## *Merci-Jens* and *Lösch-Leyen* The Semantics of Personal Name Compounds in German

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## **1** Introduction

This paper examines German determinative compounds with a personal name as their second component and is based on 532 different word types in context from the microblogging platform Twitter. Consider the examples below.

1. Impfstoff-Bestellung: "Der Verdacht, dass Deutschland ein Unternehmen bevorzugt haben könnte" Die Daten hierfür sind leider schon wieder von **Berater-Ursula**'s Handy gelöscht worden<sup>1</sup>.

Vaccine ordering: There is a suspicion that Germany might have preferred one company" Unfortunately, this information has already been deleted from **Advisor-Ursula**'s cell phone.

2. Können wir den **Laber-Lindner** nicht einfach mal nicht einladen? Den will doch keiner mehr hören<sup>2</sup>.

Could we just not invite **Babble-Lindner**? No one wants to hear him anymore.

Head constituents in all compounds refer to individuals (by first name *Ursula* in (1), by family name *Lindner* in (2). All compounds are proper names. The compound modifiers contribute some important properties of the name bearer or of events in which the name bearer is involved. Note that modifiers maybelong to different syntactic categories: *Berater* (1) is a noun, *laber*(n) (2) is a verb. As we will see below, the syntactic category of the first constituent does not affect the analysis.

In contrast to compounds with a proper name in a first position (cf. Koptjevskaja-Tamm 2009, Alexiadou2020), compounds headed by personal names (henceforth: PN-compounds) have received very little attention in the literature. This is, in part, due to their alleged marginality. For instance, compounds of this type in German account for only 0.2 % of the data in Ortner et al. 1991. Similarly, Kürschner (2020) finds only 0.9 % of proper name compounds among nicknames. According to Wildgen (1981), the meanings of PN-compounds are mainly characterised by their high degree of context-dependency (e.g. *Krisen-Strauß*). Furthermore, their interpretation is supported by other linguistic means from the context which also denote the name bearer.

In the present paper we will provide systematic analysis of the meanings of 532 different PNcompounds in context that were extracted from the microblogging platform Twitter. Contrary to what has been proposed by Wildgen (1981) and Kürschner (2020), we will argue that PNcompounding is not as marginal as is often assumed. Not only is the process very productive in naturalistic usage data representing informal language use (like social media data). Also the claim that their meanings are context-dependent and, hence, unpredictable should be relativized. Using a frame-semantic approach, we will show that meanings can be generalized according to different types of both extra-linguistic and semantic knowledge, which determine the meaning relations between the proper name and the common noun. Such relations are predictable. Decoding the meaning of an PN-compound thus involves accessing semantic frame (often an event frame), on the basis of contextual and encyclopedic knowledge about the name bearer, and determining the

<sup>&</sup>lt;sup>1</sup> https://twitter.com/Gerd581/status/1353140494801514503?s=20

<sup>&</sup>lt;sup>2</sup> https://twitter.com/joergbartz/status/1350720500515942401?s=20

relationship between the constituents on the basis of the semantic frame structure (slot filling). We argue that both steps are not substantially different from determinative compounds headed by common nouns. What sets the latter apart from PN-compounds, however, is twothings: One is that, unlike general semantic frames, the slot-filling operation with a name leads to an interpretation of the frame mostly in terms of a specific event. Another is that aspects of this specific event then become available for the interpretation of the pragmatic function of the compound as a nickname.

# 2 Methods and data

532 PN-compound types with the names of politicians as head were extracted from the microblogging platform Twitter and annotated for their semantic properties. Table 1 provides an overview of the data.

word class of the modifier	percentage	example	gloss
common noun	83.8 %	Geldkoffer-Schäuble	'money case Schäuble'
proper name	7.6 %	Schweden-Greta	'Sweden Greta'
verb	4.5 %	Laber-Lindner	'babble Lindner'
adjective	4.1 %	Dummgabriel	'stupid Gabriel'

Table 1: PN-compound types

Annotation concerned (a) relevant semantic frames and their slots, and (b) the pragmatic function of the compounds in context.

### **3** Frames for PN-compounds

In order to identify the extra-linguistic patterns, we analysed different types of knowledge evoked by the proper name head of the compound within the theoretical framework of frame-based word-formation theory (cf. Löbner 2013; Kotowski et al. 2021; cf. Olsen 2019: 117ff. for an overview of psycholinguistic approaches in which extra-linguistic knowledge plays an important role in compound meaning construction, cf. esp. Benczes 2006). We argue that proper name components of compounds evoke different types of knowledge about name bearers. These are encyclopedic and discursive knowledge, e.g. about the individual's history or their actions, and cotext based knowledge. These then serve as anchors for the activation of the relevant semantic frame (cf. Bonami et al. 2021 for a similar, scenario-based proposal). PN compounds are thus similar to what Löbner (2013) terms 'frame compounds'. The parallel nature of our PN compounds and Löbner's frame compounds, however, provides a challenge to Löbner's idea that this type of meaning construction is restricted to compoundsheaded by words denoting artifacts and to relations linking such artifacts to their affordances.

In the first step, we paraphrased each attestation considering the linguistic, cotextual, and contextual aspects as well as encyclopedic knowledge about the name bearer on the basis of the context in which the compound occurs. Based on the paraphrase, we annotated the frame and its frame elements according to the classification in German FrameNet<sup>3</sup>. The analysis of our 532 PN compounds yields eight frames (cf. Table 2).

frame	example	gloss	percentage
ACTIVITY	Kopftuch-Claudia	'headscarf Claudia'	26.9 %
MENTAL_PROPERTY	Dummlindner	'stupid Lindner'	25.7 %

<sup>&</sup>lt;sup>3</sup> https://gsw.phil.hhu.de/framenet/

ENFORCING	Dosen-Jürgen	'tin Jürgen'	13.4 %
SERVING_IN_CAPACITY	Finanzscholz	'finance Scholz'	9.9 %
PEOPLE_BY_ORIGIN	Bayern-Toni	'Bavaria Toni'	9.1 %
PREDICAMENT	Berater-Ursula	'advisor Ursula'	9.1%
EXPRESSING_PUBLICLY	Eiskugel-Jürgen	'scoop Jürgen'	5.2 %
MEDICAL_CONDITIONS	Ischias-Schulz	'sciatica Schulz'	0.7 %

Table 2: Distribution of frames in the corpus

Let us illustrate how we identified frames, using Villen-Spahn as an example. The name component Spahn evokes knowledge about the German Minister of Health Jens Spahn (e.g. appearance, function, origin, actions, events in which he was involved, statements, political decisions). In the attestation Villen- Spahn, the lexeme Villen is one frame element of the frame BUY, which becomes accessible through knowledge about a discursive event (Spahn has bought an expensive villa in Berlin). This discursive knowledge is central for the interpretation of the compound, as Spahn has bought a villa and not as Spahn lives in a villa or Spahn has sold his villa. Therefore, we annotated the attestation with the frame COMMERCE BUY from FrameNet. The frame BUY comprises two frame elements GOODS and BUYER, which are then filled by the components of the compound, Spahn and Villen. The example shows that knowledge about a specific discursive event is crucial in identifying the frame. In a second step, we grouped similar frames (e.g. COMMERCE BUY, COLLABORATION, BORROWING) to a more general frame PREDICAMENT, in order to find patterns of semantic relations on a more abstract level. The frame PREDICAMENT contains knowledge about the name bearer's involvement in big political affairs, which turns out to be relevant for 9.1% of our compounds. Another interesting example is the frame EXPRESSING PUBLICLY, in which the modifier is part of a statement made by the name bearer. *Eiskugelin Eiskugel-Jürgen*, for example, is a part of the statement of the green politician Jürgen Trittin, in which he compared the future cost of renewable energy to the price of a 'scoop of ice cream' (Eiskugel).

#### 4 Pragmatic function: nicknames

The frame analysis does not account for the pragmatic function of PN-compounds. We find that they are mostly evaluative (cf. Štekauer 2015, Barbaresi & Dressler 2020), referring to and evaluating, for example, events that have damaged their reputation (*Berater-Ursula*), that have functioned as an emblem of their stance on a political question (*Kopftuch-Claudia*), or that have characterised their political actions (*Dummlindner*). Unlike nicknames, PN-compounds are not a permanent part of the personal name since they are created in order to fulfill certain communicative functions in a text, which is often a negative evaluation, but can also be mocking and exaggeration (cf. *Dumm-dumm-Katha*).

#### 5 Summary and conclusion

Summarizing, PN compounds function as proper names. As the analysis of the twitter data shows, theirformation is based on several extra-linguistic, but predictable knowledge-based patterns which provide access to relevant semantic frames. The fact that they formally correspond to determinative compounds while still having the referential properties of names makes the link between their formal characteristics and their semantic interpretation a highly interesting object of study. The paper has shown that the study of PN compounds in informal language usage may shed new light on the role of discourse-based knowledge in the generation of compound meaning.

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