	SEE	hören	Was die Spionin tat, war den Funkspruch zu hören.
190	SEE	hören	Was der Lokführer tat, war das Warnsignal zu hören.
191	SEE	riechen	Was die Bauingenieurin tat, war den Teergestank zu riechen.
192	SEE	riechen	Was der Fluggast tat, war den Schweißdunst zu riechen.
193	SEE	riechen	Was die Mutter tat, war den Zigarettenqualm zu riechen.
194	SEE	riechen	Was der Soldat tat, war das Schießpulver zu riechen.
195	SEE	riechen	Was die Chemikerin tat, war den Chlordampf zu riechen.
196	SEE	riechen	Was der Landurlauber tat, war den Stallmist zu riechen.
197	SEE	riechen	Was die Anwohnerin tat, war die Kläranlage zu riechen.
198	SEE	riechen	Was der Feuerwehrmann tat, war den Waldbrand zu riechen.
199	SEE	riechen	Was die Laborassistentin tat, war die Schwefelwolke zu riechen.
200	SEE	riechen	Was der Enkelsohn tat, war den Schmorbraten zu riechen.
201	SEE	sehen	Was die Kapitänin tat, war den Leuchtturm zu sehen.
202	SEE	sehen	Was der Gutachter tat, war den Schimmelbefall zu sehen.
203	SEE	sehen	Was die Pilotin tat, war das Leuchtsignal zu sehen.
204	SEE	sehen	Was der Gastredner tat, war das Rednerpult zu sehen.
205	SEE	sehen	Was die Autofahrerin tat, war den Auffahrunfall zu sehen.
206	SEE	sehen	Was der Biologe tat, war die Zellmembran zu sehen.
207	SEE	sehen	Was die Touristin tat, war das Wattenmeer zu sehen.
208	SEE	sehen	Was der Grenzbeamte tat, war das Fahndungsfoto zu sehen.
209	SEE	sehen	Was die Gutachterin tat, war den Sturmschaden zu sehen.
210	SEE	sehen	Was der Eigentümer tat, war den Müllberg zu sehen.

211	SEE	spüren	Was der Besucher tat, war den Saunaaufguss zu spüren.
212	SEE	spüren	Was die Erholungssuchende tat, war den Wellengang zu spüren.
213	SEE	spüren	Was der Patient tat, war die Operationsnarbe zu spüren.
214	SEE	spüren	Was die Fremde tat, war den Dauerfrost zu spüren.
215	SEE	spüren	Was der Fußballer tat, war die Muskelverhärtung zu spüren.
216	SEE	spüren	Was die Schwimmerin tat, war die Flussströmung zu spüren.
217	SEE	spüren	Was der Fahrradfahrer tat, war den Gegenwind zu spüren.
218	SEE	spüren	Was die Süchtige tat, war den Nadelstich zu spüren.
219	SEE	spüren	Was der Klimaforscher tat, war die Erderwärmung zu spüren.
220	SEE	spüren	Was die Beifahrerin tat, war den Fahrtwind zu spüren.
221	SEE	vernehmen	Was der Angeklagte tat, war das Gerichtsurteil zu vernehmen.
222	SEE	vernehmen	Was die Tochter tat, war die Ankündigung zu vernehmen.
223	SEE	vernehmen	Was der Rechtsanwalt tat, war die Prozessankündigung zu vernehmen.
224	SEE	vernehmen	Was die Insassin tat, war die Sicherheitswarnung zu vernehmen.
225	SEE	vernehmen	Was der Fahrgast tat, war die Zugansage zu vernehmen.
226	SEE	vernehmen	Was die Restauranttesterin tat, war das Tellergeklapper zu vernehmen.
227	SEE	vernehmen	Was der Neuankömmling tat, war die Grußbotschaft zu vernehmen.
228	SEE	vernehmen	Was die Musikerin tat, war den Missklang zu vernehmen.
229	SEE	vernehmen	Was der Hotelgast tat, war das Lüftungsgeräusch zu vernehmen.
230	SEE	vernehmen	Was die Hausbewohnerin tat, war das Bremsenquietschen zu vernehmen.
231	SEE	wahrnehmen	Was der Bürger tat, war den Explosionsknall wahrzunehmen.
232	SEE	wahrnehmen	Was die Künstlerin tat, war die Farbveränderung wahrzunehmen.
233	SEE	wahrnehmen	Was der Beifahrer tat, war den Vanilleduft wahrzunehmen.
234	SEE	wahrnehmen	Was die Spekulantin tat, war den Kursanstieg wahrzunehmen.
235	SEE	wahrnehmen	Was der Aktivist tat, war die Meeresverschmutzung wahrzunehmen.
236	SEE	wahrnehmen	Was die Monteurein tat, war das Gasleck wahrzunehmen.
237	SEE	wahrnehmen	Was der Hausbesitzer tat, war den Dammdurchbruch wahrzunehmen.
238	SEE	wahrnehmen	Was die Kundin tat, war die Preissenkung wahrzunehmen.
239	SEE	wahrnehmen	Was der Polizist tat, war den Fluchtwagen wahrzunehmen.
240	SEE	wahrnehmen	Was die Sekretärin tat, war das Monitorflackern wahrzunehmen.
241	EXHIBIT	bekleiden	Was die Politikerin tat, war das Außenministeramt zu bekleiden.
242	EXHIBIT	bekleiden	Was der Manager tat, war die Führungsposition zu bekleiden.
243	EXHIBIT	bekleiden	Was die Fachfrau tat, war die Leitungsfunktion zu bekleiden.
244	EXHIBIT	bekleiden	Was der Politiker tat, war das Kanzleramt zu bekleiden.
245	EXHIBIT	bekleiden	Was die Vorgesetzte tat, war die Stabsleitung zu bekleiden.
246	EXHIBIT	bekleiden	Was der Botschafter tat, war das Repräsentantenamt zu bekleiden.
247	EXHIBIT	bekleiden	Was die Vorsitzende tat, war die Vereinsführung zu bekleiden.
248	EXHIBIT	bekleiden	Was der Schulleiter tat, war die Rektorenposition zu bekleiden.
249	EXHIBIT	bekleiden	Was die Freiwillige tat, war das Ehrenamt zu bekleiden.
250	EXHIBIT	bekleiden	Was der Staatsmann tat, war den Bürgermeisterposten zu bekleiden.
251	EXHIBIT	innehaben	Was die Wissenschaftlerin tat, war den Psychologielehrstuhl innezuhaben.
252	EXHIBIT	innehaben	Was der Lehrer tat, war die Direktorenstelle innezuhaben.
253	EXHIBIT	innehaben	Was die Angestellte tat, war die Protokollantenfunktion innezuhaben.
254	EXHIBIT	innehaben	Was die Dienstvorgesetzte tat, war den Managerposten innezuhaben.
255	EXHIBIT	innehaben	Was die Redakteurin tat, war die Redaktionsleitung innezuhaben.
256	EXHIBIT	innehaben	Was der Schüler tat, war das Schülersprecheramt innezuhaben.
257	EXHIBIT	innehaben	Was die Mentorin tat, war die Doppelspitze innezuhaben.
258	EXHIBIT	innehaben	Was der Mitarbeiter tat, war die Doktorandenstelle innezuhaben.
259	EXHIBIT	innehaben	Was die Fussballerin tat, war die Stürmerposition innezuhaben.
260	EXHIBIT	innehaben	Was der Experte tat, war die Konzernleitung innezuhaben.
261	EXHIBIT	aufweisen	Was die Neugeborene tat, war das Asperger-Syndrom aufzuweisen.
262	EXHIBIT	aufweisen	Was der Kranke tat, war den Grippevirus aufzuweisen.
263	EXHIBIT	aufweisen	Was die Professorin tat, war den höchsten Bildungsgrad aufzuweisen.
264	EXHIBIT	aufweisen	Was der Coach tat, war das Durchhaltevermögen aufzuweisen.
265	EXHIBIT	aufweisen	Was die Nachhilfeschülerin tat, war das Leistungsdefizit aufzuweisen.
266	EXHIBIT	aufweisen	Was der Bodybuilder tat, war den Vitaminmangel aufzuweisen.
267	EXHIBIT	aufweisen	Was die Erkrankte tat, war die Genmutation aufzuweisen.
268	EXHIBIT	aufweisen	Was der Student tat, war die Lernlücke aufzuweisen.
269	EXHIBIT	aufweisen	Was die Großmutter tat, war das Altersmerkmal aufzuweisen.

270	EXHIBIT	aufweisen	Was der Auserwählte tat, war das Muttermal aufzuweisen.
271	EXHIBIT	dabeihaben	Was der Feriengast tat, war den Skipass dabeizuhaben.
272	EXHIBIT	dabeihaben	Was die Reiseführerin tat, war die Regenbekleidung dabeizuhaben.
273	EXHIBIT	dabeihaben	Was der Tauchlehrer tat, war die Tauchausrustung dabeizuhaben.
274	EXHIBIT	dabeihaben	Was die Urlauberin tat, war den Reisepass dabeizuhaben.
275	EXHIBIT	dabeihaben	Was der Teilnehmer tat, war die Eintrittskarte dabeizuhaben.
276	EXHIBIT	dabeihaben	Was die Sonnenanbeterin tat, war die Sonnencreme dabeizuhaben.
277	EXHIBIT	dabeihaben	Was der Reisende tat, war den Personalausweis dabeizuhaben.
278	EXHIBIT	dabeihaben	Was die Tänzerin tat, war das Kofferradio dabeizuhaben.
279	EXHIBIT	dabeihaben	Was der Motorradfahrer tat, war den Führerschein dabeizuhaben.
280	EXHIBIT	dabeihaben	Was die Skifahrerin tat, war die Winterausrüstung dabeizuhaben.
281	EXHIBIT	dahaben	Was der Discothekeninhaber tat, war die neueste Lasertechnik dazuhaben.
282	EXHIBIT	dahaben	Was die Filialleiterin tat, war das Bioangebot dazuhaben.
283	EXHIBIT	dahaben	Was der Verkäufer tat, war den Gourmetkäse dazuhaben.
284	EXHIBIT	dahaben	Was die Bibliothekarin tat, war die Dudengrammatik dazuhaben.
285	EXHIBIT	dahaben	Was der Junge tat, war das Flyerexemplar dazuhaben.
286	EXHIBIT	dahaben	Was die Schneiderin tat, war den Stoffrest dazuhaben.
287	EXHIBIT	dahaben	Was der Heilpraktiker tat, war das Homöopathiemittel dazuhaben.
288	EXHIBIT	dahaben	Was die Tante tat, war das Brockhauslexikon dazuhaben.
289	EXHIBIT	dahaben	Was der Juwelier tat, war das Schmucksortiment dazuhaben.
290	EXHIBIT	dahaben	Was die Vermieterin tat, war den Mietvertrag dazuhaben.
291	EXHIBIT	haben	Was der Erkrankte tat, war die Grippe zu haben.
292	EXHIBIT	haben	Was die Sportlerin tat, war das Vereinstrikot zu haben.
293	EXHIBIT	haben	Was der Tätowierer tat, war die Druckvorlage zu haben.
294	EXHIBIT	haben	Was die Fahrschülerin tat, war das Lehrbuch zu haben.
295	EXHIBIT	haben	Was der Professor tat, war das Unishirt zu haben.
296	EXHIBIT	haben	Was die Doktorandin tat, war den Semesterplan zu haben.
297	EXHIBIT	haben	Was der Erstsemesterstudent tat, war das Vorlesungsverzeichnis zu haben.
298	EXHIBIT	haben	Was die Buchhändlerin tat, war den Büchergutschein zu haben.
299	EXHIBIT	haben	Was der Doktorand tat, war die Mensakarte zu haben.
300	EXHIBIT	haben	Was die Studentin tat, war den Studierendenausweis zu haben.
301	NEGATIVE CONTROL	--	Was der Schüler tat, war benotet zu werden.
302	NEGATIVE CONTROL	--	Was der Boxer tat, war getroffen zu werden.
303	NEGATIVE CONTROL	--	Was der Verbrecher tat, war geschnappt zu werden.
304	NEGATIVE CONTROL	--	Was die Patientin tat, war untersucht zu werden.
305	NEGATIVE CONTROL	--	Was die Arbeiterin tat, war gefeuert zu werden.
306	NEGATIVE CONTROL	--	Was die Kundin tat, war bedient zu werden.

### Appendix C

In Experiment 2, we used the same critical verbs and patient arguments as in Experiment 1, but subject arguments were replaced with indefinite pronouns (e.g. *manche* ‘some’). The following list in Table C1 contains the critical items in active voice (60 sentences per verb class, 10 sentences per verb). Passive sentences were constructed by removing the indefinite pronoun in subject function and by replacing the auxiliary *haben* ‘have’ with the passive auxiliary *wurde* ‘was’. Hence, there was no agent *by*-phrase in the passive items. For each item, the main-clause verb and subject were identical in active and passive voice. An example pair of active and passive sentences is given for the first item in Table C1. Negative control items only occurred in passive voice.

**Table C1.** List of items (in active voice) for Experiment 2

Item	Verb class	Verb	Sentence
1	WATCH	anschauen	<i>active:</i> Dass mehrere die Mondlandung angeschaut haben, beeindruckte Peter. <i>passive:</i> Dass die Mondlandung angeschaut wurde beeindruckte Peter.
2	WATCH	anschauen	Dass einige die Uraufführung angeschaut haben, amüsierte Maria.
3	WATCH	anschauen	Dass viele die Mondfinsternis angeschaut haben, begeisterte Otto.

4	WATCH	anschauen	Dass manche das Überwachungsvideo angeschaut haben, interessierte Ina.
5	WATCH	anschauen	Dass mehrere die Krönungszeremonie angeschaut haben, überraschte Max.
6	WATCH	anschauen	Dass einige den Sonnenuntergang angeschaut haben, verblüffte Jana.
7	WATCH	anschauen	Dass viele den Sternenhimmel angeschaut haben, störte Tim.
8	WATCH	anschauen	Dass manche den Weihnachtsbaum angeschaut haben, erfreute Julia.
9	WATCH	anschauen	Dass mehrere die Davidstatue angeschaut haben, faszinierte Markus.
10	WATCH	anschauen	Dass einige das Endspiel angeschaut haben, verwunderte Elke.
11	WATCH	beobachten	Dass viele die Gerölllawine beobachtet haben, amüsierte Maria.
12	WATCH	beobachten	Dass manche die Klimaveränderung beobachtet haben, begeisterte Otto.
13	WATCH	beobachten	Dass mehrere die Zellmutation beobachtet haben, interessierte Ina.
14	WATCH	beobachten	Dass einige die Wahldurchführung beobachtet haben, überraschte Max.
15	WATCH	beobachten	Dass viele den Teilchenbeschleuniger beobachtet haben, verblüffte Jana.
16	WATCH	beobachten	Dass manche den Gärungsprozess beobachtet haben, störte Tim.
17	WATCH	beobachten	Dass mehrere den Turmbau beobachtet haben, erfreute Julia.
18	WATCH	beobachten	Dass einige den Sonnenuntergang beobachtet haben, faszinierte Markus.
19	WATCH	beobachten	Dass viele die Sonnenfinsternis beobachtet haben, verwunderte Elke.
20	WATCH	beobachten	Dass manche das Silvesterfeuerwerk beobachtet haben, beeindruckte Peter.
21	WATCH	beschnuppern	Dass mehrere das Chemikaliengemisch beschnuppert haben, begeisterte Otto.
22	WATCH	beschnuppern	Dass einige die Suppenauswahl beschnuppert haben, interessierte Ina.
23	WATCH	beschnuppern	Dass viele die neueste Duftkerze beschnuppert haben, überraschte Max.
24	WATCH	beschnuppern	Dass manche das Waschmittelangebot beschnuppert haben, verblüffte Jana.
25	WATCH	beschnuppern	Dass mehrere das Seifensorientiment beschnuppert haben, störte Tim.
26	WATCH	beschnuppern	Dass einige die Orchideenkreuzung beschnuppert haben, erfreute Julia.
27	WATCH	beschnuppern	Dass viele das Röstergebnis beschnuppert haben, faszinierte Markus.
28	WATCH	beschnuppern	Dass manche das Parfumangebot beschnuppert haben, verwunderte Elke.
29	WATCH	beschnuppern	Dass mehrere die Edelrose beschnuppert haben, beeindruckte Peter.
30	WATCH	beschnuppern	Dass einige das Zitronengras beschnuppert haben, amüsierte Maria.
31	WATCH	betrachten	Dass viele die Verfassungsurkunde betrachtet haben, interessierte Ina.
32	WATCH	betrachten	Dass manche den Bildabzug betrachtet haben, überraschte Max.
33	WATCH	betrachten	Dass mehrere die Kohleskizze betrachtet haben, verblüffte Jana.
34	WATCH	betrachten	Dass einige das Weinettikett betrachtet haben, störte Tim.
35	WATCH	betrachten	Dass viele die Warenauslage betrachtet haben, erfreute Julia.
36	WATCH	betrachten	Dass manche den Viehbestand betrachtet haben, faszinierte Markus.
37	WATCH	betrachten	Dass mehrere die Produktpalette betrachtet haben, verwunderte Elke.
38	WATCH	betrachten	Dass einige die Kunstinstallation betrachtet haben, beeindruckte Peter.
39	WATCH	betrachten	Dass viele die Kuppelarchitektur betrachtet haben, amüsierte Maria.
40	WATCH	betrachten	Dass manche die Freiheitsstatue betrachtet haben, begeisterte Otto.
41	WATCH	betasten	Dass mehrere die Stoffstruktur betastet haben, überraschte Max.
42	WATCH	betasten	Dass einige das Ziffernblatt betastet haben, verblüffte Jana.
43	WATCH	betasten	Dass viele die Krugscherbe betastet haben, störte Tim.
44	WATCH	betasten	Dass manche die Materialkörnung betastet haben, erfreute Julia.
45	WATCH	betasten	Dass mehrere die Matratzenfüllung betastet haben, faszinierte Markus.
46	WATCH	betasten	Dass einige den Briefumschlag betastet haben, verwunderte Elke.
47	WATCH	betasten	Dass viele die Gemüseauslage betastet haben, beeindruckte Peter.
48	WATCH	betasten	Dass manche den Pelzmantel betastet haben, amüsierte Maria.
49	WATCH	betasten	Dass mehrere die Muskelverhärtung betastet haben, begeisterte Otto.
50	WATCH	betasten	Dass einige die Papyrusrolle betastet haben, interessierte Ina.
51	WATCH	verfolgen	Dass viele das Artensterben verfolgt haben, verblüffte Jana.
52	WATCH	verfolgen	Dass manche den Aktienkurs verfolgt haben, störte Tim.
53	WATCH	verfolgen	Dass mehrere die Neujahrsansprache verfolgt haben, erfreute Julia.
54	WATCH	verfolgen	Dass einige die Antrittsrede verfolgt haben, faszinierte Markus.
55	WATCH	verfolgen	Dass viele die Eisschmelze verfolgt haben, verwunderte Elke.
56	WATCH	verfolgen	Dass manche das Autorennen verfolgt haben, beeindruckte Peter.
57	WATCH	verfolgen	Dass mehrere die Weltmeisterschaft verfolgt haben, amüsierte Maria.
58	WATCH	verfolgen	Dass einige die Stimmenauszählung verfolgt haben, begeisterte Otto.
59	WATCH	verfolgen	Dass viele den Energiemarkt verfolgt haben, interessierte Ina.
60	WATCH	verfolgen	Dass manche die Preisentwicklung verfolgt haben, überraschte Max.
61	HATE	fürchten	Dass mehrere die Abschlussklausur gefürchtet haben, störte Tim.
62	HATE	fürchten	Dass einige die Abenddämmerung gefürchtet haben, erfreute Julia.

63	HATE	fürchten	Dass viele die Notenkonferenz gefürchtet haben, faszinierte Markus.
64	HATE	fürchten	Dass manche die Drogenabhängigkeit gefürchtet haben, verwunderte Elke.
65	HATE	fürchten	Dass mehrere die Altersarmut gefürchtet haben, beeindruckte Peter.
66	HATE	fürchten	Dass einige den Atomkrieg gefürchtet haben, interessierte Maria.
67	HATE	fürchten	Dass viele die Finanzprüfung gefürchtet haben, begeisterte Otto.
68	HATE	fürchten	Dass manche die Kritikermeinung gefürchtet haben, amüsierte Ina.
69	HATE	fürchten	Dass mehrere die Geisterbahn gefürchtet haben, überraschte Max.
70	HATE	fürchten	Dass einige das Verkehrschaos gefürchtet haben, verblüffte Jana.
71	HATE	hassen	Dass viele das Alleinsein gehasst haben, erfreute Julia.
72	HATE	hassen	Dass manche das Hupkonzert gehasst haben, faszinierte Markus.
73	HATE	hassen	Dass mehrere den Fluglärm gehasst haben, interessierte Elke.
74	HATE	hassen	Dass einige die Blasmusik gehasst haben, beeindruckte Peter.
75	HATE	hassen	Dass viele die Warteschlange gehasst haben, amüsierte Maria.
76	HATE	hassen	Dass manche die Wartezeit gehasst haben, begeisterte Otto.
77	HATE	hassen	Dass mehrere die Steuererhöhung gehasst haben, verwunderte Ina.
78	HATE	hassen	Dass einige den Mathematikunterricht gehasst haben, überraschte Max.
79	HATE	hassen	Dass viele die Versicherungspolitik gehasst haben, verblüffte Jana.
80	HATE	hassen	Dass manche die Winterkälte gehasst haben, störte Tim.
81	HATE	lieben	Dass mehrere die Theateraufführung geliebt haben, faszinierte Markus.
82	HATE	lieben	Dass einige den Wiener Walzer geliebt haben, verwunderte Elke.
83	HATE	lieben	Dass viele die Seeluft geliebt haben, beeindruckte Peter.
84	HATE	lieben	Dass manche den Skilanglauf geliebt haben, amüsierte Maria.
85	HATE	lieben	Dass mehrere die Bergkulisse geliebt haben, begeisterte Otto.
86	HATE	lieben	Dass einige den Reitunterricht geliebt haben, interessierte Ina.
87	HATE	lieben	Dass viele die Elbphilharmonie geliebt haben, überraschte Max.
88	HATE	lieben	Dass manche das Puppentheater geliebt haben, verblüffte Jana.
89	HATE	lieben	Dass mehrere den Lehrerberuf geliebt haben, amüsierte Tim.
90	HATE	lieben	Dass einige die Schauspielkunst geliebt haben, erfreute Julia.
91	HATE	mögen	Dass viele das Mittagessen gemocht haben, verwunderte Elke.
92	HATE	mögen	Dass manche die Osterdekoration gemocht haben, beeindruckte Peter.
93	HATE	mögen	Dass mehrere die Weihnachtsdekoration gemocht haben, amüsierte Maria.
94	HATE	mögen	Dass einige das Krippenspiel gemocht haben, überraschte Otto.
95	HATE	mögen	Dass viele das Restaurantessen gemocht haben, interessierte Ina.
96	HATE	mögen	Dass manche das Frühlingswetter gemocht haben, begeisterte Max.
97	HATE	mögen	Dass mehrere die Clowns bemalung gemocht haben, verblüffte Jana.
98	HATE	mögen	Dass einige das Theaterstück gemocht haben, störte Tim.
99	HATE	mögen	Dass viele die Fototapete gemocht haben, erfreute Julia.
100	HATE	mögen	Dass manche die Popmusik gemocht haben, faszinierte Markus.
101	HATE	verabscheuen	Dass mehrere den Korruptionsskandal verabscheut haben, verwunderte Peter.
102	HATE	verabscheuen	Dass einige den Ladendiebstahl verabscheut haben, beeindruckte Maria.
103	HATE	verabscheuen	Dass viele die Ökosteuer verabscheut haben, störte Otto.
104	HATE	verabscheuen	Dass manche das Kapitalverbrechen verabscheut haben, begeisterte Ina.
105	HATE	verabscheuen	Dass mehrere den Justizskandal verabscheut haben, interessierte Max.
106	HATE	verabscheuen	Dass einige die Tierquälerei verabscheut haben, überraschte Jana.
107	HATE	verabscheuen	Dass viele den Gewaltexzess verabscheut haben, verblüffte Tim.
108	HATE	verabscheuen	Dass manche die Kriegstreiberei verabscheut haben, störte Julia.
109	HATE	verabscheuen	Dass mehrere die Boulevardpresse verabscheut haben, erfreute Markus.
110	HATE	verabscheuen	Dass einige die Europapolitik verabscheut haben, faszinierte Elke.
111	HATE	verachten	Dass viele die Todesstrafe verachtet haben, beeindruckte Maria.
112	HATE	verachten	Dass manche den Raubüberfall verachtet haben, interessierte Otto.
113	HATE	verachten	Dass mehrere die Steuerhinterziehung verachtet haben, begeisterte Ina.
114	HATE	verachten	Dass einige die Erbmonarchie verachtet haben, amüsierte Max.
115	HATE	verachten	Dass viele die Gräueltat verachtet haben, überraschte Jana.
116	HATE	verachten	Dass manche den Finanzbetrug verachtet haben, verblüffte Tim.
117	HATE	verachten	Dass mehrere den Ehebetrug verachtet haben, verwunderte Julia.
118	HATE	verachten	Dass einige die Gefangenfolter verachtet haben, erfreute Markus.
119	HATE	verachten	Dass viele die Henkerszunft verachtet haben, faszinierte Elke.
120	HATE	verachten	Dass manche die Personalpolitik verachtet haben, störte Peter.
121	KNOW	beherrschen	Dass einige die Schaltautomatik beherrscht haben, amüsierte Otto.

122	KNOW	beherrschen	Dass manche den Handstand beherrscht haben, begeisterte Ina.
123	KNOW	beherrschen	Dass mehrere den Rückwärtssalto beherrscht haben, interessierte Max.
124	KNOW	beherrschen	Dass einige die Turnübung beherrscht haben, überraschte Jana.
125	KNOW	beherrschen	Dass viele die Prozentrechnung beherrscht haben, verblüffte Tim.
126	KNOW	beherrschen	Dass mehrere die Kopfstimme beherrscht haben, störte Julia.
127	KNOW	beherrschen	Dass manche die Kranzbinderei beherrscht haben, erfreute Markus.
128	KNOW	beherrschen	Dass viele das Notenlesen beherrscht haben, faszinierte Elke.
129	KNOW	beherrschen	Dass mehrere das Kunsthandwerk beherrscht haben, verwunderte Peter.
130	KNOW	beherrschen	Dass viele die Literaturrecherche beherrscht haben, beeindruckte Maria.
131	KNOW	erahnen	Dass mehrere das Wahlergebnis erahnt haben, begeisterte Ina.
132	KNOW	erahnen	Dass einige die Erfolgschance erahnt haben, interessierte Max.
133	KNOW	erahnen	Dass viele das Katastrophenausmaß erahnt haben, überraschte Jana.
134	KNOW	erahnen	Dass mehrere die Kampfkandidatur erahnt haben, verblüffte Tim.
135	KNOW	erahnen	Dass manche den Ministerrücktritt erahnt haben, störte Julia.
136	KNOW	erahnen	Dass viele den Parteiniedergang erahnt haben, erfreute Markus.
137	KNOW	erahnen	Dass einige den Wahlsieg erahnt haben, faszinierte Elke.
138	KNOW	erahnen	Dass viele die Nutzungsmöglichkeit erahnt haben, verwunderte Peter.
139	KNOW	erahnen	Dass mehrere den Wirtschaftsaufschwung erahnt haben, beeindruckte Maria.
140	KNOW	erahnen	Dass viele den Handlungsverlauf erahnt haben, amüsierte Otto.
141	KNOW	glauben	Dass viele die Falschnachricht geglaubt haben, interessierte Max.
142	KNOW	glauben	Dass viele die Marienlegende geglaubt haben, überraschte Jana.
143	KNOW	glauben	Dass manche den Dopingbericht geglaubt haben, verblüffte Tim.
144	KNOW	glauben	Dass mehrere das Testergebnis geglaubt haben, störte Julia.
145	KNOW	glauben	Dass einige das Statistikergebnis geglaubt haben, erfreute Markus.
146	KNOW	glauben	Dass mehrere den Rechenkniff geglaubt haben, faszinierte Elke.
147	KNOW	glauben	Dass mehrere den Zaubertrick geglaubt haben, verwunderte Peter.
148	KNOW	glauben	Dass manche die Heiligenlegende geglaubt haben, beeindruckte Maria.
149	KNOW	glauben	Dass viele die Falschaussage geglaubt haben, amüsierte Otto.
150	KNOW	glauben	Dass wenige die Zeugenaussage geglaubt haben, begeisterte Ina.
151	KNOW	kennen	Dass viele das Unfallrisiko gekannt haben, überraschte Jana.
152	KNOW	kennen	Dass mehrere das Plagiatsrisiko gekannt haben, verblüffte Tim.
153	KNOW	kennen	Dass manche die Ausfallquote gekannt haben, störte Julia.
154	KNOW	kennen	Dass viele die Paragraphenänderung gekannt haben, erfreute Markus.
155	KNOW	kennen	Dass einige das Müllproblem gekannt haben, faszinierte Elke.
156	KNOW	kennen	Dass manche das Einreiseverbot gekannt haben, verwunderte Peter.
157	KNOW	kennen	Dass mehrere die Impfvorschrift gekannt haben, beeindruckte Maria.
158	KNOW	kennen	Dass manche den Hintereingang gekannt haben, amüsierte Otto.
159	KNOW	kennen	Dass viele den Bibeltext gekannt haben, begeisterte Ina.
160	KNOW	kennen	Dass mehrere die Sonderregelung gekannt haben, interessierte Max.
161	KNOW	vermuten	Dass manche den Staatsbankrott vermutet haben, verblüffte Tim.
162	KNOW	vermuten	Dass mehrere die Firmeninsolvenz vermutet haben, störte Julia.
163	KNOW	vermuten	Dass einige das Tatmotiv vermutet haben, erfreute Markus.
164	KNOW	vermuten	Dass viele die Brandursache vermutet haben, faszinierte Elke.
165	KNOW	vermuten	Dass mehrere den Tathintergrund vermutet haben, verwunderte Peter.
166	KNOW	vermuten	Dass manche die Firmenfusion vermutet haben, beeindruckte Maria.
167	KNOW	vermuten	Dass viele den Beweggrund vermutet haben, amüsierte Otto.
168	KNOW	vermuten	Dass manche die Staatsverschwörung vermutet haben, begeisterte Ina.
169	KNOW	vermuten	Dass mehrere die Unfallursache vermutet haben, interessierte Max.
170	KNOW	vermuten	Dass viele den Bilanzfehler vermutet haben, überraschte Jana.
171	KNOW	wissen	Dass manche den Liedtext gewusst haben, störte Julia.
172	KNOW	wissen	Dass viele den Bibelvers gewusst haben, erfreute Markus.
173	KNOW	wissen	Dass mehrere das Geheimrezept gewusst haben, faszinierte Elke.
174	KNOW	wissen	Dass manche die Patentlösung gewusst haben, verwunderte Peter.
175	KNOW	wissen	Dass viele die Abseitsregel gewusst haben, beeindruckte Maria.
176	KNOW	wissen	Dass mehrere den Geheimweg gewusst haben, amüsierte Otto.
177	KNOW	wissen	Dass manche den Notausgang gewusst haben, begeisterte Ina.
178	KNOW	wissen	Dass viele das Lösungswort gewusst haben, interessierte Max.
179	KNOW	wissen	Dass manche die Fachterminologie gewusst haben, überraschte Jana.
180	KNOW	wissen	Dass einige die Verbflexion gewusst haben, verblüffte Tim.

181	SEE	hören	Dass mehrere das Jagdhorn gehört haben, begeisterte Markus.
182	SEE	hören	Dass einige die Verkehrsmeldung gehört haben, interessierte Elke.
183	SEE	hören	Dass viele die Pausenglocke gehört haben, überraschte Peter.
184	SEE	hören	Dass manche den Hahnenschrei gehört haben, verblüffte Maria.
185	SEE	hören	Dass mehrere den Autolärm gehört haben, störte Otto.
186	SEE	hören	Dass einige das Gitarrensolo gehört haben, erfreute Ina.
187	SEE	hören	Dass viele das Meeressauschen gehört haben, faszinierte Max.
188	SEE	hören	Dass manche die Kirchenglocke gehört haben, verwunderte Jana.
189	SEE	hören	Dass mehrere den Funkspruch gehört haben, beeindruckte Tim.
190	SEE	hören	Dass einige das Warnsignal gehört haben, amüsierte Julia.
191	SEE	riechen	Dass viele den Teergestank gerochen haben, interessierte Elke.
192	SEE	riechen	Dass manche den Schweißdunst gerochen haben, überraschte Peter.
193	SEE	riechen	Dass mehrere den Zigarettenqualm gerochen haben, verblüffte Maria.
194	SEE	riechen	Dass einige das Schießpulver gerochen haben, störte Otto.
195	SEE	riechen	Dass viele den Chlordampf gerochen haben, erfreute Ina.
196	SEE	riechen	Dass manche den Stallmist gerochen haben, faszinierte Max.
197	SEE	riechen	Dass mehrere die Kläranlage gerochen haben, verwunderte Jana.
198	SEE	riechen	Dass einige den Waldbrand gerochen haben, beeindruckte Tim.
199	SEE	riechen	Dass viele die Schwefelwolke gerochen haben, amüsierte Julia.
200	SEE	riechen	Dass manche den Schmorbraten gerochen haben, begeisterte Markus.
201	SEE	sehen	Dass einige den Leuchtturm gesehen haben, überraschte Peter.
202	SEE	sehen	Dass mehrere den Schimmelbefall gesehen haben, verblüffte Maria.
203	SEE	sehen	Dass viele das Leuchtsignal gesehen haben, störte Otto.
204	SEE	sehen	Dass manche das Rednerpult gesehen haben, erfreute Ina.
205	SEE	sehen	Dass einige den Auffahrungsunfall gesehen haben, faszinierte Max.
206	SEE	sehen	Dass mehrere die Zellmembran gesehen haben, verwunderte Jana.
207	SEE	sehen	Dass viele das Wattensee gesehen haben, beeindruckte Tim.
208	SEE	sehen	Dass manche das Fahndungsfoto gesehen haben, amüsierte Julia.
209	SEE	sehen	Dass einige den Sturmschaden gesehen haben, begeisterte Markus.
210	SEE	sehen	Dass mehrere den Müllberg gesehen haben, interessierte Elke.
211	SEE	spüren	Dass viele den Saunaaufluss gespürt haben, verblüffte Maria.
212	SEE	spüren	Dass manche den Wellengang gespürt haben, störte Otto.
213	SEE	spüren	Dass einige die Operationsnarbe gespürt haben, erfreute Ina.
214	SEE	spüren	Dass mehrere den Dauerfrost gespürt haben, faszinierte Max.
215	SEE	spüren	Dass viele die Muskelverhärtung gespürt haben, verwunderte Jana.
216	SEE	spüren	Dass manche die Flussströmung gespürt haben, beeindruckte Tim.
217	SEE	spüren	Dass einige den Gegenwind gespürt haben, amüsierte Julia.
218	SEE	spüren	Dass mehrere den Nadelstich gespürt haben, begeisterte Markus.
219	SEE	spüren	Dass viele die Erderwärmung gespürt haben, interessierte Elke.
220	SEE	spüren	Dass manche den Fahrtwind gespürt haben, überraschte Peter.
221	SEE	vernehmen	Dass einige das Gerichtsurteil vernommen haben, störte Otto.
222	SEE	vernehmen	Dass mehrere die Ankündigung vernommen haben, erfreute Ina.
223	SEE	vernehmen	Dass viele die Prozessankündigung vernommen haben, faszinierte Max.
224	SEE	vernehmen	Dass manche die Sicherheitswarnung vernommen haben, verwunderte Jana.
225	SEE	vernehmen	Dass einige die Zugangsage vernommen haben, beeindruckte Tim.
226	SEE	vernehmen	Dass mehrere das Tellergeklapper vernommen haben, amüsierte Julia.
227	SEE	vernehmen	Dass viele die Grußbotschaft vernommen haben, begeisterte Markus.
228	SEE	vernehmen	Dass manche den Missklang vernommen haben, interessierte Elke.
229	SEE	vernehmen	Dass einige das Lüftungsgeräusch vernommen haben, überraschte Peter.
230	SEE	vernehmen	Dass mehrere das Bremsenquietschen vernommen haben, verblüffte Maria.
231	SEE	wahrnehmen	Dass viele den Explosionsknall wahrgenommen haben, erfreute Ina.
232	SEE	wahrnehmen	Dass manche die Farbveränderung wahrgenommen haben, faszinierte Max.
233	SEE	wahrnehmen	Dass einige den Vanilleduft wahrgenommen haben, verwunderte Jana.
234	SEE	wahrnehmen	Dass mehrere den Kursanstieg wahrgenommen haben, beeindruckte Tim.
235	SEE	wahrnehmen	Dass viele die Meeresverschmutzung wahrgenommen haben, amüsierte Julia.
236	SEE	wahrnehmen	Dass manche das Gasleck wahrgenommen haben, begeisterte Markus.
237	SEE	wahrnehmen	Dass einige den Dammdurchbruch wahrgenommen haben, interessierte Elke.
238	SEE	wahrnehmen	Dass mehrere die Preissenkung wahrgenommen haben, überraschte Peter.
239	SEE	wahrnehmen	Dass viele den Fluchtwagen wahrgenommen haben, verblüffte Maria.

240	SEE	wahrnehmen	Dass manche das Monitorflackern wahrgenommen haben, störte Otto.
241	EXHIBIT	bekleiden	Dass viele das Außenministeramt bekleidet haben, interessierte Max.
242	EXHIBIT	bekleiden	Dass einige die Führungsposition bekleidet haben, überraschte Jana.
243	EXHIBIT	bekleiden	Dass mehrere die Leitungsfunktion bekleidet haben, verblüffte Tim.
244	EXHIBIT	bekleiden	Dass manche das Kanzleramt bekleidet haben, störte Julia.
245	EXHIBIT	bekleiden	Dass mehrere die Stabsleitung bekleidet haben, erfreute Markus.
246	EXHIBIT	bekleiden	Dass einige das Repräsentantenamt bekleidet haben, faszinierte Elke.
247	EXHIBIT	bekleiden	Dass viele die Vereinsführung bekleidet haben, verwunderte Peter.
248	EXHIBIT	bekleiden	Dass manche die Rektorenposition bekleidet haben, beeindruckte Maria.
249	EXHIBIT	bekleiden	Dass mehrere das Ehrenamt bekleidet haben, amüsierte Otto.
250	EXHIBIT	bekleiden	Dass einige den Bürgermeisterposten bekleidet haben, begeisterte Ina.
251	EXHIBIT	innehaben	Dass viele den Psychologielehrstuhl innegehabt haben, überraschte Jana.
252	EXHIBIT	innehaben	Dass manche die Direktorenstelle innegehabt haben, verblüffte Tim.
253	EXHIBIT	innehaben	Dass mehrere die Protokollantenfunktion innegehabt haben, störte Julia.
254	EXHIBIT	innehaben	Dass einige den Managerposten innegehabt haben, erfreute Markus.
255	EXHIBIT	innehaben	Dass viele die Redaktionsleitung innegehabt haben, faszinierte Elke.
256	EXHIBIT	innehaben	Dass manche das Schülersprecheramt innegehabt haben, verwunderte Peter.
257	EXHIBIT	innehaben	Dass mehrere die Doppelspitze innegehabt haben, beeindruckte Maria.
258	EXHIBIT	innehaben	Dass einige die Doktorandenstelle innegehabt haben, amüsierte Otto.
259	EXHIBIT	innehaben	Dass viele die Stürmerposition innegehabt haben, begeisterte Ina.
260	EXHIBIT	innehaben	Dass manche die Konzernleitung innegehabt haben, interessierte Max.
261	EXHIBIT	aufweisen	Dass mehrere das Asperger-Syndrom aufgewiesen haben, verblüffte Tim.
262	EXHIBIT	aufweisen	Dass einige den Grippevirus aufgewiesen haben, störte Julia.
263	EXHIBIT	aufweisen	Dass viele den höchsten Bildungsgrad aufgewiesen haben, erfreute Markus.
264	EXHIBIT	aufweisen	Dass manche das Durchhaltevermögen aufgewiesen haben, faszinierte Elke.
265	EXHIBIT	aufweisen	Dass mehrere das Leistungsdefizit aufgewiesen haben, beeindruckte Peter.
266	EXHIBIT	aufweisen	Dass einige den Vitaminmangel aufgewiesen haben, verwunderte Maria.
267	EXHIBIT	aufweisen	Dass viele die Genmutation aufgewiesen haben, amüsierte Otto.
268	EXHIBIT	aufweisen	Dass manche die Lernlücke aufgewiesen haben, störte Ina.
269	EXHIBIT	aufweisen	Dass mehrere das Altersmerkmal aufgewiesen haben, interessierte Max.
270	EXHIBIT	aufweisen	Dass einige das Muttermal aufgewiesen haben, überraschte Jana.
271	EXHIBIT	dabeihaben	Dass viele den Skipass dabeigehabt haben, begeisterte Julia.
272	EXHIBIT	dabeihaben	Dass manche die Regenbekleidung dabeigehabt haben, erfreute Markus.
273	EXHIBIT	dabeihaben	Dass mehrere die Tauchausrustung dabeigehabt haben, faszinierte Elke.
274	EXHIBIT	dabeihaben	Dass einige den Reisepass dabeigehabt haben, verwunderte Peter.
275	EXHIBIT	dabeihaben	Dass viele die Eintrittskarte dabeigehabt haben, beeindruckte Maria.
276	EXHIBIT	dabeihaben	Dass manche die Sonnencreme dabeigehabt haben, amüsierte Otto.
277	EXHIBIT	dabeihaben	Dass mehrere den Personalausweis dabeigehabt haben, begeisterte Ina.
278	EXHIBIT	dabeihaben	Dass einige das Kofferradio dabeigehabt haben, interessierte Max.
279	EXHIBIT	dabeihaben	Dass viele den Führerschein dabeigehabt haben, überraschte Jana.
280	EXHIBIT	dabeihaben	Dass manche die Winterausrüstung dabeigehabt haben, verblüffte Tim.
281	EXHIBIT	dahaben	Dass mehrere die neueste Lasertechnik dagehabt haben, erfreute
282	EXHIBIT	dahaben	Dass einige das Bioangebot dagehabt haben, faszinierte Elke.
283	EXHIBIT	dahaben	Dass viele den Gourmetkäse dagehabt haben, verwunderte Peter.
284	EXHIBIT	dahaben	Dass manche die Dudengrammatik dagehabt haben, beeindruckte Maria.
285	EXHIBIT	dahaben	Dass mehrere das Flyerexemplar dagehabt haben, amüsierte Otto.
286	EXHIBIT	dahaben	Dass einige den Stoffrest dagehabt haben, begeisterte Ina.
287	EXHIBIT	dahaben	Dass viele das Homöopathiemittel dagehabt haben, interessierte Max.
288	EXHIBIT	dahaben	Dass manche das Brockhauslexikon dagehabt haben, überraschte Jana.
289	EXHIBIT	dahaben	Dass mehrere das Schmucksortiment dagehabt haben, verblüffte Tim.
290	EXHIBIT	dahaben	Dass einige den Mietvertrag dagehabt haben, faszinierte Julia.
291	EXHIBIT	haben	Dass viele die Grippe gehabt haben, störte Elke.
292	EXHIBIT	haben	Dass manche das Vereinstrikot gehabt haben, verwunderte Peter.
293	EXHIBIT	haben	Dass mehrere die Druckvorlage gehabt haben, störte Maria.
294	EXHIBIT	haben	Dass einige das Lehrbuch gehabt haben, amüsierte Otto.
295	EXHIBIT	haben	Dass viele das Unishirt gehabt haben, begeisterte Ina.
296	EXHIBIT	haben	Dass manche den Semesterplan gehabt haben, interessierte Max.
297	EXHIBIT	haben	Dass mehrere das Vorlesungsverzeichnis gehabt haben, überraschte Jana.
298	EXHIBIT	haben	Dass einige den Büchergutschein gehabt haben, verblüffte Tim.

299	EXHIBIT	haben	Dass viele die Mensakarte gehabt haben, beeindruckte Julia.
300	EXHIBIT	haben	Dass manche den Studierendenausweis gehabt haben, erfreute Markus.
301	NEGATIVE CONTROL	--	Dass die Sonderausstellung gefallen wurde, beeindruckte Peter.
302	NEGATIVE CONTROL	--	Dass die Hochzeitstorte missglückt wurde, amüsierte Maria.
303	NEGATIVE CONTROL	--	Dass die Abschlussarbeit misslungen wurde, begeisterte Otto.
304	NEGATIVE CONTROL	--	Dass die Mietwohnung behagt wurde, interessierte Ina.
305	NEGATIVE CONTROL	--	Dass die Lösungsidee eingefallen wurde, überraschte Max.
306	NEGATIVE CONTROL	--	Dass der Gesetzesentwurf missbehagt wurde, verblüffte Jana.
307	NEGATIVE CONTROL	--	Dass die Rockmusik gefallen wurde, störte Tim.
308	NEGATIVE CONTROL	--	Dass der Bühnenauftritt missglückt wurde, erfreute Julia.
309	NEGATIVE CONTROL	--	Dass die Farbmischung misslungen wurde, faszierte Markus.
310	NEGATIVE CONTROL	--	Dass das Badewasser behagt wurde, verwunderte Elke.
311	NEGATIVE CONTROL	--	Dass die Chemieformel eingefallen wurde, amüsierte Maria.
312	NEGATIVE CONTROL	--	Dass die Kaffeemischung missbehagt wurde, begeisterte Otto.