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In this paper, we will be concerned with the form and interpretation of German Non-Inflectional Constructions (= NICs), which are widely used in web-based communication like chat or (informal) email, as well as in comics. Following Teuber (1998) and Schlobinski (2001), we will argue that NICs do not build upon an impoverished grammatical competence, but in fact exhibit intriguing formal and functional characteristics worthy of linguistic scrutiny.

Simple examples are given in (1) and (2); (3) provides attested NICs in a more elaborate context. English does not have corresponding forms containing modification and arguments, so any close idiomatic translation would suggest unintended similarities with full-fledged constructions. Therefore, we give only word-for-word glosses for NICs; for the sake of transparency, we use the gloss stem for verbal stems lacking inflectional morphology. Contextualized examples are amended by full translations in order to assure readability.¹

(1) •grins•
smile.stem

(2) •dich in den Arm nehm•
you.acc in the arm take.stem

(3) a. Synchro-Frank: Lichtausknips ...... •Klick• [...] Gute Nacht. [...] light.off.turn.stem ...... click.stem Good night

¹ (3) is taken from http://www.busfreunde.de/read.php?1,293725, date: 12/29/2009. Authentic NICs are usually marked by surrounding "*...*". Since "*" conventionally mark ungrammatical examples in linguistic texts, we will use • instead for highlighting NICs. This means that we slightly adapt authentic examples in order to avoid confusion. (3) shows that complex NICs are sometimes written in one word. We will adopt this for the rating study; but otherwise we will not consider orthography in any detail (see Schlobinski 2001 and footnote 7 for remarks on the orthographical realization of NICs).
b. PxCbulli: Wie? So früh schon? Nee, ein paar Stündchen

What? That early already? Come on, some hours

müssen noch! • lichtwiederanknips •

must still! light.again.on.turn.stem

Hast Du was Wichtiges vor heute Nacht so um 4, oder

Have you something important on tonight around 4, or

warum steigst Du schon so früh aus? Gruß, Henrik

why get you already so early off? Regards, Henrik

c. sMurF: • birne rausdreh •

light.bulb out.take.stem

so nu ist wieder dunkel und ich kann in ruhe abdösen hier:zzz

Well, now is again dark and I can in peace snooze here:zzz

‘Synchro-Frank: (NIC: light.off.turn.stem), (NIC: click.stem). Good night

PxCbulli: What? That early already? Come on, some hours still have to be! (NIC: light.again.on.turn.stem). Do you have something important on tonight around 4 or why do you get off that early? Regards, Henrik

sMurF: (NIC: light bulb out.take.stem) Now it is dark again and I can snooze unhindered.’

All three examples suggest that NICs are characterized by specific formal traits: they seem to possibly include VP-internal structure with the V-head in final position, but there are neither obvious inflectional morphemes nor overt subjects. The elaborate example in (3) is suggestive of the particular function of NICs: the first user Synchro-Frank turns the lights off, expressed by the formally prototypical NIC • lichtausknips • (‘light.off.turn.stem’), intending to close the discussion in the newsgroup for this day. Pragmatically, it does not make sense to assert that the user is turning lights off in “real life”, for instance at his own home. His lights at home are irrelevant for the virtual lights in the newsgroup.2 In a creative way, this performance can be responded to by turning the light on again and, finally, by taking the light bulb out in the virtual reality of the newsgroup, cf. the contributions by the users PxCbulli and sMurF. Crucially, turning off the light, turning it on and taking out the light bulb can be performed by uttering it using a NIC. We will

2 Of course, the speaker could also utter Ich mach jetzt das Licht aus (‘I turn off the light now’)—referring to the real lights at his home—and thereby convey that he is about to quit and go to bed. However, this message is only indirectly deduced from an assertion; other than in the example above, no lights are turned off by the utterance. We come back to this major point in Section 4.
argue that such performative force is characteristic for the function of NICs in general.

The paper is structured as follows: after giving an overview of the previous work on NICs in Section 2, we will show in Section 3 that NICs are robust constructions which have the following formal properties: they are syntactically independent and consist of verb stems potentially projecting internal structure; but they lack any inflectional morphology and overt subjects and are deficient in terms of functional structure. These assumptions will be supported by the results of a study on grammaticality judgements of NICs and by corpus data. In Section 4, we will show that NICs display typical properties of separate performatives according to criteria as discussed e.g. in Potts 2005, 2007c and Portner 2007. In particular, it will be argued that NICs are qua their form explicit performatives. In order to capture these findings, we will suggest a formal representation in Section 5. In Section 6, we will discuss how the pragmatic function of NICs can be linked to their specific formal properties as bare verbal structures. Section 7 summarizes our results.

2. Previous Work

There are basically two linguistic papers on NICs in German, the first one by Teuber (1998) who describes basic properties of NICs and in particular addresses formal and morphological issues. The second one, Schlobinski 2001, investigates the syntactic and pragmatic characteristics of NICs including their sociolinguistic dimension.

The German term for Non-Inflectional Constructions, “Inflektiv”, was established by Teuber (1998). He argues that NICs are neither interjections (as maintained in Hentschel & Weydt 1994: 299; see also Duden 2006: § 892) nor truncated verbal forms but that NICs are basic verbal forms in the verbal paradigm. Diachronically, Teuber assumes that NICs were permitted due to a morphological change: in previous stages only verbal forms contained the root forming suffix ō, which was attenuated to a. Due to this change,
verbal stems and roots became identical. This allowed the emergence of non-inflected forms like NICs—being identical to the verbal stem—as part of the verbal paradigm.\(^4\) Modern High German thus offered a construction which is verbal but not inflected. We will follow his insight here and assume that NICs are verbal stems, cf. (4). Further evidence for this position will be drawn from the empirical studies in Section 3.

(4) a. schluck-t
    \(\text{gulp-PRS.3SG}\)

   b. •schluck•
    \(\text{gulp.STEM}\)

Consequently, Teuber assumes that NICs are not a recent construction (which is due to comics or web language) but something which is generally provided in German grammar. On the one hand, it is thus highly special and peculiar morphologically, but on the other hand, being the verbal basic form, it corresponds to a fairly ordinary part of the verbal paradigm. He points out that NICs like \textit{knall} (‘bang.STEM’) were already reported by Adelung (1782: 207), hence claiming that the rise of NICs lies before the 20th century and has typological rather than sociolinguistic roots.

In contrast, Schlobinski (2001) assumes that NICs may have appeared sporadically before but root as a specific construction in the language of comics and spread out from this genre into other registers. In particular, he considers the proto-NICs translations of English “sound words”, for instance \textit{klopf} (‘knock.STEM’) or \textit{bimmel} (‘jingle.STEM’) in Mickey Mouse translations from the early 1950s. Functionally, Schlobinski divides non-inflectional constructions in two broad classes: first, NICs can correspond to immediate representations of actions and internal states as in the case of •\textit{grins}• (‘smile.STEM’) and •\textit{bibber}• (‘jitter.STEM’). Schlobinski considers this function the original one that is already exemplified by sound words in comics. These—in virtue of being iconic signs of the respective “sounding” events—also serve as immediate representations. Second, according to Schlobinski, there are NICs which are ordinary illocutionary acts, having assertive, expressive and regulative illocutionary forces. For instance, he argues that NICs as in (5) (= his example (39)) are assertive and form a narrative plot:

\(^4\) See Teuber 1998: 12–18 for details concerning the role of non-inflected forms in the whole verbal paradigm of Modern High German.
Although we agree with many of his intuitive observations, we do not share his conclusions and way of approaching and capturing the findings. First, it would be too simple to merely trace back NICs to sound word translations from Mickey Mouse. This extralinguistic explanation underestimates the impact of structural prerequisites; in particular, it is unable to explain the contrast between English and German because one would expect (complex) NICs in both languages if the grammar provided the expressions. To be sure, NICs are in fact distributed frequently in comics, in chats, informal emails, and recently also in newspaper texts. Nevertheless, we will show that such a distribution is an epiphenomenon: the typical pragmatic properties of NICs predestine them for virtual contexts. Second, it is misleading to identify the functional contribution of NICs with ordinary illocutions. In fact, the NICs in (5) are intuitively not identical in meaning to corresponding assertions as *Ich sprinte zum See* (‘I sprint to the lake’). Instead, by heavily relying on the notion of explicit performative, we will stick to Schlobinski’s original intuition that NICs are in a certain sense “immediate representations” and thus basically uniform in their function. This perspective will be generalized. The seemingly “assertive” effect of examples like (5) is derived from more general considerations.\(^5\) Third, Schlobinski’s (2001) approach does not provide

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\(^5\) In our opinion, Schlobinski’s (2001: 197–204, 214 f.) classification is not fully transparent to begin with. For instance, a NIC as *stamp* (sic!) (‘stamp.stem’) is classified both as immediate representation of a certain action without being an illocution proper and, at the same time, as a communicative action with—a—rather indirectly deduced—illocutionary potential. In a way, such a split correctly describes its peculiar function. However, what exactly does it mean to have and not have illocutionary force? And are other NICs really different from *stamp* in being clear-cut exemplifications of either class? Our approach will avoid these problems by relying on a more rigid understanding of (assertive) illocution and by explicitly deducing illocutionary effects on the basis of a uniform analysis of NICs as explicit performatives.
a way of linking form and function. Actually, the idea of NICs as assertions runs into obvious troubles with the more or less standard assumption that assertions are closely connected to finiteness, cf. Klein 1998. Although we will not be able to give a full account, our analysis will bear upon the desideratum of an appropriate form-function fit.

3. Formal Properties

The examples given in (1), (2) and (3) suggest that there is a specific make-up of NICs, i.e. no inflectional morphology, verb final VP-construction and lack of (overt) subjects. We will confirm this hypothesis on the basis of a

---

6 Similarly, Reis (2003: 197) points out that “finiteness is a necessary condition for SAYing X”, cf. (i) (= her example (64a)):

(i) a. Du Linguist!
   you linguist

   b. Du bist ein Linguist.
   you are a linguist

Verbless constructions like (ia) cannot be assertional; there is no anchoring in terms of grammar proper.

7 This corresponds to the observations in Schlobinski 2001, who also assumes that the word order corresponds to verb-final (infinitival) word order. We will not be concerned with incorporation here. Under this label, Schlobinski discusses correlations between the feasibility of NICs, their orthographic realization, the construction’s length and complexity, and different kinds of “relatedness to the verb”. To our mind it remains unclear what exactly constitutes incorporation in his approach. He seems to heavily rely on the writing of NICs in one word. However, we see two related problems with his perspective: first, his discussion blurs the distinction between competence and performance. Orthography as extragrammatical phenomenon can merely suggest but never provide conclusive evidence in favor of a specific structural make-up. Second, if orthography is considered a reflex of grammatically relevant features, these have to be made transparent. This remains a desideratum in Schlobinski’s work. In the case at hand, we suspect that orthography might be used in order to point to phonological and corresponding informational differences in terms of “integration” (rather than “incorporation”), cf. Jacobs 1999, 2005 (we thank one reviewer for proposing this line of thought). We cannot go into details here; let us just remark that the VP-structure in fact allows for corresponding fine-grained structural differences. For instance, building inter alia upon Jacobs 1999, Maienborn (2001) distinguishes V-adjoined locatives and VP-adjoined cases. Under neutral stress conditions, the former is considered prosodically and semantically integrated, whereas the latter is not, cf. the interpretive and prosodic differences of (ia) versus (ib) (following her example (11); capital letters mark primary sentence accent, stress marks secondary accent):

(i) a. Angela hat sich mit Bardo im MUSEUM verabredet.
   Angela has refl with Bardo in the museum arranged.to.meet
   ‘The appointed event is located in the museum'
grammaticality judgement survey and on corpus data. Subsequently, we will propose and discuss a basic syntactical structure for NICs.

3.1. Grammaticality Judgements

In a web-based study, 41 German native speakers were asked to rate sample expressions on a scale from 1 to 7 (1: little acceptance, 7: highest acceptance). Appropriate chat-like samples were followed by a NIC which was marked with “*…” (and written in one word) in order to trigger the environment typical for NICs. Participants were presented 12 items in 4 conditions. For illustration, see (6):


‘Hi everyone! It may sound stupid, but I can’t get my PC going. Gave it a new case, reassembled everything, plugged it in, but nothing works.’

In this study, NICs were presented under the following conditions: a combination of the opposing features ± subject and verb final vs. verb fronted. To be clear, *hilfebrauch* was thus presented in four versions:

\[
\begin{align*}
\text{b. Angela hat sich mit Bardo im Muséum VERABREDET.} \\
&\quad \textit{Angela has refl with Bardo in the museum arranged to meet} \\
&\quad \text{‘The arrangement takes place in the museum’} \\
\end{align*}
\]

NICs allow for the same distinction with the same interpretive effect, cf. the following contrast:

(ii) a. •im MUSEUM verabred•
\[\text{in the museum arranged to meet} \text{stem}\]

b. •im Muséum VERABRED•
\[\text{in the museum arranged to meet} \text{stem}\]

We leave for further research the question of whether, in fact, cases such as (iia) are preferably written in one word whereas those in (iib) are more likely to be written separately (here, the modifier is a full phrase; we speculate that this is an important intervening factor). One may add that those modifiers for which Schlobinski (2001: 212) notes a clear preference for one word spelling are manner modifications. For these a very close relation to the verbal head is independently motivated. See the discussion on modification below.

\footnote{Note that in this case, we present the example here as used in the study, i.e. using the typical environment “...*”.}
(a) Hilfebrauch  (- subject, verb final)
(b) Brauchhilfe  (- subject, verb fronted)
(c) Ichbrauchhilfe (+ subject, verb fronted)
(d) Ichhilfebrauch (+ subject, verb final)

The mean judgements for all NICs under these conditions are summarized in Table 1.

Table 1: Mean judgements for NICs depending on distribution of verb and subject

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Mean (4)</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>- subject verb final</td>
<td>4.0</td>
<td>‘Hilfebrauch’</td>
</tr>
<tr>
<td>- subject verb fronted</td>
<td>3.6</td>
<td>‘Brauchhilfe’</td>
</tr>
<tr>
<td>+ subject verb fronted</td>
<td>3.0</td>
<td>‘Ich brauchhilfe’</td>
</tr>
<tr>
<td>+ subject verb final</td>
<td>2.3</td>
<td>‘Ich Hilfebrauch’</td>
</tr>
</tbody>
</table>

The differences between conditions across items were highly significant (p<0.01). Also between subjects, the effects were highly significant (p<0.01). The highest ratings were given for verb-final expressions lacking a subject. This corresponds to the prototypical NIC as reported by Teuber (1998) and Schlobinski (2001). These mean ratings support our hypothesis that NICs can be identified with the help of these properties or, more generally, that a construction which can be analyzed as a verb stem lacking any inflectional morphology and lacking an overt subject is judged grammatical in certain environments. Verb-fronted expressions like brauchhilfe (‘need.help’) were rated second-best, while the corresponding expression with an overt subject ichbrauchhilfe (‘I.need.help’) is rated worse. Most interestingly, both these expressions can be reanalyzed as regularly inflected constructions with schwa-drop in the finite form of the first person singular, i.e. brauchhilfe would correspond to a finite verb-second expression with topic-drop affecting the subject constituent and ichbrauchhilfe would be an ordinary verb-second sentence.\(^9\) Nevertheless, these were assigned lower ratings in

\(^9\) We speak of schwa-drop here because most verbs’ regular (written) form includes a schwa as inflectional morpheme for the first person singular.
the given environments than prototypical NICs. This is the strongest evidence in favor of our claim since this result would be unexpected if a NIC is not considered a robust and well-established expression. The different mean ratings of the conditions (– subject, verb fronted) and (+ subject, verb fronted) can be explained in two ways: on the one hand, the subjectless version might be rated better because the lack of an overt subject at least satisfies one prototypical trait of NICs. On the other hand, one could argue that verb-second constructions with topic-drop affecting the subject are—as NICs—rather colloquial; moreover, such a topic-drop marks thematic continuity and therefore ensures in many cases—as NICs—a quite immediate connection to the speaker. The construction given the lowest ratings are verb-final containing an overt subject. In contrast to both reanalyzable cases, these are not open for such a loophole and therefore predicted outright ungrammatical.

Note that the fact that non-inflectional forms were not contrasted with (unambiguously) inflected forms is a clear disadvantage of this study. It was expected that prototypical NIC-environments would be hard to trigger and that informants would be confused if we included inflected forms in the survey. For this reason, competing inflected forms were avoided (and asterisks were used in order to trigger typical environments for NICs). However, NICs seem to be more robust than expected and seem to be recognized as constructions differing from inflected constructions. Otherwise, expressions like brauchhilfe or ichbrauchhilfe would be expected to be rated much higher than their proto-NIC counterparts.

In sum, the grammaticality judgement survey strongly supports the hypothesis that there is a particular NIC construction with very robust formal properties:

– no inflectional morphology
– verb-final
– no overt subject

In order to further strengthen our claim by another type of data that avoids the aforementioned methodological drawbacks, we will look at corpus material in the following section. In fact, the corpus data will show that inflected forms and subjects are found very rarely in typical environments of NICs, a result which supports the—at first sight—unexpected result of the grammaticality judgement survey.

---

10 Therefore, no fillers were used in order to avoid confusion between inflected and non-inflected forms.
3.2. Chat Corpus

In a corpus study, we investigated all expressions marked with the asterisk in the Dortmunder Chat-Korpus.\textsuperscript{11} It contains chats from academic and media resources and small talk and community chats. In the search engine of this corpus, it is possible to find all expressions which are enclosed by the prototypical asterisks. This is a good means to investigate which properties are typical for these constructions. There were 1265 expressions considered. 117 of these expressions are non-verbal, for instance nouns like •frechheit• (‘impudence’) or •applaus• (‘applause’). Furthermore, there are onomatopoetica like •hmnnnmm• and •ätsch•. We will not be concerned with these non-verbal constructions here although they share important properties with NICs, i.e. the expressive immediacy. The purpose of this paper, however, is to focus on the productive verbal constructions that we find in NICs. On the formal side, both verbless constructions and NICs share their property of being non-finite. Thus, we assume that they can be treated in a similar vein but we will leave this issue to future research.

Among the verbal forms, the majority (94.3\%) are non-inflectional expressions, i.e. expressions which lack any inflectional morphology. This shows that typically, these expressions are non-inflectional.\textsuperscript{12} In this group, more than half of the expressions are single lexeme expressions such as •schimpf• (‘grumble.stem’) or •gratulier• (‘congratulate.stem’). Correspondingly, their verbal distribution is undetermined. The detailed numbers for the verbal position are given in Table 2. None of the non-inflectional expressions in this group contains an overt subject.

\textit{Table 2: Non-inflected verbal expressions}

<table>
<thead>
<tr>
<th>Position</th>
<th>Items</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>verb final</td>
<td>478</td>
<td>44.2%</td>
</tr>
<tr>
<td>verb fronted</td>
<td>20</td>
<td>1.8%</td>
</tr>
<tr>
<td>undetermined</td>
<td>584</td>
<td>54.0%</td>
</tr>
<tr>
<td>(\Sigma)</td>
<td>1082</td>
<td>100%</td>
</tr>
</tbody>
</table>

\textsuperscript{11} http://www.chatkorpus.tu-dortmund.de.

\textsuperscript{12} Note that we do not rely on a definition of NIC on the basis of lack of inflexion which would be a preconception. Instead, we are interested in all verbal forms in these environments and observe that the vast majority is non-inflectional and deduce that this is an essential property.
In order to filter out only those constructions which are determined with respect to the position of the verb, in a second step, we consider only the complex forms. Among this group, 96% are verb final constructions, cf. Table 3.

Table 3: Complex non-inflected verbal expressions

<table>
<thead>
<tr>
<th>Items</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>verb final</td>
<td>478</td>
</tr>
<tr>
<td>verb fronted</td>
<td>20</td>
</tr>
<tr>
<td>Σ</td>
<td>498</td>
</tr>
</tbody>
</table>

Thus, the data strongly supports the results of the grammaticality judgement study. Non-inflectional verbal NICs generally lack subjects, and the overwhelming majority is verb-final and not inflected.

Let us consider the few cases of inflected verbal constructions marked with asterisks which were found in the corpus. They show that there are exceptions to the given characterization but that they are highly marginal: among the verbal forms, only 66 (5.7%) carry (finite) inflection. In this group, 71% of all unambiguous cases are verb-final. Few have overt subjects, cf. Table 4.

Table 4: Inflected verbal expressions in asterisk-environment

<table>
<thead>
<tr>
<th></th>
<th>– subject</th>
<th>+ subject</th>
<th>Σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>verb final</td>
<td>35</td>
<td>1</td>
<td>36</td>
</tr>
<tr>
<td>verb fronted</td>
<td>14</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>undetermined</td>
<td>13</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Σ</td>
<td>62</td>
<td>4</td>
<td>66</td>
</tr>
</tbody>
</table>

Excluding these special cases, the proportion of inflected constructions in asterisk-environments is only 4.5%.

---

13 This group becomes even smaller if we accept the suppletive bin (‘am’) in examples like (i) as a regular verbal stem of sein (‘be’). In the data, there is the competing form sei (‘be.stem’) as in (ii), cf. also the comments on sei/bin in Schlobinski 2001: 209.

(i) • kundin bin •
    *customer am*

(ii) • enttäuscht sei •
    *disappointed be.stem*
It is no coincidence that in this group, the percentage of verb-fronted constructions is higher than in the group of non-inflected constructions proper and that at the same time overt subjects are found. This suggests that these cases can be considered hybrid constructions and do not contribute to the general understanding of NICs.\textsuperscript{14}

3.3. Basic Syntax of NICs

According to both the rating and the corpus study, verbal NICs show robust formal properties: they lack inflectional morphology, are verb-final and do not contain overt subjects. Furthermore, the data suggest that NICs are not idioms but are constructed and identified spontaneously. This lends further support to the assumption that NICs are not just lexicalized interjections. In particular, examples from the corpus illustrate that they can be internally complex and are used in a fairly creative way. The NICs in (7) include VP-internal objects and a predicative; note that the assignment of accusative case and the selection of the preposition \textit{für} is fully regular:

(7) a. •meinen satz direkt wieder streich• \\
    \textit{my sentence directly again cancel.stem} \\
  b. •dich gleich mal für verrückt erklä• \\
    \textit{you immediately PART PREP insane declare.stem}

The corpus also contains coordinated expressions, cf. (8), as well as cases with embedding of an infinitival clause under a NIC, cf. (9). Examples with finite subordinate clauses are also attested, cf. (10).\textsuperscript{15}

(8) •hängematte in baum aufspann und mich reinleg• \\
    \textit{hammock in tree fix.stem and refl enter.stem} \\
(9) •hier mal die fenster aufmach um den kippenqualm rauszulassen• \\
    \textit{here part the windows open.stem in.order the cigarette.odor out.PART.let.INF}

\textsuperscript{14} Of course, such reasoning awaits further clarification. It might well be that users are to a certain extent unsure about the “correct” way of using the construction and therefore mix in elements of more familiar standard (written) language. Moreover, we suspect that the way of using NICs correlates with a user’s familiarity with chat and internet communication in general.

\textsuperscript{15} Similarly, Schlobinski (2001: 212) adduces complex examples with coordination and subordinated material.
Note, in addition, that several examples also contain adverbials; for qualifications see the discussion below.

To sum up so far, it seems reasonable to analyze NICs as non-inflected, but otherwise full head-final VPs, cf. the structural sketch (11):

(11)
\[
\text{VP} \quad \text{VP-\text{inflected}} \\
\text{objects} \quad \text{VP-\text{inflected}} \\
\text{predicatives} \\
\text{adverbials}
\]

Such a basic syntax is very parsimonious: what you see is what you get. It allows for an elaborate internal VP-structure, but excludes functional structure above the VP-level.

We will now briefly consider the adequacy of this assumption by turning to (i) structural consequences concerning the lack of overt subjects in NICs and (ii) details of adverbial modification within NICs.

As for (i): the lack of overt subjects does not per se exclude a syntactically present, yet silent subject within NICs. Possible evidence stems from control constructions, cf. (9) above or (12):

(12) •zeitmessung anfang um zu sehen wie lang einer zum timing begin.stem in.order part see how long someone for

\[
\text{selbstausbuddeln bracht fürs guinnes buch der rekorde} \\
digging.himself.up need.prs.3sg for.the guinness book of records
\]

Controlling the implicit subject of the embedded purpose clause suggests the existence of an implicit agent, let us call it PRO, in the matrix NIC as well.\(^{16}\) One might object that an adequate controlling participant

\(^{16}\) A similar argument in favor of a syntactic position for implicit agentive arguments can be found for instance in discussions about the argument structure of deverbal nominals, cf. e.g. Hout & Roeper 1998.
could be inferred on pragmatic grounds without positing an invisible structural position for it. The lack of overt subjects then follows automatically.

If, on the contrary, a structural account is correct, two follow-up questions arise: does the silent subject enforce a projection above the VP, and why does it stay unpronounced? The answer depends on more general assumptions. If one adopts the idea that (at least certain) subjects appear in the specifier of a voice-projection above the VP (cf. Kratzer 1996; see also the notion of a $\nu P$ in the minimalist tradition as in Chomsky 1995), NICs should include a voice$P$ with a silent PRO in its specifier. Its invisibility would be explained by the assumption that there is no further functional projection above (e.g. INFL) where it could move and appear overtly. If one instead subscribes to a VP-internal subject position (cf. the functionally parsimonious structure for German in Sternefeld 2006), there does not arise any need for another structural level above the VP. PRO would be just part of the VP proper. There are two plausible ways of explaining why it stays unpronounced: either, again, the lack of an appropriate functional layer above the VP forbids an overt marking or (more in line with Sternefeld’s overall approach) the lack of any inflectional morphemes and concomitant features for an appropriate case checking disallows overt subjects.\footnote{To be more precise: according to Sternefeld (2006), verbal finite inflection licenses nominative case. Since there is no inflection in NICs, such morphological licensing is trivially excluded. One might object that there are other means than finite morphology to license overt subjects, e.g. non-nominative subjects in infinite environments as ECM-constructions. However, since NICs are neither non-finite nor finite nor embedded (see below for this trait), there is no plausible room for such alternative licensing strategies.}

To sum up: As far as we can see, the behavior of NICs with regard to subjects is equally well compatible with any of these approaches, be they structural or not. As a point of departure, we therefore stick for economic reasons to the most parsimonious syntax, i.e. NICs are considered simple VPs without a syntactically present position for a subject.

As for (ii): it is common to assume that the position and interpretation of adverbials is conditioned by the hierarchical sentential organization.\footnote{There is considerable disagreement whether such ordering is to be captured by projecting adverbials as specifiers of hierarchically organized functional heads (e.g. Cinque 1999) or by mapping syntactic c-command domains onto semantic domains in a pure adjunction analysis (e.g. Haider 2000; Ernst 2002). Compromises, where adverbials are adjuncts but occupy well-defined positions, also exist (e.g. Frey 2003). We remain neutral with regard to this debate.} Therefore, the distribution of adverbials can be used as a tool for testing the
projective complexity of NICs.\textsuperscript{19} Let us take Frey’s (2003: 202 f.) hierarchy of adverbial classes in German as a starting point, cf. (13) (where “>” abbreviates c-command):\textsuperscript{20}

\begin{enumerate}
\item[13)] sentence adverbials (e.g. epistemic adverbials) \textgreater{} frame and domain adverbials (e.g. reference time related temporals) \textgreater{} event-external adverbials (e.g. causals) \textgreater{} highest ranked argument \textgreater{} event-internal adverbials (e.g. event-related locatives and temporals) \textgreater{} process-related adverbials (e.g. manner adverbials)
\end{enumerate}

According to the corpus data, the majority of modified NICs include manner adverbials, as in (14):

\begin{enumerate}
\item[14)] \textbullet{schnellersegel\textbullet{}, \textbullet{traurigguck\textbullet{}, \textbullet{fiesgrins\textbullet{}, \textbullet{fix\textbullet{} fast\textunderscore{}er\textunderscore{}sail\textunderscore{}stem, in\textunderscore{}a\textunderscore{}sad\textunderscore{}way\textunderscore{}look\textunderscore{}stem, in\textunderscore{}a\textunderscore{}nasty\textunderscore{}way\textunderscore{}grin\textunderscore{}stem, quickly}
\textbullet{die folie abpiddeln tu\textbullet{ (Chat-Corpus) the film scrape\textunderscore{}off do\textunderscore{}stem}}
\end{enumerate}

These adverbials are considered structurally very low, projected in direct proximity to the verbal head.\textsuperscript{21}

Albeit less frequent, locatives, temporals and causals are also attested, cf. (15):

\begin{enumerate}
\item[15)] a. \textbullet{zündel hier oben\textbullet{} (Chat-Corpus) kindle\textunderscore{}stem here above}
\item b. \textbullet{gleich mal erstmal pennen geh\textbullet{} (Chat-Corpus) shortly PART for\textunderscore{}the\textunderscore{}time\textunderscore{}being sleep\textunderscore{}inf go\textunderscore{}stem}
\item c. \textbullet{rumhust wegen der staubwolke\textbullet{} (Chat-Corpus) cough\textunderscore{}stem because\textunderscore{}of the cloud\textunderscore{}of\textunderscore{}dust}
\end{enumerate}

\textsuperscript{19} In terms of incorporation, Schlobinski (2001) briefly discusses adverbial modification in NICs. However, as noted in footnote 7, his discussion is mainly about orthography and does not spell out where grammar proper comes into play. Moreover, Schlobinski does not relate his remarks to current semantic and/or syntactic analyses of adverbial modification. So he speaks of verb-related versus proposition-related adverbials without further qualifications. Therefore, his argument remains quite opaque. In particular, he says that 31% of NICs with sentence adverbials are written in one word: this presupposes the existence of NICs with sentence adverbials; however, he does neither define his notion of sentence adverbial nor give an example. To our findings, sentence adverbials (in the sense of commenting on an asserted proposition) are not feasible to begin with, see below.

\textsuperscript{20} The notation follows the adaption of Frey’s proposal in Maienborn & Schäfer 2011.

\textsuperscript{21} A very low position is also maintained for directional adverbials (cf. Maienborn 1996); these can be found as well, as in (i):

\begin{enumerate}
\item[1]) \textbullet{inneEckekriech\textbullet{} (Chat-Corpus) in\textunderscore{}a\textunderscore{}corner\textunderscore{}crawl\textunderscore{}stem}
\end{enumerate}
According to Frey’s hierarchy, all of these, pace differences with regard to the subject position (see the discussion above), are projected in the direct vicinity of VP. The given VP-analysis of NICs thus correctly predicts that there is room for modifiers that directly target different verbal layers.

In Frey’s (2003) classification, sentence adverbials describe how the speaker comments on the clause’s proposition, cf. evaluatives as leider (‘unfortunately’) or epistemic modifiers as wahrscheinlich (‘probably’). The chat corpus does not contain any NICs with a sentence adverbial. In fact, constructed examples like (16) seem to be highly marked, if not outright ungrammatical:

(16) a. *?•leider das Problem nicht versteh•
   unfortunately the problem not understand.stem

b. *?•wahrscheinlich bald schlafen geh•
   probably soon sleep.inf go.stem

Frey assigns sentence adverbials a structurally high attachment site; in particular, he argues that sentence adverbials have to c-command the base position of the finite verbal form (cf. also Haider 2000). One may add that approaches with an articulated functional structure often associate sentence adverbials with structural levels higher than the VP, e.g. the C-domain (cf. the discussion in Grohmann & Etxepare 2003). The lack of sentence adverbials in NICs thus provides additional evidence for our claim that the structure of NICs does not contain finite morphology; furthermore, no need for a corresponding functional structure above the VP arises.

What is going on between the C- and V-domain is rather difficult to assess, both for theoretical and empirical reasons: there is one good candidate for a frame-setting interpretation of an adverbial in the corpus, cf. (17a). Here, the PP seems to restrict the domain in relation to which the speaker considers something a justified action. Similarly, the domain adverbial politisch (‘politically’) in the constructed example (17b) may be possible:

(17) a. •korrekte aktion find bei solchen nicknames•
   correct action consider.stem in.view.of such nicknames
   (Chat-Corpus)

b. •politisch so gut wie tot sei•
   politically virtually dead be.stem

---

22 Other than e.g. Maienborn & Schäfer (2011), Frey does not subsume frame adjuncts under the label “sentence adverbial”, see below for discussion.
Frey (2003) shows that frame adverbials do not enforce a c-command-relation with the finite verb; this might explain why they are not generally ruled out in NICs. However, it nevertheless remains an open question whether some kind of functional structure above the VP is involved. As far as we can see, there is no clear consensus on what kind of entity and structure frame-setting adverbials relate to.\textsuperscript{23} In view of missing clear-cut empirical evidence and these theoretical shortcomings, we leave this issue for further research and keep the structure simple.\textsuperscript{24}

To sum up: the distribution of adverbials in NICs confirms the basic syntactic analysis of NICs as simple VPs involving a complex internal structure but remaining deficient with regard to functional levels above.\textsuperscript{25}

\textsuperscript{23} Maienborn (2001) adjoins locative frames to a TopP_phrase (hosting the sentence topic) in the C-domain above sentence adverbials. However, in our opinion, Frey convincingly shows that frame adverbials have a lower attachment site. Alternatively, one might think of frame-setters as modifiers to a topic situation, cf. Klein's (1994) notion of topic time and remarks in Maienborn & Schäfer 2011. If this situation is introduced via an Asp-head, one could conjecture that NICs include an AspP-level above the VP.

\textsuperscript{24} In the chat corpus, we found two further adverbial types in NICs, not yet discussed, namely (ia) with a mental-attitude adverbial and (ib) with a discourse-anaphoric adverbial:

\begin{itemize}
  \item[(i)] a. skeptisch\linebreak[1]zuhör\linebreak[1]skeptically.listen.to.\stem
  \item[(ii)] b. allerdings gerade nen soundserver am testen bin\linebreak[1]however at.the.moment a sound.server at testing am
\end{itemize}

Mental-attitude adverbials are usually assigned a VP-internal attachment site (cf. Maienborn & Schäfer 2011); therefore no problem with the VP-analysis arises. Discourse-anaphoric adverbials, in being responsible for linking discourse parts, may not contribute to the internal make-up of their host expressions anyway. We leave aside how and where they should be attached in the case of NICs.

\textsuperscript{25} One reviewer asks whether there are verb type restrictions for NICs. As far as we can tell, there are no clear restrictions with regard to usual distinctions such as “unaccusatives vs. ergatives” or Vendler’s (1967) aspectual classes. However, questions arise if one looks at auxiliaries, in particular modals. There are few examples, cf. (i):

\begin{itemize}
  \item[(i)] a. malmeinauftretenhiergewaltigüberdenkenmuss\part.my.behavior.here.enormously.rethink.\stem
\end{itemize}

This shows that modals are not generally ruled out. Note that (presumably) ungrammatical forms as *könne (‘can.stem’), *müsse (‘must.stem’), etc. do not contradict this claim. NICs are not derived from the infinitive forms, i.e. könne (‘can.INF’), müssen (‘must.INF’), etc.; they are stems that can be different from the ones in infinitive forms (cf. the well-known peculiarities of the preterite-present inflection of modals in German; see also Schlobinski 2001: 209 on the alternating stems will/woll (‘want stem’)). The main question is to what extent modal NICs bear upon the given syntactic and semantic analysis. The issue deserves careful scrutiny, both theoretically and empirically; here, we can only make some preliminary remarks. First, modals seem to be rather marginal. Second, if used, they presumably have a
So far, we have shown that there is a clear-cut non-inflectional construction which can be constructed and identified according to distinctive formal properties. In the following sections, we will argue that it has specific pragmatic properties which can be related to its formal make-up.

4. NICs as Separate Performatives

Potts (2005, 2007c) and Portner (2007) argue that expressives such as bastard or damn as well as certain constructions like appositions and vocatives contribute to a meaning dimension that is both separate from the ordinary truth-conditional content and performative in character. In order to substantiate this claim, Potts enumerates a range of criteria that identify linguistic expressions as bearers of such additional performative meaning components. In particular, Potts argues that expressives are (i) nondisplaceable (i.e. they are bound to the utterance situation), (ii) perspective dependent (i.e. always viewed from a certain perspective, most often the speaker's, possibly also from that of a “contextual judge”), (iii) descriptively ineffable (i.e. difficult to exactly reformulate in propositional terms), and (iv) immediate (i.e. performative due to being automatically true by virtue of being uttered). In the following we will show that NICs obey these criteria in a characteristic way; their behavior thus provides good evidence for the analysis of NICs in terms of separate performatives. We will first focus on descriptive observations; technical details follow in Section 5.

First, that NICs belong to a separate meaning dimension is indicated by their being nondisplaceable: unlike ordinary descriptive meaning which can be temporally shifted and may relate to different worlds, NICs are invariable predicates of the utterance situation, as the following contrast illustrates:

root but not an epistemic reading, cf. for an overview of this distinction e.g. Hacquard 2011 and example (i) for exemplification. In syntactic analyses, root modals are usually associated with scope at the VP-level and epistemics with scope at the sentence level (e.g. the C-domain); see again Hacquard 2011 for a summary of arguments and more precise suggestions. Structurally, our simple VP-analysis of NICs hence seems to be basically correct (pace possible ModPs above, depending on the general syntactic framework). However, it is not clear to us how to interpret an example as (i): in our analysis (see the following sections for details), it is supposed to be an explicit performative. Consequently, does “I am hereby obliged to think about my behavior” correctly render the meaning of (i)? Maybe, we have to accept that such a performance is in fact possible in the virtual extension of the real world (see Section 5 for the notion of virtual extension). The rather marginal status of NICs with modals might be explained by the assumption that such modal interpretations are not very plausible candidates for performances.
German Non-Inflectional Constructions

(18) Gestern hatte ich ein Date mit meinem Ex-Freund.

‘Yesterday, I had a date with my ex-boyfriend.’

a. Ich werde / würde / wurde rot.
   I..nom become.prs.1sg become.1sg.1sg become.pst.1sg red.
   ‘I am blushing/would blush/blushed’

b. •rot werd•
   red become.stem

In the case of continuation (18a), the dating event and the blushing event can be freely related in terms of worlds and time, while in (18b), blushing is necessarily situated in the utterance time and world, i.e. the speaker turns red while making the utterance.\(^{26}\) Strikingly, the semantic nondisplaceability of NICs is reflected in the fact that they cannot be embedded under complementizers or in bare form. This is illustrated in (19):\(^{27}\)

(19) a. A: Was soll jeder sehen?
   B: *dass Dich in den Arm nehm•
   B: that you in the arm take.stem

b. A. Was möchtest Du tun?
   B: *Ich möchte •dich in den Arm nehm•
   B: I want you in the arm take.stem

\(^{26}\) He does so in a virtual extension of the real world. That is, he does not have to blush in the real physical sense; cf. Section 5 for qualifications. One reviewer points out a picture of a comic strip cited in Schlobinski 2001: 200 where the NICs •kick• (‘kick.stem’), •kuppel• (‘gang.stem’) and •schalt• (‘change.gears.stem’) seem to refer to the past whereas the NIC •schnarr• (‘vibrate.stem’) refers to the present. However, the example does not disprove the nondisplaceability of NICs; on closer inspection, it rather offers evidence in favor of it. The picture illustrates the initial stages of a motorcyclist’s speedy start. Those three NICs with putative past reference are smaller than the one with present reference, thereby giving the impression of background information, and, more importantly, they are localized not with the motorcyclist but with the cloud of dust left behind. That is, the NICs are drawn where the corresponding actions were carried out. In this sense, they do not refer to the past but to the present time of the situation they were in. Since this situation is over, a putative past reference arises. More generally, the example exhibits iconic strategies to bundle a temporal sequence within one picture; usually, the order of events is reflected by multiple pictures.

\(^{27}\) To be sure, examples like (9) with embedding do not provide any counterevidence. In (9), the NIC is not embedded but provides itself the embedding matrix constituent.
We conclude that NICs are *per se* syntactic orphans without any potential of being integrated into a higher structural configuration.28

Second, (18b) also shows that NICs are generally bound to the speaker’s perspective: the speaker is usually identified with the implicit subject. In particular, it would be infelicitous here to identify the referent that is turning red with the hearer.29 Note that this is not a conceptual restriction since a continuation as in (20) that makes use of an ordinary finite form is perfectly possible:

(20) Gestern hatte ich ein Date mit meinem Ex-Freund. Du wirst ja rot! Was zum Teufel hast Du damit zu tun?

‘Yesterday I had a date with my ex-boyfriend. You are blushing. What the hell do you have to do with that?’

Third, NICs are in a telling way descriptively ineffable. At first sight, an example as (21) could just be reformulated by saying *Ich grübel gerade* (‘I am meditating at the moment’).

(21) • grübel • meditate.stem

In fact, however, such a paraphrase is not satisfying because it merely describes the assumed action but lacks the performative flavor of the original NIC. This observation is closely related to the following core trait NICs exhibit.

Fourth, and most importantly, NICs are performative in a very peculiar sense: uttering a NIC is an act of performing something, thus true by virtue of being uttered. Moreover, the performed action is directly encoded in the NIC itself, i.e. NICs are explicit performatives. Therefore, one can react to the NIC in (22a) by rejection like in (23b) but not by negation like in (23a). In contrast, the assertion in (22b) can be negated. Hence, as generally assumed

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28 This contrasts with expressives like *bastard*, which are syntactically embedded though semantically separate. While Potts (2007c) therefore must assume a mismatch between structure and meaning for a range of expressives, the isolated structure of NICs is perfectly in line with its separate meaning. Moreover, the inevitable structural independence of NICs distinguishes them also from other orphan-like constructions such as certain appositives, corrections or dislocations. These might be analyzed as structurally independent units as well, but in contradistinction to NICs, they in principle have the formal potential to get linked to ordinary full-fledged linguistic material.

29 As suggested for non-speaker oriented expressives by Potts (2007c), one can imagine an implementation of a judge as well. Thereby the speaker would be allowed to play different “roles”. In fact, an identification of the denotation of the silent subject with the hearer in example (18b) seems to be possible if the speaker puts himself into the hearer’s role.
for performatives, NICs are evaluated with regard to felicity conditions and not to truth conditions.\(^{30}\)

\[(22)\]

a. A: • grübel •  
   meditate.STEM  

   I meditate.PRS.1SG

\[(23)\]

a. B: Du grübelst nicht, Du tust nur so.  
   ‘B: You are not meditating, you are just pretending.’  

b. B: Hör auf damit.  
   ‘B: Stop it.’

The specific performative effect of NICs is also evident in attested examples. Recall example (3) in the introduction, whose interpretation has to make use of performances in a virtual reality. Such a performative effect is illustrated here once more by the following attested example: \(^{31}\)

\[(24)\]

a. horsedog: guten Morgen!!!! • Kaffeeausschenk •  
   good morning!!!! coffee.serve.STEM  

b. Meuli: • Kuchen in den Thread stell •  
   cake into the thread put.STEM  

c. Flauscheding: […] • Becher hinhalt •  
   cup hand.STEM  
   :-) Guten Morgen ihr Lieben!  
   :-) Good morning, my dears!  

[…]

d. horsedog: es MUSS ein guter Tag werden – die Sonne scheint, die  
   it MUST a good day become – the sun shines, the

---

\(^{30}\) One reviewer suggests that it might be possible to react to (22a) by uttering something like (i).

(i) Komm, tu doch nicht so. Du erwartest doch nur, dass die anderen  
   come.on, do part not like.this. You expect part only that the others  
   für dich denken.  
   for you think.  
   ‘Stop pretending. You just expect the others to think for you.’

We would like to point out that the comment that speaker A was pretending presupposes nonetheless that speaker A was performing a meditating action instead of just asserting it. It is true that it does not necessarily have to be true because the speaker could simulate. Similarly, it is possible to lie using expressive interjections like aua (‘ouch’ in order to signal pain) as well. This, however, is a secondary effect and does not weaken the point.

Vögel singen :-) Ich hab super gut geschlafen! Danke für den cake, Meuli!

‘horsedog: good morning!!!! (NIC: coffee.serve.stem)

Meuli: (NIC: cake into the thread put.stem)

Flauscheding: [...] (NIC: cup hand.stem) :-) Good morning my dears! [...] horsedog: it must become a good day—the sun is shining, the birds are singing:-)) I have slept very well! Thanks for the cake, Meuli!’

In this conversation, speakers explicitly refer to the virtual reality of the coffee and of the cake, since the latter is served “into the thread”. At the same time, the NICs are responded to by actions, one is handing the cup (again via NIC), the second one is to thank for the cake (not via NIC but via a typical explicit performative). Both reactions provide evidence for our claim that NICs are interpreted as actions.

Note that the observations in Schlobinski 2001 can be captured in our approach as well, based upon general considerations. Recall first that Schlobinski considers original proto-NICs “immediate representations”. In our account, such immediacy follows directly from the analysis of NICs as separate performatives. Second, Schlobinski claims that NICs can be analyzed as plot-oriented assertive contributions. Based on the argument and evidence from above, we reject this assumption and deduce the putative assertive force from the performative analysis. Consider the following minimal pair:

(25) a. •kaffee ausschenk•

coffee serve

b. Ich schenke Kaffee aus.

I serve coffee

Under Schlobinski's approach, there is no way to distinguish between the two constructions. However, they clearly differ in function. (25b) is only

32 A thread is a chain of postings on a single subject.

33 One might object that examples with sound words/NICs provide counterevidence to the performative analysis. Prima facie, in these cases there is no speaker-dependence. If a sound word/NIC like quietsch (‘squeak.stem’) is used in a comic, the reader fills the subject slot by a car or its wheels but not by a speaker or some other protagonist. However, we argue that in these cases the “speaker” is in fact the car or the wheels. This assumption is corroborated by the fact that in a corresponding drawing the sound word/NIC would be localized next to the presumable causer, i.e. to the car or more precisely the wheels.
performative in the sense of being an assertion. Therefore it is not an explicit performative. The utterance describes the serving of coffee which is performed non-virtually (or virtually) but it does not amount to be this action itself. That is, assuming that the speaker makes a true statement (cf. Grice’s maxim of quality), the addressee only infers that the speaker in fact serves coffee. In (25a), the situation is reversed. By uttering (25a), the coffee is (virtually) served and the assertional effect is an epiphenomenon of the force of such an explicit performative. That is, since a performative is true by virtue of being uttered, the addressee can conclude that a corresponding assertion would be justified.

We conclude with remarks on a fifth criterion Potts adduces for the identification of expressives: typically, expressives should be repeatable without redundancy. Instead, as shown in example (26), there is an effect of “strengthening the emotive content” (Potts 2007c: 167).

(26) Damn, I left my damn keys in the damn car. [= Potts 2007c, (34c)]

It has to be stressed that the property of repeatability applies only for emotional content. It seems that redundancy is not a core property of expressives. Beyond examples like (26), repeating non-truth-conditional content has a variety of effects. For instance, repeated calls, which usually serve to catch the addressee’s attention (see Portner 2007, who relies on Zwicky 1974), can be thought of as a strengthening of the request for attention, but they can also be seen as iterative sequences of (single) calls or stress an ongoing request to catch attention.

The effects of repetition of expressive content needs much more research. We think that the case of NICs can be enlightening for this case. For NICs, doubling seems to open a variety of interpretations. There are NICs from emotional predicates which show the strengthening effect, e.g. see (27).

(27) •freufreu• (Chat-Corpus)

be.happy.STEM.be.happy.STEM

In contrast, there are iterative and progressive readings of NICs as well:

(28) a. •winkwink• (Chat-Corpus)

wave.STEM.wave.STEM

b. •klatschklatstsch• (Chat-Corpus)

clap.STEM.clap.STEM

(29) a. •schleppschlepp• (Chat-Corpus)

carry.STEM.carry.STEM

b. •wartwartwartwart• (Chat-Corpus)

wait.STEM.wait.STEM.wait.STEM.wait.STEM
We assume that generally, the interpretation of multiple NICs depends on the lexical semantics of the verb. Their common property is that doubling does not lead to redundancy as is the case for asserted (at-issue) content.34

Having described the central pragmatic properties of NICs, we will now turn to their formal representation.

5. The Formal Representation of NICs as Separate Performatives

Building upon Potts 2005; 2007c, Portner (2007) assigns two separate dimensions of meaning to sentences: (i) “at issue-meaning”, i.e. a sentence’s ordinary truth-conditional content, and (ii) “separate performatives”, i.e. additional non-truth-conditional content that supplies further instructions for the interpretation of the sentence. See example (30) from Portner (2007) for illustration; here, the epithet and appositive yield additional performatives:35

(30) Paul met that bastard Lance, a cyclist.

(31) a. at issue-meaning: [{\lambda w}. Paul met Lance in w]
   b. separate performatives: [{\lambda w}. I hereby assert that Lance is a cyclist in w],
      [{\lambda w}. I hereby assert that Lance is a bad guy in w}]

34 Obviously, assertions follow different rules; their repetition leads to redundancy, cf. (i):

(i) #I’m angry! I forgot my keys. I’m angry! They are in the car. I’m angry!
   [= Potts 2007c, (35)]

This may carry over for separately performed assertions. The case of appositions and appositive relatives (analyzed as expressives in Potts 2005, 2007a) shows that repetition of non-truth-conditional content may turn out to be redundant as well, see (ii).

(ii) #Lance, a cyclist, who is a cyclist, is from Texas.

Assertions, no matter whether their content is at-issue or non-at-issue, have different felicity conditions than other speech acts. For performances like clapping, there are no restrictions on iterating these acts.

35 In order to make the performative character explicit, we follow Portner’s 2007: 413 suggestion to include “I hereby assert” in the paraphrase of both cases; an alternative would be “the speaker asserts”. Note that Portner himself omits this part in his formal derivation of the appositive case whereas he includes the speaker’s action in the case of vocatives (cf. “the speaker requests John’s attention” for John, your dinner is ready!). See the contrast between the representations (15a) and (17a) in Portner 2007: 414. In order to uniformly make the speaker’s action transparent, we opt for the explicit integration of the explicit performative in the form of “I hereby ...” / “the speaker ...”.

The meaning of a sentence is thus a pair \( (A_S, C_S) \) where \( A_S \) corresponds to the regular compositional content and \( C_S \) to the simple sum of all separate performatives introduced anywhere in the sentence. For the calculation of the two dimensions, Portner assumes two different interpretation functions, \( \llbracket \cdot \rrbracket_c \) for the ordinary content and \( \llbracket \cdot \rrbracket_c^C \) for the additional separate performatives.\(^{36}\)

We propose to capture NICs as separate performatives in Portner’s terms, as in the following meaning representation:

\[
\begin{align*}
\text{a.} & \quad \llbracket \text{NIC} \rrbracket_c = \emptyset \\
\text{b.} & \quad \llbracket \text{NIC} \rrbracket_c^C = [\lambda P \lambda w. \text{I hereby make } P(v) \text{ true in } w]
\end{align*}
\]

\( P \) corresponds to the descriptive content of the subjectless verbal structure projected within NICs. Following our basic syntax from Section 3.3, this structure can include VP-internal arguments, predicates and modifiers. In order to integrate the missing argument (for the subject), \( P \) is applied to a free variable \( v \) that must be instantiated via contextual means.\(^{37}\) Applying the proposed semantics of NICs to the verbal structure \( \text{rot werd} \) (‘red become’) yields the meaning representation in (33) for the corresponding NIC •\text{rot werd}•:\(^{38}\)

\[
\begin{align*}
\llbracket \text{NIC} \rrbracket (\llbracket \text{rot werd} \rrbracket) = \\
\text{a.} & \quad [\text{•rot werd•}]_c = \emptyset \\
\text{b.} & \quad [\text{•rot werd•}]_c^C = [\lambda w. \text{I hereby make } \text{blush}(v) \text{ true in } w]
\end{align*}
\]

\(^{36}\) This strategy follows Rooth’s (1985) approach to focus semantics and is different from Potts’s type-theoretical solution for the parallel calculation of both dimensions, cf. Potts 2005, 2007c for details. Note furthermore that Portner (2007) uses both “separate performative” and “expressive meaning” for the separate meaning dimension. We will mainly use the first term because it directly captures the idea of a separately performed speech act that does not affect truth conditions.

\(^{37}\) As noted, the semantic proposal is based on the subjectless syntactic structure, cf. the discussion in Section 3.3. Hence, there is no grammatical guide for integrating the corresponding argument; that is why we resort to a free variable. If one instead adopts an analysis with a silent PRO for the subject, the semantic representation would be the following:

\[
\begin{align*}
\text{i.} & \quad \llbracket \text{NIC} \rrbracket_c = \emptyset \\
\text{b.} & \quad \llbracket \text{NIC} \rrbracket_c^C = [\lambda p \lambda w. \text{I hereby make } p \text{ true in } w]
\end{align*}
\]

Here, NIC takes as its first argument a full proposition with PRO being part of it. However, since PRO cannot be bound within the structure (recall that there is no embedding), it actually behaves as a variable to be filled contextually. This leads to the very same analysis as with a free variable \( v \). So, we do not see how in our particular case the alternative syntactic option should make a semantic difference.

\(^{38}\) See Section 6 for compositionality issues.
The representation in (33) captures the aforementioned traits of NICs as separate performatives in a fairly straightforward way: their nondisplaceability and immediacy follow automatically from their being mapped onto the second meaning dimension \([\cdot]_C\) whereas \([\cdot]_c\) remains empty. Such mapping encodes directly that NICs are performatives, i.e. bound to the utterance situation and true by virtue of being uttered. Since the “performance” is directly related to the verbal content, NICs are, moreover, explicit performatives; see below for qualifications. Since the speaker is explicitly assigned the role of a performer making \(P(v)\) true, it is natural to identify the free variable \(v\) with the denotation of the speaker. This correctly predicts the dependence of NICs on the speaker’s perspective.

What about the particular descriptive ineffability of NICs? This nicely shows up in the way we have set up the contruction’s meaning contribution. If we take the identification of \(v\) with the speaker for granted, the NIC \(\bullet\text{rot werd}\bullet\) in less formal terms has the denotation in (34):

\[
(34) \quad [\bullet\text{rot werd}\bullet]_C = [\lambda w. \text{I hereby blush in } w]
\]

That is, by uttering the NIC \(\bullet\text{rot werd}\bullet\) the speaker blushes. *Prima facie*, this is obviously impossible: in other words, the meta-language used in order to describe the meaning contribution of NICs resorts to verbalizations which are considered anomalous if taken at face-value.\(^{39}\) This “descriptive ineffability” results from the specific performative character we argue for. In the following, we briefly elaborate on this aspect and link the discussion to the question why there is an anchoring to the actual world \(w\).

The anchoring in \(w\) might come as a surprise since the corresponding actions do not seem to be really performed in the actual world. By using the NIC \(\bullet\text{rot werd}\bullet\) (‘red become.stem’), one does not in fact blush; in the case of \(\bullet\text{Dich umarm}\bullet\) (‘you embrace.stem’), if used in a chat, physical distance between the interlocutors even renders any actual performance impossible. However, according to the present idea, the construction’s specific effect is to do things linguistically which under normal circumstances cannot be instantiated by linguistic means. Especially the attested examples (3) and

\(^{39}\) One might suggest resorting to more involved formulations in order to avoid such a “problem”, cf. for instance:

\[
(i) \quad [\bullet\text{rot werd}\bullet]_C = [\lambda w. \text{speaker}(c) \text{ is an instantiator who makes } \text{blush}(v) \text{ true in } w]
\]

But this only clouds what is going on. We would rather say that there is no “problem” with the anomalous formulation to begin with; rather, it exactly reflects what NICs are about, see below.
(24) from the introduction and Section 4 made this intuition palpable. In order to handle this seemingly inconsistent state of affairs, we argue for the following: NICs simulate an extension of regularly operative felicity conditions in such a way that verbs which are canonically non-performative can come across as performative. In this sense, the actions embedded within NICs are performed in the actual world, that is, they are performed in a virtual extension of the real world.40

This perspective can be seen as an amendment to Searle’s (1989) answer to the question of how performatives work. Searle (1989: 555 f.) argues that performative utterances are “self-referential to a verb which contains the notion of an intention as part of its meaning, and [that] the acts in question can be performed by manifesting the intention to perform them”. Crucially, in his account, performatives are basically declarations, and limitations of performativity are merely due to facts of nature and the real world, not to some special “performatives” semantics. That is, the world as we know it confines performatives to those few cases where there is an institutional convention that words alone can change the world. As Searle (1989: 554) puts it: “If God decides to fry an egg by saying, ‘I hereby fry an egg,’ […] He is not misusing English”.

In the case of NICs, the speaker overrules such conventional restrictions by a specific linguistic form. In a sense, the speaker plays god by virtue of linguistic means. The predominant use of NICs in chat communication and informal e-mail is instructive here: while in these letter-based forms of communications the interlocutors are physically distant from each other, they often aim at integrating some facets of immediate oral communication, thereby going beyond a simple exchange of information. One such facet is direct perception of actions that accompany the communicational setting. Therefore it seems highly desirable to have a linguistic form that could give the impression of such direct interaction. We argue that NICs in fact constitute such a form: they do not merely describe concomitant actions but present them as being in fact performed and thus despite factual distance accessible to immediate perception.

Such reasoning also explains why expressive-emotive NICs as •lach• (‘smile.STEM’), •grins• (‘smile.STEM’), •gähn• (‘yawn.STEM’) or •seufz• (‘sigh.STEM’) are very widely used, cf. Schlobinski 2001: 204. Their base verbs describe actions which typically accompany oral communication; in this

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40 We speak of a “virtual” extension of the real world in order to make a distinction from the notion of possible worlds. Virtual worlds are considered parts of the actual world and so are the performances via NICs.
sense, the NICs imitate or double such concomitant circumstances. Hence the use of NICs is facilitated if the performances can be easily thought of as accompanying real actions. Note, however, that NICs are independently performative, cf. examples as •*dich drück*• (‘you hug.STEM’) or •*Dir Kaffee ausschenk*• (‘you coffee serve.STEM’) for which, as noted already above, there are no plausible counterparts in reality.41

Finally, the fact that repetitions in NICs are never redundant is predicted by our analysis as well. It is plausible that actions as clapping and carrying can be carried out multiple times, which captures iterative and progressive interpretations of examples like (28) and (29). For the strengthening effect with emotive content, general mechanisms seem to be at work: iterative readings of multiple emotive NICs are possible, as in (27), but are usually re-interpreted as referring to the same performative expressive act. As shown in Section 4, this phenomenon is not tied to NICs but holds for emotive expressives in general. As far as NICs are concerned, the predictions of our performative approach seem to be correct.

So far we have merely described the peculiar performative character of NICs, disregarding the question of where the construction’s specific effects come from. In other words: how does the formal make-up of NICs shape and thereby explain their function? This issue is addressed in the following section.

6. Remarks on the Form-Function Fit

In order to explain the specific performative function attested for NICs, two different approaches seem feasible. One may opt for a “constructional” account with an arbitrary relation between the form and function of NICs, or for a compositional “derivational” account that relates formal properties to function in a non-arbitrary way by resorting to independently motivated grammatical principles.42 In the following, we will not be able to give a clear-cut analysis, but merely sketch strategies to explain the specific performative force of NICs.

41 Accordingly, using e.g. the NIC •*lach*• (‘laugh.STEM’) does not necessarily include real concomitant laughing. The speaker can either perform it only via NIC (i.e., the NIC imitates the action) or he can both perform it via NIC and in real (i.e., the NIC doubles the action).

42 These two fundamentally different options are well-known from the literature on sentence types, cf. e.g. Altmann 1993 for a “constructional” account of sentence types and Brandt et al. 1992 for an early “derivational” approach.
Within his proposal for appositives, Portner (2007) does not discuss in any detail how form and function are mapped onto each other. He merely assumes that the appositive structure triggers the following meaning shift:\(^{43}\)

\[
\begin{align*}
(35) & \quad a. \ [\text{a cyclist}]_c = [\lambda x \lambda w. \text{ x is a cyclist in } w] \\
& \quad b. \ [\text{a cyclist}]_C = \emptyset \\
(36) & \quad a. \ [\text{a cyclist}_{\text{appos}}]_c = \emptyset \\
& \quad b. \ [\text{a cyclist}_{\text{appos}}]_C = [\lambda x \lambda w. \text{ I hereby assert that x is a cyclist in } w]
\end{align*}
\]

Our analysis of NICs from above can be viewed as a similar meaning-shift that empties the ordinary meaning component and renders it as a specifically modified separate performative. As they stand, both projections onto the second meaning dimension seem to be just construction-dependent effects. In contrast to this approach, we will now sketch two alternative proposals that are in the spirit of derivational accounts.

6.1. The Interpretation of NICs via a Silent Force-Indicating Operator

There is a well-known tradition of encoding illocutionary force via force-indicating operators. The basic idea here is to analyze NICs in terms of such an operator, analogously to corresponding approaches to the semantics and pragmatics of canonical declaratives, interrogatives and imperatives. To be more specific, we briefly introduce one such approach, namely Han 2000 for imperatives, and then present a similar solution for NICs. We have chosen imperatives because they resemble NICs in a particular way, see below.

Han assumes that there is a morpho-syntactic feature [imp] in the C-domain of an imperative clause, as in the following simplified structure.:\(^{44}\)

\[
\text{CP} \quad \text{C} \quad \text{VP} \\
\text{[imp]} \quad \ldots \quad \ldots \\
\ldots \quad \ldots \quad V \ldots
\]

\(^{43}\) Again, we add the explicit performative marker to Portner’s representation, cf. footnote 35.

\(^{44}\) Most notably, Han (2000) assumes a separate Mood-projection in between; we will not address this issue here.
Her main point with regard to the imperative’s force is that \[imp\] is directly mapped onto a force-indicating operator that she labels “directive”.\(^{45}\) Following the basic idea that such operators allow speakers to perform a speech act by their utterance, “directive” applies to a proposition and returns a directive action. More specifically, according to Han, a directive action amounts to instructing the addressee to update his so called Plan Set, i.e. the discourse component where the addressee’s intentions are represented.

Transferring such an operator-analysis to NICs, we propose an invisible morphosyntactic feature \[ninfl\] (symbolizing the lack of any inflection) on top of the non-inflected VP. For the sake of analogy, we let it project in C as well, cf. the structural sketch in (38).\(^{46}\)

\[
\text{(38) CP} \quad \begin{array}{c}
\text{C} \\
\downarrow \text{ninfl}
\end{array} \quad \begin{array}{c}
\text{VP} \\
\ldots V \ldots
\end{array}
\]

If one then assumes that \[ninfl\] is directly mapped onto a force-indicating NIC-operator as defined in the preceding section, cf. (32), the desired effect of NICs is derived in a systematic bottom-up compositional fashion.

The merits of this approach are the following: NICs are independent utterances with their own force; therefore, resorting to the very same mechanisms as for standard illocutions is attractive. Moreover, following the standard assumption that embedded clauses do not contain force-indicators, the principled non-embeddability of NICs results from the presence of the NIC-operator automatically. Finally, a neat parallel between imperatives and NICs is captured: in both cases, there is a close connection between morphological form and illocution. Considering \[ninfl\] a specific verbal mood feature, one may say that in both imperatives and NICs verbal and sentence mood correspond.

\(^{45}\) This is not meant to constrain imperatives to directives proper; Han rather considers the operator involved a place holder for sentential force. The exact interpretation is guided via pragmatic reasoning.

\(^{46}\) Note that we do not have any empirical evidence for such a position (cf. the discussion in Section 3.3); the proposal just follows Han’s (2000) solution. In particular, this means that that there might be reasons to assign \[ninfl\] to a separate ForceP (cf. Rizzi’s (1997) split of the C-domain) or to adjoin it to the VP without in fact having a functional structure as such (cf. remarks in Sternefeld 2006, who favors a CP-adjunction analysis of illocutionary operators without localizing them in a head position; analogously, we would then just opt for VP-adjunction in the case of NICs). We have to leave a decision about these options to further research.
In order to avoid potential confusion, we would like to point out similarities and differences in the performative character of imperatives (and declaratives and interrogatives) on the one hand and NICs on the other. These are encapsulated in the meaning contribution of the operators. The NIC- and the “directive”-operator can be considered similar in adding the “content” of their argument—a proposition in Han’s (2000) analysis of the imperative, a property in the analysis of NICs above—in a particular way to a particular discourse component. With an imperative, the speaker instructs the addressee to add a proposition to his Plan Set. In the case of NICs, there is no plausible instruction to the addressee; instead, via NIC the speaker just adds a property to his Action Set.\textsuperscript{47} Informally, we define the Action Set as the discourse component that pairs each participant of a communicational setting with those properties that describe his actions during conversation. In this sense, the NIC is an explicit performative because the property as such gets listed in the speaker’s Action Set. In the case of imperatives, it is the instruction that gets listed. This instruction, however, is \textit{not} part of the imperative’s underlying “content”, i.e. its proposition. Therefore, the descriptive linguistic material does not correspond to the action as such and we are not faced with an explicit performative.\textsuperscript{48}

\section*{6.2. The Interpretation of NICs via Pragmatic Reasoning}

As an alternative to the operator approach, one might attempt a structurally more parsimonious account by making use of the most prominent formal feature in NICs, i.e. the lack of any evidence for inflectional morphemes distinguishing NICs from both finite sentences and bare infinitive forms.

\textsuperscript{47} Of course, the addressee is involved in the sense of perceiving this amendment. However, he cannot refuse it and there is nothing else to refuse. Looking at imperatives, interrogatives and declaratives: again, the speaker cannot refuse the perception of the performative as such (i.e. he has to accept that there \textit{is} an instruction). However, he can refuse to follow the speaker’s instruction.

\textsuperscript{48} With regard to the two dimensions of meaning as assumed in Section 5, there remains an open question. In her analysis of the imperative, Han builds upon the idea that the meaning of a sentence is split into a force-component and a propositional component. In a similar way, Portner (2007) considers an analysis of imperatives in terms of a force operator that introduces expressive meaning, i.e. a separate performative. According to Portner's proposal, the force marker for the imperative does not render the at-issue-content empty; see his representation (28) with the imperative's "content" (in his analysis, this is a property) in the ordinary meaning dimension. If this is the case, NICs and ordinary illocutions differ in this respect since on our analysis the NIC-operator assigns the at-issue-meaning no value at all. However, we do not see whether, and if so, how such a difference becomes (empirically) relevant.
Without any morphological marking, it seems reasonable that NICs are not part of syntax proper: they do not give rise to any potential functional anchoring; other than bare infinitive forms, they even do not allow for a parasitic connection to functional layers via embedding. Being in this sense necessary structural orphans, we conclude that NICs cannot be linked to the ordinary meaning dimension but must be automatically mapped onto the instructional secondary meaning component.

Admittedly, this reasoning still does not explain how NICs receive their particular performative character. One could think of it in terms of pragmatic inferences. A reasonable sketch of the procedure might look as follows: due to their absolutely bare form, NICs are semantically underspecified in a radical way. However, the linguistic system—making use of inflection, word-order or prosody—provides many formally specific forms in order to convey ordinary illocutionary acts as assertions or directives (requests, commands). Consequently, in order to express these functions, one should choose the linguistic forms that are specified in the appropriate way. NICs as highly non-specific forms are therefore ruled out as potential bearers of such illocutions. In contrast, performatives as declarations in Searle’s sense, cf. the discussion in Section 5, do not seem to be formally defined. Instead, an explicit performative is an explicit performative if one conceptualizes it as such. Therefore, the according specification can be seen as a last resort strategy in order to fill the radically underspecified representation with interpretable content, i.e. with performative content.\footnote{The indicated process of pragmatic strengthening, i.e. the blocking of certain interpretations on the one hand and the appropriate enriching of the given material on the other, can be modeled along the lines of some version of Grice’s (1975) cooperative principle of conversation and his conversational maxims. For instance, exploiting the maxim of quantity—more specifically its maximizing part “Say as much as you can” (= Horn’s (1984) Q-principle)—it seems to be predicted that a non-specific form cannot convey information for which a more specific, i.e. formally unequivocal form exists. Exploiting the cooperative principle and the minimizing part of the quantity maxim “Say no more than you must” (= Horn’s (1984) R-principle), every utterance must make communicational sense and can be appropriately strengthened. A more careful application of such maxims to NICs, e.g. framed in Blutner’s (2000) bidirectional optimality theory and its balanced view on the countervailing Q- and R-principles, must be left to future research.}

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The main challenge for the pragmatic approach is to keep NICs apart from other (non-canonical) sentence types. For instance, Reis (2003) invokes a pragmatic account of \textit{wh}-root infinitives as \textit{Wohin gehen? (“Where (should one/we) go”) that also relies heavily on missing finiteness (in root position) and the lack of an overt subject. Crucially, however, it yields fairly different results; specifically, it generates a modal interpretation that is not observed with NICs. While it seems obvious to localize the difference in the lack of any possible inflection in the case of NICs as opposed to non-finite morphology in the case of root infinitives, it is not clear to us where and how exactly to integrate this information into the pragmatic inference process.

7. Conclusion

This paper was concerned with the form and function of German Non-Inflectional Constructions (= NICs). We argued that NICs are robust verbal structures with clearly distinct formal and functional properties: formally, NICs are potentially complex VPs with a verb-final head lacking both an overt subject position and any kind of inflectional morphology; functionally, NICs are separate performatives enabling otherwise not explicitly performative verbal content to come across as explicit performative.

In Section 3, data from both a grammaticality judgement survey and a chat corpus provided clear empirical evidence for the analysis of NICs as bare verbal structures: in accordingly identified slots, subjectless VPs without overt verbal morphology are both rated best, and by far most frequently used. Furthermore, the discussion of complex examples from the corpus revealed that NICs allow for an elaborate internal structure but are deficient in terms of the functional layers above VP.

Turning to the function of NICs, we have shown in Section 4 that NICs display typical properties of separate performatives as discussed in Potts 2005, 2007c and Portner 2007, i.e. they are nondisplaceable, bound to the speaker’s perspective, non-redundant in case of repetition, descriptively ineffable, and true in virtue of being uttered. In particular, we provided evidence in favor of their analysis as explicit performatives: by uttering a NIC, the speaker accomplishes the action that is described by the verbal content.

In Section 5, the specific performative meaning contribution of NICs is captured within Portner’s (2007) model. Accordingly, NICs do not contribute to the ordinary meaning dimension but map the verbal content—modified to the extent that the speaker is said to automatically guarantee
the truth of the corresponding proposition—to the separate performative dimension. This encodes the performative character of NICs in a direct way and, most importantly, captures why NICs are explicit performative speech acts used in order to “do” things linguistically which normally cannot be instantiated by linguistic means.

Finally, in Section 6, we considered whether to link the form and function of NICs in an arbitrary “constructional” way or rather via non-arbitrary “derivational” means. Following the derivational paradigm, we presented two potential solutions. It was suggested to map form and function either by resorting to a silent force-indicating NIC-operator or else by pragmatic reasoning on the basis of a radically underspecified form. The most important remaining question, to our mind, thus seems whether one can find independent evidence in favor of either of these approaches.

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