Kathrin Steyer
Preposition-noun combinations of TIME in German

A pattern-based approach to minimal phraseological units

Abstract: This paper deals with a specific type of lexeme, namely binary preposition-noun combinations containing temporal references like *am Ende* [at (the) end] or *für Sekunden* [for seconds].[1] The main characteristic of these combinations is the recurrent internal zero gap. Despite the fact that the omission of the determiner can often be explained by grammatical rules, the zero gaps indicate a higher degree of lexicalization. Therefore, we interpret these expressions as minimal phraseological units with holistic meanings and functions. The corpus-driven exploration of typical context patterns (e.g. using collocation profiles and the *lexpan* slot filler analysis) shows that a) even such minimal expressions are based on semi-abstract schemes and b) temporal expressions can also fulfill modal or discursive functions, usually with fuzzy borders and overlapping structures. In the case of modalization or pragmatization one can regard such PNs as distinct lexicon entries.[2]

Keywords: preposition-noun combinations, temporal phraseological units, German phraseological patterns.

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1 This paper is a slightly revised and abridged English version of my German publication "*Für Jahre vom Tisch sein*. Temporale Präposition-Nomen-Verbindungen zwischen Zeitreferenz und modal-diskursivem Gebrauch" (Steyer 2019). Special thanks to Annelen Brunner and Marcas Mac Coinnigh for reading this manuscript and for giving valuable advice concerning the correctness and comprehensibility of this English version.

2 English translations are marked by square brackets; meanings by single quotes, and patterns by angle brackets. For the English translation and equivalents (marked by ee), we used – among others – the *Oxford Idioms Dictionary* (OID 2006) and the English web corpus *enTenTen15* in *Sketch Engine* (over 13 billion tokens, November 2019) (see *SkE*).

Kathrin Steyer, Leibniz-Institut für Deutsche Sprache, Mannheim, steyer@ids-mannheim.de

1 Object of study

1.1 PNs as autonomous lexical units

Binary preposition-noun combinations (PNs) are understudied in phraseology and lexicography, particularly with regard to their status as minimal holistic units, as lexemes.

PNs were and are discussed primarily from the grammatical point of view as a subtype of prepositional phrases. German grammar traditionally focused on the regularities of the omission of a determiner in front of the noun, the so called 'zero article' (Helbig and Buscha 2013). As central criteria for the omission of determiners, the plural use of a noun (*nach Jahren* [after years]) or its uncountable status (*mit Genugtuung* [with satisfaction]) were defined. Besides general grammar books, Kiss' study (2011) is one of the few scholarly papers on German PNs. Kiss examined the circumstances in which it may be possible to have combinations containing a preposition plus countable noun.[3]

Our focus here is not on the preposition as a part of speech. We are interested in mechanisms of lexicalizing PNs, in the holistic quality of PNs that makes them phrasemes or multi-word expressions. The question of the lexicalization of word groups, the question of how they turn into more or less holistic units, has been a crucial question of phraseology from its inception (Burger et al. 2007). In light of new theories of fixedness and entrenchment this question is more relevant than ever, even for such minimal units as PNs.

With regard to PNs, it may be asked: under which circumstances does a PN become an autonomous semantic unit with a holistic quality? Which components are mandatory for the status as a multi-word expression? The following two fictional examples illustrate the main criteria:

(1) *unter Aufsicht* [under supervision]
     *Die Kinder sind oft auf dem Spielplatz, aber immer **unter Aufsicht**.*
     [The children are often at the playground but always **under supervision**.]

(2) *unter Leitung* [under guidance]
     *Ein Ausschuss **unter Leitung** <u>des Präsidenten</u> prüft den Plan.*
     [A committee **under guidance** <u>of the president</u> examines the plan.]

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3 Kiss et al. (2016) also published a comprehensive handbook of meanings of German prepositions.

The PN in (1) has an autonomous status as an adverb with the meaning 'beaufsichtigt' [supervised]. The PN in (2) is a non-autonomous component **unter Leitung* [*under guidance] because of its mandatory NP (<u>*des Präsidenten*</u>) [under guidance of the president]. Other excluding criteria are cases in which PNs are parts of:

– a VP, e.g. *um Hilfe bitten*
   [to ask for help]
   (**um Hilfe* [*for help])
– a LP (see 1.2), e.g. <*um* N {*Hilfe/Geld/Erlaubnis*} *bitten*>
   [to ask for N{help/money/permission}]
   (**um* N [*for N])[4]
– a copular phrase *am Ende sein*
   [to be at (the) end]
   (**am Ende* [*at (the) end])
– more complex unit *von Tag zu Tag*
   [from day to day]
   (**von Tag *zu Tag* [*from day *to day])

Autonomous PNs can be used as simple adverbials in addition to binary word classes like binary adverbs or discourse markers, e.g.

(3) temporal
   an Weihnachten   [at Christmas]
   auf Dauer   [ee: for good]
   nach Jahren   [after years]

(4) local
   vor Ort   [ee: on site]
   an Bord   [on board]
   ab Mannheim   [from Mannheim]

(5) modal
   durch Zufall   [ee: by chance]
   mit Genugtuung   [with satisfaction]
   nach Belieben   [at will]

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4 The lexical unit *bitten um* belongs to the significant group of German phrasal verbs that feature noun combinations. These are explicitly excluded from our investigation.

Such PNs are – as evidenced by their high frequency – important building blocks of language use with a wide range of ambiguity and pragmatic value. Therefore, these entities often become obstacles in the effective use of a foreign language.

1.2 PNs as core of lexical patterns (LP)

Based on corpus exploration and particularly on the slot filler analysis of patterns it became clear that binary PNs – despite their high degree of lexicalization – are almost always subject to complex processes of internal or external extensions. These extensions do not arise by chance, but from recurrent use of many speakers in different communicative situations. As internal and external extensional lexical patterns they are also entrenched in the mental lexicon.

We define LPs as conventionalised, partially filled lexical schemes that are frozen by recurrent use. Recurrence is defined as the repeated appearance of similar linguistic structures in comparable contexts (Steyer 2013, 2015, 2020) (cf. "geprägte komplexe Ausdrucksmuster" by Feilke 1996: 187). Slots can be filled with specific lexical items. Such fillers have similar semantic and/or pragmatic characteristics, but do not necessarily belong to the same morpho-syntactic category. Sometimes they only have functional characteristics in common, which cannot be captured by a traditional ontology. In any case LPs are characterised by a holistic meaning and/or function on different levels of abstraction. Speakers are able to recall those schemes as lexicon entries and fill the gaps in a specific communicative situation in a functionally adequate way.[5]

It is obvious that there are strong cross-connections to Construction Grammar. Our pattern concept focuses much more on structures and interrelations of lexical items and seeks to contribute to a usage-based theory of lexis. This approach arose from the tradition of phraseology as a genuine discipline of lexicology. This does not mean that we deny the validity of syntactic analysis. Naturally, our explorations are based on syntactic structures. But the dominance of the syntactic view can induce us to overlook the complexity of lexical phenomena. Probably this is a heuristic problem of analysis: One cannot observe all phenomena with the same intensity but some of them must by necessity fade into the background (e.g. syntactical phenomena) for a much clearer observation of others (lexical structures and networks).

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[5] Some examples of pattern theories are Renouf and Sinclair (1991); Hunston and Francis (2000); Biber (2009) and Hanks (2013).

The central criterion 'autonomy' can also be related to semi-abstract lexical patterns where lexical components are mandatory for the holistic meaning, as in the case of the semi-abstract lexical pattern *<in* ADJ *Zeit>* [in ADJ time]. In German, one cannot reduce this scheme to the lexical core *in Zeit without loss of the autonomous status. It requires adjective fillers like *absehbarer*; *kurzer*; *nächster* [foreseeable; short; next] for the pattern meaning 'forthcoming'. In contrast to this, the extensions of the pattern *<am* ADJ {*anderen/unteren*} *Ende* DET N_LOCAL{*Gebäudes/Skala/Dorfstraße*}> [at the ADJ {other/lower} end of DET N_LOCAL {building/scale/village street}] are optional for the core meaning ('place, where something stops'). This distinction between mandatory lexical components and optional extensions is a central idea in the concept of 'Lexical Patterns' that we have explored in recent years.

In chapters 3 and 4 we use the example of temporal PNs to illustrate their dual status as autonomous entities as well as components of other lexical units and patterns. Temporal PNs are especially interesting because of the transition zones between specific time references and subjective perception of duration, often including connotative values.

2 Empirical data

This case study was performed within the project *Preposition-Noun Combinations in Context* (see *PREPCON*) that was carried out within our long-term project *Usuelle Wortverbindungen* (see UWV) at the Leibniz Institute for the German Language in Mannheim (IDS). The empirical basis of *PREPCON* is an exhaustive collection of German PNs and their usage patterns compiled by the UWV group. This inventory contains the following components:

– list of 80 German prepositions and their noun slots in immediate post-position in the tagged corpora of *DeReKo* (regarding *DeReKo* see footnote 9): all in all, nearly 80,000 PN combinations
– tables of all noun fillers ranked by frequencies plus KWICs
– documentation of KWIC lines, collocation profiles and filler tables of PNs

Based on these data we selected candidates for further linguistic studies and lexicographic representation: autonomous PNs in general and temporal PNs in particular (see 3.).

The underlying methodology (Steyer 2013, 2020) can be understood as a qualitative-quantitative corpus-driven approach that is strongly focused on the word form surfaces. For this, two corpus analyzing systems are used: the

DeReKo analysis tool *COSMAS II* (see CII) and the Concordance Tool in *Sketch Engine* (see *SkE*), more specifically the collocation analysis of the IDS (see Belica 1995) and in *Sketch Engine*. The IDS collocation analysis can be used to detect significant word pairs and multi-word expressions as well as recurrent syntagmatic context patterns. This method enables us to identify typical aspects of meaning and usage – the extension of the principle of contextualism to multi-word units. An important tool for the slot filler analysis is the *Lexical Pattern Analyzer* (see *lexpan*) that we have developed in the UWV research group. In our *PREPCON* project it was used for German, Slovakian and Spanish.[6]

Central results of our corpus-driven studies are presented on the platform *PREPCON^online*. The central idea is that authentic language mass data can be used not only as a basis for empirical analyses but also as a form of lexicographic information itself. *PREPCON^online* has three different forms of data representation: PNs explorative; PNs temporal; PNs contrastive (trilingual). The explorative module is online since 2017. It consists of a fully automated database of 80,000 German PN combinations (autonomous and as part of other constructions).[7] One cannot only build up collections of local, temporal or modal PNs of German but also study the richness of the incredible number of idiomatic PNs. The trilingual module can be regarded as a pilot study for contrasting PN usage and lexical patterns in different languages based on our corpus-driven approach. The entries contain narrative descriptions, corpus citations, grouped snippets of collocation profiles (according the respective aspects of use) and slot filler tables with visualizations of convergences and divergences in meaning, pragmatics and lexical variance. The temporal module (also available online) is a semi-automatic database containing about 1,000 PNs that have to fulfill the two main criteria we discuss in the next chapters: status as autonomous lexical units and referring to TIME.

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6 For this trilingual part of *PREPCON* we cooperated with Spanish colleagues (head of this group: Carmen Mellado Blanco, University of Santiago de Compostela) and Slovakian colleagues (head of this group: Peter Ďurčo; University of Ss. Cyril and Methodius Trnava).

7 This database was implemented by Annelen Brunner.

3 Temporal PNs

3.1 Introduction

The following note at the door of the IDS student assistant room is a good example of our object of study:

(6) *Beim Verlassen des Zimmers **am Ende des Tages** bitte daran denken, alle drei Heizkörper auszudrehen. Sonst können wir die Erde auch direkt in die Tonne kloppen.*
[When leaving the room **at the end of the day**, remember to turn off all three radiators! Otherwise, we can throw our earth directly into the garbage bin.]

The phraseme in *die Tonne kloppen* is a slang expression for 'have become useless' or 'to ruin' or 'to destroy'. Our focus lies on the multi-word expression *am Ende des Tages* [at (the) end of the day] that refers to TIME in the aforementioned note, that is, 'when the working day is over'. The temporal meaning still dominates in German in contrast to the English equivalent *at the end of the day*, meaning 'finally' or 'eventually'. The following is a typical example of English usage:

(7) *At the end of the day we all know that people use their phones in many different ways these days.*
(enTenTen15, 2480594)

However, this discourse marker function has also been present in German since the late 1990s as the IDS *Dictionary of Neologisms*[8] notes. There is a widespread assumption that the multi-word unit *am Ende des Tages* is a loan translation from English, but this is not necessarily true. This syntagma existed in German for centuries as a realization of a temporal pattern: <*am Ende* DET $N_{TEMPORAL}$ {*Tages/Jahres/Saison*}> [at (the) end of $N_{TEMPORAL}$ {day/year/season}]. Of course,

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8 The *Dictionary of Neologisms* is a component of *OWID* (see *OWID*), the corpus-based Online Lexical Information System for German, located at the IDS. Other dictionaries are, for example, the dictionary *elexiko* that describes the current use of words, and the proverb dictionary that is compiled by our UWV group.

one cannot deny the influence of the English language on its growing use as a discourse marker, as evidenced by the German web corpus *deTenTen13*.

In the following discussion, we are interested in the lexical core *am Ende* [at (the) end; ee: eventually; finally], which has its own holistic meanings and functions. Therefore, one can attribute the status as a minimal phraseological unit to the PN *am Ende* as well, a multi-word expression within a multi-word expression, if you will. The article *am* is a merged form of the preposition *an* and the definite article (German dative) *dem*. Recent corpus-based studies, e.g. the contrastive exploration of Augustin (2018), show that such merged forms in German like *am* or *im* have to be interpreted as separate prepositions.

The multi-word expressions *am Ende* und *am Ende des Tages* share a "double life" as both temporal expressions and discourse markers – with subtle differences (*am Ende des Tages* preferably temporal; *am Ende* preferably discourse marker):[9]

(8) Temporal adverbial: 'closing point' (When?)
   a. *Sechs Kinder erhalten* **am Ende des Tages** *das bronzene Abzeichen, sieben das silberne. Vier Jungs bekommen Gold.*
      [Six children receive the bronze medal **at the end of the day**, seven the silver. Four boys get the golden one.]
      (DeReKo: Rhein-Zeitung, 30.08.2005)
   b. Leider haben wir unsere Möglichkeiten am Anfang und **am Ende** nicht genutzt. Diese Niederlage wäre nicht nötig gewesen.
      [Unfortunately, we did not use our advantages at the beginning and **at (the) end**. This defeat would not have been necessary.]
      (DeReKo: Niederösterreichische Nachrichten, 06.10.2009, p. 80)

(9) Discourse marker: 'eventually'; 'finally'; 'after all'
   a. *„Moderne Brillen und Helme behindern nicht in der Bewegungsfreiheit, und* **am Ende des Tages** *zählt nur die Sicherheit auf der Piste", sagt Franz Saurer, Ex-Skirennläufer, Wintersport-Experte.*
      ["Modern glasses and helmets don't obstruct the freedom of movement and **at the end of the day** only safety on the ski slope is important", says Franz Saurer, ex-ski-racer and winter sports expert.]

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9 The German examples are taken from the "W Archive" (about 11 billion word forms, November 2019), the largest subarchive of the *German Reference Corpus* (*DeReKo*) at the IDS (Leibniz-Institut für Deutsche Sprache 2019). The quantitative results are checked again using the German Web corpus in *Sketch Engine* (over 16 billion word forms, November 2019) (*deTenTen13*).

(DeReKo: Niederösterreichische Nachrichten, 07.12.2010)

b. *Ob Nacktscanner nun moralisch sauber sind oder nicht, sei dahingestellt.* **Am Ende** *entscheidet eben doch das Geld.*
[Whether the body scanner (lit.: naked scanner) are morally clean or not is left undecided. **At (the) end**, money decides (talks) after all.]
(DeReKo: Mannheimer Morgen, 12.03.2010, p. 2)

Furthermore, the unit *am Ende* is the core element of constructions or so-called multi-word patterns as a special type of lexical patterns. The combination *am Ende* is – among others – the core of the following LPs:

(10) <*am Ende* DET N$_{\text{CALENDRICAL-METRIC}}$>
N={*Tages*/*Jahres*/Saison}
[N=day/year/season]

(11) <*am Ende* DET N$_{\text{EVENT\_PROCESS}}$>
N={*Veranstaltung*/*Konzerts*/*Krieges*}
[N=event/concert/war]

(12) <*am* ADJ *Ende* DET N$_{\text{LOCAL}}$>
ADJ={*anderen*/*unteren*}
[ADJ=other/lower]
N={*Gebäudes*/*Skala*/*Dorfstraße*}
[N=building/scale/village street]

The filler *Tages* in (10) has a special status insofar as it can also be a component of a phraseological unit, as previously demonstrated. All other nominal fillers like *year* or *concert* solely indicate references to TIME or – in case of *building* or *village street* – SPACE. Finally, *am Ende* is also a part of several idioms:

(13) **am Ende** *der Fahnenstange* (*sein*)
[at (the) end of the flagpole]
'at the end of all possible options'

(14) *Licht* **am Ende** *des Tunnels*
[the light at (the) end of the tunnel]
'signs of improvement in a bad or difficult situation that has already gone on for a long time'

(15) ***am Ende*** *mit seinem Latein sein*
      [to be at (the) end with one's Latin]
      'to be at a loss/at end'

Examples (10)–(15) are used as separate patterns and idioms with different meanings. Nevertheless, they are connected by the node *am Ende* referring to TIME and SPACE. For instance, the idioms in (13) *am Ende der Fahnenstange* (*sein*) and in (15) *am Ende mit seinem Latein* (*sein*) have comparable pragmatic characteristics: both express emphatically that something cannot go on in the same way and therefore has to be immediately finished (temporal). An English equivalent is *the end of the road*/*line* ('the point where sb./sth. cannot continue'; OID: 106). The idioms *am Ende der Fahnenstange* in (13) and *Licht am Ende des Tunnels* in (14) share a common characteristic as to local aspects despite their contrary connotations: You look up and see the end point of the flagpole to which the flag can be physically raised (see 13). You can see the brightness at the end of the tunnel after a long drive at a great distance (see 14). There also exists an interrelation with the pattern <*am Ende* DET N> [at (the) end of DET N]: temporal and local.

In the cooperation *PREPCON* project, we investigated such lexical networks, overlapping concepts and fuzzy borders evoked by PNs – from a mono- as well as contrastive perspective.[10]

3.2 The underlying concept of time words

In the second edition of *Einführung in die Zeitlinguistik* [Introduction to time linguistics][11] (2007) Vater refers – among many others – to William E. Bull, a well-known hispanist and former professor at the University of California in Los Angeles, who died in 1972. Bull combined mathematics and physics with linguistics. Regarding "what time is" Bull writes:

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10 See the following selected central project publications: Steyer (ed.) (2018); Steyer (2018); Tabačeková (2019); Ďurčo and Tabačeková (eds.) (2019). With regard to PNs from a contrastive point of view see also Mellado Blanco and Steyer (2018); Ďurčo (2018); Hein et al. (2018); with regard to the didactic value for teaching and learning German as a foreign language see Iglesias Iglesias (2019).
11 We cannot go into the large number of publications on TIME in language. For German see the overview in Rothstein (2017); see also Comrie (1976).

> For the physicist time is the fourth dimension, an objective entity characterized and defined by three attributes: (1) linearity, (2) durational infiniteness, and (3) the capability of being divided into an infinite number of segments having an infinite variety of magnitudes. In less scientific but equally practical terms, time is what is measured by clocks, the phases of the moon, the revolutions of the earth upon its axis, and, on the verbal level, by minutes, hours, days, years, etc. In terms of human emotions and subjective perception, time is what passes as we grow older and what seems to go nowhere while we wait impatiently at a traffic light. Time is what we live in and by, what you are using up in reading this page, what is long if your head is under water and what is short toward the end of a summer's vacation.
>
> <div align="right">Bull (1971: 4)</div>

His distinction between public and personal time is perfectly applicable to our exploration of temporal PNs: TIME can be interpreted by the observation of the metric periodicity of natural phenomena ('public time') and a personal or subjective estimate of duration ('personal time').[12]

Examples of public-time words of duration are:
– morning (the interval between dawn and high sun (noon))
– afternoon (the interval between high sun and sunset)
– night (the interval between sunset and sunrise)
– day (the interval between sunrise and sunset)
– month (the interval between two new moons)
– year (the interval between two passages of the sun through the same equinox) (Bull 1971: 6)

Other examples are *week*, *decade*, *minute* or *hour*. Bull describes personal-time words as follows:

> Personal-time words exhibit three functions. They may be used simply as imprecise substitutes for public-time words (It'll be done in a moment, in a while, and so on). They may perform the same function as well as connoting a personal judgement about the length of time involved (The Republicans were out of office for ages). Lastly, they may express only a personal judgement about the passage of objective time (That week was no longer than a moment).
>
> <div align="right">Bull (1971: 6)</div>

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12 Vater (2007) refers to a comparable distinction between 'dates' und 'pseudodates' by Rescher and Urquhart (1971). As for the concept of metric units of TIME, Fillmore (2002) defines three types: a. 'Measurerpent [sic!] (measurement) units' like *millennium*; *year*; *month*; *day*; *hour* or minute; b. 'calendar units' like *December* or *Sunday*; c. 'calendar subunits' like *weekend*, *Halloween*; *summer or night* (34–36).

Our selection of temporal PNs is based exactly on this concept. The main criterion was the temporal meaning of the noun, and not – as in grammar – the possible temporal function of the preposition. We asked: a) To what extent is the temporal meaning incorporated in the noun? and b) Does the PN as a whole express a time concept despite the noun not being temporal?

As to a) we categorize temporal nouns/nominalizations and the respective PNs in four basic groups:

1. (chrono-)metric and calendrical nouns (times of the day, days of the week, months, bank holidays)
    PNs: *gegen Abend*; *bis Montag*; *an Weihnachten* [towards evening; until Monday; at Christmas]
2. nouns that refer to natural phenomena restricted by *time*
    PNs: *bei Sonnenaufgang*; *bis Sonnenuntergang*; *bei Ebbe* [on sunrise; until sunset; at low tide][13]
3. nouns that refer to BEGINNING – DURATION – ENDING etc.
    PNs: *am Anfang*; *ohne Unterlass*; *seit Kurzem* [at (the) beginning; without cease; since lately]
4. nouns that have a metric component but also express a subjective perception of time
    PNs: *über Nacht*; *seit Generationen*; *in Sekundenbruchteilen* [over night; for generations; in a split second]

The PNs of the first and second group can be regarded as public-time, the PNs of the third group as private-time expressions. The fourth group is especially interesting because they can also be subject to a semantic and pragmatic change from a specific reference to a time interval to an adverbial (sometimes modal) use: *Über Nacht* [over night] does not only mean an interval from evening to morning but also 'suddenly'. *Seit Generationen* [since generations] does not only mean an interval over several generations but also 'very long'; 'traditionally'; 'resistant'. *In Sekundenbruchteilen* [in a split second] does not only mean a very short part of a second but also 'immediately'; 'without hesitating'; 'extremely fast').

An example for holistic time PNs without temporal nouns in b) is the PN *auf Knopfdruck* [on pushing/at the push of the button]. The noun *Knopfdruck* is not

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13 *Sunset* (*at sunset*) refers to an everyday concrete event that always happens at a specific time and can be regarded as a temporal noun as well as *ebb* (*at ebb*), whereas *sunshine* cannot be interpreted as temporal. *Sunshine* (*by sunshine*) is a weather phenomenon not fixed at a specific time of the day.

a temporal lexeme but a noun–noun compound (*Knopf – Druck* [button – pressure]) that means 'physically pressing a button'.

(16) *Der Arbeitsplatz des Fahrers erinnert mit seinen zahlreichen Bedienelementen an ein Flugzeugcockpit. Um alle Hebel, Knöpfe und Tasten zielsicher bedienen zu können, bedarf es einer ausgiebigen Unterweisung. Wichtigste Neuerung: Der Motor wird **durch Knopfdruck** – unter dem unbeweglichen Zündschlüssel – gestartet und wieder abgestellt.*
[The driver's workplace reminds of an airplane cockpit with its numerous controls. In order to be able to operate all levers, buttons and keys in a precise manner, extensive instruction is required. The most important innovation: the engine is started and switched off again **at the push of a button** – under the immovable ignition key.]
(DeReKo: Nordkurier, 08.10.2005)

In combination with the preposition *auf* [on] a temporal meaning is realized in almost 50% of all uses ('immediately'; figurative partial meanings are also 'on demand', 'by request') – often embedded in comparative or negative structures:

(17) *Eikmanns Rat: „Man darf von Weihnachten nicht zu viel erwarten!" Sonst werde allzu leicht aus jeder Mücke ein Elefant. Von heute auf morgen auf Harmonie umzuschalten, den Alltagsfrust <u>wie</u> **auf Knopfdruck** einfach ausblenden – das sei nahezu unmöglich: „Fest steht: Weihnachten macht nicht automatisch besinnlich!"*
[Eikmann's advice: "Don't expect too much from Christmas!" Otherwise, every mosquito easily becomes an elephant. Switching from one day to the next to harmony, simply hiding everyday frustration <u>like</u> **at the push of a button** – that is almost impossible: "One thing is certain: Christmas does not automatically make you contemplative!"]
(DeReKo: Hamburger Morgenpost, 24.12.2005, S. 2-3)

Example (17) illustrates additional pragmatic effects in the corresponding contexts, a characteristic that can be observed for almost all temporal-modal PNs. Speakers very often use them to position themselves and to express their own attitudes towards what has been said, in our example for a rejection.

Hereinafter, we discuss the semantic and pragmatic aspects of temporal PNs using the example of the minimal temporal pattern <*für* N_{KALENDARISCH_METRISCH}> [*for* N_{CALENDRICAL_METRIC}].[14]

4 A case study

4.1 The pattern <*für* N_{KALENDARISCH_METRISCH}>

The pattern <*für* N_{KALENDARISCH_METRISCH}> [*for* N_{CALENDRICAL_METRIC}] seems to be unspectacular at first glance because of the explicit metric noun fillers:

(18) *für Sekunden*   [for seconds]
      für Minuten   [for minutes]
      für Stunden   [for hours]
      für Tage   [for days]
      für Wochen   [for weeks]
      für Monate   [for months]
      für Jahre   [for years]
      für Jahrhunderte   [for centuries]
      für Jahrtausende   [for millennia]

The pattern meaning can be paraphrased as follows: 'Something takes a specific time interval. This interval is defined by nature and/or calendrical systems.' Despite this common semantic core, the collocation profiles of the PNs differ significantly.

The PN *für Sekunden* [for seconds] typically correlates with verbs that express the sudden onset or minimal duration of situations such as *aufblitzen*; *stillstehen*; *einnicken*; *abgelenkt sein*; *sprachlos sein*; *Totenstille herrschen*; *den Atem anhalten* [to flash; to stand still; to doze off; to be distracted; to be speechless; there was dead silence; to hold one's breath]. Typical contexts are sudden dangerous situations such as falling asleep at the wheel or emotional reactions such as complete silence in response to unexpected events. Basically, no durative meaning is realized here, but circumstances at a certain point in time are referenced. Many co-occurrences in the context of this PN are idiomatic or met-

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14 With regard to temporal PNs see also Holzinger and Mellado Blanco (2019); Mansilla (2019).

aphorical and indicate a modal adverbial use with a sense of emotion or emphasis.

The PN *für Minuten* [for minutes] expresses an – albeit very short – time period, a brief interruption:

(19) *Status-Quo-Gitarrist Rick Parfitt kann nach einem Herzinfarkt nicht mit auf die Abschiedstournee der britischen Kult-Band. Der 67-Jährige sei bei seinem Kollaps im Juni in der Türkei* **für Minuten** „*praktisch tot*" *gewesen und falle mindestens bis Jahresende aus, teilte der Band-Manager Simon Porter mit.*
[Status quo guitarist Rick Parfitt is unable to join the British cult band's farewell tour after a heart attack. The 67-year-old was "practically dead" **for minutes** when he collapsed in Turkey in June and will be absent at least until the end of the year, said band manager Simon Porter.]
(DeReKo: Rhein-Zeitung, 16.09.2016, p. 28)

In most cases, *Minuten* [minutes] cannot be replaced by *Sekunden* [seconds]. The game was interrupted for minutes (*The game was interrupted for seconds). But also, the usage of *für Minuten* is characterized by the expression of subjective time or emotionality.

The PN *für Stunden* [for hours] primarily focuses on the perceived duration of concrete, mostly negative events or situations such as traffic jams or disruptions by construction sites. Typical collocation partners are *gesperrt; lahmgelegt; unterbrochen; stillstehen; von der Außenwelt abgeschnitten* [blocked; incapacitated; interrupted; to stand still; to be cut off from the outside world].

The PN *für Tage* [for days] has a wide and relatively heterogeneous spectrum of contexts, many comparable to those of the PN *für Stunden* [for hours], whereby the actual passing of several days is usually described. Trends towards a modal use can be found in this PN especially in recurrent lexical extensions such as *für Tage und Monate* [for days and months]; *für Tage oder gar Wochen* [for days or even weeks]. These syntagma emphasize the unexpectedly long duration.

The PNs *für Wochen* [for weeks] and *für Monate* [for months] have a comparable range of usage scenarios with the focus on a specific time duration with a foreseeable end. In addition, the PNs are very often used to refer to situations in which someone has been removed from everyday life for a long time, with serious consequences: *ans Krankenbett gefesselt sein; außer Gefecht gesetzt; ausfallen; von der Bildfläche verschwinden; von der Familie getrennt warden* [to be tied to the sick bed; incapacitated; to fail; to disappear from the scene; to be separated from the family]. One explanation could be that only certain condi-

tions (not all) seem to be worth explicit commentary, e.g. if they involve an unexpected extended period of time. If someone was in bed for several days because of a bout of flu (and not weeks or even months), this would not stimulate speakers to choose such a complicated construction like *für* N_{KALENDAR-ISCH_METRISCH} *ans Krankenbett gefesselt sein*. One would simply say that someone was in bed with the flu for three days.

For the PN *für Jahre* [for years] one can expect a reference to the interval of a finite number of years. Interestingly, the concrete time reference fades in most of the *Jahre*-realizations. Typically, this PN correlates with lexemes and syntagmas that belong to the semantic field 'in custody': *ins Gefängnis müssen*; *hinter Gitter bringen*; *inhaftiert werden* [to have to go to prison; to put behind bars; to be imprisoned]. Even if the duration is limited (at some point the detention ends and someone is released), there is still an assessment (something is perceived as particularly long). Furthermore, one can identify many idioms in the collocation profile of *für Jahre* [for years] like *vom Tisch sein*; *aufs Eis gelegt*; *in die Schublade verbannt* [to be off the table; to put on ice; banished to/put back in the drawer; ee: *put on a back burner*; *kicked into the long grass*], expressing that an initially relevant matter is no longer being dealt with or pursued, and often combined with criticism.

The PNs *für Jahrzehnte*; *für Jahrhunderte* und *für Jahrtausende* [for decades; for centuries; for millennia] relate to circumstances with long-term consequences. The PN *für Jahrzehnte* [for decades] is used for issues and their consequences that last for a long time but with an end, e.g. *hinter Gitter bringen*; *verschwinden*; *in Vergessenheit geraten*; *zementieren* [to put behind bars; to disappear; to be forgotten; to cement]. *Für Jahrhunderte* und *für Jahrtausende* [for centuries and for millennia] express a far-reaching, actually unforeseeable end, both retrospectively and prospectively: *unter einer Ascheschicht begraben*; *unbewohnbar*; *unter osmanischer Herrschaft*; *Atommüll sicher lagern*; *unbewohnbar werden*; *verseucht sein* [buried under a layer of ash; uninhabitable; under Ottoman rule; to store nuclear waste safely; to become uninhabitable; to be contaminated].

In summary, it can be stated that in this pattern the focus on a concrete interval or duration (of primarily everyday events) is typically given in the middle of the metric range: *Tage*; *Wochen*; *Monate* [days; weeks; months], while minimal units (this applies especially to *seconds*) tend to express the immediate point in time when something happened suddenly or unexpectedly. The observation that the PN *für Sekunden* [for seconds] exhibits a preference for correlation with idiomatic expressions can be explained by the metaphorical and pragmatic potential of idioms. Speakers make use of this potential to emphasise

the surprising occurrence vividly. Idiomaticity comes into play again in the case of those PNs that deal with longer periods (*für Jahre*; *Jahrhunderte*; *Jahrtausende* [years; centuries; millennia]). Here, the concrete reference to TIME is secondary to the subjective evaluation, that something felt very long, and its consequences become the central communicative task. In particular, the PN *für Jahre* is almost always used as a modal adverb comparable with the English PN *for ages*.

The assumption that there is always a scale from time reference towards a subjective perceived duration can be confirmed from a reciprocal perspective: it is revealing that the prepositions for all of the listed (chrono-)metric nouns have very different frequencies and degrees of typicality.

While the prepositions *für* [for] and *nach* [after] occur for all nouns that we have looked at above, the preposition *binnen* [within] is only relevant for the smaller time intervals. With the nouns *Jahre* [years] and *Jahrzehnte* [decades] this preposition occurs in an exceptionally low percentage. The combinations *binnen Jahrhunderte* and *binnen Jahrtausende* [within centuries and within millenia]. can be completely neglected due to the minimal frequency in the four DeReKo W-archives.

The genuine temporal prepositions *seit* [since] and *vor* [before, ee: ago] have not been used in case of *Sekunden* (**seit Sekunden*; **vor Sekunden* [*since seconds; *before seconds, ee: *seconds ago]) in our corpus: The preposition *seit* [since] appears for *Minuten* (*seit Minuten*) [since minutes] for the first time, the preposition *vor* [before ee: ago] first for *Stunden* (*vor Stunden*) [before hours ee: hours ago; *before seconds/minutes, ee: *seconds/minutes ago]. The question to what extent these restrictions are set up in the grammar of the respective preposition and/or if they are generated through processes of usage to express perceived time cannot be examined in more detail here, and must be reserved for future studies.

4.2 Extension Patterns

As already mentioned in the first section PNs are strongly lexicalized on the one hand, but one can also observe recurrent extensions (internal and external) on the other. In the case of temporal PNs, internal extensions move the purely temporal meaning to the fore but almost always connected with a more or less pragmatic potential (see also Iglesias Iglesias and Alonso Santos 2019).

For instance, the internal gap X in *<für* X *Sekunden>* [for X seconds][15] is not filled in nearly 20% of occurrences (ranked first regarding the filler frequencies in the X slot). This substantiates the status of *für Sekunden* as a lexeme. At the same time, one can also find a diverse number of fillers with different characteristics. The second group of frequent fillers *<für* {*ein paar/einige/wenige/*...} *Sekunden>* [for {a few/several/some...} seconds] is located in a transition zone: they both refer to the specific point in time when something unexpected happens, as well as to a specific, very short period of time. The third group are numerical fillers such as *<für* {*zwei/zehn/*...} *Sekunden>* [for {two/ten/...} seconds] that express a duration but with vagueness and tendencies towards modal use with the meaning 'extremely short':

(20) *Die Oper ist das Schwierigste,* **für** <u>zehn</u> **Sekunden** *Musik brauchst Du einen ganzen Tag.*
[Opera is the most difficult, you need a whole day **for** <u>ten</u> **seconds** of music.]
(DeReKo: Süddeutsche Zeitung, 13.12.2012, p. 14)
Ein Sprinter hat aber sicher einen größeren Trainingsumfang **für** <u>zehn</u> **Sekunden** *Wettkampf.*
[A sprinter certainly has a larger training scope **for** <u>ten</u> **seconds** of competition.]
(DeReKo: Die Rheinpfalz, 14.04.2016)

In contrast to the PN *für Sekunden* [for seconds] and its dominant zero gap, the internal slots for *<für* X {*Minuten/Stunden/Tage/Wochen/Monate/Jahre*}> {for X minutes/hours/days/weeks/months/years} are primarily filled by adjectives specifying the time reference in greater detail. These X fillers mainly express concrete periods as numerals and cardinal numbers or with adjectives such as *kommenden* or *nächsten* [following or next] in combination with further extensions *<für die nächsten zwei Monate/drei Jahre>* [*for orther next two months/three years*].

At the other end of the scale, in the case of the nouns *centuries* and *millennia*, the internal gap is again not filled in a high percentage of cases (centuries: almost 40%, millennia: almost 50%). This observation corresponds with the assumption we mentioned in the previous section that concrete time references are first and foremost located in the middle of the metric range whereas the modal-connotative use is predominantly at its ends.

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15 Our slot filler analysis was based on a slot of one to four gaps.

Other filler groups constitute new, idiomatic meanings. So, the PN *für Stunden* [for hours] is expanded by adjectives like *gemütliche*; *unterhaltsame*; *schöne*; *besinnliche*; *gesellige*; ... [cozy; entertaining; beautiful; contemplative; sociable; ...]. Here, the autonomous status has changed, the fixed unit is not the PN *für Stunden* [for hours] but the collocation pattern <ADJ *Stunden*> [ADJ hours], which is determined by one of the meanings of the German word *Stunde* [*hours*]: 'nice experience; event for a certain period of time' (ee: quality time). The preposition *für* [for] is used differently syntactically, mostly as a component of an NP (nominalization), e.g. <u>Danke *für*</u> *die unterhaltsamen Stunden* [<u>Thanks for</u> the entertaining hours]. This is also applicable for the internal fillers of <*für* X Tage> [for X days] in which the preposition only indicates the syntactic embedding but no longer has a semantic connection with the time nouns: e.g. (*für*) *die <u>heißen Tage/kalten Tage</u>* [(for) <u>the hot days/cold days</u>] ('summer or winter time'); (*für*) *die <u>drei tollen Tage</u>* [(for) <u>the three crazy days</u>] ('Fastnacht; Carnival'); (*für*) *die <u>schönsten Wochen des Jahres</u>* [(for) <u>the best weeks of the year</u>] ('vacation; holidays'). Only the frequent realization <*für den Rest* DET *Tage*> [for the rest of DET days] ('for the rest of somebody's life') can be regarded as a real internal extension pattern of binary PN *für Tage* [for days]. In all other cases, the autonomous status is no longer given at the PN level.

These few selected examples show that internal extensions have different functions: specifying meanings and domains of the binary core, disambiguating meanings and pragmatically adding nuances as well as constituting new meanings whereby the autonomous PN status is almost always getting lost.

In the external cotext of temporal PNs, we could also observe recurrent context partners and patterns, such as

– Negations like <u>*nicht für Jahre*</u> ... *so weitermachen*; *einsperren*; *schließen* [<u>not</u> keep doing in this manner; <u>not</u> lock up; <u>not</u> close ... for years]
– adverbs/adverb phrases like *manchmal nur/höchstens für Sekunden* [sometimes only/at most for seconds]
– functional chunks (<u>*und das*</u> *für Jahre* [<u>and that</u> for years])

(21) „*Ansonsten landen Sie mal in einem psychiatrischen Krankenhaus – <u>und das für Jahre</u>*", *sagte er.* „*Ändern Sie Ihr Leben.*"
      ["Otherwise, you end up in a psychiatric hospital – <u>and that</u> **for years**", he said. "Change your life."]
      (DeReKo: Nordkurier, 23.10.2010)

- idiomatic expressions (see the context partners in the examples *für Sekunden* [for seconds] and *für Jahre* [for years] in 4.1.)
- communication verbs in a broad sense, e.g. *ankündigen*; *sagen*; *warnen*; *ausführen* [to announce; to say; to warn; to point out] (e.g. *schon vor Jahren gewarnt*) [already warned years ago] with a high pragmatic potential.

The central function is to self-position a speaker to express his view on a specific current situation, often as a reaction to questions, or as a criticism of other speakers. Temporal meaning stays in the background; more implicit, but always resonating.

5 Summary

Using a type of minimal phraseological unit, namely preposition-noun pairs, we showed that lexical units (mono-lexemes and multi-word expressions) as well as lexical patterns are entrenched and interconnected in many ways – and on different levels of abstraction. If one explores language use inductively based on mass data it becomes obvious that no item is a unique entity with clear-cut forms and meanings, even strongly fixed expressions like idioms. We illustrated the autonomous status of PNs for a deeper understanding of their use as complex lexicalized entities. The connected aspects of fuzzy borders and overlapping phenomena can be demonstrated particularly well by the case of temporal PNs. Based on Bull's distinction between public and private time we showed that not only private-time expressions like *am Ende* [at (the) end] are expressions of subjective time, but also public-time expressions that seem to be metric at first glance like *für Sekunden* [for seconds] or *für Jahre* [for years]. The reference to specific points in time also fades in the background. Instead, these units tend to have a modal adverbial use with a scale of connotative meanings. All units are highly restricted by the contexts in which they are embedded. The relevance of pragmatic indicators in the cotext of temporal PNs becomes clear if one contrasts temporal PNs with local PNs. For local PNs we could not find such recurrent patterns to a comparable extent. A hypothesis is that speakers have a much more specific need to evaluate a perceived time than a perceived space. One reason could be that TIME is less comprehensible than SPACE. TIME is a central concept in our Kulturkreis, Western culture. This perhaps leads to the situation in which speakers often feel compelled to evaluate the duration of processes. Something is perceived as too long or too short, too soon or too late, expected or unexpected, adequate or inadequate regarding time processes etc.

Finally, the results of our investigation open new perspectives on pattern-based lexicon theories and on Construction Grammar. The discussed usage-based restrictions of binary temporal PNs again provide strong support for a network perspective[16]. The dynamic interplay between foreground and background seems to be the central principle. Sometimes frozen lexical fragments are in the foreground and become the reference point for recurrent usage. Sometimes syntactical structures are primarily activated and filled by several lexical elements. These processes can also be changed in the self-same communicative act. All exist at once but depending on communicative needs specific aspects are much more visible and discernable than others.

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16 We have been able to demonstrate these mechanisms by using very different snippets of language: lexical fields and pattern networks of idioms, of body part expressions, of the keyword GRUND [reason], of proverbs and quotations.

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