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German abstract prepositional phrases

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German abstract prepositional phrases

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Abstract

Complex prepositions in German may originate in constructions which are formed by productive rules of syntax. Many such prepositions are based on deverbal nouns, from which they initially inherit their syntactic properties. At the point of their genesis, prepositional phrases based on such abstract nouns are in a paraphrase relationship to subordinate clauses. In the German system, this is the locus of the correspondence between the adposition and the verb. Those syntactic properties of the construction which are shared with subordinate clauses are, however, limited to the initial phase of its formation. The analysis shows how they get lost in the lexicalization process which leads to a complex preposition.

1. Introduction

1.1. Deverbal adpositions

The adposition has an essential commonality with the verb: both can function as a **relator** which establishes a relation between two items in their context.¹ More specifically, both govern a complement which they relate to something else — the dependency controller of the adposition and the subject of the verb, respectively. Given a saturated main predication and an additional entity (generally represented by an NP) and the task of relating the entity to the predication, then one may either

¹ See Lehmann & Stolz 1992 and the literature cited there for the conception of grammatical relationality assumed here.

introduce another verb or an adposition to serve as a link. Many languages create new adpositions by grammaticalization of verbs in constructions such as E1.²

E1. a. Kuv txiv tsis nyob hauv tsev
 HMONG I male not [be.in inside house]
 <My father is not at home.’

b. Maivmim npaj ib roog qav nyob hauv tsev.
 Maimee prepare one table food [in inside house]
 <Maimee is preparing a meal in the house.’

In E1.b, the task is to connect the inside of the house with the main predication of the meal preparation. It is solved by starting a secondary predication on the basis of the verb *nyob* ‘be in’, whose full verb use may be seen in E1.a. The technique is known as **verb serialization**. The verb of the secondary predication is subsequently grammaticalized to a **coverb**, i.e. a word in between a verb and an adposition, and finally to an adposition. More examples of coverbs may be seen in E2 and E3.

E2. Dá íkwâ émì sìbé únàm!
 EFIK [take knife this] cut meat
 <Cut the meat with this knife!’

E3. Nám útóm émì nô mì!
 EFIK do work this [give me]
 <Do this work for me!’

Grammaticalization of a verb to an adposition involves a change in the syntactic relation of the secondary predication to the main predication. It starts out as juxtaposition, as in E1, and develops into dependency, in particular, into modification. I.e., the emergent adpositional phrase ends up as a modifier of the main verb phrase.

German just as any other language has verbs which provide the kinds of concepts which lend themselves to the function of relator between a main predication and an additional entity. However, German does not have verb serialization. The

² Cf. Lehmann 1995, ch. 3.4.1.7 for the examples and discussion of verb serialization.

grammaticalization channel illustrated by E1 – E3 is therefore not available. One way of subordinating a secondary predication to a main predication is, of course, by forming a complex sentence with a finite subordinate clause. We will come back to this in §1.2. However, there is no grammaticalization channel for this construction, and no German preposition may be formed on the basis of a finite verb, subordinate or otherwise.

T1. *Some deverbal German adpositions*

form	meaning
im Anschluß an in adjunction to	after
im Hinblick auf in perspective on	with regard to
in Rücksicht auf in consideration on	with regard to
mit Bezug auf with reference on	with regard to
im Laufe in course	during
infolge in:consequence	in consequence of
mithilfe with:help	by means of
ungeachtet un:considered	notwithstanding
abgesehen von neglected from	apart from
ausgenommen exempted	except
entsprechend corresponding	corresponding

Another possibility is to form a non-finite construction and to make it somehow depend on the main predication. There are in fact numerous **complex adpositions** — prepositions in the majority — based on one or another non-finite or nominal verb form. T1 contains a relevant sample, with the literal meaning of the components being indicated in an interlinear gloss.

The first seven of these are based on **verbal nouns**, the last four on **participles**. The combinatory potential of these two derivation types differs in two essential respects. First, a participle as such is already a modifier, so that it can insofar directly serve as an adposition, while a noun is not a modifier and therefore first has to be converted into one before it can serve as an adposition. As a consequence, those complex

prepositions which are based on verbal nouns get introduced by a simple preposition — *in* and *mit* in the examples of T1 — which converts the NP into a prepositional phrase and thus into a modifier. The simple preposition is needed

only for its structural function. Its meaning plays a subordinate role. We will study the latter in more detail in §3.

The second relevant difference between a verbal noun and a participle is that the latter may continue to govern its objects in the way of a finite verb, while a verbal noun loses this capacity, so that nominal dependents have to be added in the form of genitive or prepositional attributes. Therefore, at least some of the deparicipial adpositions govern verbal cases such as the dative and the accusative, while the denominal adpositions govern either the genitive or a particular preposition which is considered part of the complex preposition — *an* and *auf* in the examples of T1.

1.2. Abstract prepositional phrases

In the present study, we will concentrate on a subdomain of this area, namely on those complex adpositions which are based on verbal nouns.³ In German, all of these are prepositions. In the genesis of such prepositions, the following stages will be distinguished:

An **abstract prepositional phrase** is a prepositional phrase whose complement NP is headed by an abstract noun — generally an action noun. In E4, this noun is *Lösung*.

E4. nach Lösung des Problems durch die Wissenschaftler
'after solution of the problem by the scientists'

A **prepositional locution** is a conventional combination of a simple preposition with a governed noun (in the present context, always an abstract noun) in which syntagmatic and paradigmatic variation is reduced.⁴ In the examples, these combinations will be indicated by boldface. The collocation *in Ermangelung* 'in want (of)' in E5 is a typical example.

E5. **in Ermangelung** eines Schraubenziehers
'for want of a screw-driver'

³ Cf. Kortmann 1992, Kortmann & König 1992 for adpositions derived from participles.

⁴ The (mainly Germanist) literature on this subject, in which several of the analytic criteria used below have been introduced, is mentioned in Lehmann & Stolz 1992.

A **complex preposition** is a preposition which is morphologically or even syntactically complex. Examples are in T1.

The three notions are not at the same syntactic level, since an abstract prepositional phrase is a prepositional phrase, while a prepositional locution and a complex preposition — if they are syntagms at all — are prepositions.

It should be clear that not all prepositional locutions or complex prepositions are based on abstract nouns. There are examples such as *auf der Basis* 'on the basis (of)', *im Vorfeld* lit. 'in the fore-field', i.e. 'before', *von seiten* 'on the part (of)' and numerous others whose nominal base is not deverbal and not even semantically abstract. The present study limits itself to such prepositional locutions which stem from abstract prepositional phrases as defined above. The purpose of this concentration is to bring out the parallelism between adpositions and verbs even in German and to relate this to the function of prepositional phrases as secondary predications.

With regard to the three notions defined above, the analysis will focus on prepositional locutions, as these provide the intermediate stage — the missing link, as it were — between the abstract prepositional phrase and the complex preposition. Towards the end of the discussion, we will come to the reduction of a verbal noun to a preposition. However, before we arrive there, we start at the opposite pole of this scale of condensation, where an abstract prepositional phrase is related to a subordinate clause. As shown in S1, the abstract prepositional phrase E4 as a whole (S1.a) corresponds to an adverbial subordinate clause ($S_{adv} = S1.b$), its **(introductory) preposition** W corresponds to a subordinating conjunction. The preposition governs a regular abstract noun phrase (NP_{obl}), which corresponds to the finite clause (S_{fin}) itself. Its head noun X — the **abstract noun** — corresponds to the finite verb ($V_{fin,pass}$) of the clause. The abstract noun may govern a genitive attribute (Y) that corresponds to the grammatical subject of the finite clause. Specification of the logical subject of such an abstract nominal is optionally done in the form of an agent phrase (Z). Consequently, the finite paraphrase which most closely corresponds to this non-finite construction is a passive clause (S1.b). The latter, as usual, is transformationally related to an active version (c) which has the agent in subject position.

S1. *Paradigmatic relation between prepositional phrase and subordinate clause*

- a. [W_{Prep} [X_{Nabstr.obl} Y_{NP.gen} Z_{PrepP}]_{NP.obl}]_{PrepP}
 nach Lösung des Problems durch die Wissenschaftler
- b. [W_{Conj} [Y_{NP.nom} Z_{PrepP} X_{V.fin.pass}]_{S.fin}]_{S.adv}
 nachdem das Problem durch die Wissenschaftler gelöst ist
- c. [W_{Conj} [Z_{NP.nom} Y_{NP.acc} X_{V.fin.act}]_{S.fin}]_{S.adv}
 nachdem die Wissenschaftler das Problem gelöst haben

The analysis of such constructions poses at least the following questions:

- Which types of subordinate clause have such a prepositional phrase corresponding to them; i.e. what kinds of interpropositional relations do abstract prepositional phrases express?
- Which prepositions are used in abstract prepositional phrases, and what determines their choice?
- What are the conditions of choice among the alternate constructions S1.a and b?
- How does a complex preposition emerge from an abstract prepositional phrase?

In studying such questions, the *Mannheimer Korpus* has been used.⁵ This is chiefly a corpus of written language and consequently contains many examples of the construction which interests us here.

⁵ It is now publicly available on the Internet. Those examples whose source is indicated come from the *Mannheimer Korpus*; the others I have invented myself.

2. The abstract noun

The abstract nouns which occur in prepositional locutions are based exclusively on bivalent or multivalent verbs. From the formal point of view, their inventory comprises the following subtypes (see T3 for more examples):

- nouns regularly derived in *-ung*, such as *Aufbietung* 'musterling', *Einbeziehung* 'involvement, consideration';
- less regular nominalizations derived in *-e*, such as *Ausnahme* 'exception', or simply by stem conversion, such as *Verfolg* 'pursuit'.

Nouns of this morphological constitution are often polysemous between a reading as action noun and as **nomen patientis** (traditionally also called *nomen acti*). An action noun designates the situation itself, while a *nomen patientis* designates the undergoer of the situation. For fully regular abstract noun phrases, the distinction can be tested by putting them into a frame such as those shown in E6.

E6. a. Die Entdeckung Amerikas

'The discovery of America'

* __ war ein neuer Kontinent

'was a new continent'

* __ wurde zum Ziel zahlreicher Abenteurer

'became the goal of numerous adventurers'

__ dauerte drei Wochen

'took three weeks'

__ war das wichtigste Ereignis des Jahres 1492.

'was the most important event in 1492.'

b. Die Entdeckung des Columbus

'Columbus's discovery'

__ war ein neuer Kontinent

__ wurde zum Ziel zahlreicher Abenteurer

* __ dauerte drei Wochen

* __ war das wichtigste Ereignis des Jahres 1492.

Consider an abstract noun derived from a transitive verb such as *entdecken*

'discover'. It may be seen from E6 that if such a noun is combined with a genitive attribute representing its logical object (a), the construction can designate a situation and therefore be the subject of such predications as select a subject of this nature; while if the genitive attribute represents the logical subject (b), the construction does not designate a situation, but the logical object — and then the verbal noun becomes a *nomen patientis*.

In prepositional locutions, the nouns in question generally function as action noun and not as *nomen patientis*. This entails for transitive bases that their logical subject does not appear in the form of a genitive attribute. We will turn in §5 to the ways in which their logical subject may be represented. Here one exception to the generalization may be noted: The locution *nach Ausweis* 'according to (proof of)' is based on the verb *ausweisen* in the sense of 'prove'. A prepositional phrase of the structure *nach Ausweis von NP* is in a completely regular and synonymous transformational relationship with a finite subordinate clause of the structure *wie NP ausweist* 'as NP proves', as illustrated by E7.f.

- E7. in dieser Wahlperiode habe ich, **nach Ausweis** der Bibliographie ... einige Male zu dem Etat des Innern gesprochen (MK1/MHE, HEUSS, ERINNERUNGEN 1905-1933, page 346)
 'during that legislation period I spoke, according to the bibliography, several times on the budget of the Interior'
- E8. Doch größere sportliche Erfolge stellten sich erst nach 1934 ein, wie die Chronik des Vereins ausweist. (MMM/411, MM November 1994)
 'Greater sport successes, however, did not ensue until 1934, as the club's chronicle proves'

Nach Ausweis (von) is the only prepositional locution whose genitive complement is its logical subject. By what was said above on *nomina patientis*, this would mean that the locution *Ausweis (von X)* designates the object of the proof. This is actually the case, as *nach Ausweis von X* does mean 'according to what X proves'. By the same token, this is the only prepositional locution whose preposition is *nach*. The locution is, therefore, an exception in the set by several criteria.

3. The preposition

As for the prepositions used in abstract prepositional phrases, one finds, in principle, all the prepositions which can express interpositional relations. The use of some of them is entirely transparent.

T2. Prepositions expressing interpositional relations

relation	preposition	meaning	conjunction
temporal	<i>vor</i>	before	<i>bevor</i>
	<i>bei</i>	during	<i>während</i>
	<i>nach</i>	after	<i>nachdem</i>
conditional	<i>bei</i>	on	<i>wenn</i>
circumstantial	<i>in</i>	in	<i>indem</i>
	<i>unter</i>	with	<i>wobei</i>
modal	<i>durch</i>	by	<i>dadurch, daß</i>
	<i>mit</i>	with	<i>damit, daß</i>
	<i>ohne</i>	without	<i>ohne daß</i>

This is true, in particular, for the temporal prepositions in T2. Introductory preposition and abstract noun vary independently of each other, i.e. all prepositions and all nouns which make sense yield a grammatical construction. The transformational relationship of S1.a and b may be extended to all the temporal prepositions and conjunctions of T2, as illustrated in E9.

- E9. a. vor/bei/nach Lösung des Problems
'before/during/after solution of the problem'
- b. bevor/während/nachdem das Problem gelöst wird/ist
'before/while/after the problem is solved'

The interpositional senses of the non-temporal prepositions are less self-evident. However, although the meaning of such prepositions as *bei*, *in*, *unter* in abstract prepositional phrases is more elusive, even these may, in appropriate

contexts, form regular oppositions, as in E10.

- E10. a. **In** Beibehaltung einer alten Tradition überreichen wir die Promotionsurkunden am Heiligabend.
 ‘In retention of an old tradition we hand over the PhD diplomas on Christmas Eve.’
- b. **Unter** Beibehaltung aller Traditionen der Fakultät überreichte der Dekan am Heiligabend die Promotionsurkunden.
 ‘With retention of all traditions of the faculty, the dean handed the PhD diplomas over on Christmas Eve.’
- c. **Bei** Beibehaltung unserer Traditionen müßten wir die Promotionsurkunden am Heiligabend überreichen.
 ‘If we retained our traditions, we would have to hand PhD diplomas over on Christmas Eve.’

The series in E10 is meant to illustrate the meaning and paraphrase assignments made in T2 for *in*, *unter* and *bei*. The difference between these three prepositions in abstract contexts is the following: *Bei* (E10.c) differs from both *in* and *unter* by its conditional meaning. This is also seen in E11, E16, E24, E25. It is particularly clear in E24 because of the coordination with *im ... Falle* ‘in ... case’.

- E11. werden sie nämlich nicht rechtzeitig durch eine zweckmäßige Ernährung ausgemerzt, so kann es zu Spätschäden kommen, die auch **bei Aufbietung** aller ärztlicher Heilkunst bis an ein verfrühtes Lebensende mitgeschleppt werden. (H85/UA1, Abschriften zum Bereich Umwelt)
 ‘for if these are not eliminated in time by reasonable nutrition, the result may be delayed damages, which are dragged along up to a premature end of life even if all medical art is mustered.’

X unter Y presents Y as an additional circumstance of X. For instance in E10.b, the dean handed over the diplomas and **in addition** observed the traditions. Cf. E21 for a parallel example. *X in Y*, instead, stipulates coincidence of X and Y, i.e., Y is a predicate to X. For instance in E10.a, handing over the diplomas on Christmas Eve **is** a retention of an old tradition. E12 below is a parallel case. Since *in* in abstract prepositional phrases does no more than introduce a further predication, it is the least specific of those prepositions that introduce abstract prepositional

phrases. It is, in this respect, comparable to English *in* and French *en* as they introduce gerundials.

The prepositions *bei*, *in*, *unter* are particularly frequent in prepositional locutions. T3 contains a representative sample.

T3. *bei*, *unter* and *in* in prepositional locutions

form	meaning
<i>bei/unter Berücksichtigung</i>	if one considers/with consideration (of)
<i>bei/unter Einbeziehung</i>	if one considers/considering
<i>bei/unter Aufbietung</i>	if one musters/in mustering
<i>unter Zuhilfenahme</i>	by use/means (of)
<i>in Ansehung</i>	in regard
<i>in Anlehnung</i>	with reference
<i>in Beziehung</i>	with regard
<i>in Ermangelung</i>	lacking
<i>im Anschluß</i>	after
<i>im Verfolg</i>	during, in

As the examples are meant to show, with some abstract nouns there are partial contrasts among alternative introductory prepositions, while the collocations with others are fixed. In particular, either *in* or *unter* tends to get associated with a particular abstract noun, as in E12 – E13, while both may remain substitutable by *bei*.

E12. **In völliger Verkennung** der Tatsachen analysierte er Präpositionalsyntagmen als Nebensätze.

‘In complete lack of appreciation of the facts, he analyzed prepositional phrases as subordinate clauses.’

E13. **Unter Hintansetzung** eigener Interessen schrieb sie ihrem Freund die Dissertation.

‘Setting aside her own interests, she wrote the dissertation for her friend.’

In E12, the fixed assignment of the introductory preposition still makes sense, since analyzing prepositional phrases as subordinate clauses is a complete lack of appraisal of the facts. In E13, on the other hand, the appearance of *unter* instead of *in* is hardly interpretable. The last two locutions of T3 may already be regarded as complex prepositions, since here the introductory preposition is not even substitutable by *bei*.⁶ Note also that the abstract noun in these two cases is derived by one of the less regular nominalization processes.

4. The article

Insofar as abstract nouns are nouns, they can be provided with an article. We start the analysis again with regular abstract prepositional phrases.

E14. Vor (der/einer) Behandlung durch einen Facharzt ist die Zustimmung der Krankenkasse einzuholen.

'Before treatment by a specialist the consent of the health insurance is to be secured.'

In contexts such as E14, all of the logical possibilities — no article, definite article, indefinite article — are admissible. The sense differs as expected: With the definite article, there is a presupposition that a unique referent of the NP so determined exists in the universe of discourse. This version would be used if the abstract NP is anaphoric, but also if the idea of getting specialist treatment has merely been evoked in the prior context. With the indefinite article, there is a presupposition that no unique referent of the NP so determined exists in the universe of discourse. This version would be used if the idea of getting specialist treatment follows from nothing that has been said before and is just mentioned as a possibility. Without an article, neither of these meaning components is present, so that the sentence can be used in both kinds of context.

In prepositional locutions, however, no article is present. In some of the relevant examples, an article could be inserted.

⁶ The fact that *im Anschluß* figures both in T1 and in T3 is meant to highlight the conception that there is no clear-cut distinction between prepositional locutions and complex prepositions.

E15. Auch Haftprüfungen und Haftbeschwerden seien bislang **mit Ausnahme** eines einzigen Falles erfolglos geblieben ... (MMM/901, MM Januar 1989)
'Detention checks and detention complaints, too, had been without success, with the exception of a single case ...'

E16. daß man bei gutem Willen und **bei Berücksichtigung** der beiderseitigen Interessen positive Ergebnisse zum Nutzen der Entspannung und der Menschen erreichen kann. (BZK/D74, Neues Deutschland, 1974)
'that, with good will and if the interests of both sides are considered, positive results for the benefit of détente and of the people can be reached'

Thus, in E15 the definite article (*mit der Ausnahme*) would be possible, and the sentence would mean the same. Similarly, in E16 the indefinite article (*bei einer Berücksichtigung*) would be grammatical (if less idiomatic), and the sentence would mean the same.

However, in most of these collocations, no article can be used. This is true for *nach Ausweis* (E7), *bei Aufbietung* (E11), *unter Hintansetzung* (E13), *in Anlehnung an* (E20), *in Ansehung* (E22), *bei Berücksichtigung* (E25) and numerous others. As abstract prepositional phrases develop into prepositional locutions, lack of the article becomes the default case and substitutability of the articles gets restricted. The articleless version tends to be associated with either a definite or an indefinite reading; but this is conditioned by the context and insofar irrelevant.

5. The logical subject of the abstract noun

Nominalization means desententialization (cf. Lehmann 1988): the abstract noun loses grammatical properties of the underlying verb and gains nominal properties. This pertains, among other things, to its valency. As an abstract noun is a non-finite verb form, it takes no subject. Its **logical subject**, i.e. that dependent which corresponds to the subject of the underlying active verb, may undergo various fates.

We have seen in §2 that the logical subject of an abstract prepositional phrase based on a transitive verb does not appear in the form of a genitive attribute. If the construction is a regular nominalization, the logical subject can be specified by

means of an agent phrase, i.e. a prepositional phrase introduced by *durch* ‘by’, as in E4.

If the base verb of the abstract noun is intransitive, then its genitive attribute may be interpreted as its logical subject, as in E17.

E17. mit Zustimmung des Dekans
 ‘with the dean’s consent’

As usual in passive constructions (cf. S1.b), the agent phrase is optional. If it is omitted, the agent of the action designated by the abstract noun is construed with the help of world knowledge.

E18. a. Nach Lösung des Problems tranken die Wissenschaftler eine Runde
 Sekt.
 ‘After solving the problem, the scientists had a round of champaign.’
 b. Nach Lösung des Problems wuchsen die Mohrrüben meßbar schneller.
 ‘After solution of the problem, the carrots grew measurably faster.’

Thus, given appropriate contexts, in E18.a it is assumed that the scientists solved the problem, while in E18.b it is not assumed that the carrots solved the problem.

As the example shows, semantics overrides syntax in the interpretation of such constructions. It is true that the unexpressed logical subject is often construed with reference to a higher subject. That is, if the matrix clause of the abstract prepositional phrase is in active voice, then its subject is often the reference point for construing the logical subject of the embedded abstract noun. This is illustrated by the following series of examples.

E19. Er kündigte Gespräche mit allen im Abgeordnetenhaus vertretenen Parteien
mit Ausnahme der Republikaner an. (MMM/901, MM Januar 1989)
 ‘He announced talks with all parties represented in the parliament with the exception of the republicans.’

E20. Seit Anfang dieses Jahres im Amt, hat nun Baubürgermeister Lothar Quast **in Anlehnung an** die Vorstudien seines Amtsvorgängers Niels Gormsen die Pläne zur Baureife ausarbeiten lassen. (MMM/903, MM März 1989)
 ‘Being on office since the beginning of this year, construction mayor Lothar Quast has now had the plans elaborated to construction maturity, referring to pilot studies of his office predecessor Niels Gormsen.’

E21. verständlich und begrüßenswert sind daher die Bestrebungen in Osteuropa, mit westlicher Hilfe und **unter Aufbietung** aller Kräfte den Anschluß an den europäischen Binnenmarkt zu finden. (WKB/BT1, Bundestagsprotokolle (1. Hj. 1989), page 13349)
 ‘therefore endeavours in Eastern Europe to find connection with the European internal market with western help and by mustering all their forces are understandable and welcome’

In E19, the person announcing the talks is identical with the person exempting the republicans. In E20, it is the mayor who had the plans developed and who referred to certain pilot studies. In E21, the abstract prepositional phrase is embedded in an infinitive construction. The blocked subject of the infinitive — which itself is identical with the logical subject of the efforts controlling the infinitive construction — is identical with whoever musters all his forces.

Again, in passive matrix clauses, the logical subject is the default reference point for the logical subject of the abstract noun in the prepositional phrase, as in E22, where the philosophers are the subject both of the claim and of the perspective taken.

E22. diese Wirksamkeit des höchsten Wesens ist von verschiedenen Philosophen **in Ansehung** aller Handlungen des Gemüthes behauptet worden (meg/GAL, Marx-Engels-Gesamtausgabe, IV. Abt., Bd. 1, Exzerpte und Notizen bis 1842, page 225)
 ‘this efficiency of the highest being has been claimed by various philosophers with regard to all actions of mind’

However, while these may be noteworthy statistical tendencies, counterexamples in the corpus are not hard to find.

- E23. Die jährlichen Steigerungsraten lägen **mit Ausnahme** des Jahres 1983 über den Einkommensverbesserungen im öffentlichen Dienst. (MMM/901, MM Januar 1989)
 ‘Yearly increase rates are, with the exception of the year 1983, above the income enhancements in public service.’
- E24. im günstigsten Fall und **bei Aufbietung** aller Mittel könnten derartige Reihenuntersuchungen die weltweite Ausbreitung von Aids nur kurzfristig verzögern. (H87/JM5, Mannheimer Morgen (1987, Medizin)
 ‘in the best of cases and if all resources were mustered, series examinations of this kind would be able to retard worldwide expansion of aids only for a short term’
- E25. der Verbrauch der privaten Haushalte lag im ersten Quartal **bei Berücksichtigung** der Preisentwicklung um 4,5 v.H. über dem Vorjahreswert ... (H88/BM7, Mannheimer Morgen (1988, Wirtschaft))
 ‘if price development is taken into consideration, then consumption in private households in the first quarter of the year was 4.5% above last year’s value’

In E23, it is the speaker, not the increase rates, who is making the exception. In E24, no referent mentioned in the context, including in particular the matrix subject, can be the logical subject of the abstract noun. Similarly in E25, it is impossible to identify the logical subject of the abstract noun.

While regular nominalizations at least allow the specification of the logical subject by means of an agent phrase, most of the articleless prepositional locutions, including all of T3, never take a prepositional agent phrase. Thus, there are no such things as an *Ausnahme durch den Sprecher* ‘exception made by the speaker’ etc. Neither do they take a genitivus subjectivus, with the exception of *nach Ausweis*, which was analyzed in §2. If most of these constructions do not even admit of the specification of a logical subject, then it should not be surprising that there is no regular way of construing one if it is not specified.

The upshot of this discussion is that there are no general rules for the construal of the referent of an unexpressed logical subject of the abstract noun. In most of the

examples, the referent simply does not matter. From this it follows that abstract prepositional phrases are not comparable with converb constructions or systems of switch-reference (see Haiman 1983 on the latter). Non-finite constructions such as the conjunct participle and the *ablativus absolutus* in Latin are sometimes sensitive to subject control in the sense that one construction is chosen if a matrix NP controls the embedded (absent) subject while the other construction has its own subject. In abstract prepositional phrases, instead, the emphasis is more on the relation between the matrix predication and the *e x p r e s s e d* complement of the abstract noun.

6. Lexicalization of prepositional locutions

In conclusion of this analysis of prepositional locutions, we have seen that a subordinate clause may be reduced to an abstract prepositional phrase whose construction and interpretation obeys general rules of syntax and semantics. However, in constructions such as E22, several reductions and fixations have taken place: The preposition cannot be replaced, no article can be inserted, no adjective attribute to the abstract noun (as, e.g., in E12) is possible, and the construal of the logical subject of the abstract noun is superfluous. To this extent, such a construction is exempt from the rules of syntax. A sequence such as *in Ansehung* has acquired phrasal ("phraseological") status. It is for this reason that the type has been called prepositional locution. This is the incipient phase of the lexicalization of the construction.

A prepositional locution will be preferred over a finite subordinate clause whenever specification of the aspects mentioned is irrelevant. The secondary predication then has a semantically subordinate status with regard to the main predication. This means that it does not designate another situation on a par with the one designated by the main clause, but only a further component of the main situation. The abstract noun is then only needed for its semantic potential as a relator between its complement and the main predication.

7. Complex prepositions

An abstract noun governed by a preposition can again govern an abstract noun, as in E25 and E26.

E26. Herr Behnsch interpelliert abermals **in Beziehung auf** Unterstützung der Auswanderung durch die Regierung. (mew/WAD, Marx-Engels-Werke, Bd. 5, März - November 1848, page 219)

‘Mr. Behnsch interpels once more concerning support of emigration by government’

If such constructions are taken to be syntactically regular, then both *in* and *auf* in E26 are simple prepositions governing a complex NP. As a matter of fact, however, the two similar-looking sequences of preposition plus abstract noun have a different structure. While there is an NP constituent boundary in the second sequence, as indicated in both S2.a and b, *in Beziehung auf* as a whole is substitutable by a preposition such as *wegen* ‘on behalf of’ or *bezüglich* ‘with regard to’. This, however, presupposes a reanalysis of the construction, since if it is syntactically regular, then *in Beziehung auf* is not a constituent, as shown in S2.a, while its substitution by one word presupposes precisely this (b).

S2. *Reanalysis of a complex preposition*

- a. [in [Beziehung [auf [Unterstützung der Auswanderung ...]_{NP}]_{PrepP}]_{NP}]_{PrepP}
 b. [in Beziehung auf]_{Prep} [Unterstützung der Auswanderung ...]_{NP}]_{PrepP}

As is apparent from the labelled bracketing, the reanalysis produces a simpler syntactic structure, since we end up with one prepositional phrase and one noun phrase less. On the other hand, the reanalysis creates a morphologically complex preposition *in Beziehung auf*, which gets lexicalized definitively. This implies enrichment of the lexical inventory and, in the case at hand, of the prepositions in particular.

The more the embedded predication gets desententialized, the less important becomes the identification of its logical subject. We saw in §5 that it is not at all

at stake with locutions such as *im Anschluß*. Once the stage of the complex preposition is reached, there is no longer any logical subject.

The most frequent elementary preposition that introduces complex prepositions is *in* (cf. T1). It is also found in prepositions such as *im Zuge*, *im Wege*, *infolge*, some of which do not even involve an abstract noun. Thus *in* turns out to function as the case marker used for an adverbial whose relation to the matrix is not specified, like the locative in other languages. *In* enjoys preference as the introductory preposition of complex prepositions because it is only needed for its structural potential of converting the abstract NP into a modifier (cf. §3). The nature of the relation is, instead, coded by the erstwhile abstract noun, now a complex preposition.

The abstract nouns regularly derived in *-ung* figure prominently at the start of our scale, where abstract prepositional phrases bear a regular transformational relationship to finite subordinate clauses. At the end of the scale, inside complex prepositions, less regular derivations or even mere stem conversion are preferred. The varying status of word-formation processes between syntax and the lexicon is, thus, also reflected in their differential role in the formation of complex prepositions.

Abstract prepositional phrases are the closest German counterpart to the coverbs, converbs and switch-reference constructions of other languages. Since German has nothing of that kind, clumsy detours are necessary if the semantic potential of verbs is to be exploited for a relator: the verb has to be nominalized and then to be equipped with a governing preposition that provides the connection to the main predication. Consequently, abstract prepositional phrases are typical of the written language, and stylists are less than enthusiastic about them.

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