

Univerzita Karlova

Filozofická fakulta

Ústav anglického jazyka a didaktiky



Diplomová práce

Jakub Sláma

The prepositional phrase with the preposition *at* as a valency complement of nouns

Předložková fráze s předložkou *at* jakožto valenční komplement substantiv

Praha 2018

vedoucí práce: prof. PhDr. Libuše Dušková, DrSc.

Velice děkuji vedoucí své diplomové práce prof. PhDr. Libuši Duškové, DrSc., za její trpělivost, laskavost a ochotu a za její cenné a podnětné rady a komentáře.

Prohlašuji, že jsem diplomovou práci vypracoval samostatně, že jsem řádně citoval všechny použité prameny a literaturu a že práce nebyla využita v rámci jiného vysokoškolského studia či k získání jiného nebo stejného titulu.

V Praze dne 28. dubna 2018

.....

Abstrakt

Diplomová práce se zabývá problematikou valence substantiv, jejím vztahem k referenci a faktory podmiňujícími realizaci valenčního potenciálu substantiv. Teoretická část práce se věnuje jak valenci obecně, tak konkrétněji valenci substantiv. V obecnějších oddílech jsou vymezeny základní termíny a koncepty uplatňované ve valenčních popisech různého zaměření. V oddílech věnovaných substantivní valenci jsou mimo jiné vymezeny některé rozdíly mezi valenci substantiv a sloves a je odůvodněno vyloučení konstrukcí typu *make an attempt* z popisovaných dat. Vedle toho je upozorněno na vztah valence a slovo tvorby a na vztah valence substantiv a reference, resp. kontextové určenosti.

Empirická část práce je rozdělena do několika oddílů; všechny vycházejí z dat z Britského národního korpusu. Kvantitativní část analýzy ukazuje, že substantiva *attempt* a *ability* vyžadují obligatorně vyjádřený komplement, jsou-li determinována neurčitým členem vyjadřujícím kontextovou nezapojenost. Tím je potenciálně zpochybněno jak v literatuře běžné tvrzení, že vyjádření valenčního potenciálu substantiv není nikdy obligatorní, tak tvrzení, že substantiva (resp. některá z popisovaných substantiv) vůbec nemají valenci. Kvalitativní část analýzy popisuje možná vyjádření prvního argumentu substantiv *attempt*, *ability* a *failure*, ale také případy, kdy tento argument není explicitně vyjádřen. Analýza se dále zaměřuje na konkurenci předložkové fráze s předložkou *at* a infinitivní klauze v pozici komplementu těchto tří substantiv; jejím cílem je identifikace morfosyntaktických, sémantických, ale také kontextových faktorů podmiňujících volbu formy komplementu.

klíčová slova: valence substantiv; substantivní fráze; určenost; reference; syntax a sémantika

Abstract

The present thesis deals with noun valency, its relation to reference, and factors underlying the realization of the valency potential of nouns. The theoretical part examines valency in general, delineating the basic terminology and concepts usually employed in the descriptions of valency couched within various linguistic frameworks. The theoretical part subsequently focuses more specifically on the valency of nouns, pointing out in what ways it differs from the valency of verbs. The support verb construction is introduced, and it is explained why the construction is not examined in the present thesis. Two interfaces are introduced, viz. that of valency and word-formation, and that of valency and reference, or contextual boundness.

The empirical part of the thesis is divided into several parts, all relying on data from the British National Corpus. The quantitative part of the analysis shows that the nouns *attempt* and *ability* obligatorily take an explicit complement when they are immediately preceded by an indefinite article marking their newness in discourse. This could possibly challenge both the widespread claim that the expression of the valency potential of a noun is never obligatory and the claim that (these) nouns are aivalent. The qualitative part of the analysis examines the expression of the first argument of the nouns *attempt*, *ability*, and *failure*, but also the cases in which the first argument is not expressed explicitly. Subsequently, the analysis attempts to identify factors affecting the choice of an *at*-prepositional phrase or an infinitival clause as the complement expressing the second argument of these nouns; various possibilities are considered, including morphosyntactic and semantic as well as contextual factors.

key words: noun valency; noun phrase; definiteness; reference; syntax and semantics

Table of Contents

1 Introduction.....	12
2 Theoretical background	14
2.1 Valency	14
2.1.1 Definition and terminology	14
2.1.2 Basic concepts	16
2.1.2.1 Semantic vs. syntactic valency	16
2.1.2.2 Arguments vs. adjuncts.....	18
2.1.2.3 Participant vs. thematic roles	20
2.1.2.4 The mapping of argument structure.....	21
2.1.3 Views of valency	23
2.1.3.1 Lexicalist approaches.....	23
2.1.3.2 Non-lexicalist approaches.....	24
2.2 Valency of nouns.....	27
2.2.1 The scope of the notion of valency.....	28
2.2.2 Types of valent nouns.....	30
2.2.3 Nominal vs. verbal valency	31
2.2.4 Support verb constructions	35
2.2.5 Noun valency and derivation.....	36
2.2.5.1 Argument inheritance	37
2.2.5.2 Nominalization.....	38
2.2.6 Factors influencing the realization of a noun's valency potential	41
2.2.6.1 Context, reference, and anaphora	42
2.2.6.2 Semantics	48

2.2.6.3 Syntactic priming.....	52
3 Material and method	54
3.1 Nouns taking an <i>at</i> -complement	54
3.2 Selection of the nouns	54
3.3 Instances of the nouns excluded from the analysis	57
3.4 Data for the analysis.....	58
3.4.1 The corpus	58
3.4.2 Extraction of the data.....	59
3.4.2.1 Data sets	59
3.4.2.2 Samples	60
4 Analysis	62
4.1 Hypotheses	62
4.2 Some quantitative observations.....	63
4.2.1 The <i>attempt</i> data set.....	63
4.2.2 The <i>ability</i> data set.....	67
4.3 Further remarks on context, reference and noun valency	69
4.4 The first argument of the nouns	70
4.4.1 Explicit expression of the first argument.....	70
4.4.2 Implicit first argument	73
4.4.3 Summary.....	76
4.5 The <i>at</i> -PP vs the <i>to</i> -infinitive as complement.....	78
4.5.1 Factors favoring the choice of an <i>at</i> -PP as a complement.....	78
4.5.2 Factors favoring the choice of a <i>to</i> -infinitive as a complement	83
4.5.3 Semantic features.....	84

4.5.3.1 Implicativeness and/or successfulness.....	84
4.5.3.2 Mutuality, collaboration, and/or reciprocity	86
4.5.3.3 Further remarks.....	87
5 Conclusions and discussion	89
5.1 Summary of the results.....	89
5.2 Implications for studying noun valency	91
5.3 Further remarks	91
References and sources	93
Resumé.....	108
Appendix.....	112

List of Abbreviations

DNC	definite null complement
FGD	Functional Generative Description
NP	noun phrase
PP	prepositional phrase
SVC _{xn}	support verb construction (stretched verb construction)
UTAH	the Uniformity of Theta-Assignment Hypothesis
VP	verb phrase
BNC	British National Corpus
<i>OED</i>	<i>Oxford English Dictionary</i>

List of Tables

Table 1: The overall distribution of the three nouns.....	59
Table 2: The negative filters used to exclude the SVCxn.....	60
Table 3: The size of the six samples	60
Table 4: The first argument and the second argument of the nouns.....	62
Table 5: Patterns following <i>an attempt</i>	63
Table 6: Summary of the results of the quantitative analysis	68
Table 7: Realization of the first argument	71
Table 8: Implicit first arguments	73
Table 9: Expression of the first argument with the three nouns	77
Table 10: Expression of the first argument and the form of the complement	78
Table 11: Forms of <i>at</i> -complements.....	79
Table 12: The complement after <i>(un)successful attempt</i> in the BNC.....	85
Table 13: Premodifiers of <i>attempt</i> and the complement form	85
Appendix Table 1: <i>attempt at</i>	112
Appendix Table 2: <i>attempt to</i>	116
Appendix Table 3: <i>ability at</i>	121
Appendix Table 4: <i>ability to</i>	122
Appendix Table 5: <i>failure at</i>	127
Appendix Table 6: <i>failure to</i>	127

List of Figures

Figure 1: Composite structure: Caused-Motion + <i>sneeze</i> (Iwata, 2006: 508)	26
Figure 2: Nominalization readings and affixes (Park, 2017: 801).....	40
Figure 3: Accessibility Marking Scale (Ariel, 2014: 73).....	47

1 Introduction

Hardly any work concerning valency takes a point of departure different from referring to Lucien Tesnière, whose model of grammar “fully overturned the traditional model of sentence analysis [...] in favour of the valency properties of the verb” (Graffi, 2013: 469).¹ Having become a central topic of syntax and “a primary concern of all approaches to the grammar of human languages” (Thompson & Hopper, 2001: 39), the valency of verbs has been studied from a variety of perspectives, with the valency of (not only) nouns remaining “in the shadow of the valency of verbs” (Spevak, 2014a: ix). The present thesis aims to contribute to the line of research that attempts to shed light on this somewhat neglected area.

The rationale behind this thesis is twofold. First, it is often claimed that nouns either do not have valency properties at all, or that they have valency properties if and only if they are instances of complex-event nominals derived from verbs. Second, even less uncommon is the claim that nouns might have valency, but its ‘surface’ realization is never obligatory (“never” being the crucial word). The present thesis aims to scrutinize three nouns that may license *at*-complements (*attempt*, *failure*, *ability*), i.e. two deverbal nouns (one derived by affixation, one by conversion) and one deadjectival noun, considering whether the above-mentioned claims stand to be corrected on a usage-based account. Furthermore, the thesis examines the relevance of contextual factors (especially reference and what has come to be known as definite null complements or zero anaphora) for the study of noun valency, thus putting the second claim on trial. While determiners can hardly be considered as manifestation of valency, the thesis argues that they should be taken into consideration, which, however, raises questions about the validity of the widely accepted second claim. Moreover, the thesis also addresses the issue of alternative morphosyntactic expressions of complements, examining two alternative complementation patterns (*at*-PP vs.

¹ Naturally, “aspects of grammar and lexicography subsumed under this term have been recognized since the early days of linguistics” (Hellan et al., 2017: 1), that is, long before Tesnière. For instance, observations concerning Ancient Greek and Roman grammatical theory with respect to the valency of nouns are discussed by Spevak (2014b: 206–208).

to-infinitive) of the three nouns. Specific as this may sound, it might have more general implications for studying noun valency.

In the theoretical part of the thesis several basic concepts, approaches, and issues are outlined – in strokes too broad, no doubt. In the empirical part of the thesis, a corpus-based analysis of the three nouns (*attempt, failure, ability*) is presented, and an answer to the question of what factors underlie the valency behavior of these nouns is sought. The corpus-based study of these nouns might lead to illuminating results since perhaps a surprisingly large number of noun valency studies employ a theoretical rather than a usage-based perspective (cf. Bekaert & Enghels, 2014: 66; Spevak, 2014a: ix–x; Park, 2017: 800), and the focus is usually only on nominalizations and the *of*-phrases accompanying them (be they understood as complements or not).

Theoretically, the present thesis endeavors to find middle ground particularly between functionalist and cognitivist views of valency. While the latter implies adherence to the Cognitive Commitment,² empirical evidence from disciplines such as psycholinguistics is referred to in the thesis only where appropriate and/or relevant. Moreover, it needs to be pointed out that although cognitivist studies of valency have gained momentum especially over the last two decades (cf. 2.1.3), the precise nature of their implications for studying the valency of nouns remains an open question. This question cannot be specifically addressed here (see, however, Park & Park (2017), and references therein). Nevertheless, given the lack of communication between morphologists and syntacticians on the one hand and the common disregard for analyses couched within linguistic approaches different from one’s preferred framework (cf. Park, 2017: 803–805), which can be a hurdle in the advancement of our understanding of (not only) nominalizations, the present thesis aims at an approach as inclusive and integrative as possible (and reasonable) by considering insights from works rooted in various linguistic frameworks.

² That is, “a commitment to make one’s account of human language accord with what is generally known about the mind and the brain, from other disciplines as well as our own” (Lakoff, 1990: 40), or simply the commitment to view language as “as an instrument for organizing, processing, and conveying information” (Geeraerts, 1990: 1). These two formulations of the commitment and their implications are contrasted and insightfully discussed by Geeraerts (2016: 530–533).

2 Theoretical background

The present chapter has two major sections; the first comments on valency in general, the second focuses specifically on the valency of nouns. Especially in the latter part, attention needs to be paid to several seemingly unrelated phenomena, the discussion of which might appear rather fragmentary; however, the theoretical chapter should form a coherent whole.

2.1 Valency

2.1.1 Definition and terminology

Valency³ can be defined as “the capacity a verb (or noun, etc.) has for combining with particular patterns of other sentence constituents” (Allerton, 2006: 301). More specifically, valency has been traditionally ascribed to verbs and defined as “their internal property of selecting any argument controlled by the verb predicate itself” (Resi, 2014: 161).⁴ The term ‘predicate’ is often used for any word that requires one or more arguments, which are bound in a relationship by the predicate, thus constituting a proposition, expressible in a sentence (Kearns, 2011: 35). As shown below (cf. 2.2.1), nevertheless, valency has come to be understood as a property of not only verbs; that is, words other than verbs can be deemed predicates as well. Most importantly for the present purposes, some nouns⁵ can be uncontroversially deemed valent. The valency of nouns can then be defined as “the number, type and form of arguments that are bound to a noun” (Klímová et al., 2016: 1). This quotation touches upon two major aspects of valency, in some frameworks captured by the distinction of quantitative and qualitative valency (cf. Usón & Faber, 2002: 40). The quantitative valency of a predicate is the number of arguments that it requires (Mackenzie, 2002: 13), and it is occasionally referred to as the ‘adicity’ of the predicate (Kearns, 2011: 39). The qualitative valency of

³ Especially in the United States, the variant *valence* is also used (cf. Allerton, 2006: 301).

⁴ A more extensive and insightful overview of how the notion of valency has been delineated might in fact be welcome as the authors of the reviewed literature seem to use ‘valency’ and corresponding terms loosely, often without even attempting to define them (as is the case e.g. in Hellan et al., 2017: 1).

⁵ Whenever we speak of nouns, only common nouns are meant. Proper nouns are excluded from the discussion as they are “in a way ‘intransitive’ and cannot therefore have any arguments” (Resi, 2014: 164–165).

a predicate consists in the semantic properties of its associated arguments, including the selection restrictions that apply to them (Mackenzie, 2002: 15).

Valency needs to be distinguished from complementation and transitivity; the distinction consists in “the inclusion of the subject in the case of valency, whereas complementation excludes it” (Dušková, 1999: 98; cf. Holcová, 2016: 67, on a corresponding distinction in Czech). Complementation in this sense corresponds to transitivity; as Resi (2014: 161) puts it, “valency may also involve the external argument whereas transitivity does not.”⁶

Valency as the language fact defined above can be referred to by a variety of terms, the central ones being ‘valency,’ ‘argument structure,’ and ‘subcategorization.’ Haspelmath & Hartmann (2015: 45) state that these terms “all have basically the same meaning.” However, ‘argument structure’ and ‘subcategorization’ should be distinguished (the latter being used especially by generativists, at least since Chomsky, 1965). On the generativist view, subcategorization is listed in the lexicon, i.e. “the repository of all (idiosyncratic) properties of particular lexical items” (Chomsky & Lasnik, 1995: 30); following from the Anglocentric claim that “all verbs have subjects” (Haegeman, 2009: 45), having a subject is not deemed as an idiosyncratic property creating a subcategory of verbs, hence nothing concerning the nature of the subject is part of the subcategorization information in the lexicon. Subcategorization therefore specifies only complements (in the sense of complementation or transitivity, as defined above), whilst argument structure concerns both the complements and the subject (i.e. both internal and external arguments).⁷

It should be noted that argument structure is often conceived of as a distinct level of representation between semantic structure and syntactic structure (Alsina, 2006: 461); for instance, Zaenen & Goldberg (1993: 807) define argument structure as “the level of linguistic representation that mediates between lexical semantics and syntactic representation.” For the sake of completeness, it should

⁶ The external argument is tantamount to the subject within the Government and Binding model and its offshoots (cf. Baker, 1988: 47; Borer, 2005: 22).

⁷ In the present thesis, the terms ‘valency’ and ‘argument structure’ are preferred and used more or less interchangeably. Similarly, it is said that a predicate ‘takes,’ ‘selects,’ ‘licenses,’ ‘requires,’ or ‘subcategorizes for’ an argument or a complement without any distinctions being implied.

also be mentioned that the term ‘valency’ can refer to “a verbal category marking valency change, such as causatives, applicatives, etc.” (Kulikov et al., 2006: vii; cf. the remark on valency-changing derivation in 2.2.5, footnote 21).

2.1.2 Basic concepts

This section outlines some of the basic concepts underlying various theories of valency. It needs to be categorically emphasized that one “cannot hope to give a theory-neutral presentation of argument structure” (Alsina, 2006: 462). It seems to be virtually impossible to find a universally accepted set of concepts and terminology that could qualify as ‘theory-neutral’ and that would provide a satisfactory framework for a complex survey. Thus, while some differences in terminology are explicitly pointed out, the focus should ideally be on the concepts, not the terminology. The overview of approaches to valency in section 2.1.3 is intended to facilitate the understanding of this somewhat sketchy outline of basic concepts, yet again, without aiming at exhaustiveness.

2.1.2.1 Semantic vs. syntactic valency

We may take the following claim as the starting point: “A central part of the grammar of every human language is the encoding of events and their participants in the clause.” (Croft, 2013: 1) This statement suggests that it is necessary to posit two levels of the analysis of argument structure. First, there is the level of events and participants as conceptualized by a speaker, i.e. the level of propositions, and second, there is the level of linguistic units encoding propositions, i.e. the level of sentences (cf. Kearns, 2011: 25). Jackendoff (1997: 173) refers to the two levels as ‘conceptual structure’⁸ and ‘syntactic structure.’ The conceptual-syntactic division is in a way reflected in the distinction of semantic and syntactic valency (cf. e.g. Herbst, 1999).⁹ On some views, syntactic arguments are identified by their functions (such as ‘subject’), and the notion of semantic arguments

⁸ The conceptual structure is not to be confused with the generativist D(eep)-structure (e.g. Chomsky, 1965: 16; Chomsky & Lasnik, 1995: 20) as the former is fundamentally what the Generative Semanticists pleaded for (cf. e.g. Geeraerts, 2010: 107) and what can also be called “semantic structure” (e.g. Goldberg, 1995: 101).

⁹ Herbst (1999) was published only as a web-page (see the References), and no page numbers are thus provided.

corresponds to “how many participants are present in the situation depicted, and which roles they play (such as ‘agent’)” (Dakubu & Hellan, 2017: 110). The crucial question, then, concerns “the nature of the relation between semantic structure and overt syntactic structure” (Goldberg, 1995: 101), often referred to as ‘linking’ (ibid.) or ‘mapping’ (e.g. Croft, 2013: 174); it is usually accepted that “event structure is the primary semantic determinant of argument realization” (ibid.: 3; cf. 2.1.2.4).

It might be useful to introduce an example to clarify the semantic-syntactic opposition. The verb *kiss* can be taken to require two participants: the KISSER and the KISSEE. In a linguistic description, this information is usually captured in the valency frame of the verb (cf. Urešová, 2006: 93). The semantic valency and the syntactic valency often coincide, as in example (1), where the complement *Amy* refers to the KISSER, while *him* refers to the KISSEE:

(1) *Amy went and kissed him.* (Herbst, 1999)

However, this is not the case with (2), where both the semantic arguments are expressed by a single complement (in an instance of reciprocalization; cf. 2.2.5, footnote 21):

(2) *I doubt that they ever even kissed.* (ibid.)

This is just one example of how semantic and syntactic valency may fail to align. Similarly, the verb *arrive* can be taken to require two semantic arguments, one referring to the entity that arrives somewhere, the other referring to where this entity arrives (cf. Gillon, 2015: 69). Although the verb requires two semantic arguments, utterances such as (3) are perfectly grammatical:

(3) *My friends have already arrived.* (Panevová, 2014: 5)

Here the question arises of how to identify all the components of the valency frame of *arrive*, and how to justify the claim that *arrive* requires two arguments. Within the framework of Functional Generative Description (henceforth FGD), the so-called dialogue test is proposed (cf. 2.2.6.1.2). If one uttered (3) and were asked where the friends have arrived, “I don’t know” would not be a felicitous answer (Panevová, 2014: 5). On the other hand, if one were asked when precisely the friends have arrived, “I don’t know” would be a possible answer, and thus the

specification of time (unlike the specification of goal) is not an obligatory semantic argument of *arrive*, and is thus not included in the valency frame of the verb.

Semantic valency (as delineated above) corresponds to what has been called valency potential, based on the observation that valency “has to be considered a potential: the slots attached to a verb can be filled with complements, but do not have to be in every single case” (Vater, 2003: 795). Syntactic valency (as delineated above) then corresponds to valency realization, which is “determined by the interaction of valency potential, sentence structure and communicative factors” (ibid.: 796).

2.1.2.2 Arguments vs. adjuncts

A distinction is typically drawn between what is required by the predicate (or, what is subcategorized for obligatorily) and what is not required by the predicate (or, what is subcategorized for optionally; cf. Dowty, 1991: 217). For example, irrespective of their theoretical backgrounds, scholars would agree that while the prepositional phrase in (4) is not required by the predicate *laugh*, the PP in (5) is required, and so is the object *a book*.

(4) *Someone was laughing loudly in the next room.* (Quirk et al., 1985: 49)

(5) *John put a book into a box.* (Dowty, 1991: 216)

However, despite its importance in syntactic theory, the distinction “has never been very well defined and there exist grey areas in the taxonomy” (Tutunjian & Boland, 2008: 632). Various frameworks differ in how they reflect this distinction; most frequently, an opposition is set between complements or arguments such as *a book* and *into a box* on the one hand, and adjuncts such as *in the next room* on the other (e.g. Resi, 2014: 169; Tutunjian & Boland, 2008; Borer, 2005: 22; Van Valin & LaPolla, 1997: 26–27; Chomsky & Lasnik, 1995: 53). As Herbst (1999) summarizes, “[a]djuncts differ from complements in that, firstly, their occurrence in a sentence is not dependent on the governing word (or predicator) of the sentence and, secondly, they are not determined in form by the predicator.” It is, nevertheless, questionable to what extent the form of *into a box* is governed by *put*, and thus a further distinction might be drawn between direct arguments, i.e. arguments which are either unmarked or marked by case alone

(e.g. *a book*), and oblique arguments, i.e. arguments which are marked adpositionally, e.g. *into a book* (Van Valin & LaPolla, 1997: 29). Note that the argument-adjunct distinction is not a clear-cut one; rather it is a typical instance of gradience (cf. Aarts, 2007: 186), which is why Herbst (1999) postulates the continuum of obligatory complements, optional complements, contextually optional complements, and adjuncts.

Nevertheless, there are several terminological problems. The terms ‘argument’ and ‘complement’ are often used interchangeably (e.g. Resi, 2014: 170; Frank, 2002: 30, 66). ‘Argument’ is sometimes used only at the semantic level of description, and so “[t]here is a systematic ambiguity in the way the term ‘argument’ is used” as “it can refer to an element in the semantic representation and also to a syntactic entity” (Van Valin & LaPolla, 1997: 27–28). Similarly, ‘complement’ is often used in two different senses, which is why Allerton (1982: 33) prefers the term ‘verb elaborator.’ Some authors (e.g. Spevak, 2014b) still use the term ‘complement’ for any dependent, be it argument or non-argument. The term ‘adjunct’ may cause some further confusion since it is often used in descriptive grammars in a different sense (cf. Quirk et al., 1985: 55; Aarts, 2011: 10); following their practice, both *in the next room* and *into a box* could be described as adjuncts. Analogically to the argument-adjunct distinction, some scholars differentiate complements and modifiers (e.g. Langacker, 1999: 21), specifiers and modifiers (e.g. Osenova, 2014: 143), ‘actants’ and ‘circumstants’ (e.g. Allerton, 2006: 302), and the like. The so-called Berkeley Construction Grammar (Fillmore, 2013) employs the term ‘valents,’ distinguishing semantic valents, “having in mind only the semantic roles that accompany a lexeme” (ibid.: 119), and syntactic valents, “roughly analogous to the subcategorization frames of generative theories” (ibid.).

In the present thesis, sometimes the vague term ‘valent’ is used, where appropriate; the term ‘dependent’ is used in the usual sense for any syntactic dependent of the head (noun), the term ‘complement’ is preferred for syntactic dependents that are selected, or subcategorized for, by the head (noun), the term ‘argument’ is preferred for a semantic valent of the head (noun). This should be consistent with how the terms are used in 2.1.2.1 above. Furthermore, ‘modifier’

is preferred as a syntactic term for any dependent of the head (noun) that is not semantically required by this noun.

2.1.2.3 Participant vs. thematic roles

A further (yet related) distinction needs to be drawn between participant roles (at the level of semantic valency) and thematic roles (at the level of syntactic valency), with the latter also known as ‘theta roles’ or ‘ θ -roles’ (e.g. Chomsky, 1981: 5–6; Hornstein et al., 2005: 76), ‘argument roles’ (e.g. Goldberg, 1995: 43), ‘semantic roles’ (e.g. Quirk et al., 1985: 740; Aarts, 2011: 105 ff.), and ‘cases’ or ‘case roles’ (e.g. Fillmore, 1968: 24–25). The term ‘semantic roles’ is sometimes used in a broader sense to cover both participant roles and thematic roles. The distinction is justified by the fact that the highly general thematic roles such as agent, patient, and theme “came to be seen as inadequate for providing an account of the semantic motivation for argument structure” (Croft, 2013: 22), and several scholars thus came to the conclusion that “the best analysis was to start with semantic roles specific to individual predicates” (ibid.: 23), i.e. participant roles. Participant roles can be deemed as “instances of the more general argument roles” (Goldberg, 1995: 43). To give an example, the verb *rob* can be described in the spirit of frame semantics (cf. Geeraerts, 2010: 225–229) as having three participant roles, namely THIEF, TARGET, and GOODS. If an example such as (6) is considered, the complements can be ascribed more general thematic roles:

(6) *Jesse robbed the rich (of all their money).* (Goldberg, 1995: 45)

Thus, it might be said that *Jesse* can be ascribed the thematic role of agent, while the entity that *Jesse* refers to might be ascribed the participant role THIEF (ibid.). This example illustrates how participant roles may be semantically fused with thematic roles iff they are semantically compatible. Since the THIEF participant of *rob* can be construed as an instance of the agent role, the participant of the verb may be fused with the agent-role slot of the syntactic construction (ibid.: 50).

2.1.2.3.1 Inventories of thematic roles

The following comment made by Quirk et al. (1985: 741) still seems to be relevant: “Analysis of participant roles has not achieved a general consensus, nor has it fully explored all distinctions. Our description must therefore be considered

tentative.” Croft (2013: 175) states that thematic roles that have been typically proposed are agent, patient, theme, experiencer, recipient, beneficiary, locative, and instrument. Other possible candidates include natural force and stimulus, with further roles having been suggested, including negative quality (*a man without humor*), function (*I used the stick as a club*), reference (*We talked about the war*), judicantis (*It’s too warm for me*), and several others (ibid.: 180). While the status of thematic roles has come to be questioned (ibid.: 175–182), they are still undeniably “a convenient tool” for preliminary analyses (Primus, 2009: 265).

2.1.2.4 The mapping of argument structure

As mentioned above, the central question in research into argument structure is how arguments project onto syntax, which is referred to as the ‘mapping’ of syntax to semantics or simply ‘linking.’ The following survey is extremely selective, and the lack of space is compensated for by referring to relevant literature; a thorough and relatively recent overview can be found in Chapter 5 in Croft (2013).

One way to address the above-mentioned central question (a way favored particularly by mainstream generativists) is to propose what Primus (2009: 262) refers to as ‘transparency principles,’ i.e. “principles that guarantee a transparent relationship between semantic roles and grammatical relations.” Two famous examples of such transparency principles are the Theta-Criterion and the Uniformity of Theta-Assignment Hypothesis (UTAH). The former states that “[e]ach argument bears one and only one theta-role, and each theta-role is assigned to one and only one argument” (Chomsky, 1981: 36). UTAH proposes that “[i]dentical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure” (Baker, 1988: 46), which is further specified by linking principles stating for instance that the agent is mapped onto the specifier of a higher VP (Primus, 2009: 265) or that an external argument is mapped onto the subject (Alsina, 2006: 466). This fundamentally leads to the syntacticization of theta roles (cf. Croft, 2013: 176). The most obvious counterargument against this is that “a wide range of conceptual distinctions can be expressed in terms of apparently identical syntactic

structure” (Jackendoff, 1997: 34), as illustrated by the following examples (ibid.: 34–35):

- (7) *Emily threw the ball.* (object = Theme/Patient)
- (8) *Joe entered the room.* (object = Goal)
- (9) *Emma emptied the sink.* (object = Source/Patient)
- (10) *George helped the boys.* (object = Beneficiary)
- (11) *The story annoyed Harry.* (object = Experiencer)
- (12) *The audience applauded the clown.* (object = ???)

Insisting that the direct objects in these examples must all have divergent underlying relations to the verb, as required by transparency principles, “results in increasing unnaturalness of underlying structures and derivations” (Jackendoff, 1997: 35). Another argument against transparency principles (one relevant for the present thesis) is that the “same grammatical role – same case marker” claim might hold only if the assignment of case markers depended exclusively on the grammatical role, which is not the case; “the form of the case marker frequently depends on the morphosyntactic class membership of the constituent that carries it” (Moravcsik, 2009: 241), and so, to oversimplify, verbs take an accusative case complement while nouns take a genitive case complement, despite the complements presumably having the same semantic relation to their respective heads.

Another way to address the mapping problem consists in proposing “a list of informally defined semantic roles and a linking mechanism that is grounded on a role hierarchy” (Primus, 2009: 263), as pioneered by Fillmore (1968) and generally favored by linguists in more functionalist traditions (cf. Croft, 2013: 176). Fillmore (1968: 24–25) proposes the inventory of six case roles, viz. Agentive (A), Instrumental (I), Dative, Factitive, Locative, and Objective (O), and suggests the following hierarchical principle (ibid.: 33): “If there is an A, it becomes the subject; otherwise, if there is an I, it becomes the subject; otherwise, the subject is the O.” This is illustrated with examples such as the following:

- (13) *John [A] opened the door [O] with the key [I].* (ibid.: 25)
- (14) *The key [I] opened the door [O].* (ibid.: 25)
- (15) *The door [O] opened.* (ibid.: 27)

An overview of several other, more complex hierarchies can be found in Primus (1993: 264). For the present purposes, it is sufficient to mention that hierarchy-based linking theories are based on the observation that “clearly, syntactic form is not related in an arbitrary way to the semantics of predicates” (Goldberg, 1995: 111). Goldberg (ibid.) argues that “it is not possible to state all linking generalizations in a construction-independent way,” and illustrates that “the mapping from semantics to grammatical relations is not determined by a function that is based solely on the thematic role to be expressed” (ibid.). Therefore, the third possibility (in addition to transparency principles and thematic role hierarchies) is postulating argument structure constructions, i.e. independent schematic pairings of form and meaning (cf. 2.1.3.2).

2.1.3 Views of valency

On the traditional view, valency is seen as lexically specified information, i.e. a structure encoded by the verb. However, this is “far from being a universally accepted notion” (de Almeida & Manouilidou, 2015: 11–12). The following section briefly characterizes the traditional view and lists some approaches advocating it, while the subsequent section focuses on alternative approaches that have been gaining momentum over the course of approximately the last two decades. The section is somewhat redundant, but it is also believed to hint at the complexity of some theoretical questions that might have profound ramifications for any description of (nominal) valency. Furthermore, being aware of various views of (not only) argument structure and aiming for a more integrative and inclusive approach seems to be important, as suggested in the Introduction (cf. Park, 2017: 803–805).

2.1.3.1 Lexicalist approaches

Central to the traditional view is the idea, as mentioned above, that argument structure is specified lexically (hence ‘lexicalist’ approaches). Simply speaking, a lexical unit (typically a verb) is seen as having a valency frame specifying its valency requirements. These are argued to be mapped onto syntax based on general transparency principles and/or on role hierarchies of the type outlined above (cf. 2.1.2.4). On this account, the verb *sneeze* and *kick*, for instance, are said to be typically monovalent or intransitive, and divalent or monotransitive,

respectively. Verbs can be grouped according to their valency frames, which leads to the study of basic clause patterns. The clause pattern is argued to be determined by the verb, “analogized to the predicate of formal logic, which has an inherent number of distinct arguments” (Goldberg, 1995: 11). If a verb has more valency frames, these valency frames are argued to reflect different senses of the verb. Lexical units with their valency frames are presumed to be stored in the lexicon, while the general principles of linking are supposed to be part of our grammatical knowledge (cf. Tutunjian & Boland, 2008: 632). Since this is the view advocated by the majority of (if not all) structuralist, generativist, and functionalist approaches to language,¹⁰ the reader is believed to be familiar with it.

2.1.3.2 Non-lexicalist approaches

“Where does a verb’s frame come from? The obvious answer is the verb itself,” Michaelis (2010: 155) opens her discussion of the construction-based model of argument structure, thus identifying the core idea of the above-outlined lexicalist approaches to valency. However, as she immediately highlights, it is difficult “to square this view with the observation [...] that a verb can often be found in unexpected frames, which nonetheless make sense in context” (ibid.). This is typically the point of departure for proponents of non-lexicalist approaches to valency, who share the idea that “argument structure is determined by more general syntactic principles” rather than individual lexical units (de Almeida & Manouilidou, 2015: 12). Thus it has even been claimed – in a way that might be misleading, however – that these approaches try “to sever the link between verbs and argument structure that has so long been taken for granted” (Stefanowitsch & Herbst, 2011: 315). Most non-lexicalist approaches are couched within various traditions of construction grammar. They typically suppose that while some information on the participants required is part of the rich lexical representation of

¹⁰ Of the works referred to in the present thesis, representatives of the traditional view include Allerton (1982) and Herbst (1999). The generativist tradition is represented especially by the works of Chomsky (1965; 1972; 1981), Baker (1988), Chomsky & Lasnik (1995), Grimshaw (1990), and Haegeman (2009), but it should be noted that the generativist paradigm should not be reduced to the work of Chomsky and other mainstream generativists (cf. Boeckx, 2006: 155–156). Functionalist approaches are selectively represented for example by Mackenzie (1997; 2002), Usón & Faber (2002), and the Role and Reference Grammar of Van Valin & LaPolla (1997).

a word (typically a verb), there exist independent argument structure constructions (such as the Ditransitive Construction). These constructions have the status of Saussurean signs, being defined as form-meaning pairs (cf. Goldberg, 1995: 4; on the sign vs. the construction, cf. Diessel, 2015: 297–299). The meaning of the construction is not the sum of its parts; for instance, the Ditransitive Construction formally contains three NPs, but its form and meaning are not predictable by stringing the NPs together with a verb (cf. Casenhiser & Bencini, 2015: 580).

Adele Goldberg (1995; 2006), perhaps the most prominent advocate of non-lexicalist approaches, albeit certainly not the only one,¹¹ gives several arguments for a constructionist account of valency, a major argument being its variability. Ordinary verbs such as the above-mentioned *kick* can appear with a welter of arguably distinct argument structures (the examples are cited after Goldberg, 1995: 11):

- (16) *Pat kicked the wall.*
- (17) *Pat kicked Bob black and blue.*
- (18) *Pat kicked the football into the stadium.*
- (19) *Pat kicked at the football.*
- (20) *Pat kicked his foot against the chair.*
- (21) *Pat kicked Bob the football.*
- (22) *The horse kicks.*
- (23) *Pat kicked his way out of the operating room.*

The traditional account cannot explain this in a way avoiding circularity. Several senses of *kick* have to be postulated, and then “it is claimed that *kick* has an

¹¹ Goldberg works within the framework of Cognitive Construction Grammar (cf. Goldberg, 2006: 214). Other construction grammars share the same core ideas, including approaches advocated by some of the authors whose work is referred to in the present thesis, e.g. the Cognitive Grammar (cf. Langacker, 1987; 1999), the Berkeley Construction Grammar (cf. Fillmore, 2013), and the Sign-Based Construction Grammar (cf. Michaelis, 2010; 2012). Naturally there are differences between various constructionist frameworks, some of them pointed out by Iwata (2006: 506–508) and Barbu (2014: 132). A slightly outdated comparison of four major construction grammars is presented in Chapter 10 of Croft & Cruse (2004). Of the scholars referred to elsewhere in the present thesis, some others advocate non-lexicalist approaches as well, including Hagit Borer (2005), associated with what she (ibid.: 14) calls “neo-constructionist models,” and Ray Jackendoff (1997; 2013), who refers to his generativist approach as the Parallel Architecture.

n-argument sense on the basis of the fact that *kick* occurs with *n* complements” and “it is simultaneously argued that *kick* occurs with *n* complements because it has an *n*-argument sense” (ibid.).

Another major argument for the constructionist approach is its ability to account plausibly for naturally occurring examples such as the following (cited after Goldberg, 1995: 9):

(24) *He sneezed the napkin off the table.*

(25) *She baked him a cake.*

(26) *Dan talked himself blue in the face.*

On the traditional, lexicalist account, for instance the verb *sneeze* in (24) would have to be argued to have a three-argument sense ‘X causes Y to move Z by sneezing’ (ibid.). This would mean that the verb *sneeze* has at least two senses, one monovalent, one trivalent, which is rather questionable. On the constructionist account, on the other hand, it can be argued that an independently existing Caused Motion construction is combined with the verb *sneeze*. The SNEEZER participant of the verb *sneeze* can be fused (cf. 2.1.2.3) with the agent-role slot of the Caused Motion construction, and this construction contributes extra arguments, theme and goal, projected syntactically onto the object *the napkin* (direct argument) and the adverbial *off the table* (oblique argument), respectively. This can be captured schematically as follows:

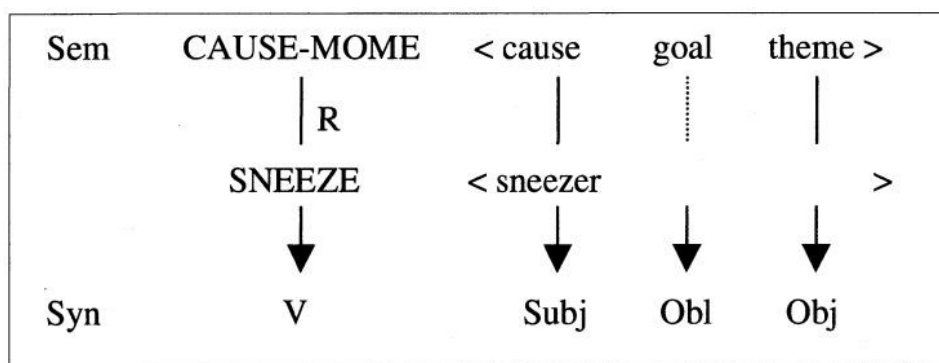


Figure 1: Composite structure: Caused-Motion + *sneeze* (Iwata, 2006: 508)

Further arguments for a construction-based account of argument structure and supportive evidence from language acquisition and sentence processing can be found in Chapter One of Goldberg (1995). Similar arguments are proposed by

Jackendoff (1997: 171–173). For a recent overview of this approach and psycho- and neurolinguistic evidence supporting it, see Casenhiser & Bencini (2015).

One final remark should be made concerning various views of valency. It is often assumed that the lexicalist approach and the constructionist approach are sharply distinguished (cf. Casenhiser & Bencini, 2015: 580). Moreover, there seems to be a surprising lack of communication between proponents of the two approaches. For instance, Allerton’s overview of valency grammar (2006) does not comment on the research on argument structure (which is, however, not limited to constructionist approaches), while Alsina’s overview of argument structure in the very same handbook (2006) does not comment on the research in valency grammar (even though the object of their study is fundamentally the same). Nevertheless, concerning the lexicalist-constructionist dichotomy, Herbst (2011) argues that the lexicographically-oriented corpus-based research subscribing to the lexicalist view of valency is largely compatible with the constructionist view (cf. Stefanowitsch & Herbst, 2011), which is more or less the position assumed in the present thesis.

2.2 Valency of nouns

This section focuses more specifically on the valency of nouns, assuming that the concepts outlined above remain relevant. However, it is questionable whether noun valency should be described with or without recourse to the valency of verbs and adjectives (cf. Herbst, 1988: 267). For instance, Allerton (2006: 311) suggests that noun valency should be specified independently, which is, nevertheless, a rather vague statement, interpretable in various ways. Williams (1991: 584) speaks of “the target syntax argument” against the nominalization transformation (cf. Chomsky, 1972; cf. 2.2.1): “the NPs projected from derived nouns have exactly the syntax of NPs projected from underived nouns.” Williams proposes a parallel “target semantics argument.” The two arguments are reinterpreted by Goldberg (2006: 24) as follows: “one should not attempt to derive A from C if there exists a pattern D that has the same syntax and semantics as C and yet cannot serve as input from which to derive A.” Goldberg argues that this implies that “the syntax of argument structure should be represented without recourse to

derivations,” which could arguably be extended to the description of noun valency, and that we should not overplay the importance of paraphrases. Given the presumable existence of nouns that have valency despite not being derived from verbs or adjectives, this could suggest that the valency of nouns should not be described with recourse to the valency of verbs and adjectives (even though that is the usual practice, cf. 2.2.5.1). One of the arguments put forward to support this is the fact that nominalizations can have complements not found with the base verbs or adjectives:

(27) **He is weak for sweets.*

(28) *He has got a weakness for sweets.* (Herbst, 1988: 267)

This issue, however, requires further examination, which seems to be beyond the scope of the present thesis.

The present section is organized as follows. First, by way of introduction, it is outlined how the scope of the notion of valency has broadened to cover not only verbs (2.2.1). Subsequently, a brief overview of what types of nouns have been described as valent is provided (2.2.2). Second, more specifically, some differences between verb and noun valency are pointed out (2.2.3). Furthermore, the so-called support verb construction is introduced, and it is argued that occurrences of nouns in this construction should be treated separately, not as nouns displaying typically ‘nouny’ valency behavior (2.2.4). Third, two specific interfaces and their relevance for the present thesis are discussed, viz. the valency-derivation interface (2.2.5) and the valency-reference interface (2.2.6).

2.2.1 The scope of the notion of valency

Tesnière (1959: 670) famously defined valency as “nombre d’actants qu’un verbe est susceptible de régir,” i.e. as a property of verbs. The very next year witnessed the publication of an early transformational generativist account of nominalizations, viewed as “noun-like versions of sentences” (Lees, 1960: 54). Even though the central assumption of this work – that all nominalizations are transformations of underlying sentences – was later rejected by Chomsky (1972: 21–22) with the proposal of the lexicalist hypothesis (ibid.: 26) and the X-bar theory (ibid.: 52; cf. Boeckx, 2006: 173), Lees (1960: esp. 66–73) still includes several interesting observations on the valency-related behavior of

nominals of various types. However, it was only later that it began to be widely recognized that valency is not restricted to verbs; for instance, Matthews (1981: 115) – still somewhat cautiously – states that adjectives can also have “semantic properties akin to valency.” In the same decade Herbst (1988) publishes an attempt at a comprehensive account of noun valency in English. Almost a decade later, Matthews (1997: 394) defines valency as a property of “a verb or other lexical unit.” Dušková (1999 [1990]: 98) explicitly states that “[c]omplementation is not only a feature of the verb, but also of nouns and adjectives” (cf. also Quirk et al., 1985: 1231 ff.). It seems to have been widely accepted in the 1980s and 1990s that “it would be appropriate to say that at least some nouns take arguments analogous to verbs taking arguments” (Van Valin & LaPolla, 1997: 54). Trask (1993: 296) provides a broader definition of valency limited to verbs, and a narrower definition of valency as “the subcategorization requirements of any lexical item.” Similarly, Crystal (2003) delineates valency vaguely as “the number and type of bonds which syntactic elements may form with each other,” in which sense, Matthews (2007: 4) points out, valency would not be the foundation “just of the syntax of verbs, or of verbs and other lexical units, but of syntax generally.”

This selective and inevitably reductive overview hints at two points. First, the importance of valency for the study of syntax can hardly be overstated; second, the scope of the notion of valency has, in a sense, broadened since the late 1950s, and today it is – despite occasional claims to the contrary (cf. Mackenzie, 1997)¹² – widely accepted as uncontroversial that not only verbs can be viewed as words requiring valency complements. Unfortunately, “the valency of nouns is a topic that still remains in the shadow of the valency of verbs” (Spevak, 2014a: ix). It should be noted, nevertheless, that the lexicographically-oriented corpus-based research has taken manifestations of noun valency into account since at least the 1990s (for instance, see the remarks on ‘noun and adjective patterns’ in Hunston & Francis, 1999: 6–7).

¹² We have only found what seems to be a preprint version of Mackenzie (1997). Throughout the thesis, we provide page numbers based on this preprint version, available at <<https://www.academia.edu/1077018>>.

2.2.2 Types of valent nouns

Nouns which have been described as valent can be distinguished and further classified along the lines of derivational morphology, but also along the lines of semantics. The former option yields a classification with subgroups such as deverbal nouns (by far the most thoroughly explored area of nominal valency), deadjectival nouns (by contrast a largely neglected area), and primary, non-derived nouns.¹³ The description typically utilizes the notion of argument inheritance (cf. 2.2.5.1). If semantic criteria are preferred, the distinction of relational nouns and sortal (Plag, 2003: 148), non-relational nouns is arrived at, with only the former being deemed valent (cf. Mackenzie, 1997: 4, who, however, denies noun valency as such).¹⁴ The group of relational nouns includes some primary nouns, with only those expressing interhuman relationships having been studied, such as *father*, *brother*, and *neighbor* (cf. Barbu, 2014: 114). Furthermore, there are also deverbal and deadjectival relational nouns, such as *combination* (ibid.: 120) and *similarity* (ibid.: 122), respectively. Nevertheless, typical deverbal nominalizations can be viewed as relational nouns as well (cf. Plag, 2003: 148).

Spevak (2014b: 184) combines this approach to the classification with the concept of orders of entities. As “Lyons distinguishes between spatial entities (first-order), temporal entities (second-order), and propositional content (third-order)” (ibid.), Spevak excludes zero-valent nouns that are semantically sufficient on their own

¹³ The possibility of there being valent denominal nouns is not usually mentioned; some denominal nouns such as *relationship*, however, could presumably be deemed as valent.

¹⁴ Arguably, other than relational nouns could be deemed valent as well (the “arguably”-caveat hints at the fact that it is not always entirely clear which nouns precisely should qualify as relational). For instance, Osenova (2014: 143) views presumably non-relational nouns such as *glass* (as in *a glass of water*) as “subcategorizing heads rather than modified heads.” Within the Czech FGD, nouns such as *sklenice* ‘glass,’ *talíř* ‘plate,’ *šálek* ‘cup,’ and *košík* ‘basket’ are viewed as taking an optional complement (of the MAT(erial) type), as opposed to nouns such as *část* ‘part,’ *konec* ‘end,’ *polovina* ‘half,’ *člen* ‘member,’ *skupina* ‘group,’ and *odstavec* ‘section,’ viewed as taking an obligatory complement of the MAT type. Nouns such as *bratr* ‘brother,’ *předseda* ‘chairman,’ and *vlastnost* ‘quality’ are viewed as taking an obligatory complement of the APP(urtenance) type; these nouns are presumably relational (Panevová, 2014: 12–13).

and thus do not require any complements, and proposes the following five categories of valent nouns:

- a. first-order relational nouns (*father*);
- b. first-order agent nouns (*judge*);
- c. second-order nouns denoting various states of affairs (verbal nouns) and abstract qualities;
- d. third-order nouns (verbal nouns);
- e. ‘containers’ including nominal quantifiers (*part, amphora, great number*), ‘classifiers’ (*type, sort*), and similar expressions.

Spevak illustrates that different categories display different patterns of valency behavior in Latin; generally, “first-order entities mostly combine with expressions of possession, second- and third-order entities take expressions of agent or patient, and third-order entities admit complements with the form of a clause” (ibid.: 185).

2.2.3 Nominal vs. verbal valency

The noun and the verb differ in crucial aspects, some of which are relevant to the study of valency. It seems to be the case that a basic noun-verb distinction is universally found across all languages (cf. Evans & Levinson, 2009: 434), which reflects the fact that “each realizes one of the two fundamental functions of language, reference (nouns) and predication (verbs)” (Van Valin & LaPolla, 1997: 28) and that all humans are presumably able “to talk about people, things, and events” (Haspelmath, 2009: 458). This seemingly trivial observation has profound ramifications for the study of valency, which is reflected in Anderson’s claim that “nouns, grammaticalizing what are perceived as entities, are less ‘relational’ than verbs, which grammaticalize perceived ‘situations’, especially ‘events’” (2011: 1). Following from this notionally based difference,¹⁵ prototypical nouns are said to

¹⁵ Cf. Langacker’s oft-cited notional definitions of the two word-classes: The noun is defined as a “symbolic structure whose semantic pole profiles a thing” (1987: 491), while the verb is considered a “symbolic structure whose semantic pole profiles a process” (ibid.: 494). Put differently, “prototypical nouns typically conceptualize autonomous, enduring entities [whose] existence is presupposed,” while “prototypical verbs profile the interactions between these entities” (Mackelberghe, forthcoming). However, some argue that “such semantic criteria cannot be definitional because they are not steadfast” (Aikhenvald, 2015: 87).

differ from verbs in that the former “do not have an inherent argument structure” (ibid.: 70).

Despite the focus being often on the parallels between the clause structure and the NP structure (cf. Van Valin & LaPolla, 1997: 53; Rijkhoff, 2002: 213, 223–224), several interrelated differences between verbal and nominal valency in English can be identified; the following list does not claim to be exhaustive.

First and foremost, the omission of a complement occurs much more often with nouns than with verbs (Panevová, 2014: 6–7). More radical versions of this claim usually state that “for verbs, syntactic realization of semantic participants is obligatory, while for nominalizations (as well as for non-derived nominals) it is optional” (Meinschaefer, 2003: 234; cf. Panevová et al., 2014: 90; Karlík & Nübler, 1998: 111). Similarly, Quirk et al. (1985: 63) explicitly describe the complementation of adjectives as “obligatory or optional,” while the complementation of nouns is somehow marginalized and dealt with only under the heading of postmodification, which is described as optional (ibid.: 62).

Second, a distinction can be made “between verbal predicates which license verbal case such as nominative and accusative, and nominal predicates which license genitive case” (Butt, 2006: 8; cf. Aikhenvald, 2015: 119). In other words, the standard case for marking nominals licensed by other nominals is the genitive (ibid.), as in *John’s hat* or *the destruction of the city*. The periphrastic *of*-genitive follows the ergative pattern, “being used to specify transitive objects and intransitive subjects” (Langacker, 1999: 84).¹⁶ Furthermore, “[i]f only one participant is specified periphrastically, *of* can introduce it regardless of whether it corresponds to a clausal subject or object” (ibid.), as exemplified by the following NPs:

¹⁶ A point is often made that concerns the ambiguity of nominalizations, resulting from the ergative pattern, with *the shooting of the hunters* as a popular example (cited, among many others, in Lyons, 1968: 251; Huddleston, 1984: 271; Kroeger, 2004: 48; Newmeyer, 2005: 162; Panevová, 2014: 8). This issue can arguably be deemed as irrelevant for the present thesis, or perhaps for accounts of noun valency in general, for it is hard to imagine that invented examples such as *the shooting of the hunters* could in fact pose a problem in actual discourse. The question of how speakers manage to resolve the ambiguity during language comprehension is not dismissed by this; it is only excluded from the realm of noun valency as it is not a question limited to this realm.

(29a) *the chanting of / by the demonstrators*

(29b) *the chanting of the slogans*

(29c) *the chanting of the slogans by the demonstrators*

Constructions with only one genitive, such as (29c), are commonly found across languages, while constructions such as *the enemy's destruction of the city* make English “quite unusual among languages in permitting the expression of two possessive NPs in an NP headed by a deverbal noun” (Van Valin & LaPolla, 1997: 60). This has led some to point out the pseudo-subjecthood of *the enemy's* and the pseudo-objecthood of *the city* (ibid.).

It should also be mentioned that *of* in the adnominal genitive is described as “semantically empty” (Van Valin & LaPolla, 1997: 54; cf. Spevak, 2014b: 198) because it does not mark any semantic relation in particular, as illustrated by the following examples (ibid.: 55):

(30) *the attack of the killer bees* (Agent)

(31) *the gift of a new car* (Theme)

(32) *the destruction of the city* (Patient)

(33) *the leg of the table* (Possessor)

(34) *the resupplying of the troops (with ammunition)* (Recipient)

While studies of noun valency mostly focus on the genitive case argument marking, only an occasional remark can be found concerning other means for marking nominal complements (including PPs, relevant to this thesis). Even though the following statement concerns Latin, it could arguably be of greater cross-linguistic validity: “Prepositional phrases, which unlike the genitive make the semantic relationship between two entities explicit, can be used for argument coding in Latin only with nouns belonging to very specific semantic fields.” (Spevak, 2014b: 197–198). These specific semantic fields include (in Latin) nouns implying interactivity or sharing (e.g. *bellum* ‘war’) and nouns expressing affections (e.g. *love, hatred, fear, flattery, anger, and praise*; ibid.).

Third, as Meinschaefer (2003: 234) succinctly states, “it is controversial whether the syntactic complements of nominalizations corresponding to arguments of the base verbs should be termed arguments too, or whether they should rather be classified as adjuncts.” For instance, Matthews (1981: 157) discusses the

difference between what he terms complementation and modification of nouns, and he considers the nature of *of Calais in a map of Calais*, concluding that “it is not entirely like either, we are in the middle of a chain of partial resemblances” (ibid.: 158). In a similar vein, Langacker (1999: 80) juxtaposes *(the father) of the bride* and *(the bench) under the tree*, emphasizing that “complement status and modifier status are matters of degree” and that “they need not be incompatible with one another” (ibid.: 81). He concludes that *of the bride* is a modifier, not a complement, but could be regarded as a complement, for it “elaborates the parent-offspring relationship that is pivotal to the head’s semantic structure” (ibid.: 82). Similarly, Butt et al. (1999: 48) view such PPs as adjuncts rather than complements, believing that “the proper level of analysis for the dependency relations between the main noun and its modifiers in this case is at the level of thematic argument structure, not at the level of grammatical functions.” Osenova (2014: 157) and Van Valin & LaPolla (1997: 53) endorse the other possibility, with the former pointing out that “this issue needs more elaboration and argument-strengthening in the future.”

Syntactically, verbal dependents are usually¹⁷ categorized as subjects, objects, adverbials, and complements (cf. e.g. Quirk et al., 1985: 49), while dependents of nouns are described in terms of NP modification (cf. Quirk et al., 1985: Chapter 17).¹⁸ Note, however, that Aarts (2011: 11) describes the noun phrase given in (35) in an insightfully different way, stating that *of the market* is a complement, while *that were published last week* is an adjunct:

(35) *all our favorable reviews of the market that were published last week*

Fourth, with verbs that select several complements in English,¹⁹ there is “the ‘order of complements’ problem” (Bobaljik & Wurmbrand, 2009: 48). It is held

¹⁷ Perhaps the only exception known to us is a theory of valency which assumes that only subject, object, and the so-called ‘adject’ are needed (cf. Herslund & Sørensen, 1996).

¹⁸ Cf. e.g. Colliander (2003: 269): “Bei den Attributen [...] stellt sich die Frage, ob es in einigen Fällen nicht sinnvoll wäre, eine Subklassifikation parallel zu der verbaler Satelliten vorzunehmen...”

¹⁹ While the previous points seem to apply in Czech as well, and, concerning the second point, “many other languages use the genitive” (Butt, 2006: 8), Czech differs in that there seems to be an ordering effect: “the genitive always has to precede all other postnominal arguments and adjuncts”

that “the NP argument must precede all other arguments, *at least in ‘neutral’ clauses*” (ibid.; italics added), which explains the presumable unacceptability of (37), as opposed to the grammatical (36):

(36) *Maggie donated* [_{NP} *her allowance*] [_{PP} *to the charity*].

(37) **Maggie donated* [_{PP} *to the charity*] [_{NP} *her allowance*].

As the following examples illustrate, “[t]here is no such ordering effect in the corresponding nominalizations” (ibid.):

(38) [*Maggie’s donation* [_{PP} *of her allowance*] [_{PP} *to the charity*]] *was nice*.

(39) ?[*Maggie’s donation* [_{PP} *to the charity*] [_{PP} *of her allowance*]] *was nice*.

Fifth, it should also be noted that the patterns of noun complementation are slightly less variable than the patterns of verb complementation, with the former being more or less limited to infinitives (40), PPs (41), possibly followed by a conjunction (42), and *that*-clauses (43); all the examples are cited after Hunston & Francis (1999: 6):

(40) *Anne’s desire to please her mother-in-law*

(41) *a specialist in chest diseases; our anxiety for news*

(42) *the knowledge of how it should be done*

(43) *a hope that you would soon be well again*

2.2.4 Support verb constructions

When discussing nominal versus verbal valency, a note should be taken of a phenomenon that seems to occupy an ‘in-between’ position, namely the support verb construction with a semantically weak verb (henceforth SVCxn; e.g. Kolářová, 2014: 23), also referred to as the ‘periphrastic verb construction’ (Wierzbicka, 1988: 293), the ‘stretched verb construction’ (cf. Allerton, 2002), and the ‘Light Verb construction’ (Jackendoff, 2013: 80), exemplified by *make an attempt (to do something)* (Allerton, 2002: 235). The SVCxn is usually described as a verbonominal construction; however, Wierzbicka (1988: 297) takes what follows the indefinite article to be a verbal infinitive, not a noun (also cf. Croft & Cruse, 2004: 243). The SVCxn poses a host of questions, including that of the

(Dvořák, 2014: 93), hence the unacceptability of **přemlouvání prodavačem stařenky* ‘the persuading by a seller of an old lady’ (ibid.).

semantic difference from the corresponding simplex construction (cf. Allerton, 2002: 5 ff.; Wierzbicka, 1988: 293 ff.; Brinton & Traugott, 2005: 130).

What is more relevant for the present thesis, nevertheless, is the fact that “the verbal component of the support verb construction can influence the valency of its nominal component” (Kolářová, 2014: 56), i.e. the valency behavior of this construction as a whole may differ from the ‘normal’ valency behavior of the noun *per se*. This is related to the fact that the SVCxn allows “arguments of the verb to fill the slots of the frame elements of the frame evoked by the noun” (Ruppenhofer et al., 2016: 43). Furthermore, Thompson & Hopper (2001: 33) consider SVCxns as “V-O compounds,” stating that for clauses with these, “it is not clear whether they should even be considered two-participant clauses at all” (ibid.: 34). Theoretically, a case could be made for analyzing *an attempt* as the object of the transitive *make* (ibid.: 46) as well as for analyzing *make an attempt* as an intransitive composite predicate (Brinton & Traugott, 2005: 130). Considering the non-prototypical valency behavior of nouns in SVCxns and the unclear morphosyntactic status of the presumably nominal component, instances of SVCxns are excluded from analysis in the present thesis.

2.2.5 Noun valency and derivation

This section touches upon in what ways word-formation²⁰ is relevant to valency, focusing mainly on selected points concerning nominalization in a broad sense. The issue of the so-called valency-changing derivation (or valency-changing word-formation)²¹ is left aside, being rather irrelevant to the present thesis. For the

²⁰ Compounding is beyond the scope of the present thesis (cf. Grimshaw, 1990: 68–70; Plag, 2003: 149–150; Booij, 2007: 215–216; Bierwisch, 2015: 1089–1094).

²¹ The term refers to changes in the number of arguments or their rearrangement, “typically marked by an affix on the verb, or by a periphrastic multi-verb construction” (Aikhenvald, 2015: 141), which form a ‘voice’ system, including valency-reducing derivation (e.g. the formation of passives, antipassives, reflexives, and reciprocals) and valency-increasing (or valency-augmenting) derivation (e.g. the formation of causatives and applicatives). These changes can be included under the more general term ‘valency alternations’ (cf. Comrie et al., 2015: 11). For recent overviews, see Aikhenvald (2015: 141–146) and Wunderlich (2015), and references therein.

same reason, the relevance of argument structure for word-formation²² is not addressed.

2.2.5.1 Argument inheritance

Booij (2007: 215) defines argument inheritance as “(partial) preservation of the syntactic valency of the base.” For instance, *destroy* might be claimed to require two complements, referring to the agent and the patient; the same can be said about the noun derived from this verb, *destruction*. Examples such as *Pat’s destruction of evidence* illustrate that the nominal allows the expression of the same arguments as the verb, only with their formal realization being different (ibid.; cf. also Moravcsik, 2009: 241). Generally, the selection of preposition in noun complements can, but does not always have to, correspond to that in related words (verbs or adjectives), as Allerton (2006: 311) illustrates by the following examples:

(44) *Alice’s dependence **on** her parents*

cf. *Alice was dependent **on** her parents; Alice depended **on** her parents*

(45) *Alfred’s pride **in** the project*

cf. *Alfred was proud **of** the project; Alfred prided himself **on** the project*

Nouns can differ in the extent of argument inheritance; result nouns (cf. the following section), for instance, exhibit a lesser degree of inheritance than event nouns such as *destruction*. Since result nouns do not denote an event with participants (as e.g. *destruction* does), they do not allow for agent complements, hence the unacceptability of the following two examples (after Booij, 2007: 215):

(46) **extensive collections of shells by Indriaas*

(47) **these expressions by my father are old-fashioned*

It should be noted that there are diverse views of argument inheritance, intertwined with diverging assumptions about the valency of nominalizations, especially the non-inheritance view, the partial inheritance view, and the complete inheritance view (cf. Bierwisch, 2015: 1078). Furthermore, for linguists such as Law (1993), inheritance does not seem to be deemed a necessary component of

²² This concerns for instance “suffixes like [the Italian] *-ible* / [the German] *-bar* ‘able’ which normally and productively select only transitive verbs” (Gaeta, 2017: 368).

the description of valency; it is claimed that “the argument of the *of*-phrase in derived nominals should be considered as the semantic argument of the verb base, not of the derived noun” (ibid.: 144). Law (ibid.: 150) even concludes that “[i]f the claim that derived nominals do not have argument structures is correct, then [...] all nouns, derived or underived, [...] would be uniformly have [sic] no argument structure,” which is, however, a problematic claim (ibid.: 147, note 3).

2.2.5.2 Nominalization

The autological term ‘nominalization’ can be used to cover a broad range of phenomena,²³ “whereby a word which is not a noun (but also not necessarily a verb) is turned into a noun (not necessarily denoting a situation)” (Koptjevskaja-Tamm, 2015: 1196), including examples such as *red* → *redness* and *teach* → *teacher*. The former example, *redness*, can be described as the result of deadjectival (or property) nominalization, or as a quality noun (Rainer, 2015a: 1269). Quality nouns are “nouns denoting a quality, generally both derived (e.g., *ugliness* ← *ugly*) and underived (e.g., *beauty*)” (ibid.). The latter example, *teacher*, can be described as the result of agent(ive) nominalization, or as an agent(ive) noun (cf. Rainer, 2015b: 1305). Analogically to other types of nouns, including patient nouns such as *examinee* and *detainee* (cf. Mühleisen, 2015: 1318), agent nouns can be treated as absorbing a position of the valency frame of the corresponding verb. For instance, the noun *teacher* can be claimed to have absorbed the agent slot in the valency frame of the verb *teach*, which explains why the noun cannot take a complement with the semantic role of agent (cf. Panevová, 2014: 11).

Nevertheless, what “is often understood as *the* nominalization proper” (Koptjevskaja-Tamm, 2015: 1196) is probably the best-known type of nominalization, that is, the formation of action nouns. A distinction has been traditionally made between event (or process) and result nominals (cf. Kolářová, 2014: 37; Bekaert & Enghels, 2014: 61). Event and results nominals are often

²³ Gerundive nominals and other phenomena which are often subsumed under syntactic derivation – as opposed to lexical derivation (cf. Panevová, 2014: 7; Ouhalla, 2011: 119–120) – are beyond the scope of the present thesis; there is a large body of literature on the topic, including influential works such as Chomsky (1972: 15 ff.).

morphologically indistinguishable, and thus the notion of (semi-)regular polysemy needs to be invoked (Melloni, 2015: 1254), as examples such as *John's criticism of the book* suggest, allowing both readings (San Martin, 2009: 833). It should be noted that result nominals are often treated as a broad category including all non-event nominals, i.e. nominals with more concrete meanings, for instance result nominalizations proper (*the agreement they signed*), agent nouns (*teacher*), instrument nouns (*sharpener*), object (or patient) nouns (*employee*), locative nominals (*refinery*), and the like (Koptjevskaja-Tamm, 2015: 1197). Therefore, some authors adopt the term 'referential nominals' rather than 'result nominals' (Bekaert & Enghels, 2014: 63), including further semantic types, such as psychological stimulus (*attraction*) and agentive-collective (*administration*).

It has been argued, most influentially by Grimshaw (1990: 45 ff.), that event nouns (called complex-event nominals by her) have argument structure, hence the presumable unacceptability of (48), as opposed to (49), while result nouns take complements only optionally, as in (50), cf. Alexiadou & Grimshaw (2008: 1); Alexiadou (2017); these examples are quoted after San Martin (2009: 834):

(48) **The instructor's intentional examination took a long time.*

(49) *The instructor's intentional examination of the papers took a long time.*

(50) *The examination (of the papers) puzzled us.*

On this account of valency, it is presumed that "nouns which are identical in form to verbs [i.e. nouns formed by conversion] do not generally behave like complex event nominals" (Alexiadou & Grimshaw, 2008: 4), and thus they "lack argument structure properties" (ibid.: 10). Nevertheless, the claim that only complex-event nominals have argument structure and take obligatory complements (which has particularly resonated with generativists, cf. Alexiadou, 2017, and references therein) is far from uncontroversial (Koptjevskaja-Tamm, 2015: 1197).

From the perspective of word-formation,²⁴ action nouns are by far most frequently formed by suffixation; nevertheless, conversion and syntactic derivation are also well attested (ibid.). As Koptjevskaja-Tamm (ibid.) notes, "languages normally have several word-formation types of action nouns, and most of these word-formation types are not tightly bound to just one meaning," as manifested

²⁴ As noted above (cf. 2.2.5, footnote 20), compounding is not considered here.

by the example *John's criticism of the book* mentioned above. Furthermore, “we almost never find one-to-one relationships between affixes and readings” (Park, 2017: 800), which is depicted in Figure 2. As the figure shows, each semantic type includes several morphological types, and a morphological type may belong to more semantic types. Morphological types in regular font are typical of the respective semantic types, and the lighter font represents morphological types expressing the respective semantic type secondarily (ibid.).

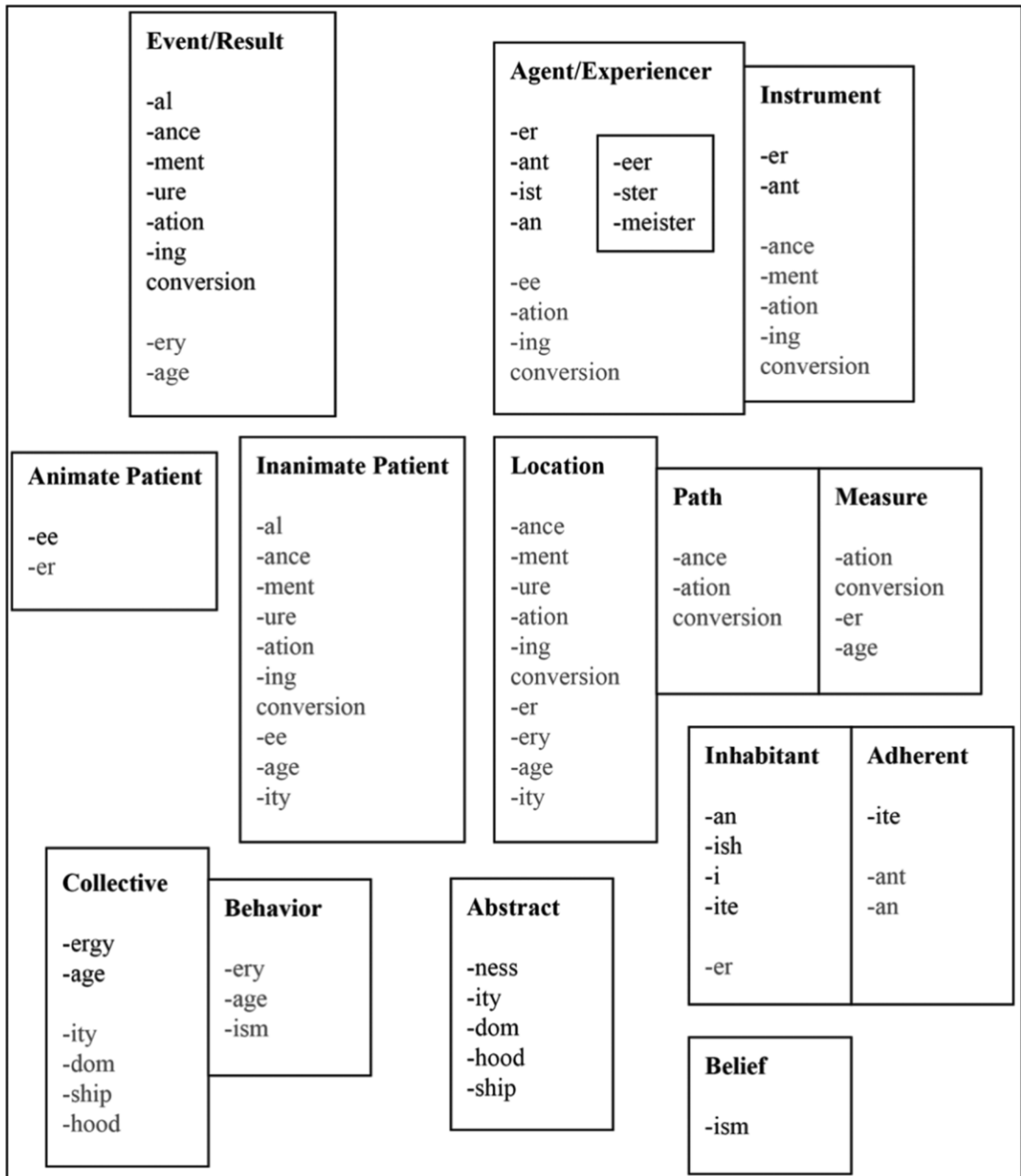


Figure 2: Nominalization readings and affixes (Park, 2017: 801)

2.2.6 Factors influencing the realization of a noun's valency potential

As noted above, it can be assumed that “event structure is the primary semantic determinant of argument realization” (Croft, 2013: 174). This enables us to formulate certain predictions about the valency behavior of nouns, which would, however, be somewhat trivial. For instance, based on some of the examples given above, we might safely hypothesize that the agentive argument of the noun can be expressed by a *by*-phrase (as in (29c)) or by a possessive determiner (as in (44), (45), and (49)), or it can remain unexpressed (as in (50)). However, observations like these are not very illuminating, and it is best to formulate them only on the basis of corpus data. Tentatively, we might rely on Allerton's rather formalist summary of his observations: “it can be said that *by* complements normally correspond to transitive subjects, possessives to transitive or intransitive subjects (and occasionally objects), and *of* phrases to intransitive subjects or to objects. Furthermore, two complements of the same kind are not allowed.” (2006: 312)

This section focuses on more specific factors which might be expected to influence the realization of the valency potential of a noun, which is, as already stated above (cf. 2.1.2.1), “determined by the interaction of valency potential, sentence structure and communicative factors” (Vater, 2003: 796). The first subsection (2.2.6.1) outlines several basic concepts pertaining to reference and anaphora, and highlights the need for an integrative approach to noun valency. The second subsection (2.2.6.2) very selectively touches upon certain semantic factors which might prove relevant in the analysis. The last subsection (2.2.6.3) explains the fundamentals of a cognitive-communicative factor, namely syntactic (or structural) priming, and illustrates how this phenomenon has been shown to be relevant for the study of valency. This overview of the potential factors does not claim to be exhaustive.

Given the focus of the present thesis on the nouns *attempt*, *failure*, and *ability*, which allow both *at*-PP complements and infinitival complements (cf. 3.2), the first subsection concerns what might be expected to affect the choice of no overt vs. overt complementation, while the second and the third subsections concern what might be expected to affect the choice between various forms of

complementation (e.g. *attempt at something*, *attempt at doing something* vs. *attempt to do something*).

2.2.6.1 Context, reference, and anaphora

The relevance of context to valency has been acknowledged by scholars approaching the issue from a variety of perspectives. These include, for instance, the study of language acquisition; it has been shown that children acquiring English tend to use certain verbs without a subject if this subject refers to a participant that is contextually bound in “the immediate perceptual and/or discourse situation” (Tomasello, 2005: 217). This reflects a general pattern of our cooperative language use and its foundation in the “dynamic and flexible human cognition capable of accessing context, enriching the utterance at the explicit level, and deriving implicated conclusions” (Yus, 2010: 652). The importance of not ignoring the context when approaching valency has been clear for decades, as suggested by the body of literature on definite null complements (cf. 2.2.6.1.2), and by relatively early observations, such as Allerton’s (1982: 19): “[M]any verbs that do allow object-deletion require the object to be contextually recoverable.” The valency behavior of some words can be said to be affected by the context, and “the boundary between obligatory and optional complements is known to be influenced by contextual factors” (Sæbø, 2003: 815; cf. Croft, 2013: 27).

Herbst (1988: 286) mentions the fact that sentences such as *He gave a very interesting explanation* and *The explanation was rather silly* are “grammatical but at the same time restricted in occurrence to contexts where it has already been made clear what the explanation is of,” which seems to be the most explicit suggestion concerning the link between noun valency and reference found in the reviewed literature. With this exception, however, this line of study has, to our knowledge, focused exclusively on verbs, with only occasional remarks on nouns, such as the following:

- “nouns can unproblematically occur without any adnominal specification of their ‘argument’, *provided that the hearer can be expected to supply appropriate ‘bridging assumptions’*” (Mackenzie, 1997: 4; italics added);

- “most nouns productively derived from perfective transitive verbs need to have an overt complement *if none is known from the previous discourse*” (Kolářová, 2014: 27; italics added);
- “Knowing the arguments is compulsory. [...] even if the arguments are not overtly expressed, *they must be recoverable from the* (discourse or knowledge of the world) *context.*” (Barbu, 2014: 120–121; italics added)

Moreover, Panevová (2014: 4) pays lip service to the possibility of “[d]eletions connected with text structure,” but excludes this issue from her study. Dvořák (2014) makes a few explicit remarks concerning the impact of context dependence on Czech event-naming nominalizations ending in *-ní/tí*, suggesting that the valency behavior of certain nominals may be affected by the context (non-)boundness of these nominals.

2.2.6.1.1 On reference

Importantly, as Halliday (2004: 644) points out, nominalizations “gain access to the textual systems of the nominal group – most significantly, the system of determination.” This has several implications; the system of reference, “essentially a discourse category” (Aikhenvald, 2015: 121), provides NPs with explicit markers of their contextual boundness. Examining the interplay of reference and nominal valency might enhance our understanding of such phenomena as definite null complements (cf. 2.2.6.1.2). This might in turn provide a better insight into the workings of nominal valency, for which the role of null complements might be even more important than for verbal valency.

The rest of this section introduces types of reference in a necessarily reductive manner, relying on the reader’s familiarity with the English system of reference. The central focus here is on reference as one of the major cohesive “resources for marking textual status” (Halliday, 2004: 549).

Two types of specific definite reference (cf. Quirk et al., 1985: 265–266) may be distinguished: exophoric and endophoric reference. The former concerns cases in which the reference is derived from the extralinguistic situation, be it the immediate context or the general world knowledge (ibid.: 266–267), and thus “does not contribute to the cohesion of the text” (Halliday, 2004: 552). The latter

“means that the identity presumed by the reference item is recoverable from within the text itself” (ibid.). When pointing “backwards” (i.e. when an anaphor points back to its antecedent through grammatical means), it is usually referred to as anaphoric reference (or anaphora), including instances of indirect anaphora, arising “when a reference becomes part of the hearer’s knowledge indirectly, not by direct mention” (Quirk et al., 1985: 267). When the reference points “forwards,” it is usually referred to as cataphoric reference (or cataphora), including instances of structural cataphora, i.e. reference “resolved within the same nominal group where the reference item appears” (Halliday, 2004: 552).

This outline is far from exhaustive; other types of reference could be mentioned, e.g. the ‘logical’ use of *the* in cases “where the uniqueness of the referent is to be explained not so much by knowledge of the world, as by appeal to the logical interpretation of certain words” (Quirk et al., 1985: 270), such as *first*, *same*, *only*, and *sole*. It is not hard to imagine that a valent noun could be determined by the ‘logical’ *the*, which also hints at the fact that the definite article might accumulate more functions. In general, the definite article might be said to “indicate identifiability within *some* part of the common ground, be it the speech event, shared personal history, or shared culture” (Verhagen, 2015: 243). The primary function of the indefinite article, on the other hand, is “to introduce a new [...] entity in discourse” (Biber et al., 2007: 260).

2.2.6.1.2 Null complements (zero anaphora)

As suggested above, the issue of null complements (or zero anaphora) should be recognized as an issue – and perhaps as one of crucial importance for any study of noun valency. Huang (2006: 315) explicitly states that in discourse, “full NPs are predicted to be used when the targeted referent is currently not addressee-activated, whereas reduced anaphoric expressions such as pronouns and zero anaphors are predicted to be selected when such a referent is estimated to be currently both speaker- and addressee-activated.” Despite recognizing the possibility of reduction in anaphoric NPs, Huang (ibid.: 5) still defines null-complement anaphora as “an elliptical construction in which *a* [...] *complement of a verb* is dropped” (italics added) as it can “be understood from the preceding clause or context,” giving the following example:

(51) *They asked him to pay lip-service to the principle, but he refused.*

In an oft-cited paper, Fillmore (1986: 96) draws a distinction between definite null complements (henceforth DNCs; e.g. (51)) and indefinite null complements.²⁵ The latter can be illustrated by examples such as (52) and (53), with (52) involving “a semantic object of considerable generality” (ibid.) and with (53) requiring “the specification of various degrees of semantic specialization” (ibid.), in which case the verb can be said to have the more specialized meaning ‘drink alcoholic beverages’ (ibid.: 97):

(52) *When my tongue was paralyzed I couldn't eat or drink.* (ibid.: 96)

(53) *I've tried to stop drinking.* (ibid.)

With indefinite null complements, the identity of the referent is unknown, or it does not matter, whereas with DNCs, the missing element must be recoverable from the context. Fillmore proposes the following test to distinguish the two: while it is not odd to say (54), it is odd to say (55):

(54) *He was eating; I wonder what he was eating.* (ibid.)

(55) **They found out; I wonder what they found out.* (ibid.)

This suggests that while *he was eating* is an example of indefinite null complement, *they found out* is an instance of DNC because it is not an acceptable utterance unless the previous context specifies what it is that they found out.²⁶ The phenomenon of DNC (or zero anaphora) is complex and cannot be reduced to semantics; as Fillmore (ibid.: 98) puts it, “a genuine semantic explanation does not appear to be forthcoming,” as illustrated by sets of synonymous words, some of which permit DNCs while others do not, cf.:

(56) *Because mother insisted.* (ibid.)

(57) **Because mother required.* (ibid.)

(58) **Because mother demanded.* (ibid.)

²⁵ Cf. Herbst's (1999) distinction between optional and contextually optional complements. Gillon (2015: 68–69) distinguishes implicit indefinite object verbs (*read, eat*), implicit reflexive object verbs (*bathe, shave*), implicit reciprocal object verbs (*meet, kiss*), and implicit definite object verbs (corresponding to Fillmore's DNCs).

²⁶ Note that Fillmore's test seems to have inspired the dialogue test used in the framework of FGD (cf. 2.1.2.1) for identifying obligatory semantic valents.

As these examples also demonstrate, the phenomenon of DNC cannot be explained merely in terms of context boundness either; some verbs (such as *require* and *demand*) simply do not permit DNCs, no matter how clear the pragmatic context might be. For a relatively recent overview of some of the issues touched upon above, see Michaelis (2012: 51–57), and references therein. Incidentally, Michaelis (*ibid.*: 52–53) points out that the phenomenon of DNCs is not relevant only to the valency of verbs, illustrating its importance for the study of nominal and adjectival valency with (59) and (60), respectively, without further elaborating on nominal valency, nevertheless:

(59) *I made a copy (of that).*

(60) *I'm afraid (of that).*

Note that Sæbø (2003: 817) emphasizes that “context dependence in an empty complement should not be considered as the result of deleting a pronoun” as the phenomenon “is more semantic than syntactic in nature.” In other words, Sæbø argues that DNCs should not be analyzed as instances of ellipsis.

The overview presented above implicitly relies on the assumption that an NP either is or is not anaphoric. While this might be acceptable, it needs to be emphasized that anaphora as such is a scalar rather than an either-or matter. For instance, in her Accessibility theory, Ariel (2014: 4) argues that “speakers not only mark certain pieces of information as accessible, they also indicate how accessible it is to the addressee.” This leads her to propose the Accessibility Marking Scale (*ibid.*: 73), here reproduced as Figure 3.

Ariel (*ibid.*: 71–72) argues that the more accessible an antecedent, the higher an accessibility marker will be selected to refer to it. Extremely High Accessibility markers include gaps, reflexives, *wh*-traces and the empty *pro* and *PRO*.²⁷ This seems to predict that if the complement of a noun (or any other word, for that matter) is highly accessible to both the speaker and the addressee, an extremely high accessibility marker with no overt expression will be used, rather than a long definite description.

²⁷ On the generativist empty categories of “little *pro*” and “big *PRO*,” see e.g. Chomsky & Lasnik (1995: 36).

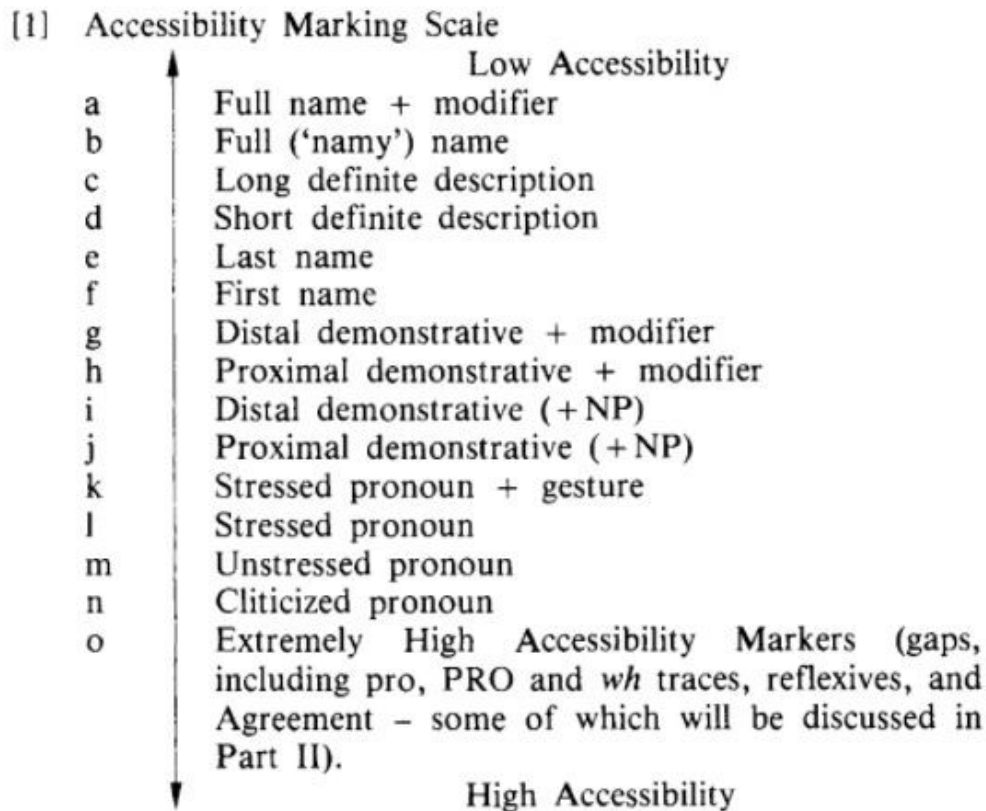


Figure 3: Accessibility Marking Scale (Ariel, 2014: 73)

Based on what has been said, it could be hypothesized that the use of a valent noun in a text without any overt complements can be felicitous, with the addressee being able to do the “informational filling” (Yus, 2010: 648), if the valent noun has definite reference based on (indirect) anaphora. Assuming that this might be a realistic scenario seems to be in line with what is known about the reduction in explicitness in the noun phrase, related to the context. As Quirk et al. (1985: 1243) put it, “[t]here is, typically, a progression from ‘more explicit’ to ‘less explicit’ in discourse.” Practically, this results in a) the omission of postmodification, or b) its expression in premodification. The latter tendency is illustrated by Dušková (2015: 339), who gives the following examples:

- (61) *I was like someone who upon descending from a snow-covered hill steps onto **a patch of ice** hidden beneath the snow ... Only a person with no knowledge of what it is to engage in a desperate battle to keep one’s balance would say that I could have left **the ice patch** at any moment.*

(62) *The process of charging a capacitor consists of transferring a charge from the plate at lower potential to the plate with higher potential. The charging process therefore requires the expenditure of energy.*

The parallel between the context-driven reduction in postmodification of NPs (especially when it comes to its omission) and the phenomenon of definite zero anaphora is striking and should not be ignored. However, the importance of anaphora should not be overstated at the expense of, for instance, structural cataphora (cf. the previous section), which might be expected to enter the complex interplay of factors as well, especially when we are dealing with nouns that take complements.

2.2.6.2 Semantics

Kolářová (2014: 56) identifies several factors influencing the special valency behavior of Czech nouns (i.e. valency behavior that defies more general tendencies), including semantic properties of the noun, properties of the complementation (such as animacy), and grammatical properties of the source verb (such as aspect). While it is no doubt beneficial to be aware of such general factors that might influence the valency behavior of nouns, this section focuses more specifically on what might skew the choice of the complementation pattern in favor of either an *at*-prepositional phrase (possibly with a gerund) or an infinitive. The question suggesting itself is whether these two complementation patterns are in free variation or whether one of the patterns is preferred under certain conditions, supposing that “a difference in syntactic form always spells a difference in meaning” (Bolinger, 1968: 127). Note, however, that it has been pointed out that “clearly, the syntax of English complementation cannot be satisfactorily accounted for without semantics; unfortunately, with semantics, it cannot be satisfactorily accounted for either” (Wierzbicka, 1988: 23).

2.2.6.2.1 The semantics of *at*

It is well-known that “[l]exical concepts belonging to prepositions are usually very difficult to determine” (Tendahl, 2009: 206). Tendahl (ibid.) argues that “the conceptual region of a function word like *at* does not have much context-independent conceptual content,” and his characterization of *at* as “always used in situations in which there are at least two entities which stand in some

relation to one another” is accordingly not particularly illuminating. Specifically trying to identify the semantic properties of prepositions in valency complements in general – that is, bound, rather than free prepositions (cf. Biber et al., 2007: 74) – might be even more problematic as “bound prepositions often have little independent meaning” (ibid.).

As Taylor (forthcoming) notes, “[c]ognitive linguists have long been interested in prepositions,” and thus it might prove fruitful to take into account the cognitivist perspective. Given the premise that “spatial concepts are systematically extended to provide a wide array of non-spatial meanings” (Tyler & Evans, 2003: ix), Evans (2010: 243) identifies co-location as the prototypical lexical concept for *at*, pointing out that it is the preposition that allows the most general spatial localization in English, and hence the most polysemous of all English prepositions. Evans (ibid.) argues that the most salient feature connected with *at* is Practical Association, presumably reflected in metaphorical extensions to its ‘state’ uses. These include uses referring to the state of existence (63), to states relating to mutual relations (64), and to states relating to external circumstances (65); the examples are cited after Evans (2010: 244):

(63) *He stood at ease. He is at peace.*

(64) *The EU is at war with the US over the imposition of steel tariff.*

(65) *The company is at risk of going under.*

2.2.6.2.2 The semantics of the infinitive

Morita (2012: 31) states that “[i]t is generally agreed that the infinitive denotes some kind of future,” that is, “the time of the event represented by the infinitive is temporally located after the time of the event represented by the matrix predicate.” There are, however, numerous examples that do not exactly conform to this tendency, such as the following (ibid.: 32):

(66) *Mary seems (pretends) to be honest. I consider Mary to be honest.*

(67) *It is nice to meet you.*

(68) *John was surprised to see Mary.* (ibid.: 40)

Wierzbicka (1988) endeavors to provide a comprehensive account of the semantics of the infinitive in English, stating for instance that it can “offer

a motive, i.e. a reason” (ibid.: 28), as in (67) above, and that it may often “imply ‘wanting’ if (1) the main verb is a verb of wanting, or (2) the main verb is (or can be interpreted as) a verb of intentional action, or (3) there is no main verb” (ibid.: 29). Apart from wanting (“the *to* of volition”), such uses of the infinitive may imply “thinking and a future ‘will’” (ibid.); there are, however, other uses, including the purposive infinitive, “the *to* of opinion” (69), and “the *to* of emotion, awareness, and thought,” as in (67) and (70):

(69) *She is thought to be dishonest.* (ibid.: 46)

(70) *I blush to think of it. I regret to have inconvenienced you.* (ibid.: 98)

Wierzbicka concludes her discussion of the infinitive by stating that “*to* complements are generally characterized not only by a personal, first-person mode (‘I want’, ‘I know’, ‘I think’), but also be [sic] a future component of some sort” (ibid.: 166).

2.2.6.2.3 The infinitive vs. the gerund

The semantics of gerunds has been described in terms of their ‘action’ (71) vs. ‘fact’ (72) semantics, exemplified by Maekelberghe (forthcoming) by the following:

(71) *Designers should check locally to determine whether the Local Act is still operative in the area proposed for **building** a high-bay warehouse.*

(72) *Conservatives have never forgiven the President for **breaking** his ‘no new taxes’ pledge to get his last economic package.*

Nevertheless, it has been claimed that “a gerund’s meaning – such as its action or fact semantics – largely depends on the context it is embedded in” (ibid.). Furthermore, it has been noted that nominal gerunds (73) typically conceptualize actualized situations, while verbal gerunds (74) “quite often locate their referents in virtual (hypothetical, future or counterfactual) mental spaces” (ibid.), as in the following examples, cited after Maekelberghe (ibid.):

(73) *For instance, the **unveiling** of the 500-pound bronze statue in the Petty Garden occurred only 45 minutes before he was to qualify his Pontiac for the last time.*

(74) *Mr Surkov would get the chance of **seeing** the duty solicitor.*

In other words, “nominal gerunds are more frequently attested in existentially presupposed contexts, whereas verbal gerunds exhibited a preference for virtual space-building nouns, i.e. nouns which set up a new mental space that contains hypothetical, irrealis or future situations” (Maekelberghe, forthcoming). Verbal gerunds can thus be claimed to overlap functionally with the infinitive, characterized along very similar lines by Poldauf (1955: 203) as “neosobní výraz pro neskutečnostně pojatý děj.” This quotation might imply that while infinitives are more personal (cf. the last paragraph of the previous section), verbal gerunds might construe the event that they refer to as impersonal. Furthermore, there have been attempts to capture the differences between the infinitive and the gerund; for instance, Morita (2012: 42) suggests the following tendency: “If the main predicate is nonimplicative and its complement denotes future, the complement tends to take an infinitival form. Otherwise, it takes a gerundive form.” Nonimplicative²⁸ verbs such as *refuse* take an infinitival complement, and both the following sentences are possible (both quoted after Morita, 2012: 42):

(75) *Mary refused to go out with John yesterday, so she didn't go out with him.*

(76) *Mary refused to go out with John yesterday, but she changed her mind...*

By contrast, the verbal complement of *can't help* is known to happen, i.e. it is implicative, as witnessed by the unacceptability of (78) as opposed to (77), and thus the gerund is used.

(77) *Mary couldn't help laughing, so she laughed.* (ibid.)

(78) *?Mary couldn't help laughing, but she didn't laugh.* (ibid.)

Morita (2012: 42) nevertheless admits that “it is impossible to predict the form of the verbal complement with semantics of the main predicate alone,” in part because “the meanings of infinitive and gerund could overlap” (ibid.: 43; cf. Poldauf, 1955: 204 ff.).

²⁸ Morita (2012: 42) views nonimplicative verbs as verbs with which “it is not known in advance whether its verbal complement really happens or not.”

2.2.6.3 Syntactic priming

There is another factor that should be taken into consideration, which pertains to the cognitive grounding of language use, namely the so-called syntactic priming, i.e. “a tendency to repeat the whole syntactic configuration of structures that the speaker has previously encountered or produced” (Tomlin & Myachykov, 2015: 43), or “a tendency to repeatedly employ the same syntactic form across successive utterances” (Bock, 1986: 356). Crucially, the tendency occurs subconsciously (ibid.: 379; Feng et al., 2014: 647). The most often cited example involves the use of the passive; Weiner and Labov (1983) were the first to show that “one of the factors that is significantly associated with the occurrence of a passive utterance is the presence of another passive somewhere in the previous five sentences,” as Bock (1986: 357) reports. Syntactic priming²⁹ is also referred to as ‘structural priming’ (e.g. Goldberg, 2006: 120–125; occasionally these two terms are differentiated, cf. Feng et al., 2014: 641), ‘syntactic persistence’ (e.g. Bock, 1986: 355), and the ‘recency effect’ (Taylor, 2012: 208–216). Priming effects have been documented in both production and comprehension, and in both conversation and monologic production (Feng et al., 2014: 641). They have been observed in corpora as well; even though some experimental psychologists claim that observational data should not be used, Lester et al. (2017: 33) argue that “[m]odern statistical techniques now enable distinguishing the influences of many confounding variables” and that “many variables important to priming are more difficult to control for in experimental paradigms than in corpus studies.”

Priming effects are relevant to the study of valency. To give just one example, speakers of English have been shown to be much more liable to describe a scene depicting an act of transfer using the *to*-dative (rather than the ditransitive) construction “if they had heard or used the *to*-dative construction prior to the experimental task” (Diessel, 2015: 307). Importantly, “these priming effects occur even if prime and target have different meanings” (ibid.), e.g. a locative *by*-phrase can prime an agentive *by*-phrase (and vice versa). Strictly speaking, syntactic

²⁹ The term is also used to refer to a psycholinguistic paradigm; as Feng et al. (2014: 642) state, “syntactic priming is not only a phenomenon, but also a very effective experimental method.” In her pioneering study, Bock (1986) refers to the former as “syntactic persistence” and to the latter as “a syntactic priming paradigm” (359) or “the priming paradigm” (383).

priming seems unaffected by the repetition of *by* per se. What matters is the repetition of the grammatical construction, not the repetition of any particular word; thus (79) primes (81) as strongly as (80) does (Branigan, 2007: 3):

(79) *The secretary is baking a cake **for her boss**.*

(80) *The secretary is taking a cake **to her boss**.*

(81) *The girl is handing a paintbrush **to the man**.*

It is possible to hypothesize that this is relevant to the present thesis, but it needs to be emphasized that while priming can alter the relative likelihood of producing one structure over another, it cannot be claimed to uniquely determine which one is produced, and priming therefore has to be seen as only “one of many factors that conspire to determine structure choice, and may in some circumstances exert a relatively weak (although consistent) influence” (Branigan, 2007: 2).

Finally, it should be noted that there might be at work a tendency opposite to structural priming, viz. the so-called horror aequi principle, i.e. “the widespread (and presumably universal) tendency to avoid the repetition of identical and adjacent grammatical elements or structures” (Rohdenburg, 2003: 205).

3 Material and method

3.1 Nouns taking an *at*-complement

The original idea behind the present thesis was to explore certain aspects of noun valency in general. Given the limitation of space, however, it was necessary to choose only a limited number of nouns that could be practically analyzed. Nouns taking an *at*-complement were chosen based on an introspective (and hence somewhat arbitrary) assumption that these nouns form a relatively small and homogenous set. This assumption proved justified (cf. the following section). Furthermore, based on the reviewed literature, it can be claimed that the focus of studies of noun valency in English is typically on nominalizations complemented by *of*-phrases, and it might prove fruitful to pay more attention to other types of complements.

3.2 Selection of the nouns

Originally, it was planned for the list of *at*-nouns to be extracted from a corpus. However, the query searching for a noun followed by the preposition *at* in virtually any corpus has an extremely low precision and such a high recall that the necessary manual analysis of the results would be impossible within any reasonable timeframe. For instance, the simplified query [tag="NN."] [lemma="at"] returns over 160,000 hits in the British National Corpus (BNC).³⁰ A manual analysis of a random sample of 100 concordance lines showed that the *at*-phrase typically cannot be considered a complement of the immediately preceding noun; temporal (1) or spatial (2) adjuncts, complements licensed by words other than the immediately preceding noun (3), and a single mistagged verb (4) accounted for over 90% of this sample.

- (1) *the time **intervals at** which samples [...] will be tested*
- (2) *You should be able to buy these **books at** a bookshop*
- (3) *his father stopped and looked in a startled **manner at** his mother*
- (4) *Well, Bilborough, my mother **lives at** Bilborough*

³⁰ The BNC was accessed through the KonText interface of the Czech National Corpus project, available online from <<https://kontext.korpus.cz>>. Occasionally, when a longer context of an example was needed, it was retrieved through the BNCweb interface, available online from <<http://bncweb.lancs.ac.uk>>.

There were only six potentially relevant results, including three occurrences of the construction *take a (fresh, detailed) look at*, and the following: *not having any skill at games*, *graduates with a chance at a job*, and *without a glance at Gwen*. Note that extracting a list of valent nouns taking an *at*-complement would, as these examples suggest, require formulating clear criteria for distinguishing valent and aivalent nouns, which is a far from trivial task, especially when we are dealing with prepositional phrases (cf. Herbst, 1988: 269 ff.).

Since compiling an exhaustive list of nouns that can take an *at*-complement is not really an aim of the thesis, it was deemed reasonable to choose a different starting point, namely valency dictionaries of English. The *Erlangen Valency Patternbank* (Herbst & Uhrig, 2009)³¹ lists the following three noun patterns:

- **noun + at_NP**, represented by *ability, anger, anguish, anxiety, attempt, concern, delight, effort, expert, failure (two senses), horror, joy, luck, master, practice, protest, terror*;
- **noun + at_V-ing**, represented by *ability, anger, anguish, anxiety, attempt, delight, effort, expert, failure (two senses), horror, joy, luck, master, practice, protest, terror*; and
- the contextually specified pattern **noun + at_NP:QUANT**, represented only by *offer*, restricted to the construction *on offer at_NP:QUANT*.

In the dictionary (Herbst et al., 2004: 296), the two senses of *failure* are glossed as ‘a lack of success’ (hereafter *failure*₁)³² and ‘someone or something that has no success’ (hereafter *failure*₂)³³ exemplified by (5) and (6), respectively:

- (5a) *Failure at chess reflects badly on the state and cannot be tolerated.*
 (5b) *his failure at doing something as simple as buying...*
 (6a) *After a depressing weekend feeling a hopeless failure at everything I did, it was a comfort to find I could get them to sleep happily.*
 (6b) *I will inevitably be a failure at being perfect.*

³¹ Available online from <<http://www.patternbank.uni-erlangen.de>>. The patternbank is based on the valency dictionary by Herbst et al. (2004).

³² In the following text, the subscripts are used only when it is necessary to distinguish the senses.

³³ For *failure*₁, these patterns are listed: *to_INF*; *as_NP*; *at_NP*; *at_V-ing*; *in_NP*; *in_V-ing*; *of_NP*; *by_NP + to_INF*. For *failure*₂, the following patterns are listed: *as_NP*; *at_NP*; *at_V-ing*.

Note that *failure*₂ can be described as absorbing a slot in the valency frame of the verb *fail* (if we accept the notion of frame inheritance, cf. 2.2.5.2); for instance, when the noun refers to a person (as in 6), it can be described as having absorbed the agent slot.

Three nouns were selected for analysis, viz. *attempt*, *ability*, and *failure*₁. The rationale behind this selection is threefold: First, these nouns can be used both in the *at*_NP pattern and in the *at*_V-ing pattern, and with all these nouns the pattern alternates with *to*_INF. This allows us to identify both valency behavior shared by the three nouns and the peculiarities of the individual nouns.

Second, each of these nouns is different with respect to derivational morphology. While *attempt* and *failure* are deverbal, *ability* is deadjectival; and while *failure* and *ability* are words formed by the suffixation of *-ure* and *-ity* respectively, *attempt* is a word formed by conversion. Doubts may arise concerning the direction of the conversion; nevertheless, Aarts (2011: 38) mentions *attempt* as an example of the verb-to-noun conversion, and the online *Oxford English Dictionary (OED)*³⁴ explicitly states that the noun *attempt* is derived from the verb *attempt*. As mentioned above (cf. 2.2.5.2), some very influential accounts of valency, most notably that of Grimshaw (1990), assume that only deverbal complex-event nominals have argument structure, thus taking obligatory complements, while other nouns lack valency (ibid.: 45). On this account, it is presumed that nouns formed by conversion lack argument structure properties. If these claims were correct, *ability*, *attempt*, and other than complex-event interpretations of *failure* would be expected to display no valency properties, and thus to manifest behavior different from that of the complex-event reading of *failure*.

Third, *attempt* and *failure*₁ represent relatively prototypical instances of nominalization, i.e. “deverbal nominalizations derived from verbs with an agentive subject” (Bekaert & Enghels, 2014: 61). Given its limitations, the present thesis can only pay lip service to the need for studying less prototypical nominalizations, while partly sharing the bias towards the presumably

³⁴ Available online from <<http://www.oed.com/view/Entry/12765>>.

prototypical³⁵ instances, only slightly reducing it by examining a deadjectival nominalization (*ability*) as well. It is, however, tentatively assumed that for the study of phenomena such as the interplay of noun valency and reference, valent nouns should display more or less uniform patterns of behavior, no matter how (non-)prototypical.

It should be acknowledged that *attempt*, *failure*, and *ability* are by no means the only possible choice. It might have been sensible to include a primary noun as well, e.g. *effort* or *master*. However, the primacy of the former is to a certain extent problematic (according to the *OED*, the noun *effort* is a loanword from French, originally a “noun of action” derived from the verb *efforcer*; cf. Quirk et al., 1985: 751), and the choice of the latter might introduce an unwanted confound into the data. While the selected nouns allow for both *at*- and *to*-complements, this is not the case with *master*; moreover, the noun *master* seems to differ from the three nouns in the number of required valents.

3.3 Instances of the nouns excluded from the analysis

The following occurrences of the three nouns are excluded from the analysis:

- a) tokens of the verb *attempt* mistagged as a noun (in a random sample of 100 instances of the lemma *attempt* tagged as a noun in the BNC, two verbs³⁶ were found);
- b) instances of the SVCxn in both the active and the passive voice, for reasons given above (cf. 2.2.4); this concerns only *attempt*;
- c) occurrences of *failure*₂ (cf. the previous section); the decision to exclude *failure*₂ should be consistent with the decision to include only nouns that take both *at*-PPs and *to*-infinitives as complements (cf. footnote 33 in section 3.2);

³⁵ However, consider Thompson & Hopper's (2001) comments on prototypicality.

³⁶ These are the two instances of the lemma *attempt* mistagged as a noun: *The error messages in the process log **attempt** to give as much information about the cause and source of an error as possible. This simplistic anti-fascist emphasis **attempts** to mobilize the memory of earlier encounters with the fascism of Hitler and Mussolini.*

d) tokens of the nouns corresponding to compounds (cf. 2.2.5, footnote 20), such as *heart failure* (listed in the *OED*³⁷ as a compound), *belt failure*, *engine failure*, *market failure*, *piano-failure*, *potato failure*, *power failure*, *reciprocity failure*, *assassination attempt*, *rescue attempt*, and *thought-reading ability* (all listed in the *OED* as compounds); analogically, the relatively frequent *coup attempt*, *suicide attempt* (listed as a compound in Quirk et al., 1985: 1571), *liver failure*, *kidney failure* and *business failure* are excluded as well.

3.4 Data for the analysis

3.4.1 The corpus

The source of data resorted to is the British National Corpus (BNC). The choice of British English, “the default variety” (Deshors & Gries, 2016: 199), is somewhat arbitrary, which, however, does not mean that it is not significant. Different varieties of English might display diverging complementation preferences (cf. Deshors & Gries, 2016), and a certain amount of caution is therefore needed when drawing conclusions to avoid overgeneralization. Furthermore, this holds true not only with respect to regional and interference varieties; the inclusion of data from a particular register and even a text type might skew the results when valency is studied. For instance, in “certain kinds of highly restricted mini-genres” (Fillmore, 1986: 95) such as instructional language, it is common to omit direct objects, as in *Bake at 450°* and *Keep away from children* (Quirk et al., 1985: 23). On the level of registers, conversation has been shown to be generally “very low in transitivity” (Thompson & Hopper, 2001: 27).³⁸ What is more relevant to any study of noun valency, complex NP constructions cannot be expected in conversation (Biber & Conrad, 2009: 15) as NPs tend to be simple, “with little postmodification or adjective sequence” (Crystal & Davy, 1969: 113).

The source of data for the present thesis is, nevertheless, the BNC as a whole; in other words, no particular subcorpus was chosen. It is assumed that phenomena

³⁷ Available online from <<http://www.oed.com/view/Entry/85068?#eid127256912>>.

³⁸ See also Kolářová et al. (2017) on differences between written and spoken Czech concerning deverbal nouns.

such as the relation of noun valency and reference are to a certain extent general and can thus be studied on the basis of data from any register.

3.4.2 Extraction of the data

First, three data sets were extracted from the BNC, separately using the following queries:

```
[lempos="attempt-n"]
[lemma="ability"]
[lemma="failure"]
```

The following table shows the overall distribution of the three nouns:³⁹

Data set	Hits		Total hits	Followed by	
	sg	pl		<i>at</i>	<i>to</i>
<i>attempt</i>	8,700	4,600	13,300	936	8,598
<i>ability</i>	9,063	1,326	10,389	36	5,546
<i>failure</i>	7,687	1,072	8,759	60	2,472

Table 1: The overall distribution of the three nouns

As can be observed in the two rightmost columns of the table, with *ability* and *failure* the *at*-pattern turns out to be underrepresented.

3.4.2.1 Data sets

The data sets for *attempt* and *failure* were reduced. Out of the *failure* data set compounds were filtered out (cf. 3.3), viz. *heart failure* (107 instances), *liver failure* (80), *market failure* (73), *business failure* (65), *power failure* (49), *engine failure* (41), and *kidney failure* (30). The *failure* data set was thus reduced from 8,759 to 8,314 concordance lines. As for the *attempt* data set, 1,555 instances of the SVCxn were automatically filtered out; Table 2 provides an overview of the negative filters that were used, given with examples illustrating what types of concordance lines were excluded. Furthermore, a few compounds were filtered out of the *attempt* data set (cf. 3.3), viz. *coup attempt* (316 occurrences), *assassination attempt* (72), *suicide attempt* (52), and *rescue attempt* (17), resulting in the *attempt* data set being comprised of 11,288 concordance lines.

³⁹ Cf. Thompson & Hopper's comments on frequency and argument structure (2001: 49).

Span	Query	Excluded	Remaining
0 to 2	[lemma="attempt"][lemma="be"] [word="made"]	419	12,881
	e.g. <i>attempts were made to improve the monks</i>		
2 to 3	[lemma="be"][word="made"]	367	12,514
	e.g. <i>But now some attempt is being made to help them...</i>		
-2 to -1	[lemma="make"]	534	11,980
	e.g. <i>She made no attempt to conceal her surprise...</i>		
-3 to -3	[lemma="make"]	235	11,745
	e.g. <i>Paul made one last attempt.</i>		

Table 2: The negative filters used to exclude the SVCxn

Based on the *ability* data set, the *attempt* data set, and the *failure* data set, samples for the analyses were selected (cf. the following section). Furthermore, the *ability* data set and the *attempt* data set were used for the brief quantitative part of the analysis presented in section 4.2. These data sets are not included in the appendix of the present thesis as they are too large and can easily be retrieved directly from the BNC by anyone with an access to the corpus.

3.4.2.2 Samples

Apart from the two data sets (for *attempt* and *ability*) used for the purposes of the quantitative part of the analysis (cf. 4.2), six smaller samples were used for a more qualitatively oriented part of the analysis. Two samples were selected for each of the three nouns (*attempt*, *ability*, *failure*). One sample for each noun includes its occurrences followed by an *at*-complement, and one sample for each noun includes its occurrences followed by an infinitival complement. The six samples were all selected from the corresponding data sets; that is, for instance, the reduced *attempt* data set (11,288 concordance lines), whose compilation was described in the previous subsection, was the source of the two *attempt* samples. The following table gives the size of the individual samples:

Noun	With an <i>at</i> -complement	With an infinitival complement	Total
<i>attempt</i>	50	50	100
<i>ability</i>	12	50	62
<i>failure</i>	6	50	56
Total	68	150	218

Table 3: The size of the six samples

As Table 3 shows, the *ability at* sample and the *failure at* sample comprise fewer examples than the other samples, which stems from the low number of instances of these nouns followed by an *at*-phrase (cf. Table 1). These two samples were collected by simply going through all the data and selecting only those examples in which an *ability* or *failure* is followed by an *at*-phrase licensed by the noun (for instance, temporal *at*-phrases functioning as modifiers rather than complements were excluded).

The other four samples were collected as follows: the respective data set was shuffled; a random sample of 150 instances of the noun followed by an *at*-phrase or a *to*-infinitive was generated from the respective data set; the sample was cleaned of concordance lines of the types listed in section 3.3 (that is, for example, instances of the verb *attempt* tagged as a noun, instances of the SVC_{xn}, and instances of *failure*₂). Moreover, concordance lines in which the noun is followed by *to* or *at* not introducing the complement of the noun (as in *by stretching their abilities to the limit*) were excluded. A final random sample of 50 concordance lines was generated from each of the four manually cleaned samples. The six samples are given in Appendix Tables 1 to 6.

4 Analysis

4.1 Hypotheses

This section restates the hypotheses hinted at above and examined in the analysis.

First, in the reviewed literature, it is typically taken as uncontroversial that the expression of the valency potential of a noun is never obligatory (cf. 2.2.3). This widespread claim, it is argued here, completely disregards the textual system of reference. Therefore, it is hypothesized that the expression of the valency potential of a noun is in fact obligatory if the noun is not contextually bound (and hence is determined by an indefinite determiner). The expression of the valency potential of a noun is hypothesized to be optional only with nouns that are contextually bound, as signaled by grammatical means (e.g. the definite article).

Second, as discussed above (cf. 2.2.5.2), very influential accounts of valency predict that only *failure* as a complex-event nominalization is a valent noun, while *ability* and *attempt* are predicted not to have argument structure. However, it is hypothesized here that if a usage-based analysis of these nouns pinpoints no significant differences in the valency behavior of these nouns, the claim that only *failure* has valency properties is not justified.

Third, it is hypothesized that the *at*-PP and the *to*-infinitive complementation patterns do not vary at random. If “event structure is the primary semantic determinant of argument realization” (Croft, 2013: 174), we might expect there to be semantic factors (but also contextual and cognitive factors, including structural priming) affecting the choice of an *at*-PP or a *to*-infinitive as a complement.

In the following text, the terms ‘first’ and ‘second argument’ are used, with the term ‘argument’ referring to a semantic valent, as defined above (cf. 2.1.2.2). The following table shows what is meant by the first-second argument distinction, thus presenting our assumptions about the participants required by the three nouns:

	Participants		
Noun	First argument		Second argument
<i>attempt</i>	THE ENTITY	that attempts	TO DO SOMETHING
<i>ability</i>	THE ENTITY	that is able	TO DO SOMETHING
<i>failure</i>	THE ENTITY	that fails	TO DO SOMETHING

Table 4: The first argument and the second argument of the nouns

4.2 Some quantitative observations

As hinted at above, the *ability* data set (10,389 concordance lines) and the *attempt* data set (11,656 concordance lines) were used for a simple quantitative analysis, consisting in the examination of the patterns in which the two nouns are used when determined by an immediately preceding indefinite article (i.e. *an attempt*, *an ability*). If the first hypothesis stated above is correct (and if *attempt* and *ability* are valent nouns, as we suppose), then these nouns – when not contextually bound – would not be expected to occur without complementation. In other words, if *an attempt* and *an ability* occur regularly without an overt complement, that could seriously undermine the validity of the first hypothesis. On the other hand, if *an attempt* and *an ability* do not regularly occur without an overt complement, that would presumably support the hypothesis. The *failure* data set is not considered here because *failure*₂ seems to occur frequently with an indefinite article, and thus, given its specific valency behavior (cf. 3.2), it might skew the results of this quantitative analysis.

4.2.1 The *attempt* data set

In the *attempt* data set, there are 2,858 instances of the syntagma *an attempt*. The following table gives an overview of what most frequently follows:

Lemma	Tag	Absolute frequency	Relative frequency
<i>to</i>	T00	2,449	85.7%
<i>by</i>	PRP	160	5.6%
<i>at</i>	PRP	92	3.2%
<i>to</i>	PRP	29	1.0%
<i>on</i>	PRP	22	0.8%
<i>in</i>	PRP	12	0.4%

Table 5: Patterns following *an attempt*

As Table 5 shows, *an attempt* is most frequently (in 85.7% of the cases) followed by an infinitival clause, the instances of which were filtered out. The remaining 409 concordance lines were manually analyzed. When *an attempt* is followed by a *by*-phrase, this PP always expresses the agent, but more importantly, it is in 159 out of 160 instances followed by an infinitival complement of *attempt*, as exemplified by the following:

- (1) *An **attempt** by Francis Pym and some thirty dissatisfied MPs in 1985 to form a Centre Forward group to press for such changes was short-lived.*

In the remaining 249 concordance lines, all instances of *an attempt* with overt complementation were manually excluded, including instances of the second argument expressed by an *at*-phrase, as in (2), and by an *on*-phrase, as in (3):

- (2) *Perhaps we can now hazard an attempt **at defining** ‘a good reader’.*
(3) *they failed in an attempt **on Nasser himself***

The first argument can be expressed by a *by*-phrase (as in (1)), or occasionally by another PP, as in (4), (5), and (6), the last of which can be argued to involve an instance of metonymy. Moreover, the construction exemplified by (7) and (8) is possible:

- (4) *we are witnessing an attempt **amongst more committed narrators** to seek out a way of dealing directly with the emotions*
(5) *It represented an attempt **of a small group of working professional women** to make a nationwide survey of the conditions of town life in England which might be held responsible for particular characteristics of wartime evacuees.*
(6) *Premadasa on Aug. 30 countered an attempt **in Parliament** to impeach him, by announcing that he was suspending Parliament until Sept. 24.*
(7) *no more than an attempt **on the part of the coffin-maker** to mask some splits at the shoulder caused by over-zealous saw-cuts when kerfing*
(8) *The people explained their action as an attempt **on their part** to adhere to the principle of non-violence...*

Even though this part of the present analysis is supposed to be purely quantitative, these examples suggest that the morphosyntactic expression of the arguments of a noun is much more variable than the reviewed literature seems to predict. Furthermore, the first argument can be expressed outside the NP headed by *attempt*, as in the following:

- (9) ***Jezrael** twisted her face in an attempt not to cry...*

Importantly, out of the 2,858 concordance lines with *an attempt*, only twenty (i.e. less than one percent) are instances of *attempt* without the second argument overtly expressed. These twenty instances can be subclassified as follows:

1. ***such an attempt*** (6 cases), as in the following:

(10) *any attempt to define what is meant by spiritual is easily killed in infancy by pointing out how ridiculous **such an attempt** is*

2. ***an attempt meaning ‘a suicide attempt’*** (4 cases), as in the following:

(11) *Not all patients require specialized help after **an attempt**.*

3. ***an attempt used repeatedly in an appositive construction*** (3 cases), as in the following:

(12) *Despite an undoubted attempt to enlarge rather than curtail the sphere of effective papal control – **an attempt** that on the surface at least succeeded again and again in particular areas from Holland to Brazil – the wider agenda was seldom set in Rome.*

4. ***an attempt as the subject complement constituting the rheme*** (3 cases), as in the following:

(13) *It wasn't a killing, John. It was just **an attempt**.*

The first group is somewhat specific, given the semi-determiner character of *such* (cf. Biber et al., 2007: 281), which inherently implies reference to the preceding text (ibid.: 900). The four cases in the second group can be viewed as resulting from the ‘local’ lexicalization of the ‘suicide attempt’ sense of *attempt*, in which no second argument is required (*attempt* seems to mean ‘an attempt at suicide,’ and thus the expression of the second argument seems to be blocked as the noun seems to absorb the second-argument valency slot of *attempt*; cf. 2.2.5.2). Alternatively, the second group could be accounted for by invoking the phenomenon of definite null complements (DNCs), in which case, however, the definite rather than indefinite article would arguably be expected. The third and the fourth group present instances of a syntactic construction enforcing the classification reading (or the qualification-by-false-classification reading), hence the use of the indefinite article. In other words, the instances in the first group and

in the last two groups do have an indefinite article, but this article does not function to signal the newness of the following noun in discourse. Therefore, these four groups do not seem to include actual counterexamples against the first hypothesis. However, the remaining four examples, not included in any of the four groups, could possibly challenge the validity of the hypothesis; these are the only instances in which the noun lacks an overt complement (inferable from the context, nonetheless), but still takes an indefinite determiner:

(14) *Section 64 of the OAPA penalises any person who has “in his possession any thing, with intent thereof” to commit an offence under the Act. The Law Commission’s draft Criminal Code, Law Com. No. 177, 1989, does not include this crime. All remaining portions of the 1861 Act would be included in the Code. Therefore, s. 64 would no longer serve a useful purpose. It does nevertheless seem a useful offence to catch persons who have not reached the stage of **an attempt**. An alternative view is that s. 64 is restricted to explosives because it falls within the part of the Act dealing with explosives.*

(15) *Despite his ambition, Gordon Brown, 41, the shadow trade and industry secretary, is unlikely to take on Mr Smith. He knows he would probably lose now and can afford to bide his time. The same goes for Tony Blair, 38, the employment spokesman and another rising star. But at least one candidate of the ‘soft Left’ is likely to emerge, probably Bryan Gould or John Prescott. Others might launch **an attempt** if they can garner support: Ken Livingstone could emerge as candidate of the hard-Left Campaign group.*

(16) John: *Did you spend much time on that?*

Andrew: *No I j-- just had a l-- er <pause>*

John: *Good.*

Andrew: *er **an attempt** and then I thought, No I’m not*

(17) *any candidate would have to be nominated by early July. The outcome would be decided at Labour’s autumn conference, by an electoral college of MPs, trades unions and constituency parties. Under a rule introduced to prevent frivolous challenges in the wake of **an attempt** by*

Tony Benn in 1987, each candidate must first be backed by at least 20 per cent of Labour MPs. That means it is unlikely there would be more than three.

Note that (16) could be interpreted as an instance of the SVCxn (*have an attempt*); if interpreted so, it should be excluded from our data. The important point is, however, that only twenty of the 2,858 instances of *an attempt* are used without an overt complement, which can nevertheless be – in 16 instances – accounted for by the fact that the noun appears in a specific construction (e.g. *such a NOUN*) or by appealing to lexicalization.

4.2.2 The *ability* data set

The *ability* data set confirms what has been shown with the *attempt* data set. There are 258 instances of *an ability*; two examples (*an ability tax*; *an ability level*) were excluded in which *ability* is not the head noun. 223 of the remaining instances of *an ability* are immediately followed by a *to*-infinitival clause (or, more precisely, by *to* tagged as T00). The remaining 33 concordance lines were analyzed manually; seven of them were excluded because they included an explicit complement not immediately following the noun. The remaining 26 concordance lines can be classified as follows:

1. ***such an ability*** (5 cases), as in the following:

(18) *Rational thought and behaviour are generally thought to be dependent in some ways upon an ability to reason logically. This raises questions about how **such an ability** develops...*

2. ***an ability used repeatedly in an appositive construction*** (7 cases), as in the following:

(19) *it also requires a workable memory and a simple ability to reason, to see logical consequences, **an ability** not always found among students of literature*

(20) *That he got into his stride so quickly at the pre-Wimbledon Queen's Club tournament was evidence of his timing ability, **an ability** that holds good for both sports.*

3. ***an ability as the subject complement*** (6 cases), as in the following:

(21) *Sight was also **an ability** acquired very early.*

(22) *The art of doubting is easy, for it is **an ability** that is born with us.*

4. ***an ability* used specifically in texts on education** (8 cases), often contrasted to *capacity*:

(23) ***An ability** is made up of a repertoire of skills...*

(24) *Thus **an ability** represents what a person can do now, whereas a capacity is essentially a potential.*

Note that the instances in this last group could be treated as cases of indefinite null complements, or possibly as instances of the lexicalization of a specific sense of *ability*. Every single one of the 256 concordance lines with *an ability* thus either includes *an ability* with an overt complement or belongs to one of the four groups listed above. These four groups self-evidently parallel what has been found in the *attempt* data set (cf. 4.2.1), i.e. the occurrences of *an ability* without an overt complement can once again be accounted for by the fact that they appear in specific constructions in which the indefinite article does not really signal the newness of the noun in discourse (e.g. *such a NOUN*), or by appealing to lexicalization (*attempt* meaning ‘suicide attempt’) or to the notion of indefinite null complements (*ability* as ‘ability at anything one can have an ability at’).

The results are summarized in Table 6. Most importantly, 99.3% of the occurrences of *an attempt* and 90% of the occurrences of *an ability* have an overt complement. All the remaining data for *an ability* are specific cases which do not undermine the first hypothesis. Only 4 examples of *an attempt* could possibly be argued to violate the expectations arising from the hypothesis.

Used with the indefinite article	<i>an attempt</i>	<i>an ability</i>
used with an overt complement	2,838 [99.3%]	230 [90%]
used without an overt complement in specific cases	16 [0.6%]	26 [10%]
the <i>such a NOUN</i> construction	6	5
the appositive construction	3	7
subject complement	3	6
a specific sense (‘locally’) lexicalized / DNC	4	-
indefinite null complements	-	8
others	4	-
Total	2,858	256

Table 6: Summary of the results of the quantitative analysis

Simple and reductive as this quantitative analysis might seem, it is still believed to strongly support the first hypothesis. Furthermore, these results can be taken to support the second hypothesis as well; if *ability* and *attempt* were aivalent, as some linguists claim, it would be difficult to account for the naturally occurring data presented above.

The rest of the analysis is based on the six samples (all attached in the Appendix), unless explicitly specified otherwise. Unlike above, every single example in the following text is referred to by its unique number under which it can be found in the Appendix tables; this number is always given in square brackets.

4.3 Further remarks on context, reference and noun valency

The preceding section supports two of the three hypotheses, viz. that nouns such as *ability* and *attempt* do have valency potential, and that the expression of this potential is in fact obligatory under certain conditions. While this remains the main argument, which is not elaborated any further in the present thesis, some additional remarks on this issue can be formulated upon deeper examination of the data in the six samples. First, a few examples in the data present occurrences of one of the three nouns found at the beginning of a text; for instance, the following examples illustrate the use of *attempts* in the opening sentence:

[39] *ANY **attempt at** a face-to-face meeting with the IRA is a dangerous operation, because it could either help or hinder the cause of peace.*

[44] *Pregnancy in elderly women*

*SIR, – Successful **attempts at** inducing pregnancies in women after menopause have prompted a response from a higher authority, who feels that publication of His work has been overlooked by modern authors.*

Second, there are a few instances of one of the three nouns found in the existential construction with *there*, whose main function “is to present new information” (Biber et al., 2007: 944), and thus it might be expected that in this construction, the complement needs to be expressed, as in the following examples:

[24] *there had been an **attempt at** deliberate desecration*

[55] *there was no subsequent **attempt to** capture London*

[58] *there had been **attempts to** both burn and boil the remains*

Given inevitable limitations, the quantitative analysis examined only occurrences of *attempt* and *ability* immediately preceded by *an*; nevertheless, these examples suggest that examining instances of presumably valent nouns in introductory parts of texts and possibly in existential clauses might prove fruitful in future attempts at strengthening the arguments presented above.

4.4 The first argument of the nouns

While it has been illustrated that the claims about the non-obligatoriness of the complement (expressing the second argument) might in fact fail to capture the whole truth, it does seem to be the case that the expression of the first argument is optional. This is further explored in the present section.

Based on the reviewed literature (cf. 2.2.6), one might expect that the first argument of a valent noun would be frequently expressed by an *of*-phrase or a *by*-phrase dependent on the respective noun, which turns out not to be the case. There are only three instances⁴⁰ in the samples of a *by*-phrase expressing the first argument:

[17] *a quite serious **attempt** at mutual reassessment of their relations by these groups*

[40] *Despite **attempts** at mediation by the FSLN leader and former President Daniel Ortega Saavedra, and by the Venezuelan President Carlos Andrés Pérez, six people were reportedly killed...*

[189] *If the jurisdiction were discretionary, no refusal to exercise it nor any **failure** to exercise it by the House of Lords would constitute a breach of Article 6...*

4.4.1 Explicit expression of the first argument

Excluding the three examples listed above, the first argument of the valent noun is expressed within the same NP or the same sentence in further 115 cases (53%). The following table shows the distribution of the three possible ways of expressing the argument across the six samples. The percentages in the first six

⁴⁰ This, however, does not seem surprising, given that the expression of the *by*-agent is also quite restricted (cf. Biber et al., 2007: 477).

rows give frequencies of the individual means of expressing the argument relative to the individual sample (e.g. 13 instances in the *attempt at* sample, i.e. 26%, have a possessive determiner that expresses the first argument); the percentages in the last row, however, are given relative to all the 218 examples (this also applies to Tables 8 to 10 below).

	Determiner		Subject		Others		Total	
<i>attempt at</i>	13	26%	6	12%	1	2%	20	40%
<i>attempt to</i>	9	18%	11	22%	4	8%	24	48%
<i>ability at</i>	7	58%	4	33%	-	-	11	92%
<i>ability to</i>	18	36%	8	16%	7	14%	33	66%
<i>failure at</i>	1	17%	2	33%	-	-	3	50%
<i>failure to</i>	22	44%	-	-	2	4%	24	48%
Total	70	32%	31	14%	14	6%	115	53%

Table 7: Realization of the first argument

Most frequently, in 70 of the 218 examples (32%), the first argument is expressed by the possessive determiner (be it a possessive pronoun or the adnominal form of a noun), as in the following examples:

- [42] *Hitler's first attempt at starting World War II was a failure.*
 [54] *he thought his attempts to fit in had been rather embarrassing*
 [102] *Existence depended on his aunt's ability at home sewing*
 [123] *The cat's ability to pause is instinctual...*
 [165] *her failure at not having conducted the evening more to her advantage*
 [208] *their retarded growth and failure to thrive*

Furthermore, the first argument is often expressed elsewhere in the matrix clause, i.e. externally to the NP. In 31 of the 218 examples examined (14%), the first argument of the noun is the same as the first argument of the matrix verb that projects onto the subject in the matrix clause, as in the following examples:

- [37] *'I prefer your company,' Jenna stated with no attempt at subterfuge...*
 [82] *Jesus knew that any failed attempt to enter the Lift would be likely to result in his being sliced to ribbons within a matter of seconds.*
 [110] *blacks have a natural ability at sport*

[142] *most systems support [...] the **ability** to sweep two-dimensional shapes into solids*

In these cases, the noun *ability* is typically the object of *have*, but other verbs are possible, including *show*, *lack*, and *support* in [142]. Note that in some structurally similar cases, the situation is slightly different:

[8] *But although Wordsworth contributed a few lines, he quickly realized that **attempts** at collaboration were once again bound to fail...*

While it might be tentatively concluded that this example belongs to the same category as the examples cited above, the first argument of *attempts* is not in fact the same as the referent of the subject *he* (the first argument of *attempts* includes both Wordsworth and the other contributor).

The following peripheral examples were included in the ‘Subject’ group as well:

[43] *My observer bias forbids any **attempt** at interpreting Lees’ fig 1.*

[162] *The strengths that these people show are an **ability** to command respect...*

In [43], the first argument of *attempt* is not explicitly expressed as the subject of the matrix clause, but only as its determiner. In [162], the first argument of *ability* is expressed as the subject of a relative clause embedded in the subject of the matrix clause.

There are also cases in which the first argument of the noun is expressed externally to the NP either as the head of the valent noun [119] or as the head’s dependent other than the subject (cf. the ‘Others’ column in Table 7), as in the following examples:

[119] *a need in Northern Ireland for graduates with the **ability** to follow a career in business within a multilingual environment*

[64] *a warning to policy-makers that continued **attempts** to reduce unemployment below its natural level can only lead to higher and higher inflation rates*

[95] *A quarter of waste dumps in England have been closed by companies in **attempt** to sidestep new pollution control rules...*

[172] *Failure to understand the significance of truth is the Achilles' heel of many Christians.*

[198] *it could not [...] penalise a rugby club for failure to support the council's policy of condemning a tour of South Africa*

For instance, in [95] the first argument of *attempt* is the same as the agent of the verb *closed* (expressed as the *by*-agent), and in [198] the first argument of *failure* is expressed as the object of the matrix verb. Nevertheless, the following example illustrates what is often typical of the expression of the first argument, viz. a certain semantic vagueness:

[28] *one local post graduate student involved in the Belfast research was firmly convinced that front-raised pronunciations by working-class speakers of items like cap and rat reflected attempts at correction in the direction of Received Pronunciation*

While the underlined *by*-phrase can be viewed as referring to the first argument of *attempts*, one cannot in fact be certain as the *attempts* might as well have been initiated by someone else than the working-class speakers themselves (e.g. their then teachers).

4.4.2 Implicit first argument

The vagueness or underspecification illustrated by example [28] seems to be characteristic of the expression of the first argument. This is even more evident in all the cases not discussed above, in which there is no explicit expression of the first argument within the same NP or the same sentence, but a first argument is still implied. Table 8 captures four tentative types of implicit first arguments and shows their distribution across the six samples:

	Definite		Indefinite		General		Potential		Total	
<i>attempt at</i>	13	26%	7	14%	1	2%	7	14%	28	56%
<i>attempt to</i>	13	26%	7	14%	2	4%	4	8%	26	52%
<i>ability at</i>	-	-	-	-	-	-	1	8%	1	8%
<i>ability to</i>	6	12%	3	6%	7	14%	1	2%	17	34%
<i>failure at</i>	2	33%	-	-	1	17%	-	-	3	50%
<i>failure to</i>	12	24%	5	10%	6	12%	2	4%	25	50%
Total	46	21%	22	10%	17	8%	15	7%	100	46%

Table 8: Implicit first arguments

It needs to be emphasized that the four types are largely based on introspection, and hence to some extent arbitrary; the types are far from clearly distinguished, and no rigid criteria on which these types could be claimed to be based can be easily spelled out.

The first type ('Definite') includes instances in which the first argument of a noun is not expressed in the same sentence as the noun, but still can be retrieved or inferred from the context (this in a way mirrors the phenomenon of definite null complements, cf. 2.2.6.1.2), which accounts for 21% of the six samples. For instance, in [36] it is beyond any doubt that the first argument of *attempt* is the entity referred to as *I* in the previous sentence:

[36] *On answering the phone I discovered it was the manager of my football team, Bob, to say that due to a waterlogged pitch the game was off. Another vain **attempt** at watching television followed, but it was no good, no dangermouse!*

[63] *By choosing to write from interviews, Glen is being more of a journalist (in the great American style) than a historian. Yet this is the first serious **attempt** to write about the revolution since the heyday of the early 1970s.*

[146] *Whether it's converting pictures into a compatible format for publication, or just expanding your artistic horizons, then this little program is worth a look. During the conversion process there are a wide range of options available to the user. These include the **ability** to rotate or flip the image, change the size, colour and introduce dithering.*

Example [146] illustrates that sometimes the first argument cannot be precisely determined; the *ability* might be ascribed both to the program (cf. *the program is able to rotate the image*) and to the addressee (cf. *you will be able to rotate the image with this program*). In either case, however, it can still be argued that the entity to which the *ability* is ascribed is retrievable from the context.

The second type ('Indefinite') includes instances in which the presence of a specific first participant is implied, but this participant cannot be retrieved from the immediate context (10% of the samples):

[10] *The initial **attempts** at the solution of this problem are mentioned in the next chapter.*

[58] *The nose had been smashed, the throat was terribly bruised, and there had been **attempts** to both burn and boil the remains.*

[115] *A reduction in Vet's fees plus the **ability** to be self-sufficient in machinery repairs could mean considerable savings especially in the more isolated areas.*

[179] *The vast bulk of these acts involved insecure or improperly adjusted fencing of dangerous machinery, inadequate precautions against fire and explosion, as well as **failure** to inspect equipment and maintain healthy work conditions.*

For example, in [10] there must be some specific agents of the *attempts* but no information as to their precise identity is retrievable from the immediate context (even though it is certainly retrievable from *the next chapter*). Similarly in [58] there must be a specific, pragmatically inferable agent of the *attempts*, but the identity of this agent is not retrievable from the context; in fact, it is clearly not known to the author. In [115] the *ability* is ascribed to people living *in the more isolated areas*; this example, however, might arguably be classified as one with the general human 'agent' implied (it is an oversimplification to speak of 'agent' with *ability*, hence the inverted commas).

The third type ('General') includes instances in which the first argument seems to correspond to the general human agent (8% of the examples examined here). This is sometimes found in legal texts, the main verb is often in the gnomic present tense, and expressions such as *usually* can sometimes be found in the sentence, as illustrated by some of the following examples.

[2] *But **attempts** at social engineering usually lead to downfall.*

[140] *Education may enhance the **ability** to produce justifications...*

[188] ***Failure** to comply with this requirement is also a criminal offence.*

[205] *Indeed **failure** to consider such matters is itself an aspect of human error.*

The fourth type ('Potential') is similar to the previous type, and could possibly be subsumed under it; however, to an extent it differs in that the first argument is not

exactly the general human agent, but rather an entity from a limited set of potential participants (7% of the data). This interpretation is often triggered by contextual factors (such as the use of the conditional in the sentence). For instance, in [47] there is no actual agent of the *attempt* simply because the *attempt* is merely hypothetical, but the general human agent does not seem to be invoked here in the same way as in the examples above:

[47] *An **attempt** at prediction, like that outlined above, would now have little chance of success.*

[139] *In general, Walton and Susman argue that an appropriate management response to these developments has four key ingredients: a highly skilled, flexible, coordinated, committed workforce; a lean, fiat, flexible and innovative management; **ability** to retain experienced people; strong partnership between management and unions.*

[185] *This should enable individual young people who are seeking employment to find a suitable Compact opportunity. Is **failure** to meet Compact goals recorded on reports, records of achievement, testimonials, etc.?*

4.4.3 Summary

This section has illustrated several points. First, while the reviewed literature (cf. 2.2.6) seems to predict that apart from the use of determiners the first argument of a valent noun should be expressed primarily by means of *of*-phrases and *by*-phrases, this does not turn out to be the case. In the samples analyzed here, there is not a single instance of the former, and there are only three instances of the latter.

Second, while the previous sections illustrated that the claim does not seem to be accurate that the complement (i.e. the expression of the second argument) is never obligatory, it seems more justified to claim that the expression of the first argument is optional. However, the argument is still explicitly expressed in approximately 50% of the sample, which might call for a further analysis that would try to pinpoint the factors underlying the (non-)systematicity in the (non-)expression of the first argument.

Third, even though the expression of the first argument, strictly speaking, does seem to be optional, the first argument is expressed explicitly in approximately 54% of the examples in the six samples (53%, if we do not count the three *by*-phrases, as is the case with Table 7). In another 21% of the data, the first argument is retrievable or inferable from the immediate context. This suggests that the optionality is somewhat restricted, which might call for further elaboration of our first hypothesis (cf. 4.1). Moreover, the data presented in this section might be viewed as supporting the second hypothesis (cf. 4.1), viz. that all the three nouns examined do have valency properties. As the following summative table shows, there cannot be drawn any clear line that would differentiate *failure* on the one hand from *ability* and *attempt* on the other, which can be also used as evidence against the claim that only *failure* has valency properties. However, *ability* seems to behave in a way slightly different from the other two nouns as it appears more likely to have the first argument expressed explicitly (71%) than the other two nouns (46% and 50%), which might hint at the diverging valency behavior of quality nouns and action nouns.

		<i>attempt</i>		<i>ability</i>		<i>failure</i>		Total	
Explicit	Determiner	22	22%	25	40%	23	41%	70	32%
	Subject	17	17%	12	19%	2	4%	31	14%
	<i>by</i> -PP	2	2%	-	-	1	2%	3	1%
	Others	5	5%	7	14%	2	4%	14	6%
	Total	46	46%	44	71%	28	50%	118	54%
Implicit	Definite	26	26%	6	10%	14	25%	46	21%
	Indefinite	14	14%	3	5%	5	9%	22	10%
	General	3	3%	7	11%	7	13%	17	8%
	Potential	11	11%	2	3%	2	4%	15	7%
	Total	54	54%	18	29%	28	50%	100	46%
Total		100	100%	62	100%	56	100%	218	100%

Table 9: Expression of the first argument with the three nouns

Fourth, the following table summarizes the data from yet another perspective, showing that there is no significant correlation between the form of the complement and a specific way of expressing the first argument (note that there are 150 examples for the *to*-infinitive but only 68 examples for the *at*-PP, hence the focus needs to be on the relative frequencies):

		<i>at</i> -PP		<i>to</i> -infinitive		Total	
Explicit	Determiner	21	31%	49	33%	70	32%
	Subject	12	18%	19	13%	31	14%
	<i>by</i> -PP	2	3%	1	1%	3	1%
	Others	1	1%	13	9%	14	6%
	Total	36	53%	82	55%	118	54%
Implicit	Definite	15	22%	31	21%	46	21%
	Indefinite	7	10%	15	10%	22	10%
	General	2	3%	15	10%	17	8%
	Potential	8	12%	7	5%	15	7%
	Total	32	47%	68	45%	100	46%
Total		68	100%	150	100%	218	100%

Table 10: Expression of the first argument and the form of the complement

In other words, whether or not (and how) the first argument is expressed does not in any way correlate with the form of the complement.

4.5 The *at*-PP vs the *to*-infinitive as complement

Factors which do not seem to have a significant influence on the choice of the realization form include the syntactic function of the noun. For instance, the distribution of the syntactic functions of *attempt* in the *attempt to* sample is similar to that in the *attempt at* sample, with the samples including respectively 20 and 23 cases in which *attempt* is the subject of a clause, seven and nine cases (respectively) in which *attempt* is the object, ten and nine cases (respectively) in which *attempt* is part of an adverbial, and so forth.

Note that, as suggested above (cf. Table 1), the infinitive is generally much more frequent as a complement than the *at*-phrase, hinting at its primacy. The analysis proceeds as follows: first, some factors favoring the choice of an *at*-PP as a complement are discussed (4.5.1). Second, some factors favoring the choice of a *to*-infinitive (apart from its presumable primacy) are suggested (4.5.2). Third, potential semantic differences between the two forms of complementation are discussed (4.5.3).

4.5.1 Factors favoring the choice of an *at*-PP as a complement

The primacy of the infinitive, or rather the primacy of propositional second arguments with the three nouns, is supported by the fact that the *at*-complement

often incorporates a gerund or a nominalization. The following table summarizes the distribution of complementation patterns in the three *at* samples.

	Gerund	Nominalization	Primary noun	Pronoun	Total
<i>attempt at</i>	14	30	6	-	50
<i>ability at</i>	-	6	6	-	12
<i>failure at</i>	1	3	-	2	6
Total	15	39	12	2	68

Table 11: Forms of *at*-complements

Instances in which the choice of an *at*-PP over a *to*-infinitive is rather straightforward include cases in which the noun seems to take an *at*-complement simply because the corresponding argument could not be easily expressed as a verb. This is most obviously the case with the two pronominal complements, exemplified here by [166]:

[166] *I'd been brought up to regard **failure at anything** as the ultimate sin.*

Similarly straightforward are the cases in which the *at*-complement incorporates a compound (these cases are counted as nominalizations in Table 11), as in the examples given below; it can be assumed that even though a corresponding verbal expression might be possible with a similar meaning (*my attempt at problem solving* - ?*my attempt to solve (the) problems*), this verbal alternative is not very likely to occur in discourse as it is statistically preempted⁴¹ by the compound.

[2] ***attempts at social engineering** usually lead to downfall*

[27] *that was my **attempt at problem solving***

[101] *Branson's **abilities at man-management and manipulation***

[168] *two **failures at his first high jump or pole vault***⁴²

⁴¹ “Statistical preemption or ‘blocking’ of a target form is the process of learning to avoid a potential target form because a competing form has consistently been witnessed instead in contexts in which the target form would otherwise have been appropriate.” (Goldberg & Boyd, 2015: 185) Note that statistical preemption “is capable of scaling up to account for certain nonoccurring syntactic formulations that have readily available competing alternatives” (ibid.), which seems to be the case here.

⁴² Note that *social engineering*, *problem-solving*, *man-management*, *high jump*, and *pole vault* are explicitly listed as compounds in the *OED*. Further examples include *home breeding* [13], *land reform* [19], and *self-justification* [31].

It is possible to extend this explanation to cases in which the complement is a set phrase rather than a compound, for instance:

[12] *an Edison-Bell Picturegram [...], an early attempt at audio-visual entertainment*

[14] *the necessity of abandoning these unhappy attempts at political engagement*

[18] *attempts at an out-of-court settlement have failed*

[39] *ANY attempt at a face-to-face meeting with the IRA*

Another group of cases in which the *to*-infinitive does not present a straightforward alternative comprises instances in which the *at*-complement incorporates a primary noun, for example:

[4] *Spielberg's last attempt at an adult theme*

[21] *many intervals of truce and several attempts at a final peace*

[37] *'I prefer your company,' Jenna stated with no attempt at subterfuge...*

[110] *a natural ability at sport*

[111] *Polsky used his ability at the pool-table in his study of 'hustlers'...*

[112] *"She's the one who [...] has ability at the barbecue?"*

It might be argued that some of these examples could be rephrased in an alternative way using the infinitive of an implied verb (e.g. *a natural ability to do sport* for [110] or *Polsky used his ability to play at the pool-table* [111]) but searching for an infinitival paraphrase might be futile in other cases. It seems reasonable to assume that these cases might be instances of a specific construction based on metonymy in grammar (hence the non-primacy of this construction); the oft-cited example of grammatical metonymy is *George began the book*, in which *book* stands for a relation of a kind. Without considering contextual and pragmatic aspects, however, it is not possible to specify the precise nature of this relation; while the above-mentioned example probably means 'George began reading the book,' in specific contexts *book* might imply 'write,' 'illustrate' or 'bind' (cf. Barcelona, 2015: 156). Nevertheless, whether we consider the examples above as instances of a similar grammatical metonymy or not, it appears to be the case that the infinitival expression of the second argument does not seem to be readily available here.

If we exclude all these examples, in which the straightforward expression of the second argument by an infinitive does not appear to be possible, the focus should move to the examples in which *at* is followed by a gerund or a nominalization (and thus mainly on the two *attempt* samples). In such cases it often seems to be possible to replace the *at*-phrase by a corresponding infinitive. For instance, the author of [42] might presumably have chosen the construction in [42']:

[42] *Hitler's first attempt at starting World War II was a failure.*

[42'] *'Hitler's first attempt to start World War II was a failure.*

Before discussing possible semantic differences between examples such as [42] and their potential infinitival paraphrases (see 4.5.3), however, it should be pointed out that in some cases, the choice of an *at*-PP seems to be based on slightly different grounds than semantics. Consider, for instance, the following example (from a biographical book):

[9] *we had to shout very loudly in an attempt at conversation*

This example illustrates that the interplay of factors underlying the choice of the form of the complement may be rather complex. While the use of the construction *in an attempt* seems to favor the use of an infinitival complement (cf. 4.5.2), the *at*-PP is used instead, perhaps because the noun *conversation* is much more frequent than the corresponding verb *converse*,⁴³ which is moreover rather formal,⁴⁴ and thus the noun is preferred.

Another factor which seems to be important also concerns restrictions on the possible use of the corresponding verb, illustrated by examples such as [24]:

[24] *The excavator noted that domestic rubbish had been tipped inside the precinct because, either it had become a convenient dumping ground, or there had been an attempt at deliberate desecration, as happened at a later date in the orchestra of the Verulamium temple theatre.*

⁴³ The BNC query [lempos="converse-v"] returns 197 matches, while the query [lemma="conversation"] returns 6,182 hits.

⁴⁴ Cf. the *English Cambridge Dictionary* entry for the verb *converse*, explicitly describing the verb as 'formal,' available online from <<https://dictionary.cambridge.org/dictionary/english/converse>>.

While in [24] the second argument of *deseccration* is known from the previous context, and is thus not expressed, the construction with the infinitive (‘‘an attempt to deseccrate deliberately, or perhaps ‘‘an attempt to deliberately deseccrate) seems to require the object of *deseccrate* to be explicitly specified as the verb is typically used transitively. The construction with *at* followed by a nominalization, however, seems to present a convenient alternative if the second argument of the verb corresponding to the nominalization (e.g. *deseccrate*) is not to be expressed (for instance because it is very salient in the given context, as in [24]). This explanation could possibly be extended to other examples, including the following:

[33] *he stopped by the side wall of the room, where more conventional paper and cardboard books lined the slate fabric of the castle – the masons’ lame **attempt at insulation***

[34] *The difference was that he accepted her **attempt at consolation**, taking her palm between both of his own hands...*

[41] *The snow had covered the nomes’ sad **attempts at cultivation**.*

[49] *I believe in a free Press, with rights to freedom of expression and to report that which is truthful. In my opinion, there are too many **attempts at gagging**, preventing us from being aware of authoritarianism and mischief.*

[108] ‘‘[...] had it not been for my,’’ and he preened himself, ‘‘**abilities at detection**.’’⁴⁵

As the preceding discussion suggests, the interplay of various factors which conspire to determine the choice of an *at*-PP rather than an infinitive might be of great complexity. Some other factors might contribute to the choice, including syntactic parallelism and/or syntactic (self-)priming (cf. 2.2.6.3), as in the following examples:

[165] *Freddie had managed to get into the hall by now, although even here his hostess had contrived to place her formidable bulk before the front*

⁴⁵ Note, however, that the *OED* does list the verb *detect* as possibly intransitive, defined as ‘to be engaged in work of detection; to act as a detective’ and exemplified by the following: ‘Good evening, Inspector Craddock.’ ‘Coming to **detect** in the kitchen?’ asked Bryan with interest.

*door, her expression revealing, only too plainly, her **disappointment at his early departure and her failure at not having conducted the evening more to her advantage.***

[112] *the one who is **good at** figures and has **ability at** the barbecue*

4.5.2 Factors favoring the choice of a *to*-infinitive as a complement

Apart from the presumed primacy of the infinitive in expressing the second argument of the three nouns examined, there might be some additional ‘pressures’ towards selecting the infinitive rather than an *at*-phrase. One of them is particularly notable as its relevance can be objectively supported by the data, viz. the occurrence of the construction *in an attempt* (in which *attempt* can be premodified). This construction accounts for 11% of the two *attempt* samples as there are 9 occurrences of the construction in the *attempt to* sample and 2 occurrences of the construction in the *attempt at* sample. This seems to suggest that the construction favors the use of an infinitival complement, the only exceptions being examples [9], discussed above, and [31]:

[9] *we had to shout very loudly **in an attempt at** conversation*

[31] *‘Why not...’ insisted Dora **in a transparent attempt at** self-justification.*

The strong preference of this construction for infinitival complements is clearly manifested by the BNC data; the query [lemma="in"] [tag="AT0"] [tag="A.*"]? [lemma="attempt"] returns 1,702 hits, with 1,618 of them (95%) immediately followed by the infinitival *to* (tagged as T00). When the construction is followed by an *at*-PP, *at* is complemented by a nominalization (as in [9] and [31]) more often than by a gerund.

It should also be noted that when the construction is used, the first argument of *attempt* is typically the same as the first argument of the matrix verb (cf. 4.4.1), and hence it is expressed as the subject of the clause ([9], [72]), or by a *by*-phrase (not dependent on *attempt*) if the clause is in the passive ([95], [97]):

[72] ***In a desperate attempt to** hold in what moisture there is in the thin soil, farmers have constructed low walls as refuges for vines...*

[95] *A quarter of waste dumps in England have been closed by companies **in attempt to** sidestep new pollution control rules...*

[97] *Passers by have been questioned by police in an attempt to discover more about the stubbly, blotchy-faced man...*

4.5.3 Semantic features

Based on the examination of the samples, it was suspected that certain semantic features might result in the choice of an *at*-phrase over a *to*-infinitive, or vice versa. The following discussion focuses primarily on *attempt*, endeavoring to identify whether or not there is a systematic semantic difference in pairs such as the following, mentioned above:

[42] *Hitler's first attempt at starting World War II was a failure.*

[42'] [?]*Hitler's first attempt to start World War II was a failure.*

4.5.3.1 Implicativeness and/or successfulness

The following discussion largely relies on what has been said above (cf. 2.2.6.2), including Morita's suggestion, repeated here for the sake of convenience: "If the main predicate is nonimplicative and its complement denotes future, the complement tends to take an infinitival form. Otherwise, it takes a gerundive form." The noun *attempt* can be viewed as an inherently nonimplicative predicate in that one's attempt to do something does not entail success; this could possibly serve as a semantically motivated explanation for the primacy of infinitival complements. If *attempt at doing something* were to be semantically differentiated from *attempt to do something*, it should follow from Morita's suggestion that in *attempt at doing something*, the predicate *attempt* is construed as implicative rather than nonimplicative. This would presumably mean that the context would have to make it clear whether the attempt was successful or not. Since the label 'nonimplicative predicate' relates to the fact that "it is not known in advance whether its verbal complement really happens or not" (Morita, 2012: 42), it seems reasonable to assume that if *attempt* were construed as implicative, it would mean, to mirror Morita's words, that it is known whether the verbal complement really happens or not. This, however, does not seem to be strongly supported by data even though a large proportion of examples in the *attempt at* sample seem to suggest that *attempt at* might be more likely to be used when the attempt is not successful, as in the following:

[2] *But attempts at social engineering usually lead to downfall.*

[6] *Another attempt at politicising themselves ended in similar embarrassment.*

[8] *attempts at collaboration were once again bound to fail*

In the *attempt to* sample it is more difficult, but not impossible, to find similar examples:

[100] *his futile attempts to pull together the shreds of his old life*

However, if we test the hypothesis in a simple way by searching for what follows *successful attempt* and *unsuccessful attempt* in the BNC, it can be concluded that the speaker's evaluation of the successfulness of the attempt does not play a straightforward role in determining the form of the complement:

<i>attempt(s)</i>	<i>to</i> -infinitive	<i>at</i> -phrase
<i>successful</i>	22	5
<i>unsuccessful</i>	71	2

Table 12: The complement after (un)successful attempt in the BNC

Nevertheless, focusing on the premodification of *attempt* might not be completely misleading. We can compare the adjectival premodification of *attempt* complemented by an *at*-phrase (308 hits) and by an infinitive (1,760 hits) in the BNC in a cursory way by looking only at the most frequent premodifiers:

	<i>at</i> -phrase			<i>to</i> -infinitive		
	Premodifier	Abs. freq.	Rel. freq.	Premodifier	Abs. freq.	Rel. freq.
1	<i>early</i>	17	5.52%	<i>desperate</i>	79	4.49%
2	<i>further</i>	10	3.25%	<i>serious</i>	78	4.43%
3	<i>serious</i>	10	3.25%	<i>unsuccessful</i>	68	3.86%
4	<i>half-hearted</i>	8	2.60%	<i>vain</i>	54	3.07%
5	<i>previous</i>	8	2.60%	<i>deliberate</i>	49	2.78%
6	<i>feeble</i>	7	2.27%	<i>further</i>	31	1.76%
7	<i>failed</i>	7	2.27%	<i>conscious</i>	24	1.36%
8	<i>major</i>	6	1.95%	<i>previous</i>	23	1.31%
9	<i>only</i>	5	1.62%	<i>futile</i>	23	1.31%
10	<i>recent</i>	5	1.62%	<i>abortive</i>	22	1.25%

Table 13: Premodifiers of attempt and the complement form

Table 13 seems to suggest that when a premodifier commenting on the estimated success or the lack thereof is used, the choice of the infinitive might be preferred. The premodifier might enforce the nonimplicative reading of *attempt*: if an attempt is explicitly described as unsuccessful, it is clear that the action referred to by the verbal complement does not have to take place, hence the enforced nonimplicative reading. The choice of the infinitive thus logically follows, in accordance with Morita's suggestion. This seems to contradict what has been said above about the preference for *at* and illustrated by examples [2], [6], and [8]. Nevertheless, the premodifier precedes the predicate noun and might arguably affect the choice of the form of the complement in language production, while in such examples as [2], the attempt is described as unsuccessful only later, externally to the NP. This suggestion, however, needs to be taken for what it is: merely a suggestion, which still does not fully account for the data.

4.5.3.2 Mutuality, collaboration, and/or reciprocity

Another semantic feature that might be relevant is the feature of mutuality, collaboration, and/or reciprocity, often following from the semantics of the complement. As noted above (cf. 2.2.6.2.1), Evans (2010: 243–244) suggests that *at*-phrases can be used to refer to mutual relations, giving examples such as *The EU is at war with the US over the imposition of steel tariff*. In the *attempt to* sample there is no example strongly implying mutuality, while in the *attempt at* sample there might be some 10 examples (i.e. a fifth of the sample) in which mutuality or collaboration is implied, or even expressed explicitly, as in [17]:

[17] *a quite serious attempt at mutual reassessment of their relations*

[21] *several attempts at a final peace*

[39] *ANY attempt at a face-to-face meeting with the IRA*

In some examples, the feature of mutuality seems to combine with the potential feature of nonimplicativeness or unsuccessfulness, which, however, seems to contradict what has been suggested above:

[9] *we had to shout very loudly in an attempt at conversation*

[30] *be ready for irritating news and yet another fruitless attempt at communication*

This might imply either that the feature of mutuality might override the feature of unsuccessfulness (and hence nonimplicativeness) or that the present discussion of semantic features might be misguided.

4.5.3.3 Further remarks

Other features suggested above, such as the possibility of gerunds construing the event as more impersonal than infinitives (cf. 2.2.6.2.3), do not seem to be supported by the samples. However, the *attempt at* sample contains only 14 gerunds following *at*, and the *failure at* sample includes only one example of the gerund (cf. Table 11), which is far from a sample that would enable us to draw robust conclusions.

It might be tempting to postulate further semantic features that might be somehow relevant to the choice of the complementation form. However, the data samples at hand are believed to be too small to allow for that, given the level of delicacy (cf. Halliday, 2005: 98–99) at which we are operating. The situation is in fact much more complex than presented here; for instance, it should not be assumed that there is a single grammar of (British) English shared by all its speakers, which is, unfortunately, still a common assumption that is “widely espoused, even by cognitive and functional linguists” (Dąbrowska, 2015: 651). The study of variation at this level of delicacy should be based on larger data sets so that more robust conclusions can be drawn, and, ideally, aspects such as interpersonal variation should be taken into account as well. To come back to one of the previously mentioned examples, for instance, while [42] was presumably acceptable for a native speaker of English,

[42] *Hitler’s first attempt at starting World War II was a failure.*

there is at least one native speaker of English,⁴⁶ who believes that “[n]o English speaker would write” [a], while [b] would be the only acceptable option, as for “important or dramatic matters” one should use an infinitival complement:

[a] *?The German attempt at conquering the Soviet Union failed.*

⁴⁶ The citations and examples are quoted from a discussion on the web *English Forums*, available online from <<https://www.englishforums.com/English/AttemptToVsAttemptAt/wzrwh/post.htm>> (accessed April 7, 2018).

[b] *The German attempt to conquer the Soviet Union failed.*

This only points towards the complexity of the issue at hand, which unfortunately does not allow us at this point to identify all the factors that might underlie the choice of the form of the complement.

5 Conclusions and discussion

5.1 Summary of the results

The thesis has attempted to address several issues concerning the valency of nouns. These issues can be summarized by rephrasing, and commenting on, the hypotheses outlined above (cf. 4.1).

First, the present thesis argues that the widely accepted claim that the expression of the valency potential of a noun is never obligatory might need to be corrected. The quantitative analysis (4.2) focused on occurrences of *an attempt* (2,858) and *an ability* (256), illustrating that when these nouns occur with the indefinite article marking the first mention, the expression of the second argument seems to be obligatory; in only four cases (which accounts for less than 0.13% of the data) there appears an indefinite article marking the first mention, without there being an explicit complement, which also supports the second hypothesis (viz. that these nouns do have valency).

Furthermore, it was suggested in 4.2.1 that the forms employed in the expression of the first argument might be more variable than the reviewed literature predicts, and it was illustrated that the first argument is expressed by a *by*-phrase (or an *of*-phrase) much less frequently than expected. This might follow from the fact that studies of noun valency typically focus on nominalizations modified or complemented by such phrases, not on valent nouns that might require other types of complements (such as the *at*-PP). The subsequent analysis (cf. 4.4.1) showed that in 54% of cases, the first argument is explicitly expressed as the determiner in the NP headed by the respective noun (32%) or externally to the NP, either as the subject of the sentence (14%) or as another dependent of the element heading the valent noun (6%). In the remaining 46% of cases, the first argument is not expressed explicitly in the same sentence, but it is inferable from the context (21%), or it is indefinite yet specific (10%), general (8%), or ‘potential’ (7%).

Furthermore, it was noted (cf. Table 9 in 4.4.3) that generally *ability* seems to be more likely to have the first argument expressed explicitly (71%) than *attempt* (46%) and *failure* (50%), which presumably reflects more general differences between quality nouns and action nouns.

Second, as discussed above, very influential accounts of valency maintain that only deverbal complex-event nominalizations have valency properties (this partly follows from the belief that the expression of the valency potential of a noun is never obligatory), which, moreover, presumably applies only to suffixal nominalizations. This predicts that of the three examined nouns, only *failure* as a complex-event nominalization should be a valent noun, while *ability* and *attempt* should lack valency properties (cf. 2.2.5.2). However, the data presented above suggests that this view might be unsubstantiated, which only points towards the need for empirical studies of noun valency rather than further theoretical ruminations based on introspection and invented examples. The quantitative analysis (4.2) manifested that when a presumably valent noun is first mentioned, it needs to take an explicit complement; the fact that the nouns examined here take a complement in more than 99.8% of cases suggests that these nouns are indeed valent. As suggested in 4.3, the potential future argument-strengthening might facilitate a methodology based on examining the titles and opening sentences or paragraphs of texts, in which positions nouns could be expected to have to display their full valency potential.

Third, it has been suggested that, as one might expect, the *at*-PP and the *to*-infinitive complementation patterns do not vary at random. It seems that it is the infinitive that is the primary form of the complement (cf. 4.5). In the case of *attempt*, the choice of an infinitival complement rather than an *at*-PP is further enforced when the construction *in an attempt* is used, which displays a strong preference for infinitival complements.

On the other hand, there are factors that support the choice of an *at*-PP rather than an infinitival complement, including cases in which the complement has no obvious verbal counterpart (*failure at anything*), the complement is a compound or a set phrase (*my attempt at problem solving*), or the complement is a primary noun and/or the construction could possibly be described as an instance of grammatical metonymy (*Spielberg's last attempt at an adult theme, a natural ability at sport*). Furthermore, an *at*-PP with a nominal complement might be preferred when the corresponding verb is stylistically marked and significantly less frequent than the nominal (*an attempt at conversation*). Furthermore, an *at*-PP with a nominal complement might be preferred when the verb

corresponding to the nominal is transitive, and thus the use of an infinitival clause would require the complement of the verb to be specified (*an attempt at deliberate desecration*). Another contributing factor might be the tendency to use the same syntactic construction repeatedly (*her disappointment at his early departure and her failure at not having conducted the evening more to her advantage*). Semantically, the feature of mutuality, collaboration, and/or reciprocity implied by the meaning of the complement might contribute to the choice of an *at*-phrase (*a quite serious attempt at mutual reassessment of their relations*). It was also tentatively suggested that with *attempt*, the feature of unsuccessfulness contributed by a premodifier might skew the choice of the form of the complement in favor of the infinitive, which might result from the predicate's feature of nonimplicativeness being thus enforced.

5.2 Implications for studying noun valency

It is hoped that future research might focus especially on three general points. First, and perhaps most importantly, the link between noun valency and reference should be systematically examined, considering as wide a range of nouns as possible and reasonable. At the same time, however, insights from various linguistic frameworks should be systematically examined and contrasted because, to repeat Osenova's words, mentioned above, "this issue needs more elaboration and argument-strengthening in the future" (2014: 157). Second, the same data could be used to describe and systematically compare the valency behavior of various groups of nouns (including not only action nouns and quality nouns), and it might be useful to make an attempt to pinpoint the factors underlying the (non-)systematicity in the (non-)expression of the first argument. Third, larger data sets could be used to verify, and further elaborate on, the suggestions made above concerning the factors underlying the choice of an *at*-PP or a *to*-infinitive as a complement, as such factors could possibly prove to be at work whenever a noun takes a complement that could be realized by phrases of varying morphosyntactic status.

5.3 Further remarks

Based on the reviewed literature, several points can be identified concerning lacunae in the research on the valency of nouns, some of them hinted at above:

- a) studies of noun valency focus almost exclusively on the valency of nominalizations;
- b) studies of noun valency uniformly assume that the noun valency is – with the exception of relational nouns – exclusively a matter of the inheritance of valency frame from the base verb or adjective, which is questionable (cf. Herbst, 1988: 267; Williams, 1991; Allerton, 2006: 311; Goldberg, 2006: 24);
- c) the study of phenomena such as definite null complements (cf. Fillmore, 1986) is limited to verbs, and has been recently extended only to adjectives (Gillon, 2015); studying definite null complements of valent nouns can enhance our understanding of both noun valency and null complements;
- d) studies of noun valency typically focus on presumably prototypical instances of valent nouns, i.e. on nouns derived from transitive verbs with agent-like subjects and patient-like objects (cf. Bekaert & Enghels, 2014: 61);
- e) studies of noun valency acknowledge only relational nouns referring to interhuman relationships (*father*, *neighbor*, and the like), neglecting many other relational nouns (cf. Barbu, 2014: 114);
- f) several other underresearched topics of greater specificity can be identified; for instance, Maekelberghe (forthcoming) points out that despite their frequency, gerunds as noun complements have not received much attention.

It is hoped that the future research could overcome these limitations, establish an inclusive and usage-based framework for studying noun valency, and enhance our understanding of the topic (which could also possibly contribute to more theoretical debates concerning valency and the working of language as such).

References and sources

References

- Aarts, B. (2007): *Syntactic Gradience. The Nature of Grammatical Indeterminacy*. Oxford: Oxford University Press.
- Aarts, B. (2011): *Oxford Modern English Grammar*. Oxford: Oxford University Press.
- Aikhenvald, A. Y. (2015): *The Art of Grammar: A Practical Guide*. Oxford: Oxford University Press.
- Alexiadou, A. (2017): Nominalization structures across languages. Queen Mary, London, May 2017. Available online from <https://www.angl.hu-berlin.de/departement/staff-faculty/professors/alexiadou/files/qml_17-5.pdf> (accessed November 11, 2017).
- Alexiadou, A. & J. Grimshaw (2008): Verbs, nouns and affixation. In: F. Schäfer (ed.), *Working Papers of the SFB 732 Incremental Specification in Context*, 1–16. University of Stuttgart. Available online from <<http://dx.doi.org/10.18419/opus-5696>> (accessed October 19, 2017).
- Allerton, D. J. (1982): *Valency and the English Verb*. London: Academic Press.
- Allerton, D. J. (2002): *Stretched Verb Constructions in English*. Routledge.
- Allerton, D. J. (2006): Valency Grammar. In: K. Brown (ed.), *Encyclopedia of Language & Linguistics*, Vol. 13, 301–314. 2nd ed. Amsterdam: Elsevier.
- Alsina, A. (2006): Argument Structure. In: K. Brown (ed.), *Encyclopedia of Language & Linguistics*, Vol. 1, 461–468. 2nd ed. Amsterdam: Elsevier.
- Anderson, J. M. (2011): *The Domain of Syntax*. Oxford: Oxford University Press.
- Ariel, M. (2014): *Accessing Noun-Phrase Antecedents*. London: Routledge.
- Baker, M. C. (1988): *Incorporation: A Theory of Grammatical Function Changing*. Chicago: The University of Chicago Press.

- Barbu, A. M. (2014): A data-driven analysis of the structure type ‘man-nature relationship’ in Romanian. In: O. Spevak (ed.), *Noun Valency*, 113–140. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Barcelona, A. (2015): Metonymy. In: E. Dąbrowska & D. Divjak (eds.), *Handbook of Cognitive Linguistics*, 143–167. Berlin & Boston: De Gruyter Mouton.
- Bekaert, E. & R. Enghels (2014): Nominalizations of Spanish perception verbs at the syntax-semantics interface. In: O. Spevak (ed.), *Noun Valency*, 61–87. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Biber, D., S. Johansson, G. Leech, S. Conrad & E. Finegan (2007): *Longman Grammar of Spoken and Written English*. Harlow: Longman.
- Biber, D. & S. Conrad (2009): *Register, Genre, and Style*. Cambridge: Cambridge University Press.
- Bierwisch, M. (2015): Word-formation and argument structure. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1056–1099. De Gruyter Mouton.
- Bobaljik, J. D. & S. Wurmbrand (2009): Case in GB/Minimalism. In: A. Malchukov & A. Spencer (eds.), *The Oxford Handbook of Case*, 44–58. Oxford University Press.
- Bock, K. (1986): Syntactic persistence in language production. *Cognitive Psychology* 18: 355–387.
- Boeckx, C. (2006): *Linguistic Minimalism. Origins, Concepts, Methods, and Aims*. Oxford: Oxford University Press.
- Bolinger, D. L. (1968): Entailment and the meaning of structures. *Glossa* 2: 119–127.
- Booij, G. (2007): *The Grammar of Words*. 2nd ed. Oxford: Oxford University Press.
- Borer, H. (2005): *In Name Only*. Oxford: Oxford University Press.

- Branigan, H. (2007): Syntactic priming. *Language and Linguistics Compass* 1(1–2): 1–16.
- Brinton, L. J. & E. C. Traugott (2005): *Lexicalization and Language Change*. Cambridge: Cambridge University Press.
- Butt, M. (2006): *Theories of Case*. Cambridge: Cambridge University Press.
- Butt, M., T. Holloway King, M. E. Niño & F. Segond (1999): *A Grammar Writer's Cookbook*. Stanford: CSLI Publications.
- Casenhiser, D. M. & G. M. L. Bencini (2015): Argument structure constructions. In: E. Dąbrowska & D. Divjak (eds.), *Handbook of Cognitive Linguistics*, 579–594. Berlin & Boston: De Gruyter Mouton.
- Chomsky, N. (1965): *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press.
- Chomsky, N. (1972): Remarks on Nominalization. In: *Studies on Semantics in Generative Grammar*, 11–61. The Hague: Mouton.
- Chomsky, N. (1981): *Lectures on Government and Binding: The Pisa Lectures*. Dordrecht: Foris.
- Chomsky, N. & H. Lasnik (1995): The Theory of Principles and Parameters. In: N. Chomsky, *The Minimalist Program*, 13–127. Cambridge, Mass.: MIT Press.
- Colliander, P. (2003): Dependenzstruktur und grammatische Funktion. In: V. Ágel et al. (eds.), *Dependenz und Valenz. Ein internationales Handbuch der zeitgenössischen Forschung. Dependency and Valency: An International Handbook of Contemporary Research*, Vol. 1, 263–269. Berlin & New York: Walter de Gruyter.
- Comrie, B., I. Hartmann, M. Haspelmath, A. Malchukov & S. Wichmann (2015): Introduction. In: A. L. Malchukov & B. Comrie (eds.), *Valency Classes in the World's Languages*, 1–26. Berlin: De Gruyter Mouton.
- Croft, W. (2013): *Verbs. Aspect and Causal Structure*. Oxford: Oxford University Press.

- Croft, W. & D. A. Cruse (2004): *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Crystal, D. (2003): *A Dictionary of Phonetics and Linguistics*. 5th ed. Oxford: Blackwell.
- Crystal, D. & D. Davy (1969): *Investigating English Style*. New York: Longman.
- Dąbrowska, E. (2015): Individual differences in grammatical knowledge. In: E. Dąbrowska & D. Divjak (eds.), *Handbook of Cognitive Linguistics*, 650–668. Berlin & Boston: De Gruyter Mouton.
- Dakubu, M. E. K. & L. Hellan (2017): A labelling system for valency: Linguistic coverage and applications. In: L. Hellan, A. Malchukov & M. Cennamo (eds.), *Contrastive Studies in Verbal Valency*, 109–149. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- de Almeida, R. G. & C. Manouilidou (2015): The Study of Verbs in Cognitive Science. In: R. G. de Almeida & C. Manouilidou (eds.), *Cognitive Science Perspectives on Verb Representation and Processing*, 3–39. Cham: Springer.
- Deshors, S. C. & S. Th. Gries (2016): Profiling verb complementation constructions across New Englishes. *International Journal of Corpus Linguistics* 21(2): 192–218.
- Diessel, H. (2015): Usage-based construction grammar. In: E. Dąbrowska & D. Divjak (eds.), *Handbook of Cognitive Linguistics*, 296–322. Berlin & Boston: De Gruyter Mouton.
- Dowty, D. R. (1991): *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ*. Dordrecht: D. Reidel Publishing Company.
- Dušková, L. (1999 [1990]): A Contrastive View of Complements in English and Czech Grammar. In: *Studies in the English Language*, Vol. 2, 98–104. Prague: Karolinum.

- Dušková, L. (2015 [2011]): A textual view of noun modification. In: *From Syntax to Text. The Janus Face of Functional Sentence Perspective*, 335–349. Prague: Karolinum.
- Dvořák, V. (2014): Case assignment, aspect, and (non-)expression of patients. In: O. Spevak (ed.), *Noun Valency*, 89–111. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- English Cambridge Dictionary Online*. Cambridge University Press. Available online from <<http://dictionary.cambridge.org/dictionary/english/>> (last accessed April 11, 2018).
- English Forums*. MediaCet Ltd. Available online from <<https://www.englishforums.com/>> (accessed April 7, 2018).
- Evans, N. & S. Levinson (2009): The Myth of Language Universals: Language diversity and its Importance for Cognitive Science. *Behavioral and Brain Sciences* 32: 429–448.
- Evans, V. (2010): From the spatial to the non-spatial: The ‘state’ lexical concepts of *in*, *on* and *at*. In: V. Evans & P. Chilton (eds.), *Language, Cognition & Space*, 215–48. London: Equinox.
- Feng, H., L. Chen, L. Feng & L. Feng (2014): A Review of the Syntactic Priming – A Research Method in Sentence Production. *Open Journal of Modern Linguistics* 4: 641–650.
- Fillmore, C. J. (1968): The Case for Case. In: E. Bach & R. T. Harms (eds.), *Universals in Linguistic Theory*, 1–88. New York: Holt, Rinehart and Winston.
- Fillmore, C. J. (1986): Pragmatically Controlled Zero Anaphora. In: V. Nikiforidou, M. Van-Clay, M. Niepokuj & D. Feder (eds.), *Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society*, 95–107. Berkeley: Berkeley Linguistic Society.
- Fillmore, C. J. (2013): Berkeley Construction Grammar. In: T. Hoffmann & G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*, 111–132. Oxford: Oxford University Press.

- Frank, R. (2002): *Phrase Structure Composition and Syntactic Dependencies*. Cambridge: MIT Press.
- Gaeta, L. (2017): Valency alternations between inflection and derivation. In: L. Hellan, A. Malchukov, M. Cennamo (eds.), *Contrastive Studies in Verbal Valency*, 327–373. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Geeraerts, D. (1990): Editorial statement. *Cognitive Linguistics* 1(1): 1–3.
- Geeraerts, D. (2010): *Theories of Lexical Semantics*. Oxford: Oxford University Press.
- Geeraerts, D. (2016): The sociosemiotic commitment. *Cognitive Linguistics* 27(4): 527–542.
- Gillon, B. S. (2015): Optional Complements of English Verbs and Adjectives. In: R. G. de Almeida & C. Manouilidou (eds.), *Cognitive Science Perspectives on Verb Representation and Processing*, 67–75. Cham: Springer.
- Goldberg, A. E. (1995): *Constructions. A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
- Goldberg, A. E. (2006): *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, A. E. & J. K. Boyd (2015): A-adjectives, statistical preemption, and the evidence: Reply to Yang (2015). *Language* 91(4): 184–197.
- Graffi, G. (2013): European Linguistics since Saussure. In: K. Allan (ed.), *The Oxford Handbook of the History of Linguistics*, 469–484. Oxford: Oxford University Press.
- Grimshaw, J. (1990): *Argument Structure*. Cambridge: MIT Press.
- Haegeman, L. (2009): *Introduction to Government & Binding Theory*. 2nd ed. Oxford: Blackwell Publishing.
- Halliday, M. A. M. (2004): *An Introduction to Functional Grammar*. 3rd ed. London: Hodder Arnold.

- Halliday, M. A. K. (2005 [1963]): Class in Relation to the Axes of Chain and Choice in Language. In: J. Webster (ed.), *On Grammar, Vol. 1 of Collected Works of M. A. K. Halliday*, 95–105. London, New York: Continuum.
- Haspelmath, M. (2009): The best-supported language universals refer to scalar patterns deriving from processing cost. *Behavioral and Brain Sciences* 32: 457–458.
- Haspelmath, M. & I. Hartmann (2015): Comparing verbal valency across languages. In: A. L. Malchukov & B. Comrie (eds.), *Valency Classes in the World's Languages*, 41–71. Berlin: De Gruyter Mouton.
- Hellan, L., A. Malchukov & M. Cennamo (2017): Issues in contrastive valency studies. In: L. Hellan, A. Malchukov & M. Cennamo (eds.), *Contrastive Studies in Verbal Valency*, 1–24. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Herbst, T. (1988): A valency model for nouns in English. *Journal of Linguistics* 24(2): 265–301.
- Herbst, T. (1999): English Valency Structures – A first sketch. *Erfurt Electronic Studies in English* 6. Available online from <<http://webdoc.gwdg.de/edoc/ia/eese/rahmen22.html>> (accessed January 7, 2018).
- Herbst, T., D. Heath, I. Roe & D. Götz (2004): *A Valency Dictionary of English*. Berlin: Mouton de Gruyter.
- Herbst, T. & P. Uhrig (2009): *Erlangen Valency Patternbank*. Available online from <<http://www.patternbank.uni-erlangen.de>> (accessed February 21, 2018).
- Herbst, T. (2011): The Status of Generalizations: Valency and Argument Structure Constructions. *Zeitschrift für Anglistik und Amerikanistik* 59(4): 347–367.
- Herslund, M. & F. Sørensen (1996): Introduction. In: N. Davidsen-Nielsen (ed.), *Sentence Analysis, Valency, and the Concept of Adject*, 9–13. Frederiksberg: Samfundslitteratur.

- Holcová, M. (2016): Valence a vazebnost. In: P. Kochová & Z. Opavská (eds.), *Kapitoly z koncepce Akademického slovníku současné češtiny*, 64–68. Praha: Ústav pro jazyk český AV ČR, v. v. i.
- Hornstein, N., J. Nunes & K. K. Grohmann (2005): *Understanding Minimalism*. Cambridge: Cambridge University Press.
- Huang, Y. (2006): *Anaphora. A Cross-linguistic Study*. Oxford: Oxford University Press.
- Huddleston, R. (1984): *Introduction to the Grammar of English*. Cambridge: Cambridge University Press.
- Hunston, S. & G. Francis (1999): *Pattern Grammar: A Corpus-driven Approach to the Lexical Grammar of English*. Amsterdam: John Benjamins.
- Iwata, S. (2006): Where do constructions come from? *English Linguistics* 23(2): 493–533.
- Jackendoff, R. (1997): *The Architecture of the Language Faculty*. Cambridge: MIT Press.
- Jackendoff, R. (2013): Constructions in the Parallel Architecture. In: T. Hoffmann & G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*, 70–92. Oxford: Oxford University Press.
- Karlík, P. & N. Nübler (1998): Poznámky k nominalizaci v češtině. *Slovo a slovesnost* 59: 105–112.
- Kearns, K. (2011): *Semantics*. 2nd ed. Basingstoke: Palgrave Macmillan.
- Klímová, J., V. Kolářová & A. Vernerová (2016): Towards a Corpus-based Valency Lexicon of Czech Nouns. In: *GLOBALEX 2016: Lexicographic Resources for Human Language Technology. GLOBALEX Workshop 2016*, 1–7.
- Kolářová, V. (2014): Special valency behavior of Czech deverbal nouns. In: O. Spevak (ed.), *Noun Valency*, 19–59. Amsterdam & Philadelphia: John Benjamins Publishing Company.

- Kolářová, V., J. Kolář & M. Mikulová (2017): Difference between Written and Spoken Czech: The Case of Verbal Nouns Denoting an Action. *The Prague Bulletin of Mathematical Linguistics* 107: 19–38.
- Koptjevskaja-Tamm, M. (2015): Action nouns. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1195–1209. De Gruyter Mouton.
- Kroeger, P. (2004): *Analyzing Syntax: A Lexical-Functional Approach*. Cambridge: Cambridge University Press.
- Kulikov, L., A. Malchukov & P. de Swart (2006): Introduction. In: L. Kulikov, A. Malchukov & P. de Swart (eds.), *Case, Valency and Transitivity*, vii–xix. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Lakoff, G. (1990): The invariance hypothesis: Is abstract reason based on image-schemas? *Cognitive Linguistics* 1(1): 39–74.
- Langacker, R. W. (1987): *Foundations of Cognitive Grammar: Theoretical Prerequisites*. Stanford, CA: Stanford University Press.
- Langacker, R. W. (1999): *Grammar and Conceptualization*. Berlin & New York: Mouton de Gruyter.
- Law, P. (1993): Argument structure in nominalization. *Toronto Working Papers in Linguistics* 12(1): 139–152.
- Lees, R. B. (1960): *The Grammar of English Nominalization*. The Hague: Mouton.
- Lester, N. A., J. W. Du Bois, S. Th. Gries & F. M. del Prado Martín (2017): Considering experimental and observational evidence of priming together, syntax doesn't look so autonomous. *Behavioral and Brain Sciences*: 33–34.
- Lyons, J. (1968): *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- Mackenzie, J. L. (1997): Nouns are avalent – and nominalizations too. In: K. van Durme (ed.), *The Valency of Nouns*, 89–118. Odense: Odense University Press.

- Mackenzie, J. L. (2002): The predicate in Functional Grammar. In: R. M. Usón & M. J. P. Quintero (eds.), *New Perspectives on Argument Structure in Functional Grammar*, 1–38. Berlin & New York: Mouton de Gruyter.
- Maekelberghe, C. (forthcoming): The English gerund revisited. *Corpus Linguistics and Linguistic Theory*.
- Matthews, P. H. (1981): *Syntax*. Cambridge: Cambridge University Press.
- Matthews, P. H. (1997): *The Concise Oxford Dictionary of Linguistics*. Oxford: Oxford University Press.
- Matthews, P. H. (2007): The scope of valency in grammar. In: T. Herbst & K. Götz-Votteler (eds.), *Valency: Theoretical, Descriptive and Cognitive Issues*, 3–14. Berlin; New York: Mouton de Gruyter.
- Meinschaefer, J. (2003): Nominalizations of French psychological verbs. In: J. Quer, J. Schrotten, M. Scorretti, P. Sleeman & E. Verheugd (eds.), *Selected papers from Going Romance*, 231–246. Amsterdam: John Benjamins.
- Melloni, C. (2015): Result nouns. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1253–1268. De Gruyter Mouton.
- Michaelis, L. A. (2010): Sign-Based Construction Grammar. In: B. Heine & H. Narrog (eds.), *The Oxford Handbook of Linguistic Analysis*, 147–166. Oxford: Oxford University Press.
- Michaelis, L. A. (2012): Making the Case for Construction Grammar. In: H. C. Boas & I. A. Sag (eds.), *Sign-Based Construction Grammar*, 31–69. Stanford: CSLI Publications. Available online from http://spot.colorado.edu/~michaeli/Making_the_case.pdf (accessed November 11, 2017).
- Moravcsik, E. A. (2009): The Distribution of Case. In: A. Malchukov & A. Spencer (eds.), *The Oxford Handbook of Case*, 231–245. Oxford University Press.

- Morita, H. (2012): Unification of the Semantics of the Infinitive in English. *A Journal of English and American Studies* 45: 31–52. Available online from <www.miscelaneajournal.net/index.php/misc/article/download/123/51> (accessed February 16, 2018).
- Mühleisen, S. (2015): Patient nouns. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1316–1327. De Gruyter Mouton.
- Newmeyer, F. (2005): *Possible and Probable Languages. A Generative Perspective on Linguistic Typology*. New York: Oxford University Press.
- Osenova, P. (2014): Classifier noun phrases of the type N1N2 in Bulgarian. In: O. Spevak (ed.), *Noun Valency*, 141–159. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Oxford English Dictionary* (2018). Oxford University Press. Available online from <<http://oed.com>> (last accessed April 11, 2018).
- Ouhalla, J. (2011): Categorization and the Interface Levels. In: R. Folli & C. Ulbrich (eds.), *Interfaces in Linguistics: New Research Perspectives*, 116–134. New York, NY: Oxford University Press.
- Panevová, J. (2014): Contribution of valency to the analysis of language. In: O. Spevak (ed.), *Noun Valency*, 1–17. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Panevová, J. et al. (2014): *Mluvnice současné češtiny. 2, Syntax češtiny na základě anotovaného korpusu*. Prague: Karolinum.
- Park, C. (2017): Review of Rochelle Lieber's *English Nouns: The Ecology of Nominalization*. *Cognitive Linguistics* 28(4): 799–805.
- Park, C. & B. Park (2017): Cognitive Grammar and English nominalization: Event/result nominals and gerundives. *Cognitive Linguistics* 28(4): 711–756.
- Plag, I. (2003): *Word-Formation in English*. Cambridge, New York: Cambridge University Press.

- Poldauf, I. (1955): O konkurenci infinitivu a gerundu v angličtině. *Časopis pro moderní filologii* 37: 203–223.
- Primus, B. (2009): Case, grammatical relations, and semantic roles. In: A. Malchukov & A. Spencer (eds.), *The Oxford Handbook of Case*, 261–275. Oxford University Press.
- Quirk, R. et al. (1985): *A Comprehensive Grammar of the English Language*. London & New York: Longman.
- Rainer, F. (2015a): Quality nouns. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1268–1284. De Gruyter Mouton.
- Rainer, F. (2015b): Agent and instrument nouns. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1304–1316. De Gruyter Mouton.
- Resi, R. (2014): Noun phrasal complements vs. adjuncts. In: O. Spevak (ed.), *Noun Valency*, 161–182. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Rijkhoff, J. (2002): *The Noun Phrase*. New York: Oxford University Press.
- Rohdenburg, G. (2003): Cognitive complexity and horror aequi as factors determining the use of interrogative clause linkers in English. In: G. Rohdenburg & B. Mondorf (eds.), *Determinants of Grammatical Variation in English*, 205–250. Berlin: Mouton de Gruyter.
- Ruppenhofer, J., M. Ellsworth, M. R. L. Petruck, C. R. Johnson, C. F. Baker & J. Scheffczyk (2016): *FrameNet II: Extended Theory and Practice*. Berkeley: International Computer Science Institute. Available online from <<https://framenet2.icsi.berkeley.edu/docs/r1.7/book.pdf>> (accessed February 25, 2018).
- San Martín, I. (2009): Derived nominals from the nominal perspective. *Anuario del Seminario de Filología Vasca “Julio de Urquijo”* 43, 831–846. Available online from

- <www.ehu.es/ojs/index.php/ASJU/article/download/1764/1396> (accessed February 29, 2018).
- Sæbø, K. J. (2003): Valency and Context Dependence. In: V. Ágel et al. (eds.), *Dependenz und Valenz. Ein internationales Handbuch der zeitgenössischen Forschung. Dependency and Valency: An International Handbook of Contemporary Research*, Vol. 1, 814–819. Berlin & New York: Walter de Gruyter.
- Spevak, O. (2014a): Editor's foreword. In: O. Spevak (ed.), *Noun Valency*, ix–xiii. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Spevak, O. (2014b): Noun valency in Latin. In: O. Spevak (ed.), *Noun Valency*, 183–210. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Stefanowitsch, A. & T. Herbst (2011): Argument Structure – Valency and/or Constructions? Preface. *Zeitschrift für Anglistik und Amerikanistik* 59(4): 315–316.
- Taylor, J. R. (2012): *The Mental Corpus. How Language is Represented in the Mind*. Oxford: Oxford University Press.
- Taylor, J. R. (forthcoming): Cognitive Linguistic Approaches to English grammar. In: B. Aarts, J. Bowie & G. Popova (eds.), *The Oxford Handbook of English Grammar*. Oxford University Press.
- Tendahl, M. (2009): *A Hybrid Theory of Metaphor. Relevance Theory and Cognitive Linguistics*. Basingstoke: Palgrave Macmillan.
- Tesnière, L. (1959): *Éléments de syntaxe structurale*. Paris: Klincksieck.
- Thompson, S. A. & P. J. Hopper (2001): Transitivity, clause structure, and argument structure: Evidence from conversation. In: J. Bybee & P. Hopper (eds.), *Frequency and the Emergence of Linguistic Structure*, 27–60. Amsterdam: John Benjamins.
- Tomasello, M. (2005): *Constructing a Language. A Usage-Based Theory of Language Acquisition*. Cambridge, Mass.: Harvard University Press.

- Tomlin, R. S. & A. Myachykov (2015): Attention and salience. In: E. Dąbrowska & D. Divjak (eds.), *Handbook of Cognitive Linguistics*, 31–52. Berlin & Boston: De Gruyter Mouton.
- Tutunjian, D. & J. E. Boland (2008): Do we need a distinction between arguments and adjuncts? Evidence from psycholinguistic studies of comprehension. *Language and Linguistics Compass* 1: 631–646.
- Trask, R. L. (1993): *A Dictionary of Grammatical Terms in Linguistics*. London: Routledge.
- Tyler, A. & V. Evans (2003): *The Semantics of English Prepositions*. Cambridge: Cambridge University Press.
- Urešová, Z. (2006): Verbal Valency in the Prague Dependency Treebank from the Annotator's Viewpoint. In: M. Šimková (ed.), *Insight into Slovak and Czech Corpus Linguistics*, 93–112. Bratislava: Veda, Publishing House of Slovak Academy of Sciences.
- Usón, R. M. & P. Faber (2002): Functional Grammar and lexical templates. In: R. M. Usón & M. J. P. Quintero (eds.), *New Perspectives on Argument Structure in Functional Grammar*, 39–94. Berlin & New York: Mouton de Gruyter.
- Van Valin, R. D. & R. J. LaPolla (1997): *Syntax, Structure, Meaning and Function*. Cambridge: Cambridge University Press.
- Vater, H. (2003): Valency Potential and Valency Realization. In: V. Ágel et al. (eds.), *Dependenz und Valenz. Ein internationales Handbuch der zeitgenössischen Forschung. Dependency and Valency: An International Handbook of Contemporary Research*, Vol. 1, 794–802. Berlin & New York: Walter de Gruyter.
- Verhagen, A. (2015): Grammar and cooperative communication. In: E. Dąbrowska & D. Divjak (eds.), *Handbook of Cognitive Linguistics*, 232–252. Berlin & Boston: De Gruyter Mouton.

- Weiner, E. J. & W. J. Labov (1983): Constraints on the agentless passive. *Journal of Linguistics* 19: 29–58. Available online from <<http://idiom.ucsd.edu/~rlevy/lign251/fall2007/cedergren-labov-1983.pdf>>.
- Wierzbicka, A. (1988): *The Semantics of Grammar*. Amsterdam & Philadelphia: John Benjamins Publishing Company.
- Williams, E. (1991): Meaning Categories of NPs and Ss. *Linguistic Inquiry* 22(3): 584–587.
- Wunderlich, D. (2015): Valency-changing word-formation. In: P. O. Müller, I. Ohnheiser, S. Olsen & F. Rainer (eds.), *Word-Formation. An International Handbook of the Languages of Europe*, Vol. 2, 1424–1466. De Gruyter Mouton.
- Yus, F. (2010): Relevance theory. In: B. Heine & H. Narrog (eds.), *The Oxford Handbook of Linguistic Analysis*, 641–662. Oxford: Oxford University Press.
- Zaenen, A. & A. E. Goldberg (1993): Review of Jane Grimshaw's *Argument Structure*. *Language* 69(4): 807–817.

Source

The British National Corpus, version 2 (BNC World). Distributed by Oxford University Computing Services on behalf of the BNC Consortium. Institute of the Czech National Corpus, Prague 2001. Available online from <<http://www.korpus.cz>> (last accessed April 11, 2018).

Resumé

V odborné literatuře reprezentující různé lingvistické směry a pojednávající o různých jazycích – včetně angličtiny – se lze běžně setkat s tvrzením, že vyjádření valenčního potenciálu substantiv není nikdy obligatorní. S tím do určité míry souvisí názor, že substantiva buď vůbec nemají valenci (srov. např. Mackenzie, 1997), nebo mají valenci pouze tehdy, jde-li o deverbativní nominalizace, které se formálně liší od základových sloves (tj. nejde o případy konverze, srov. Alexiadou & Grimshaw, 2008: 4) a které označují propozice (tj. jde o tzv. complex-event nominals, srov. Grimshaw, 1990: 45 ff.). Zastánci takového chápání valence substantiv pak tvrdí, že hlavou fráze *John's criticism of the book suggest* (San Martin, 2009: 833) je nominalizace s valencí *criticism* pouze tehdy, jde-li o dějový význam ‚kritizování‘; ve významu ‚(např. publikovaná) kritika‘ není *criticism* chápáno jako substantivum s valencí. Podobně substantiva jako *attempt* nebo *ability* (první je odvozeno konverzí, druhé není deverbativní a neoznačuje děj) by vůbec neměla mít valenci.

Předkládaná diplomová práce se zabývá problematikou valence substantiv ve snaze poukázat na potenciální neadekvátnost výše uvedených tvrzení. Už T. Herbst (1988: 286) upozorňuje na to, že věty typu *The explanation was rather silly* jsou gramatické i bez vyjádření valenčního komplementu, ale pouze tehdy, je-li možné druhý argument potenciálně vyjádřitelný komplementem vyvodit z kontextu. Nezdá se ale, že by tento poznatek našel patřičnou odezvu; vztah mezi valencí substantiv a kontextovou určeností či referencí se však zdá být klíčový. Diplomová práce se mimo jiné snaží upozornit na to, že právě opomíjení tohoto vztahu vede k tomu, že lingvistické popisy přiznávají valenci menší části substantiv, než by mohlo být záhodno.

Teoretická část práce je rozdělena do dvou hlavních oddílů. První se věnuje valenci obecně, druhý se zaměřuje konkrétně na valenci substantiv. V prvním, obecnějším oddílu jsou vymezeny základní termíny a uvedeny koncepty, se kterými se obvykle v popisech valence pracuje. Na pozadí několika příkladů je mj. vysvětlen rozdíl mezi sémantickou valencí a syntaktickou valencí. Zatímco slovesa typu *přijít* sémanticky vyžadují (v pojmech funkčního generativního popisu) jak doplnění typu ACT (tj. kdo přichází), tak doplnění typu DIR3 (tj. kam

přichází), „povrchově“ je obvykle vyjádřeno pouze doplnění typu ACT. Tematizován je také ústřední problém popisu valence, tj. otázka toho, na základě jakých principů se sémanticky vyžadovaná doplnění promítají na úrovni morfosyntaktického vyjádření. Zmíněny jsou lingvistické přístupy, které postulují principy, jako je theta kritérium (Chomsky, 1981: 36) či hypotéza obvykle označovaná jako UTAH (Baker, 1988: 46), a přístupy, které postulují hierarchie sémantických rolí (např. Fillmore, 1968). V neposlední řadě jsou proti těmto lexikalistickým přístupům vymezeny přístupy konstrukční, které na ústřední problém ‚mapování‘ syntaxe a sémantiky reagují tak, že postulují valenční konstrukce (viz především Goldberg, 1995; 2006).

Druhý oddíl teoretické části se věnuje konkrétněji valenci substantiv. Nejprve je naznačeno, jak se pojetí valence (původně chápané jako charakteristické výhradně pro slovesa) rozšiřovalo a jaká substantiva lze chápat jako valenční. Práce dále shrnuje vybrané rozdíly mezi valencí sloves a substantiv a upozorňuje na tzv. support verb construction (např. *make an attempt*). Je oprávněné domnívat se, že substantiva v této konstrukci vykazují specifické valenční chování, a proto jsou doklady této konstrukce z výzkumu vyloučeny. Poslední třetina druhého oddílu se věnuje jednak vztahu mezi valencí a slovtvorbou, jednak vztahu mezi valencí a referencí, resp. kontextovou zapojeností. Předpokládá se, že je-li substantivum kontextově nezapojené, jeho valenční potenciál se musí realizovat; v dalším textu je kontextová zapojenost signalizována gramatickými prostředky (např. určitým členem) a plná realizace valenčního potenciálu již není obligatorní.

Metodologická část práce zdůvodňuje volbu substantiv s předložkovou frází s předložkou *at* jakožto valenčním komplementem (jde o relativně malý soubor substantiv). Tato část dále vysvětluje motivaci výběru substantiv *attempt*, *ability* a *failure* na základě valenčních slovníků (především Herbst et al., 2004; Herbst & Uhrig, 2009) a shrnuje, jaké případy jsou z analýzy vyňaty (chyby v tagování *attempt*; případy tzv. support verb construction; případy, v nichž je sledované substantivum součástí kompozita; výskyty *failure* v nezákladním významu ‚someone or something that has no success‘). Metodologická část dále zdůvodňuje výběr Britského národního korpusu (BNC) jako zdroje dat a vysvětluje, proč práce nevychází ze specifického subkorpusu, nýbrž z BNC jako celku.

Empirická část nejprve rekapituluje tři ústřední hypotézy (4.1):

1. Vyjádření valenčního potenciálu substantiva je obligatorní, je-li substantivum kontextově nezapojené.
2. Pokud empirická analýza neukáže kvalitativní rozdíly ve valenčním chování sledovaných substantiv, tvrzení, že pouze jedno z nich má valenci, není oprávněné.
3. Výběr formy komplementu (předložková fráze s *at* vs. infinitivní klauze) není náhodný.

Empirická část práce dále sestává z kvantitativní analýzy a kvalitativní analýzy. V kvantitativní části (4.2) je sledováno 2 858 dokladů spojení *an attempt* a 256 dokladů spojení *an ability*. 2 838 dokladů *an attempt* (99,3 %) a 230 dokladů *an ability* (90 %) má explicitně vyjádřený druhý argument (tj. explicitní komplement). Všechny zbývající doklady *an ability* a většina zbývajících dokladů *an attempt* představují buď specifické konstrukce, v nichž neurčitý člen nesignalizuje první zmínku (např. *such an attempt*), nebo případy lexikalizace (snad „lokální“ lexikalizace *attempt* ve významu ‚suicide attempt‘) či nulového komplementu, resp. tzv. indefinite null complement (*ability* ve významu ‚ability in general, ability at anything one can have an ability at‘). Výsledky této analýzy se neslučují a) s tvrzením, že substantiva *ability* a *attempt* nemají valenci, a b) s tvrzením, že vyjádření valenčního komplementu substantiv není nikdy obligatorní.

Další část práce (4.4) se zaměřuje na vyjádření prvního argumentu substantiv. Na vzorku 218 dokladů tří sledovaných substantiv (*attempt*, *ability*, *failure*) je ukázáno, že předložkové fráze s předložkami *by* nebo *of* vyjadřují první argument méně často, než se dá očekávat na základě literatury (v materiálu jsou pouze tři doklady *by*). První argument je explicitně vyjádřen v 54 % dokladů, nejčastěji jako substantivum v adnominálním pádu nebo posesivum ve funkci determinátoru dané substantivní fráze (32 %) nebo jako podmět dané věty (14 %). Ve 46 % dokladů první argument není v dané větě explicitně vyjádřen. Celkem ve 46 případech (21 %) je však vyvoditelný z kontextu. Ve zbylých případech lze mluvit o specifickém, ale neurčitém argumentu (10 %), o zevšeobecněném argumentu, který svým způsobem odpovídá všeobecnému lidskému konateli

(8 %), a o potenciálním argumentu (7 %). U substantiva *ability* je explicitní vyjádření prvního argumentu častější (71 %) než u substantiv *attempt* (46 %) a *failure* (50 %), což poukazuje na možné rozdíly mezi deadjektivními a deverbativními substantivy. Mezi substantivy nebyly identifikovány kvalitativní rozdíly, které by naznačovaly, že některá z těchto substantiv mají valenci, zatímco jiná ne.

Poslední část analýzy (4.5) se věnuje konkurenci předložkové fráze s předložkou *at* a infinitivní klauze jakožto komplementu substantiv. Infinitivní komplement se zdá být primární; pro jeho výběr mluví u substantiva *attempt* i to, vyskytne-li se toho substantivum v konstrukci *in an attempt* se silnou preferencí infinitivního komplementu. Lze se domnívat, že existují faktory, které podporují – v různé míře závaznosti – výběr předložkové fráze. Volba předložkové fráze s předložkou *at* je zřejmě preferována, nemá-li komplement předložky odpovídající slovesný protějšek, protože je realizován zájmenem (*failure at anything*), etablovaným kompozitem nebo ustálenou frází (*my attempt at problem solving*) nebo primárním substantivem (*Spielberg's last attempt at an adult theme*). Fráze s předložkou *at* je dále zřejmě preferována, pokud je odpovídající sloveso stylisticky příznakové, a (snad) proto méně časté než substantivum (*an attempt at conversation*), nebo pokud by odpovídající slovesné vyjádření obsahovalo tranzitivní sloveso vyžadující komplement (*an attempt at deliberate desecration*). Dalším faktorem může být tendence k syntaktickému paralelismu či syntaktický priming (*her disappointment at his early departure and her failure at not having conducted the evening more to her advantage*). Vedle těchto faktorů (které nelze chápat výlučně) by mohly hrát roli i určité sémantické rysy daných konstrukcí. Doplnění s předložkou *at* může být preferováno, implikuje-li komplement význam vzájemnosti či součinnosti (*a quite serious attempt at mutual reassessment of their relations*). Pokud je predikát *attempt* premodifikován přívlastkem, který svou sémantikou naznačuje neúspěšnost pokusu, volba infinitivního komplementu by mohla být pravděpodobnější. Především tyto závěry týkající se možných relevantních sémantických rysů je však nutné chápat jako prozatímní; v ideálním případě by měly být ověřeny na větším množství dat.

Poslední část práce shrnuje závěry a naznačuje jejich důsledky a další možný směr výzkumu substantivní valence.

Appendix

Appendix Table 1: *attempt at*

1	The dispatch of James Prior to the Northern Irish office, in place of Atkins, in the government reshuffle of September 1981, also presaged an attempt at further negotiation .
2	But attempts at social engineering usually lead to downfall.
3	There are many stories concerning man's first attempts at making cheese .
4	Spielberg's last attempt at an adult theme was the nave, saccharine spirituality of <i>Always</i> ; and yet, paradoxically, his children's <i>Neverland</i> lacks innocence.
5	Actually, I can vouch that some young heterosexual men of John's age were also obsessed by fancy clothes, and observation today suggests that the interest has not died out. John was capable of laughing at himself in respect of attempts at beautification .
6	'A bloke told us to watch it because there was a police car around the corner taking names and addresses. We thought they were going to follow us, so we took a really weird route home,' says Peter. Another attempt at politicising themselves ended in similar embarrassment.
7	John Cruikshank at Castle Hill House and his 'very amiable' wife, Anna, were chief among them, and for Coleridge, at least, there were also a number of admiring and musical young women with whom his puns, conundrums, and attempts at dancing made him 'an immense favorite'.
8	But although Wordsworth contributed a few lines, he quickly realized that attempts at collaboration were once again bound to fail...
9	He was blind and very deaf, but he remained cheerful and interested in all our doings. [...] We used to take him for walks, and this could be embarrassing, for we had to shout very loudly in an attempt at conversation .
10	Ideally, one would like to be able to specify the particular solution corresponding to an arbitrary set of initial conditions. Such techniques are available in the axisymmetric case, and may soon be extended to the colliding wave situation. The initial attempts at the solution of this problem are mentioned in the next chapter.
11	In larger economic terms, however, some previous attempts at intervention in the regions have been misguided, even patronising, assuming the North best supported by being kept in its place and in the (terminal) condition it should expect.
12	An Edison-Bell Picturegram of 1927, an early attempt at audio-visual entertainment . The record tells a story, complemented by a picture scroll. The machine was easy to damage and was not a huge success.
13	Some forms of mobile invertebrates like, for example, Cleaner Shrimps, also regularly spawn in the home aquarium and could be ideal for a first attempt at home breeding .

14	In an increasingly desperate search for peace some pacifists were even prepared to make overtures to Fascist organizations. As war approached, growing numbers of PPU supporters came to accept the necessity of abandoning these unhappy attempts at political engagement .
15	Siann, in a recent study <i>Accounting for Aggression</i> which gives an excellent overview of existing theories and positions, does make a distinction between aggression and violence. [...] Heelas has also given a survey of the different attempts at defining aggression , and the main theories which account for it.
16	Efforts were once made to export American-type trade unions and collective bargaining to occupied countries such as Japan in the early post-World War II period. Yet a regression from those principles soon occurred after it became apparent that the orderly industrial relations which were sought were not being achieved (Levine, 1958; Barkin, 1980). The hazardous nature of any such attempts at interchangeability or piecemeal transplant forms a recurrent theme in the literature, and has become something of a commonplace.
17	One other factor converted this blurring of factional lines into a quite serious attempt at mutual reassessment of their relations by these groups...
18	The suit was originally filed in February in the US federal courts in California and is being pursued now that attempts at an out-of-court settlement have failed.
19	White farmers argue that parcelling out commercial farmland in small plots will reduce productivity and so jeopardise the country's ability both to feed its people and to export valuable crops. The government's previous attempt at land reform , shortly after independence, was not regarded as a success.
20	The first full attempt at establishing a colony was Raleigh's colony of Virginia, named for Elizabeth the virgin queen and located in what is now the Roanoke district of North Carolina.
21	The war which Edward thus inaugurated was to endure, with many intervals of truce and several attempts at a final peace , until the expulsion of the English from Gascony in 1453.
22	Mathematical modelling can determine theoretically ideal laser variables for treating port wine stains. This work has made a great contribution to our understanding of the subject, although the structural diversity of port wine stains confounds the best attempts at mathematical modelling and there is no substitute for good clinical assessments and comparisons of different laser systems.
23	<i>Dragons of Flame</i> , sequel to US Gold's first AD&D licence, <i>Heroes Of The Lance</i> , sees the land of Krynn in deep trub. [...] Alas, <i>Dragons of Flame</i> is far from gripping. Again the AD&D licence is only for show, with only token attempts at roleplaying included.
24	The excavator noted that domestic rubbish had been tipped inside the precinct because, either it had become a convenient dumping ground, or there

	had been an attempt <i>at deliberate desecration</i> , as happened at a later date in the orchestra of the Verulamium temple theatre.
25	Trends in prices for Flemish-Dutch, French and Italian drawings over the last twelve years are described here, with an attempt <i>at evaluating how the technique used, the subject of the drawing, its dimensions, its provenance and other objective characteristics may influence prices</i> .
26	In effect, there was no apparatus, military or political, whereby Rome could have imposed herself forcibly on Ireland. Any attempt <i>at forcible conquest</i> – by the word or by the sword – could easily have been neutralised or repelled.
27	we're obliged to report on social skills and so forth [...] one of the most important things that bias report on is problem solving, and that was my <pause> attempt <i>at</i> <pause> <i>problem solving</i>
28	For example, one local post graduate student involved in the Belfast research was firmly convinced that front-raised pronunciations by working-class speakers of items like cap and rat reflected attempts <i>at correction in the direction of Received Pronunciation</i> ; but the more systematically collected pilot-study data confirmed that this variant was in fact a low-status and recessive feature.
29	He cautions against any hasty attempts <i>at imposing reform from outside</i> , warning that they would be very likely to upset the delicate social and economic balance which society has achieved...
30	It seems you keep having to hold the same conversation over and over again. Somehow the message isn't getting through – or worse, it's getting twisted. This week, be ready for irritating news and yet another fruitless attempt <i>at communication</i> . But the penny will drop very soon.
31	'Why not? I did see him you know – oh, I know he's supposed to have been somewhere else, but his alibi might not be... anyway, I'm sure he's quite capable of it,' insisted Dora in a transparent attempt <i>at self-justification</i> .
32	However many of the group's participants were extremely disappointed that the Chairmen of the Welsh Development Agency and the Development Board for Rural Wales withdrew their support from the statement just before its publication, despite their officers having contributed fully to its preparation. This aborted attempt <i>at developing an integrated approach</i> illustrates that most statutory and local authorities in Wales recognise the need for, and benefits of, a coastal strategy for Wales...
33	Before he left the games room for the short corridor which led to his rooms, he stopped by the side wall of the room, where more conventional paper and cardboard books lined the slate fabric of the castle – the masons' lame attempt <i>at insulation</i> .
34	Unable to find the right words, Gina moved her hand impulsively across the table and touched his fingers with her own, unconsciously reciprocating the gesture he had made to her earlier. The difference was that he accepted her attempt <i>at consolation</i> , taking her palm between both of his own hands...

35	She was determined not to lose her temper, at least until she'd got to the bottom of the riddle, but his apparent attempt at playing God with her life infuriated her.
36	On answering the phone I discovered it was the manager of my football team, Bob, to say that due to a waterlogged pitch the game was off. Another vain attempt at watching television followed, but it was no good, no dangermouse!
37	'You do not have to stay in to be with me, Jenna, dear,' she said softly. 'I prefer your company,' Jenna stated with no attempt at subterfuge , and Marguerite burst into laughter.
38	She felt as though all her bones had melted and that everyone knew it. Dame Sybil earned her everlasting gratitude by suggesting that it was time she retire. Unfortunately her attempt at a dignified exit was ruined by fitzAlan murmuring in a perfectly audible voice that he would not be long in joining her.
39	ANY attempt at a face-to-face meeting with the IRA is a dangerous operation, because it could either help or hinder the cause of peace.
40	The strike was declared illegal on July 7. Despite attempts at mediation by the FSLN leader and former President Daniel Ortega Saavedra, and by the Venezuelan President Carlos Andrés Pérez, six people were reportedly killed and over 100 injured as gangs of armed supporters of the former FSLN government clashed with armed right-wing vigilantes (among whom were former members of the contras) during days of fighting in the capital, Managua.
41	'Look, it's coming back out.' They watched it walk around the sheds. The snow had covered the nomes' sad attempts at cultivation . There were plenty of nome tracks, though, like little bird trails in the snow. The human didn't notice them. Humans hardly ever noticed anything.
42	Goering did not fly, and Hitler's first attempt at starting World War II was a failure. The orders were indeed issued, and the attack should have begun at 4.30 a.m. on August 26.
43	Did any of the femora excluded from the Christ Church study show hip or knee deformities, bowing, or other stigmata of childhood rickets? My observer bias forbids any attempt at interpreting Lees' fig 1 .
44	<s>Pregnancy in elderly women </s><s><p> SIR, – Successful attempts at inducing pregnancies in women after menopause have prompted a response from a higher authority, who feels that publication of His work has been overlooked by modern authors.
45	Black obviously isn't going to rival Bill Bragg for 'eart-warming', 'ave-a-go cheery yarn-spinning'. Either nerves or alcohol turn every attempt at chat into a limping string of words.
46	Many Jamaicans persist in the myth that there are only two varieties: the patois and the standard. But one speaker's attempt at the patois may be

	closer to the standard end of the spectrum than is another speaker's attempt at the standard.
47	An attempt at prediction , like that outlined above, would now have little chance of success.
48	<s> Date: Mon, 15 Nov 93 16:02:48 GMT </s><s> Subject: My 18 </s><s><p> My best attempt at a sweeper system : (I'd probably replace Walker with the guy who sweeps for Norwich... but I don't know his name!!)
49	I believe in a free Press, with rights to freedom of expression and to report that which is truthful. In my opinion, there are too many attempts at gagging , preventing us from being aware of authoritarianism and mischief.
50	A dissection of the relationship between employment, means of production and output does not, of course, explain the boom in any other than a purely statistical sense. Since the production of more goods and services is never an end in itself under capitalism but always a means to making profit, any attempt at an explanation of the boom must centre around the returns capitalists received on their outlays.

Appendix Table 2: attempt to

51	All forms are being checked by Price Waterhouse computer systems to weed out illegal multiple applications. Sophisticated 'fuzzy matching' technology is being used to spot attempts to disguise similar names and addresses .
52	THE Nicaraguan Government is expected to launch an all-out attempt to secure the demobilisation of the contra rebels when the Central American presidents gather at San Jose in Costa Rica tomorrow for a summit meeting crucial to the future of the peace process.
53	Tolba accuses the international community of neglecting problems which will grow worse with time: 'The real obstacle is the lack of political will.' There are others, though, who say that UNEP's Plan of Action is largely irrelevant to the attempts to stabilize the drylands .
54	He was beginning to get a bit homesick since they'd stopped travelling and he'd been on his own. He'd come to the conclusion that he was of a completely different species to Leila and her people. Away from the others, he thought his attempts to fit in had been rather embarrassing.
55	The Earl of Essex, who was in overall charge of all the Parliamentary troops, with the advice of Cromwell, decided that the advance of the Royal troops on London must be halted, so he asked for volunteers from amongst the considerable number of apprentices in London; armed them as best he could and they marched to Turnham Green where they were able to inflict such losses on the troops led by Prince Rupert that they were forced to withdraw, and there was no subsequent attempt to capture London .

56	Where the school is in the wrong then full and generous apologies and expressions of concern are far more effective in maintaining good relationships than attempts to justify unjustifiable action .
57	We can best examine their character as two competing principles of neutrality in the context of objections to political neutrality on the ground that it is impossible or even incoherent. [...] The most serious attempt to specify and defend a doctrine rather like our principle of comprehensive neutrality is that of J. Rawls.
58	There, less than three inches below the surface, they found the body of Rhoda Anne Carter. [...] The nose had been smashed, the throat was terribly bruised, and there had been attempts to both burn and boil the remains .
59	Israel began to integrate elements of the military government into its own civil ministries, proving that the kind of autonomy it had in mind implied less rather than more Palestinian control over their affairs. It also set up Village Leagues, an attempt to create a co-operative Palestinian structure in the less politically active villages of the West Bank .
60	Indeed, the search for anatomical abnormalities seemed to create a division between conditions, such as haemorrhage into the brain or a cerebral tumour, where an organic cause of disease was obvious, and conditions where a patient was all too evidently suffering from a mental disturbance, but for which no physical basis could be found. Attempts to classify mental disorders and give them names ran into many difficulties.
61	Here then, cutting through all the waffle, is a concise run-down of what makes a board work. [...] In an attempt to make the board plane in marginal winds (Force 3/4) most boards have single, double or quadruple concaves.
62	These acts make it an offence to kill these wild animals and they have an obvious effect on conservation; that these animals are not being killed – at least if the law is being obeyed. Also, any attempts to kill wild animals , or almost all attempts, do result in a large amount of suffering.
63	By choosing to write from interviews, Glen is being more of a journalist (in the great American style) than a historian. Yet this is the first serious attempt to write about the revolution since the heyday of the early 1970s.
64	This vertical Phillips curve (labelled LPC in Fig. 6.4) can be regarded as a warning to policy-makers that continued attempts to reduce unemployment below its natural level can only lead to higher and higher inflation rates and no long-run decrease in unemployment.
65	It may have sounded odd to only have an 18in tube for a four foot tank, but this is another attempt to try to establish a more natural environment . In tropical rivers, there are always areas of bright sunlight and areas of shade under the overhanging trees, these areas being cooler and slower moving.
66	A second question is whether the ‘rights’ approach does not essentially depend on a non-controversial (that is, abstract and apolitical) formulation

	of the master principle? Dignan’s attempt <i>to reformulate it in a ‘progressive’ way</i> could therefore be seen as partisan, and therefore necessarily outside the ambit of a ‘rights’ approach.
67	Convinced by fear that another attempt <i>to manipulate the rigid ropes and frozen krabs at my waist</i> would result in permanent loss of consciousness, I let Roger take over, clipping me into the belay while I lowered by head against the ice, shivering violently, numb fingers screaming with the return of feeling...
68	Such movement from the land caused alarm. There were frequent attempts <i>to check it</i> .
69	‘He’s on the case and, from his actions so far, I have to say I’ve come to trust him. He speaks good English, so he’ll understand everything we say.’ Myeloski smiled at Leeming, a lame attempt <i>to gain his confidence</i> .
70	The problem has been the cost and complexity of point-of-sale systems that can run to around £3,000 or £4,000 he says. In an attempt <i>to tap a potentially huge, but difficult to get at market</i> , the two companies will rent out the necessary kit in packages starting from £90 a month.
71	The worst aspect of Maastricht was its rushed attempt <i>to suppress the effects of the end of the cold war, rather than take them on board</i> .
72	Rainfall is minimal and the land is infertile, marked by erosion and extreme dryness. In a desperate attempt <i>to hold in what moisture there is in the thin soil</i> , farmers have constructed low walls as refuges for vines and other crops.
73	Domestic economic factors further complicated this gloomy picture. The rapid inflation which resulted directly from the cost of financing the war raised the cost of British industry significantly, and made much more difficult the attempt <i>to restore financial stability</i> .
74	Within these councils, social services were strictly regulated. In the 1970s and 1980s their work was dominated by statutory duties toward the care of children. While there were many attempts <i>to devolve welfare services to a neighbourhood level</i> , the overall decline in local authority power relative to the centre vitiated much of the potential for popular decision-making.
75	Whatever one’s interpretation of these events, however, attempts <i>to explain away the chronological oddity of the attack on Hastings</i> should not be allowed to obscure the fact that in practice it did not stop Richard taking control of the duke of York.
76	The instability of such pluralisms was revealed in the “brawl” which accompanied attempts <i>to amend the paper entitled “The history and theory of literacy criticism”</i> in 1972.
77	Hyponymously related lexical items occur normally, in the appropriate order, in expressions such as the following: [...] He likes all fruit except bananas. [...] Any attempt <i>to frame a definition along these lines</i> , however, would run aground because, although such a definition could be made fairly

	general, it would not discriminate sharply enough to provide a guarantee of hyponymy...
78	A heavy-handed policy of Russification tended to push even relatively mild cultural movements, such as that in the Ukraine, in the direction of political protest. In areas such as the Baltic provinces and the semi-autonomous Duchy of Finland, the government's attempts to tighten its control and impose administrative and cultural uniformity created nationalist opposition where little had existed.
79	The naive inductivist account of science, which I will outline in the following sections, can be looked on as an attempt to formalize this popular picture of science .
80	He had hinted darkly of rumours of police incompetence and attempts to smother establishment scandal .
81	This has led, since the turn of the century, to a number of interesting attempts to reformulate the original theory with a new appraisal of the role of the state in monopoly capitalism .
82	The jagged hole through which he'd been propelled some minutes before now rushed past his face once every minute or so. The ragged edges of the hole glinted sharply, and Jesus knew that any failed attempt to enter the Lift would be likely to result in his being sliced to ribbons within a matter of seconds.
83	The second view of climatic geomorphology emerged much more in relation to attempts to relate process to climate and to emphasize the interrelation between the morphological, pedological, vegetational and climatic characteristics of the earth's surface .
84	As a result, the Bill will not be the last word on local government finance. It will be an interim attempt to be seen to be doing something to replace the discredited poll tax .
85	According to the report, the USA was "pouring millions of dollars into north-western Cambodia" in an attempt to win support for the non-communist rebels ahead of any peace settlement .
86	Urban violence, inadequate infrastructure and, at 3.1 per cent a year, the fastest population growth in southern Asia were among the chief obstacles in the way of the Bhutto government's attempts to revitalize the economy .
87	Flights took place sporadically throughout the month in a desperate attempt to build up stockpiles of supplies before the winter .
88	Assurances were given about the number of lesson visits on which judgments about teachers' competence would be based, and an attempt to make the procedure more 'egalitarian', or 'fraternal' was blocked.
89	The thesis contains a mixture of research in the laboratory and on the road in an attempt to first observe phenomena in actual driving, then explore them in a laboratory setting, before finally returning to actual driving to attempt to validate the laboratory results .

90	Duncan reminds us of the antiquity of the propensity to quantify the doings of people in various ways. There has long been the counting of people as one of the first activities of states. There are voting, taxation, efforts to measure and record social rank, attempts to fix standards for weights and measures , and above all, money.
91	The Falangists, however, were not monarchists and their rhetoric, if not their ideology, was revolutionary, whereas the very <i>raison d'être</i> of the Carlists was monarchism and they were totally opposed to all revolutionary notions. Any attempt to unite them would, therefore, have to be carefully planned if it were to win the acquiescence of the parties involved.
92	The aims of the work operated in different ways but principally they represented my attempt to set personal responses to premature labour into a cultural context .
93	The Department of Social Security had always had discretionary power to pay for nursing or residential home care though this was little known. Klein reports that the total sums spent began a slow rise from the 1970s, reaching £39 million by 1983. In an attempt to prevent this slow creep the department asked each local office to set a maximum upper weekly limit for fees in their area.
94	Each of the three approaches discussed so far is an attempt to explain the similarities and differences between individuals' speech behaviour, even within what may be broadly construed as the same "speech community" .
95	A quarter of waste dumps in England have been closed by companies in attempt to sidestep new pollution control rules , leaving a toxic legacy which could cost councils millions of pounds to clean up.
96	There is some question as to the true extent of s 2. First of all it is necessary to decide the type of party whose attempts to exclude liability are regulated by the section.
97	Angry traders blame too few police and a part time police station. One businessman accosted a senior officer, as he arrived to be interviewed by Central South about the level of policing in the village. Passers by have been questioned by police in an attempt to discover more about the stubbly, blotchy-faced man who who escaped in a stolen car driven by an accomplice after the latest robbery .
98	She died along with her sister Sylvia and 77 year old Alice Mulford. [...] The coroner Nicholas Gardner said the Metro driver's attempts to regain control of her car may have made matters worse.
99	The invasion forces, sent to end what the reformers had dubbed as an attempt to introduce 'Socialism with a human face,' captured Dubcek, manacled him and flew him to Moscow.
100	The memories were vague and dream-like, not associated with the world in which he now lived, but he was well aware that the relatively brief time he spent on the island had changed his life irreversibly. He recalled with

	a shudder his futile attempts <i>to pull together the shreds of his old life as if nothing had happened</i> , his tangled emotions, the trouble at school.
--	---

Appendix Table 3: *ability at*

101	Virgin had, to a large extent, been built on Branson's abilities at man-management and manipulation – his unrivalled capacity, as one friend put it, 'to get people to do things for him, and feel that they are the ones who have been done a favour'.
102	When he was eighteen months old, the family broke up, his care passing to a maiden aunt. An elder sister disappeared, and he saw his mother only once again, though contact with his father was re-established later in life. Existence depended on his aunt's ability at home sewing , yet two foundations of his later development were laid down, an awareness of literature and familiarity with religion.
103	The most effective profile is likely: to make reference to broad achievements across the attainment targets; to describe the child's personal emotional and behavioural development; to describe abilities at general achievements in the process of learning ; to offer a contribution from children and parents...
104	Read this leaflet in conjunction with Rules for Roundabouts in the Highway Code for Northern Ireland. Many drivers are satisfied with their own ability at roundabouts , but consider most other drivers do it all wrong!
105	Before starting the drive and after completing it subjects filled in a questionnaire in which they were required to rate their ability at 12 different standard driving manoeuvres .
106	Following a conversion at sea he became an evangelical Christian, and spare-time preaching developed his ability at public speaking .
107	BRITISH CHALLENGERS. ENGLAND: Steven Richardson, David Gilford. The Ryder Cup pair proved their ability at medal matchplay with victory in the Dunhill Cup, without the help of Nick Faldo.
108	"Your agent on Belial also murdered Federique Moshe-Rabaan in an attempt to divert Adjudicator Bishop's suspicions: an attempt which would have succeeded had it not been for my," and he preened himself, " abilities at detection ."
109	You would need a quite advanced ability at the game to vary the ball flight at will.
110	The point is: virtually everyone in sport, to some extent, accepts that blacks have a natural ability at sport which functions at both physical and intellectual levels.
111	Some researchers have been able to make use of their own skills to gain access to a group. Becker's expertise as a jazz pianist made possible his study of dance musicians (Becker 1963). Polsky used his ability at the

	<i>pool-table</i> in his study of ‘hustlers’...
112	“I’m afraid it vanished along the main highway. It happened one day when I ran out of petrol and this girl came along. She had eyes as blue as cornflowers – ” “She’s the one who is good at figures and has ability at the barbecue? ” she asked pointedly, deciding to get all these aggravating niggles off her chest.

Appendix Table 4: *ability to*

113	Their response was lower than that of control animals. It appears that the high level of anxiety created by entering a totally new environment, where everything was strange and unknown, interfered with the animal’s ability to perceive genuine threats and to avoid them.
114	<s> Questor Column: GENERATORS </s><s><p> HOARE Govett is neutral on the two power generators (National Power at 222p, PowerGen at 233p). They will gain from the ability to buy cheap imported coal in coming years. But there are concerns over the longer term outlook, with the all-important coal contracts up for renegotiation.
115	A reduction in Vet’s fees plus the ability to be self-sufficient in machinery repairs could mean considerable savings especially in the more isolated areas.
116	This means being capable of thinking quantitatively and being relatively happy at using figures in a variety of ways in order to: [...] As part of the manager’s ability to use numbers there is a growing expectation that this will include a familiarity with some basic methods and principles of statistics.
117	It’s strange that two quite different words can mean the same thing. ‘I’ve got unlimited credit’ sounds a proud boast; ‘I’ve got the ability to take on unlimited debts ’ is far more ominous.
118	The overall aims of the experience would be specified, including: to give students the opportunity to work in a real production kitchen where the pace, the expectations and the allowed tolerances would be different from a college training kitchen; to give students the chance to see and use specialist equipment unavailable at college; to give the students the opportunity to assess their own personal skills, including the ability to cope on their own, away from home.
119	This degree relevant to the Single European Market of the 1990s has operated successfully since 1981. It was established in response to a number of surveys of graduate opportunities which indicated a need in Northern Ireland for graduates with the ability to follow a career in business within a multilingual environment.
120	The first scanning acoustic microscope (SAM) was built in 1973 by a team at Stanford University in California, headed by Professor Calvin Quate. This

	group has been doubling resolving power of the SAM (its ability to see detail) every year since its invention, and the device can now surpass the resolution of the best optical instruments.
121	There are many ways to beat the machines, but losses tend to follow a common pattern. First, over the initial half of the game, the human builds up an overwhelming position. The ability to make long-range plans is at a premium in early middle game, and the machine's low level of ability in this department usually gets it into terrible trouble.
122	Stress becomes harmful only when it exceeds our ability to cope with the situation , or when it continues unrelieved over a prolonged period.
123	The cat's ability to pause is instinctual – in other words, it is an automatic function of the subconscious brain.
124	And it is this regular aerobic routine that speeds up the body by increasing its metabolic rate and gives it the ability to shed those extra pounds .
125	'I like to watch life and I guard my ability to stand back or to move in very jealously .'
126	The rarity of artefacts found during excavations of such farms not only affects the archaeologist's ability to date the buildings , but also makes it extremely difficult to understand the details of the activities carried out on the farm.
127	The first exercise can now be taken further: establishing the figure in a few choice lines. Once the basic gesture is jotted down, further refinements can be made; the arms and legs can be fleshed out and the sex differences made evident. The purpose here is to develop your ability to visualise clearly the figure you want to draw .
128	'Next to the matches itself, the draw is the single biggest event in the World Cup,' said Steve Sampson, vice president of World Cup USA 1994. 'For an hour and a half that Sunday, the eyes of the world will be on Las Vegas.' Sampson added that the gambling city's ability to put on major events and Caesars' commitment to the World Cup made it a logical choice over Orlando and Phoenix, the two other cities that had hoped to win.
129	Joe descended the stairs, a grin on his face. He knew all about his landlady's ability to talk the hind-leg off a cockney donkey .
130	The signals coming from Spaak and others may in the end have led Britain to underestimate the determination of the Six and to overevaluate its own ability to pull the OEEC states, including the Six, round to its own viewpoint .
131	They say what they're seeing from SunSoft Inc right now is a very commercially packaged product that looks to be pretty much a full-blown release but lacks personal computer compatibility or the ability to run Santa Cruz Operation Inc Unix software because of the extensions.
132	Finally, the company feels that the ability of its products to use 3270 coaxial cable, coupled with their ability to manage 3270 dumb terminals , gives it

	a unique advantage in targeting companies wanting to protect existing investment in 3270s as part of their migration strategy.
133	The difference between this and the more probabilistic version of determinism is in what it is that is seen as being responsible for the ‘looseness’ of the association. In classical criminology it is our ability to make free choices and resist so-called causal pressures ; in the determinist version it is the fact that there is an unknowable amount of other causal variables in play, pulling in varying directions.
134	It is desirable for the text editor to be able dynamically to remove a block of text from the document being worked on, and to replace the block at any desired position at a later stage of the editing session. It is desirable for the text editor to have the ability to cancel the latest operation performed .
135	Thus jobs which involve social interaction with other workers are generally more satisfying than socially isolated work; monotonous, repetitive work is more likely to be linked with job dissatisfaction than more varied work; jobs which involve responsibility and the ability to organize work time and work methods are generally preferred over those which lack these qualities, and so forth.
136	Elgar’s recordings from first to last have notable consistency of style. He had the ability to phrase his long melodies in a particularly intense and poignant fashion, asking the violins to use bows which were ‘ten feet long’ .
137	But the poetry which emerged front that experience is hard and clear, and it is as if his capacity for suffering existed with an immense ability to use and to order it .
138	But human beings discovered a long time ago that if the birds were taken away from their homes, they had an uncanny ability to return even across miles of territory that was totally unknown to them .
139	In general, Walton and Susman argue that an appropriate management response to these developments has four key ingredients: a highly skilled, flexible, coordinated, committed workforce; a lean, fiat, flexible and innovative management; ability to retain experienced people ; strong partnership between management and unions.
140	Similarly, the distinction between ‘old-fashioned’ and ‘modern racism’ may not always be a distinction in kind, but may reflect an ability to provide justifications, often post hoc, for views and positions. Education may enhance the ability to produce justifications , rather than eliminate racism tout court.
141	The process is thus based on an ability to define and interpret the many possible and desirable relationships that can exist between two orthogonal domains .
142	Models are thus constructed from volumes built from nodes, edges and surfaces and can represent such free-form bodies as, found typically in the automobile and aircraft industries. To aid the construction of complex

	engineering shapes, most systems support, in some form, the ability to sweep two-dimensional shapes into solids .
143	This restriction on waiver is to be welcomed; such a surrender of rights should not be inferred lightly. It is in fact open to question whether it should be allowed at all, at least in certain types of cases. The premise behind the ability to waive is that it is only the individual who is concerned, and thus if he 'chooses' to ignore the interest then so much the worse for him.
144	Says Jill: 'We do hope to see a return on our investment in gaining a better qualified, more capable and more enthusiastic performer, someone who perhaps returns to us armed with new ways of looking at and tackling problems, or an ability to analyse situations and develop concepts .'
145	Since 1971, though the scheme was temporarily abandoned, and more determinedly since 1981, the control of monetary growth has depended upon the Bank's willingness and ability to manipulate short-term interest rates and upon changes in interest rates' ability to influence the demand for bank lending.
146	Whether it's converting pictures into a compatible format for publication, or just expanding your artistic horizons, then this little program is worth a look. During the conversion process there are a wide range of options available to the user. These include the ability to rotate or flip the image, change the size, colour and introduce dithering .
147	Any game that tests my logical mind is always a winner with me, and this excellent game of Brix is top of my list. It is an arcade puzzler game that tests your ability to think fast and move quickly .
148	There will be a written test of the representatives' knowledge of law and procedure and ability to think through a problem and formulate advice and a practical assessment of the representatives' ability to argue their clients' case and intervene appropriately and assertively during interview.
149	A drawback of being a private company is limited access to capital 'so we also have to look to investment income as a way to increase shareholders' funds for development', Davidson said. But an even greater advantage of being private is, according to Davidson, the ability to take a longer-term view of its business performance .
150	In particular, I feel a particular debt to those at the Edinburgh Academy who taught me how to write precis. The discipline of distilling the thoughts of others into your own words seems in retrospect about the most useful thing on the curriculum. And the ability to express yourself forcefully and clearly, to be able to master the sense of an issue and convey it to others , is an enormous help to any career.
151	We use all of the native widget sets so we're not using the lowest common denominator approach. But one thing which makes this product stand out from the crowd is its ability to address the needs of work group computing .
152	It is hoped that social scientists will not only be able to carry out with

	greater ease and rapidity those types of computation previously undertaken on mainframe computers but that they may also be able to take advantage of the machines' ability to handle graphical information .
153	But the Soviet Union in the 1950s was an even more formidable adversary than Hitler's Germany had been. It was therefore thought necessary to take steps not only to secure the defence of the Iberian Peninsula, but also to give it the ability to assume an offensive role if necessary .
154	With the new machinery in operation, it is not only flexibility that has increased but also the ability to accommodate an increased diversity of product range .
155	However policy H two as drafted, seeks to deprive the decision maker of the ability to consider all material considerations , by the unqualified use of the words will be required to and applies this to all twelve criteria without allowing discretion to be taken into account of any special circumstances that might present to justify exceptional development.
156	Some of their aims are that learning methods should be non-directive, interactive, and based on clinical cases and that teaching should foster the ability to evaluate critically published data on different treatments and new drugs .
157	If we ask the acoustic front end to leave some of the labelling to lexical access it will do so with a vengeance since it has no way of knowing what dilemmas need resolving at the lexical level. If we are not to have too few choices at some point, then we are bound to have too many at others. The ability to mark discrimination points is lost since ambiguity of word boundaries in connected speech, together with multiple choices of phoneme labels, means that a variable number of paths through the tree will be pursued more or less in parallel at any particular point in processing.
158	If those who beneficially own shares are the same in number and identity as the principals in the unincorporated firm of solicitors then the firm and the recognised body will normally be treated as one practice for the purpose of the Indemnity Rules; i.e. only one contribution, based on one gross fee return, will be payable. Top-up insurance will be required in addition, where the recognised body is a company limited by shares. The ability to incorporate only part of the practice will be important to those firms having or wishing to set up separate executor, trustee or nominee companies.
159	Often there was a marked persistence of the traditional tendency to regard external polish and savoir-faire, good appearance and manners, as much more important than the ability to do well in examinations .
160	Although the image of the Trinity is distorted, its powers are not destroyed and this is the activity of God in the soul – the ability to understand what could be, and to desire it...
161	Equally important for understanding of religion is the ability to distinguish between what is peripheral and what is central .

162	The strengths that these people show are an ability to command respect, and to inspire enthusiasm.
-----	---

Appendix Table 5: *failure at*

163	The only failures at innovation that I saw in high-tech firms occurred when the manager thought he or she already had so much power that coalition building was unnecessary.
164	If a search path to a goal takes n steps, then the first rule on the path will gain no credit until the nth traversal of the path. It is even slower at learning from failures at search.
165	Freddie had managed to get into the hall by now, although even here his hostess had contrived to place her formidable bulk before the front door, her expression revealing, only too plainly, her disappointment at his early departure and her failure at not having conducted the evening more to her advantage.
166	All my life, I've been successful at everything I've done. In fact, I'd been brought up to regard failure at anything as the ultimate sin.
167	It is a weariness to fumble for truth and completeness, and after all to feel the failure at both.
168	Daley Thompson apparently lies on his bed for much of two days before a decathlon thinking his way through each event, mentally rehearsing the self-discipline needed when confronted with two failures at his first high jump or pole vault.

Appendix Table 6: *failure to*

169	The point can be made best by returning to the Hunter and Grier schism from the Irish Presbyterian Church in 1927 and its failure to attract popular support, even from those people who shared Hunter and Grier's religious beliefs.
170	With the Tories certain to vote against such higher taxes, Labour would be defeated on the issue unless it gained power with an overall majority. Failure to push through the higher taxes would have a serious impact on Labour's plans to raise extra revenue to pay for improved social benefits, such as higher pensions and child benefit.
171	The federal civil service is the only part of Canadian society which remotely approaches the bilingual and bicultural ideal: this isolates it from real life in Canada and gives it the tendency, like the Prussian army, to believe that it is the sole repository of national values. In addition, Canada's failure to develop a two-party system has inflicted a chronic volatility and instability on the country's political life.

172	Instead of presenting a strong, clear answer to this misconception, many Christians show that their defences are down at the very place where modern unbelief is most devastating. Failure to understand the significance of truth is the Achilles' heel of many Christians.
173	When the problem is cichlids killing each other it is usually the result of overcrowding or simply failure to realise that the usual rules about stocking fish, i.e. inches of fish relative to surface area, don't apply.
174	Membership rose to 836 firms (v 831). Of the claims notified for 1991, tax again features prominently, especially errors in advice about CGT. There was a handful of claims for alleged failure to detect fraud on audit.
175	For many, investment business activity carries with it the very real threat of punitive action, whether arising from failure to comply properly with the regulations or, worse still, from committing the criminal offence of conducting investment business without being authorised at all.
176	However, the courts have made it clear that the two avenues of approach are still available and this case shows that a failure to establish unfair prejudice does not preclude the winding-up approach.
177	Steven, who re-joined Rangers from Marseille in the summer, says: 'Pele is a very unpredictable player. He has a lot of skill and pace, and could cause us problems.' The England international reluctantly left France, because of Marseille's failure to honour his contract.
178	The idolisation of Miss Hatherby that had so annoyed Nora in the early days of the piano lessons had gone. Constance still respected her friend and had a certain detached affection for her. But since her failure to understand and help her over her mother's lover, Constance viewed Miss Hatherby rather as her mother described her: an old maid, unworldly, afraid of emotions and inexperienced in life.
179	The vast bulk of these acts involved insecure or improperly adjusted fencing of dangerous machinery, inadequate precautions against fire and explosion, as well as failure to inspect equipment and maintain healthy work conditions.
180	If this BSL – English is unacceptable in English, one must also question the validity of interpretation in sign language forms which follow English structure. In both circumstances the deaf minority have to struggle to participate in community life if their contributions do not sound like English and if their failure to understand the interlanguage interpretation is put down to their poor general knowledge or low mental ability.
181	A study by Robert Gordon, at Northwestern University, estimated that America's inflation rate was overstated by 1.5–2% a year between 1947 and 1983 because of the failure to adjust for the improving quality of consumer durables.
182	Unfortunately, if they have little interest in power they may not be very good managers. Indeed, characteristics of some of the extreme cases are:

	Failure to tell others what the goals are. Setting impossible standards for others to follow.
183	Most research would suggest that this is a problem of employment, a failure to satisfy the goals the employee is seeking.
184	My main point is, though, not simply that the Webbs' own general prospectus was wrong, nor even that it misdirected their appraisal of Owen. Rather, it is this: that in its failure to comprehend the essential quality of the industrial co-operative or, as they put it, Producer Co-operation, that appraisal displays a vitiating absence of imagination.
185	This should enable individual young people who are seeking employment to find a suitable Compact opportunity. 6. Is failure to meet Compact goals recorded on reports, records of achievement, testimonials, etc.? Compact is essentially about celebrating success rather than recording failure.
186	Erm, and you will be aware that at two of er, three of the er summonses that are now left here to de deal with, that's three of the four er, do in fact, relate to clearly produce the documents. Er, failure to produce his driving licence failure to produce a test certificate for the vehicle and failure to produce his insurance documents and what Mr says in respect of er, those three offenses is that er, the officer, he accepts, did tell him that he was obliged to produce the documents to a police station...
187	Not surprisingly, this doctrine has become especially important to those who feel as a matter of Marxist science that the proletariat ought by now to have enacted a revolutionary response to the crises which are seen as always present; and their failure to do so is therefore commonly explained as an aspect of false consciousness, which prevented them from recognizing their proper historical duty.
188	This requirement arises only where such a person demands to know the name and address of the proprietor and not otherwise. Failure to comply with this requirement is also a criminal offence.
189	If the jurisdiction were discretionary, no refusal to exercise it nor any failure to exercise it by the House of Lords would constitute a breach of Article 6, but, again, if the appeal goes ahead, it must be by a process which the Convention recognises as fair.
190	the Court of Appeal refused to follow that approach and held that a statutory demand, which on the face of it contained a number of puzzling and perplexing statements, was nonetheless valid because the debtor knew precisely what he owed and there was no injustice in holding that his failure to pay the debt gave rise to a presumption that he was unable to pay
191	From the fairly casual manner of Nicholls' wording and his failure to mention what he had recommended, we may take it that, at least so far as he was concerned, the problem of the status of emigres holding non-Soviet passports had not at this stage been presented as of overwhelming importance or urgency.

192	Instead a growing number of elderly demented people were admitted because of the local authorities' failure to provide alternative care .
193	Ine did not allow the displeasure of Canterbury at his failure to agree to a partition of the diocese of Winchester to drive him into action on the matter, despite threats of excommunication.
194	Green is one of several authors who maintain that media coverage of the strike attempted to denigrate and undermine the miners' case against the government. The vilification of Arthur Scargill, the unbalanced emphasis on picket-line violence and intimidation, the failure to explain issues at the heart of the strike , the criminalization of striking miners, the unquestioned assumptions of police neutrality and the fundamental contradiction between the reality experienced by striking communities and the distorted presentation of that reality through the mass media – these were the key components of the media's ideological policing of the strike.
195	The fundamentalist outrage directed against Salman Rushdie (parodied in <i>Textermination</i>) is a real-life consequence of a failure to read the novel as a novel, that is, as a plotted confrontation between people with different points of view, not as a tract or a credo .
196	Where two or more petitions are pending against the same debtor, the court may order the consolidation of the proceedings on such terms as it thinks fit. [...] Whilst a petition, based upon failure to comply with a statutory demand , may be presented before the expiry of the three week period stipulated in the demand if there is a serious possibility that the debtor's property will be diminished in value...
197	There may well be an area where the interest at stake in an application for a licence is considerably more important than that involved in a forfeiture or failure to renew in a different context.
198	In Wheeler it was held that while section 71 of the Race Relations Act 1976 allowed the council to consider the best interests of race relations when exercising its discretion in the management of a recreation ground, it could not, in the absence of any infringement of the law or improper conduct penalise a rugby club for failure to support the council's policy of condemning a tour of South Africa .
199	The morning I woke up and realised that perhaps the reason I resented young Tulloch so much was because I too was an observer of human beings and that this most likely derived from an equal failure to establish satisfactory human relationships , was not a happy one.
200	Such data require special methods of analysis, particularly to account for the influence of omitted, possibly unmeasurable factors, which affect behavior. For example, the failure to account for such characteristics as 'frailty', which vary from individual to individual , can lead to systematic exaggeration of the benefits of medical treatments.
201	Since the revolution he had come under attack from laity and junior clergy,

	while Culture Minister Andrei Plesu condemned his church's failure to provide a basis for an organized opposition movement to Ceausescu . Romanian Orthodoxy was professed by around 85 per cent of Romanian Christians.
202	Sporadic student troubles during April hardened into protest demonstrations during May, with the use of tear gas against hundreds of students and schoolchildren in the streets of Bangui and reports of violence and destruction. Most protest was directed at the government's failure to pay salaries, overdue for several weeks .
203	However, other observers attributed the sharp reduction in rainfall to the accelerated destruction of tropical forests. Critics also blamed energy shortages on mismanagement and corruption in the electricity and generating sector, pointing to the failure to invest in coal generating power when the problems first became evident.
204	The government's handling of the disaster, notably its alleged failure to issue warnings prior to the opening of the sluice-gates of the Mangla Dam to prevent flooding the Indus basin in the south , prompted charges of criminal negligence and incompetence by its political critics and sections of the army.
205	Designers of plant, processes or systems of work must always take into account human fallibility and never presume that those who operate or maintain plant or systems have full and continuous appreciation of essential features. Indeed failure to consider such matters is itself an aspect of human error.
206	The battle ended in defeat for the Italians on 22 March. Franco's failure to assist them undoubtedly contributed to that result and had been calculated in political rather than exclusively military terms.
207	Payback is a very simple and useful method, and hence it is popular. The main drawback, however, is its failure to reflect the relative financial attractiveness of projects , as it is biased in favour of the short term.
208	Giardiasis is especially common in infants and children and may be responsible for their retarded growth and failure to thrive .
209	<p><s> Discussion </s><s><p> Failure to prevent cross-infection with P cepacia in CF patients attending adult CF clinics, despite hospital segregation of colonised from non-colonised patients, has led to increased awareness that social contact may be an important mode of acquisition.</p>
210	Financial considerations may have played as big a part as stupidity in explaining the military administration's failure to switch from smooth-bore to rifled muskets before the Crimean War.
211	In a study entitled Removing the Wind Brakes, FoE warn that a failure to differentiate between wind energy and nuclear power in the non-fossil fuel provisions of electricity privatization legislation is hampering the prospects for wind energy promoters.

212	The summit's failure <i>to address environmental issues</i> may however be mitigated by meeting of G7 environment ministers later this year.
213	Ecologists have been critical of the government's failure <i>to introduce planned legislation to make farmers seek approval from local authorities before grubbing out a hedge.</i>
214	In Smith's (Henry) Charity Trustees v AWADA Trading and Promotion Services Ltd (1983) 269 EG 729 the rent review clause prescribed an elaborate procedure of notices and counterpoints. At each stage the clause set out the consequence of failure <i>to serve the requisite notice or counternotice.</i>
215	In the county court there is no positive obligation to disclose expert reports but the right to adduce expert evidence is lost unless disclosure is made within 10 weeks. Failure <i>to disclose</i> means that the leave of the court or agreement of the other parties must be obtained before expert evidence can be adduced.
216	It is difficult, in any case, to sustain the conclusion that a hypothec has been created because inherent in this is the idea that the debtor owns the goods and the creditor enjoys real rights. As such, this would therefore suggest a predisposition of some of the Scottish judiciary towards the possession vout titre continental concept and the logical concomitant here is the failure <i>to give effect to ss17-19 of the 1979 Act.</i>
217	She lifted the bottle and glasses and slammed them at him. 'Now get out and leave me to get ready in peace.' Without a word he left her and it was his failure <i>to make a suitable response</i> that really got to her.
218	Ardiles, eager to bounce back after losing the Newcastle job to Kevin Keegan, declared an immediate interest in the Hawthorns' vacancy before the dust had settled on Bobby Gould's departure. Gould was sacked after a stormy 14 months following Albion's failure <i>to at least make the Third Division promotion play-offs.</i>