Fake Form
and what it tells us about the relation between form and interpretation

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1 Introduction

The core goal of this paper is to explore the formal underpinnings of *fake form.* I here use the term 'fake form' as a descriptive term for forms that appear to have two distinct interpretations: one is typically considered the real one whereas the other one is considered fake. The main empirical domain within which I investigate this notion of *fakeness* is that of indexical pronouns. In particular, so-called *fake indexicals* have received considerable attention in the recent literature (Kratzer 2009). A crucial example, widely discussed, is presented in (1).

(1)   *I'm the only one around here who can take care of **my** children.*
                     (Kratzer 2009: 188 (1); modeled after Partee 1989:fn. 3)

The first person pronoun *my* in (1) is ambiguous between an indexical (referential) reading and a bound variable reading. On the bound variable interpretation, (1) implies that nobody else around here can take care of his or her own children. It is when they receive the bound variable reading that indexical pronouns are typically referred to a *fake indexicals.* This suggests that the indexical interpretation is somehow considered basic and that the bound variable interpretation is not quite true to the underlying function of the pronoun. This is schematized in Figure 1.
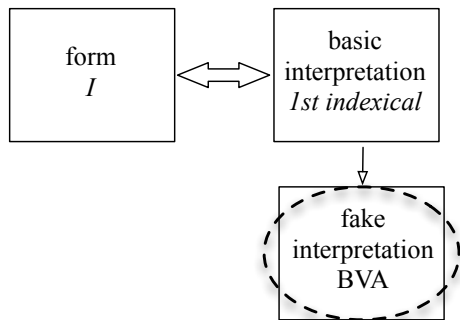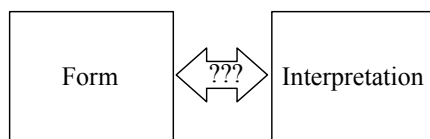
Figure 1: Fake indexicals

An obvious solution to the problem of fake interpretation is simply to posit lexical ambiguity. That is, we could duplicate the lexical entries for all indexical pronouns that allow for the bound variable interpretation as schematized in Figure 2.
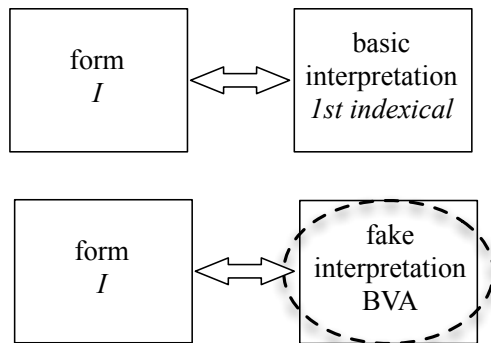
Figure 2: A lexical ambiguity approach for fake indexicals

Since fake indexicals are a pervasive and systematic phenomenon it seems undesirable and rather costly to identify the source of the ambiguity in the lexical entry of the 1st person pronoun (Kratzer 2009).

The purpose of this paper is to develop an alternative. In particular, we will consider the phenomenon of fake indexicals within a larger context. On the one hand fake forms are not restricted to pronouns, and on the other hand multi-functionality is not restricted to patterns that are labeled as *fake*. The central question within which such patterns of multi-functionality have to be explored is at the very core of linguistic theory. How should we model the relation between form and interpretation?

Figure 3: The challenge: modeling the relation between form and interpretation

Patterns of multi-functionality, such as the fake instance of the indexical *my* considered above, provide us with a unique and constructive window into this question. The solution to the problem of fake forms, which we develop in the domain of pronouns, can equally be applied to other patterns of multi-functionality. And since multi-functionality is a pervasive property of all natural languages, any attempt to model the form-meaning relation that predicts these patterns will have broader empirical coverage than those theories that have to be amended in some way to capture these patterns.

The core insight we gain from fake patterns is that the relation between form and interpretation is more complicated than depicted in Figure 3. That is, the relation between a particular form and its interpretation is not always direct. Rather – at least sometimes – this relation is mediated by syntax (Wiltschko 2014) as schematized in Figure 4.
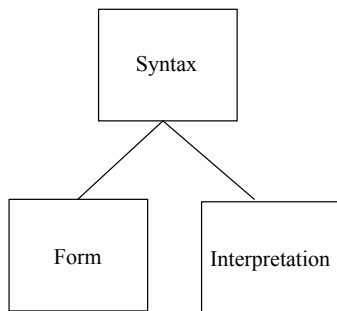
Figure 4 The relation between form and interpretation is mediated by syntax

It is precisely the apparent mismatches between form and interpretation considered here, i.e., fake forms, that speak to the necessity of such a model. Applied to the cases at hand, I shall argue that neither of the two interpretations associated with the pronoun is basic or fake. Rather, the 1st person pronoun (along with other indexicals) is not analyzed as being intrinsically indexical. Instead, both their indexical and their bound variable interpretation are derived by virtue of associating the form with syntactic structure such that a difference in syntactic structure results in a difference in interpretation as schematized in Figure 5.
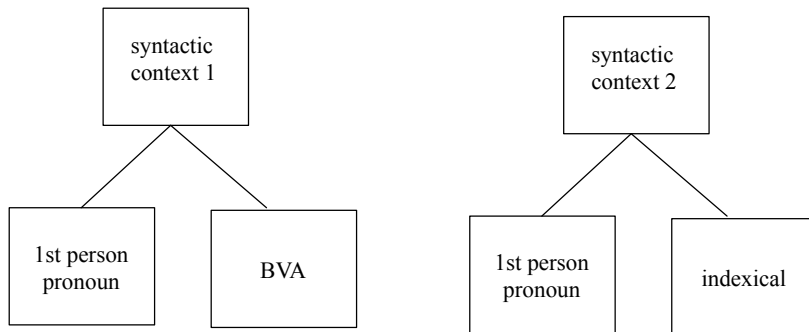
Figure 5 The relation between pronominal form and interpretation is mediated by syntax

On this view, indexicality, just like anaphoricity, is a syntactic construct rather than a lexical primitive.

The paper is organized as follows. I start in section 2 with a closer look at the nature of *fakeness* establishing first that the phenomenon is not restricted to pronouns, and second that it is an instance of a larger pattern: linguistic forms are pervasively associated with patterns of multi-functionality. In section 3, I introduce the analysis, reviewing Wiltschko's 2104 basic insights. In section 4, I discuss three consequences of the claim that *ich* is not intrinsically indexical: i) the bound variable interpretation is not the only non-indexical use of local pronouns; ii) *ich* is a building block of 2nd and 3rd person pronouns (*dich/sich*) as well; and iii) we will have a closer look at third person pronouns. In section 5, I conclude with some remarks on the issue of linguistic categorization and its relation to interpretation.

2   What is a fake form?

Taking literally, the term *fake* implies that there is a basic form with a basic meaning. Fake forms have been discussed under this label in two empirical domains: fake indexicals (Kratzer 2009) and fake past (Iatridou 2000). In what follows, I discuss each of these phenomena in turn.

2.1   Fake indexicals

The term 'fake indexical' has been introduced in Kratzer 2009 and has become the standard way of referring to 1st and 2nd person pronouns used as bound variable

anaphors.[1] In this subsection, I consider the relevant data that have lead to this term.

1st and 2nd person pronouns have typically been considered to be directly referential, indexing the speaker and addressee, respectively (Kaplan 1989). And moreover, they are typically considered indexical as a matter of their lexical specification. In this respect, they differ from 3rd person pronouns and definite descriptions, which may have an indexical use, but are not intrinsically specified as indexical (see Schlenker 2003 for discussion). This difference can be seen on the basis of the fact that the definite description *the speaker* in (2)a cannot be replaced by the 1st person pronoun as shown in (2)b. The latter sentence makes sense only if indeed I was John at some point. No such requirement is associated with the sentence in (2)a.

(2) a. *At some point **the speaker** was John.*
    b. *At some point **I** was John.*

             modeled after Schlenker 2003: 30

The difference between (2)a and (2)b comes about despite the fact that the 1st person pronoun refers to the speaker – however, it does so indexically. There are, however, contexts in which the indexical interpretation of 1st and 2nd person pronouns disappears. Examples of this sort are given in (3).

(3) a. *I'm the only one around here who will admit that **I** could be wrong.*[2]

                Partee 1989, fn.3

  b. *Only I got a question that **I** understood.*

                Kratzer 1998: 92 (4)[3]

  c. *We all think **we**'re smart.*

                Rullmann 2004: 161 (2a)

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[1] Angelika Kratzer (p.c.) thinks that the term was around before she used it. However, I was unable to find any references to it prior to her 2006 version of Kratzer 2009.

[2] In (3a) the 1st person pronoun is embedded in an attitude context. Consequently it may be interpreted as a logophor and as such it can be considered to be an indexical interpretation. That is, if indexicality is defined as applying to expressions whose semantic value is determined by some feature of a context of utterance then the 1st person pronoun in (3)a qualifies as indexical: it refers to the attitude holder of some context. As such it may be considered akin to pronouns found in logophoric systems such as Amharic (cf. Schlenker 1999, 2003).

[3] Kratzer 1998 attributes this example to Irene Heim, class lectures.

What all these instances of 1ˢᵗ person pronouns have in common is that they need not be interpreted indexically (referring to the speaker) but instead their interpretation depends on variable assignment – they behave as bound variable anaphors. Take for example the sentence in (3)b. It has two readings: one indexical (4)a, the other is that of a bound variable (4)b.

(4) a.   λx [x got a question that I understood]
    b.   λx [x got a question that x understood]

It is only if we consider the forms *I* and *we* to be intrinsically indexical that the term fake indexical is appropriate. In that case, the examples in (3) would indicate that indexical forms may sometimes *lose* their indexical interpretation. They would only appear to be indexical (i.e., be fake indexicals) when in fact they are not. Thus, the term fake indexical suggests that the non-indexical use of the indexical is derived, such that one of the meaning components is lost under certain conditions.[4] This type of approach is summarized in Figure 6, repeated from above.
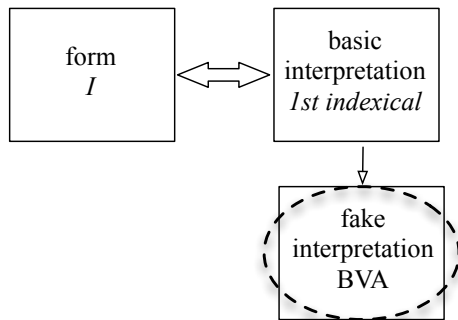
Figure 6: Fake indexicals

An analysis that adheres to this line of reasoning is that of Stechow 2003. He argues that the features of a pronoun are not interpreted by the interpretive component just in case that pronoun is bound. In that case the feature checking operation results in the deletion of the relevant features yielding a fake pronoun. This is illustrated in Figure 7.

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[4] See Déchaine & Wiltschko, to appear for a discussion on the conditions that allow for the bound variable interpretation of indexical pronouns.
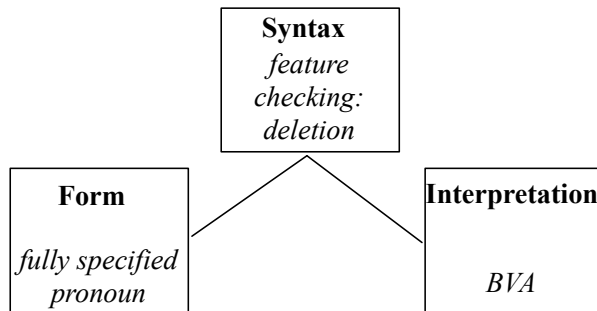
Figure 7 von Stechow's 2003 analysis of fake indexicals

Here the fake indexical is derived from the fully specified form (which in the absence of binding is interpreted indexically) via feature checking.

Interestingly, the analysis for fake indexicals developed in Kratzer 2009, the very paper that introduced the term 'fake indexical' to the field, does not in fact reflect the intuition that fake forms are somehow derived from fully indexical forms. In particular, she analyzes the fake interpretation as derived from an abstract pronominal base, i.e., a minimal pronoun with a defective feature set. This defective feature set is completed in the course of the syntactic derivation. In Kratzer 2009's particular implementation, feature valuation is achieved through binding by a λ-operator, which is in turn associated with verbal functional categories. Crucially, the process of feature transmission, which supplies a defective pronoun with its features, is invisible to the semantic component allowing for the bound variable interpretation. This is schematized in Figure 8.
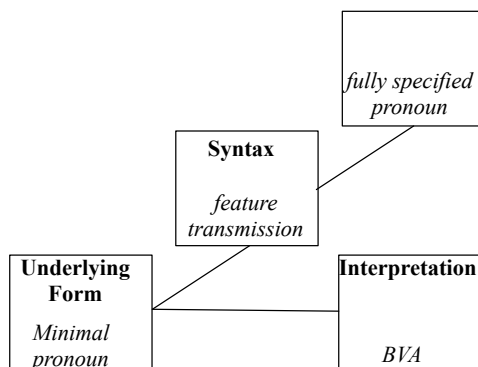

Figure 8 Kratzer's 2009 minimal pronoun approach towards BVA

However, in Kratzer's 2009 analysis, pronouns need not be borne fully unspecified. Instead they can be fully or partially specified. In that case, such pronouns may either be indexical in which case their underlying form is directly interpreted as a fully referential (indexical) pronoun. However, it may also be bound by a context shifting λ-operator (Cable 2005) in which case the result is a long distance fake indexical. This is schematized in Figure 9.
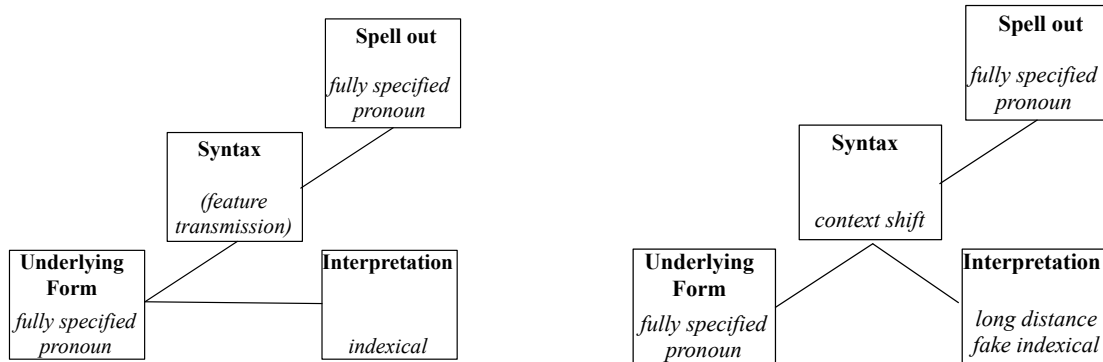
Figure 9 Kratzer's 2009 fully specified pronouns (indexical/long distance fake indexicals)

Thus, on this view there are two possible underlying forms for pronouns: one defective the other fully or partially specified. In addition, there are two ways in which fake indexicals can be derived. On the one hand, the defective minimal pronoun may be interpreted independent of its feature specification (which is supplied syntactically). On the other hand a fully specified pronoun may be interpreted via context shifting operations. Accordingly, there is no sense in which the indexical interpretation is basic and the fake form derived from it.

2.2 Fake past

The term *fake past* was first introduced in Iatridou 2000 to refer to a past tense morpheme when it is used without denoting past time reference. In particular, in a number of unrelated languages, past tense morphology is used to express counterfactuality. This is shown on the basis of the English examples in (5)-(6) below. Within an indicative clause such as in (5), past morphology on the verb expresses a past temporal reference. This is the reason for why a temporal adverb of past time (*in 2003*) is felicitous (5)a, while a temporal adverb of present time (*now*) is ill-formed (5)b.

(5) a.   *I **had** a car in 2003.*
    b.   **I **had** a car now*.

The same morphology may however systematically be used to express counterfactuality. This is the case when embedded under verbs of wishing and results in what Iatridou 2000 refers to as *present counterfactual wishes* (6)a as well as in counterfactuals (6)b. Evidence that in such contexts past tense morphology is no longer associated with a past interpretation comes from the fact that in this context it is compatible with a temporal adverb of present time (*now*).

(6) a.   *I wish I **had** a car now.*
      b.   *If I **had** a car now, I might drive to school.*

Again, the term 'fake past' is only really appropriate if we consider the past tense morphology to be intrinsically denoting past time reference. In that case, the examples in (6) would indicate that past tense may sometimes *lose* is past interpretation. It would only appear to be past (i.e., be fake past) when in fact it is not. Thus, the term fake past suggests that the non-past use of the past morphology is derived, such that one of the meaning components is lost under certain conditions. This approach is schematized in Figure 10.
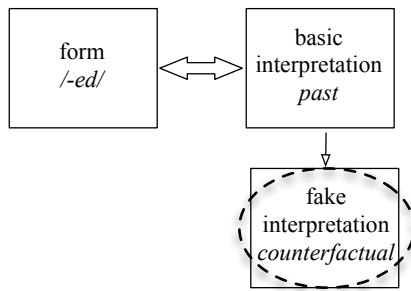

Figure 10: Fake past

Interestingly, the analysis developed in the very paper that introduced the term 'fake past', i.e., Iatridou 2000 does not reflect this intuition. Rather on Iatridou's 2000 approach both the past and the fake past (i.e., the counterfactual) interpretation are derived from a more abstract form as follows. The so-called past tense morpheme is analyzed as providing a skeletal meaning of the form in (7).

(7) $T(x)$ excludes $C(x)$.
      where
            $T(x)$ = "Topic(x)" (i. e., "the x that we are talking about")
            $C(x)$ = "the x that for all we know is the x of the speaker '
                                            Iatridou 2000: 246

Thus, what we call the past morpheme is really the realization of an exclusion feature (ExclF). When it ranges over times it receives a temporal interpretation: The topic time excludes the utterance time, as schematized in Figure 11.

9
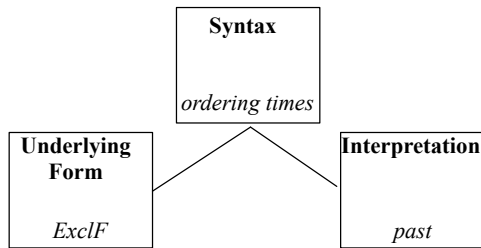
Figure 11 Deriving a past interpretation from ExclF

When access to alternative worlds is given (such as in conditionals and under verbs of wanting), then the exclusion feature ranges over worlds and yields a counterfactual interpretation: the topic world excludes the actual world. This is schematized in Figure 13
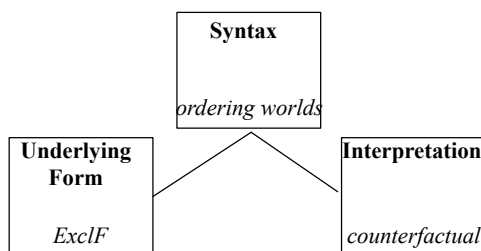
Figure 12 Deriving a counterfactual interpretation from ExclF

2.3   Summary

We have now seen that fake indexicals and fake past forms have a common plot: there is an intuitive sense in which one interpretation is basic while the other is derived, hence fake. This is schematized in Figure 13.
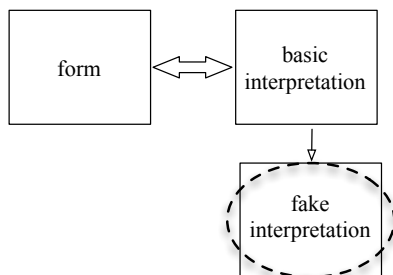
Figure 13 Fake form

More precisely, the term *fake* suggests that one of the meaning components of the basic interpretation is somehow lost in certain contexts. Indexicals lose their

indexical force allowing for a bound variable interpretation, and past morphology loses its past force allowing for a counterfactual interpretation.[5]

While the terms fake indexical and fake past are at first sight insightful names for the phenomena at hand, neither Kratzer 2009 nor Iatridou 2000 ultimately adopt an analysis that would be true to the term. On Iatridou's account, the syntactic derivation serves as a crucial mediator between the form and the interpretation. That is, both the past and the counterfactual occurrence of the same morpheme are derived from an underlying form. The syntactic configuration crucially determines the surface interpretation of ExclF either as past tense or as counterfactual. In this way, counterfactual marking is not really an instance of fake form. The intuition that past marking is basic while counterfactual marking derived through some kind of loss (i.e., fake) stems from the fact that the syntactic context for past marking is in some way more basic than that for counterfactual marking. The former involves all matrix indicative clauses, while the latter must be embedded under an operator that allows access to worlds. The logic behind Iatridou's analysis of fakeness is summarized in Figure 14.
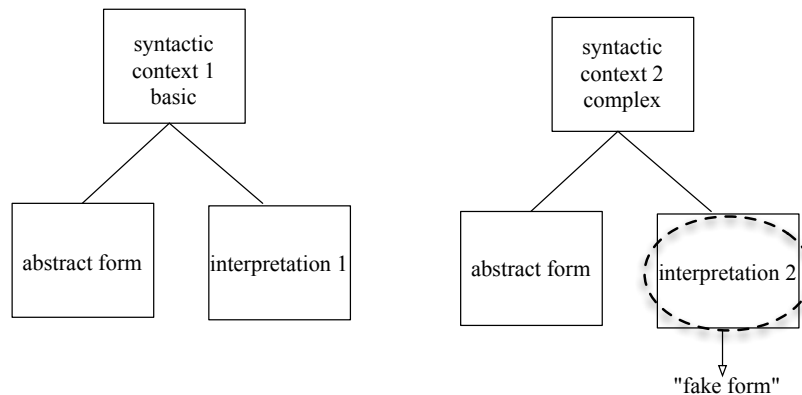
Figure 14 Fake forms aren't fake

The logic behind Kratzer's analysis of fake forms is somewhat different. In particular, she argues that the surface form is enriched in the syntactic component but crucially in a way that does not affect its interpretation. Moreover it differs from non-fake (genuine) indexical forms in that the latter are borne with fully specified

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[5] Note in passing that it is not surprising that indexical pronouns and past tense morphology behave in similar ways: in matrix clauses tense marking is itself deictic in that it relates the event situation to the utterance situation – and is thus dependent in its interpretation on features of the context, just as indexicals. Moreover, tense marking is sometimes treated on a par with pronouns (Partee 1973, Kratzer 1998).

features. The intuition that we are dealing with a fake form may again be related to the fact that the bound variable reading requires a more complex syntactic configuration, namely one where binding takes place. This is schematized in Figure 15.
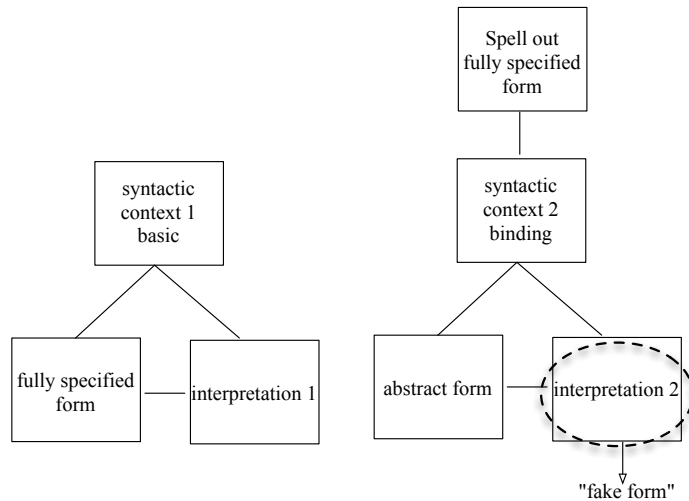
Figure 15 Fake forms aren't fake

 Thus, Kratzer's 2009 account of fake form differs crucially from Iatridou's 2000 in that it does not view syntax as mediating between form and interpretation. Rather, the interpretation can be directly read off their underlying form and thus the difference between the two interpretations is entirely a matter of semantics (Kratzer 2009: 219).

The proposal I develop here is in the spirit of Iatridou's 2000 analysis of fake past but at the same time it also has some ingredients of Kratzer's 2009 analysis of fake indexicals. In the next section, I introduce the basic insight as well as the necessary background assumptions.

3   The relation between form and interpretation is mediated by syntactic category

Fake forms provide us with a unique window into the relation between form and interpretation and I suggest, following Wiltschko 2014 that this relation can be mediated by syntax. In this section I first introduce the background that allows us to develop the proposal (3.1) and then I move on to introducing the proposal (3.2).

3.1 Background

Wiltschko 2014 argues that the interpretation of a particular form is affected by the syntactic category (κ) it associates with, as schematized in Figure 16.

```
        Syntactic
        Category
           κ
         /     \
     Form      Interpretation
      π            Σ
```
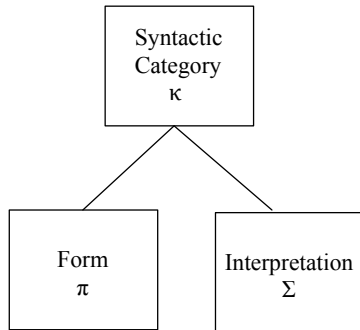
Figure 16 Syntactic category mediates the form-interpretation relation

This claim is similar in spirit to the standard view on the form-interpretation relation when it comes to complex expressions (i.e., sentences). In particular, it has long been established that syntax mediates the relation between the level of representation which feeds the component responsible for semantic interpretation (LF) and the level of representation that feeds the component responsible for phonetic interpretation (PF). Crucially, there is no direct relation between LF and PF, neither in the government and binding version of modeling the architecture of grammar – the T-model illustrated in Figure 17 - nor in the minimalist version of that model – the Y-model illustrated in Figure 18.

```
     D-structure
         |
         |         ⊳ syntax
     S-structure
       /      \
    PF          LF
```
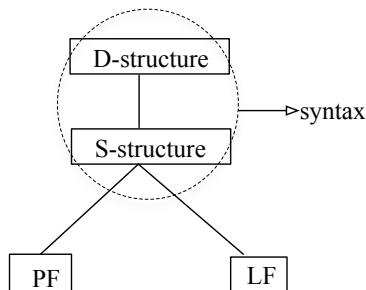
Figure 17 The T-model
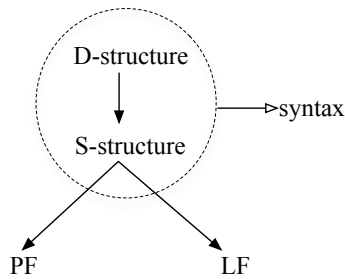
Figure 18 The Y-model

In addition, it is also necessary to adopt some of Kratzer's assumptions on syntactic computation. In particular, Kratzer subscribes to the so-called *syntactic contextualism* of the kind initiated by Borer (2005a,b). On this view, many properties of lexical forms are in fact contributed by functional heads, hence by the syntactic environment of the respective lexical item. This is a version of the claim that syntax plays an important role in the mediation between form and interpretation. However, Kratzer's version of it takes it to determine the *"ultimate shape of pronouns"* rather than its interpretation (Kratzer 2009: 189). The way this is possible is to admit that lexical items may be inserted after syntactic computation i.e., via the process of late insertion familiar from Distributed Morphology (Halle & Marantz 1993; but see also Sproat 1985, Beard 1995 and Jackendoff 1997). Unlike most approaches that allow for late insertion however, Wiltschko 2014 argues that it is necessary to recognize that linguistic forms may be either inserted early or late. The particular framework Wiltschko 2014 develops recognizes a universal syntactic spine, i.e., a series of hierarchically organized functional categories, which come with core abstract functions (such as anchoring or classifying). As illustrated in Figure 19, each of these functions has verbal and nominal instantiations capturing the long-established parallelism between verbal and nominal extended projections (Chomsky's 1970, Abney 1987, Cardinaletti and Starke 1999; Bernstein 2001, 2008; Grimshaw 2005; Koopman 2005; Rijkhoff 2008).
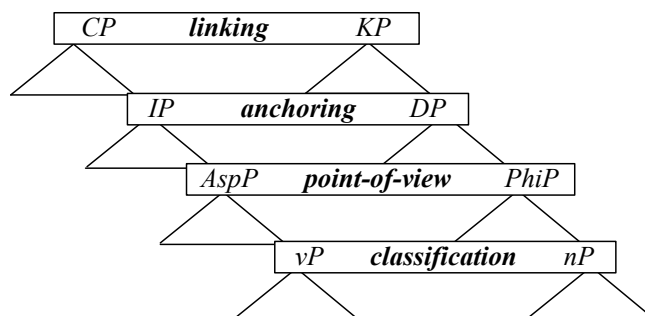

Figure 19 The universal spine hypothesis

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What differentiates the universal spine hypothesis from most other approaches towards functional projections is the claim that the substantive content of each category is provided by language-specific lexical forms, referred to as *units of language (UoL)* in Wiltschko 2014 (see also Ritter & Wiltschko 2009, 2014).

On this view then, the spine exists independently of the language-specific UoLs that are used to construct sentences. Wiltschko 2014 further assumes that all categories along the spine have in common that they relate two abstract arguments to each other, as in (Speas 2010).

(8) The universal structure of categories
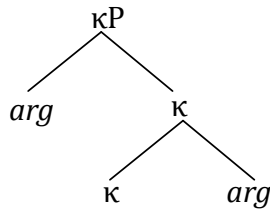
In particular, verbal categories relate situation arguments (arg_{sit}), which contain times, locations, and participants (<t,loc,part> in (9)a) while nominal categories relate individual arguments (arg_{ind}) which contain times and locations (<t,loc> in (9)b; see Gruber 2013). Moreover, these arguments are related to each other via an abstract unvalued feature intrinsically associated with the head of the category κ. For verbal categories this feature is [±coincidence] in the sense of Hale 1983 and for nominal categories this feature is [±identity].

(9) a.   verbal categories   b.   nominal categories
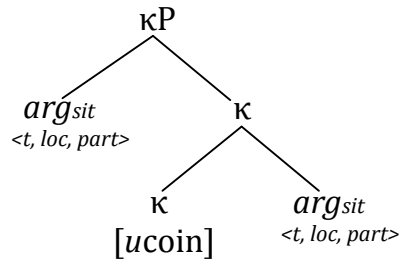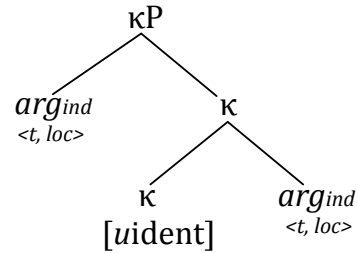
This view allows for a novel formal typology for linguistic categories fully explored in Wiltschko 2014. There are three dimension across which the association of UoLs with the spine may differ: i) place, ii) manner, iii) and timing. That is, any particular UoL may associate with the spine in different places, i.e., at different layers within the spine as illustrated in Figure 20.

κ:*linking*

κ:*anchoring*

κ:*point-of-view*

UoL

κ:*classification*
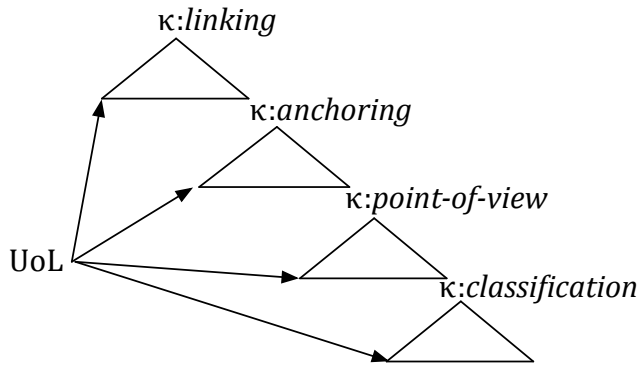
Figure 20 Variable place of association

The second parameter relative to which language-specific UoLs may differ has to do with the manner of association. UoLs differ as to whether they associate with the spine via the *is-a* relation in which case they display the distribution of syntactic heads. Alternatively UoLs may associate as modifiers. The difference in the manner of association is schematized in Figure 21.

κ

[UoL]$_κ$ *arg*

κ

κ   *arg*

UoL   κ

Figure 21 Variable manner of association

Finally, the third parameter relative to which language-specific UoLs may differ has to do with the timing of association. UoLs differ as to whether they are associated early or late, as schematized in Figure 22. The arrow pointing from UoL towards κ indicates early insertion (i.e, before syntactic computation); the arrow pointing from κ towards UoL indicates late insertion (i.e., after syntactic computation).

κ

κ   *arg*

UoL

κ

κ   *arg*

UoL

Figure 22 Variable timing of association

With these assumptions in place, the universal spine hypothesis allows for syntactic contextualism in two ways. For late association UoLs, syntactic computation will affect the form of a given UoL, just as in Kratzer's 2009 analysis of fake indexicals.

However, for early association UoLs, syntactic computation will affect the interpretation of a given UoL just as in Iatridou's 2000 analysis of fake past. The effect on interpretation follows from the assumption that each layer in the spine is associated with a unique function as a matter of UG. Hence it follows that a given UoL may acquire some meaning simply by virtue of being associated with the syntactic spine. In this way the relation between form and interpretation is thus mediated by syntax. While a given, early association UoL is associated with a particular meaning, its interpretation may change depending on the syntactic context it associates with. The universal spine hypothesis thus predicts the existence of multi-functionality. And indeed patterns of multi-functionality such as the apparent fake interpretations discussed here are ubiquitous in the languages of the world. In particular, there are several phenomena that require a model of grammar where the relation between form and interpretation is mediated by syntactic structure. This is because a given form is interpreted in different ways depending on the syntactic context. Such phenomena include not only fake past and fake indexicals, but also expletives, polysemy, conversion, as well as syncretism.
In what follows, I develop an analysis of fake indexicals within the framework of the universal spine hypothesis.

3.2   Proposal

In this section I review the analysis of fake past developed in Ritter & Wiltschko 2014 (3.2.1). This will serve as the basis for the analysis of fake indexicals (3.2.2).

3.2.1   Fake past

The starting point for the analysis is the translation of Iatridou's 2000 insight into an analysis within the universal spine hypothesis (Ritter & Wiltschko 2014). The intrinsic [±coin(cidence)] feature of functional categories plays the role of Iatridou's exclusion feature. By hypothesis, past morphology values the unvalued coincidence feature associated with the anchoring category (i.e., INFL) as [-coin].

(10)   An analysis of past marking

κP: anchoring

Utt-time   κ

       κ   *Ev-time*

     [-coin]

      ↑

     past
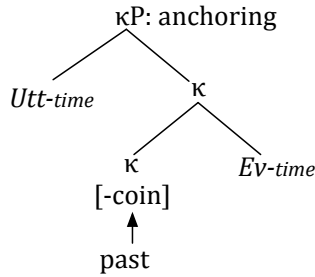
Furthermore Ritter & Wiltschko 2014 argue that the utterance situation associated with the anchoring category is an instance of default interpretation. In particular, they claim that it is in fact a pronominal (i.e., anaphoric) argument, but that in the absence of an antecedent (i.e., in matrix clauses) it is interpreted as the utterance situation.

(11)   The external argument is pronominal

κP: anchoring

Pro-sit   κ

       κ   *Ev-sit*

    [±coin]
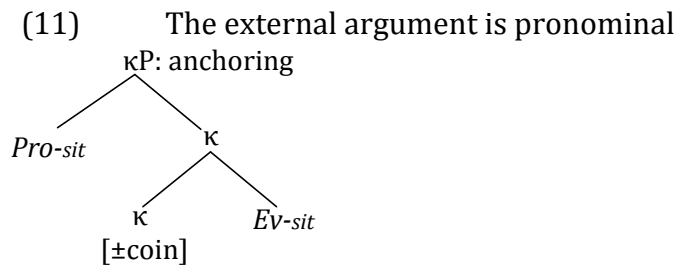
Since past marking values κ in (10), the situation arguments are restricted to times.

To account for fake past marking in counterfactual contexts, Ritter & Wiltschko (2014) argue that in this case, counterfactuality - associated with the linking layer of the spine (i.e., CP) – values the coincidence feature in the anchoring category. In this case, past marking is an instance of *past agreement*. In particular, fake past in counterfactuals is not the only instance of past tense morphology that lacks past temporal force. The same can be observed in English Sequence of Tense (SOT) effects as well as in Romance subjunctives. SOT effects arise when an embedded clause is selected by a [+past] matrix verb. In this case the embedded INFL must be inflected as past even though its temporal reference need not be past relative to the matrix situation. Thus it allows for both a simultaneous reading as well as a shifted reading. It is only in the shifted reading that past morphology is in fact interpreted as past. The absence of a past interpretation in the simultaneous reading can be viewed as a form of tense agreement with the matrix verb (see Giorgi 2009 for a recent overview).

(12)   *Mary said that she was tired.*

(i)   Simultaneous reading: Time of being tired is at time of saying.
(ii)   Shifted reading: Time of being tired is before time of saying

(Enç 1987: 350 ex. 18)

Ritter & Wiltschko 2014 suggest that a similar mechanism is at play in counterfactuals, but here we are not dealing with past agreement but instead it is an instance of agreement between two [-coin] features: the one in INFL must be of the same value as the one in C. Since now past no longer values INFL as [-coin] it is no longer interpreted as past but rather it spells out the independently valued [-coin] feature. This is reminiscent of Iatridou's 2000 insight that past morphology expresses an exclusion feature. And the intuition that in counterfactuals it is worlds rather than times that are excluded is captured by the assumption that the trigger for [-coin] agreement in INFL is counterfactuality in C, which in turn orders world arguments (Mezhevich 2008a,b).

(13)   Counterfactuals ordering worlds

κP
├── *Eval-world*
└── κ
    ├── κ
    │   [-coin]
    │   ↑
    │   irrealis
    └── *arg*sit
        <t, loc, part>
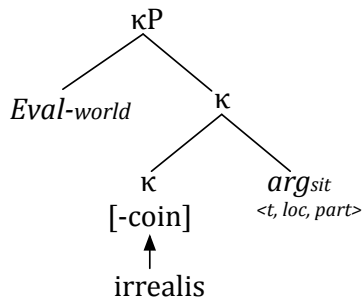
Ritter & Wiltschko 2014 present independent evidence that fake past marking in INFL is dependent on the counterfactual content in C. In particular, it is consistent with the well-known fact that in counterfactuals the inflected auxiliary may move to C, as in (14). This differs crucially from realis conditionals where past marking has temporal force (15)a,b but INFL- to-COMP is ruled out (15)c.

(14)   *Had she arrived, I would not have left.*

(15)   a.   *If she really **arrived** last night she will be here today.*
        b.   **If she really arrived right **now,** she will be here today.*
        c.   **Has she really arrived, she will be here.*

Ritter & Wiltschko's 2014 analysis thus captures the intuition that indexical past is somehow more basic than fake past by claiming that in that context it doesn't serve an interpretive function, namely that of valuation. In such contexts the anchoring
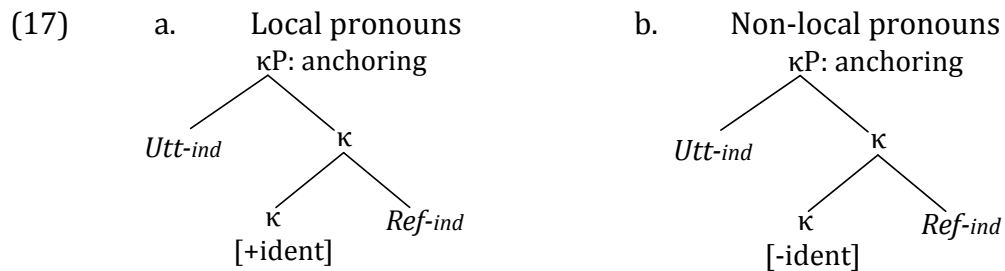
category is necessarily embedded (either under a matrix predicate or under a higher functional head C) and thus the syntactic context is essentially more complex.

3.2.2   *Fake indexicals*

As mentioned above, Wiltschko 2014 assumes that nominal categories are similar to verbal categories. However they differ in that the intrinsic feature is not coincidence but instead identity and moreover that we are dealing with individual rather than situation arguments. Thus, the nominal equivalent of the anchoring category (INFL) – generally assumed to be D – is shown in (16).

(16)   Nominal anchoring

```
            κP: anchoring
           /          \
      Pro-ind          κ
                      /    \
                    κ       Ref-ind
                 [±ident]
```
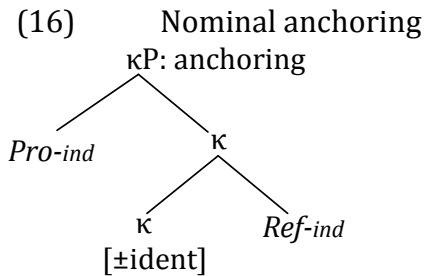
In the absence of an antecedent, the pronominal individual argument *Pro-ind* will, by default, be interpreted as an Utterance individual, i.e., a speech act participant. Thus, both 1st and 2nd person pronouns are analyzed as instances of [+ident] such that it is asserted that the referent is identical to an utterance individual, as in (17)a.[6] In contrast, 3rd person pronouns are analyzed as instances of [-ident] such that it is asserted that the referent is not identical to an utterance individual, as in (17)b.

(17)   a.   Local pronouns   b.   Non-local pronouns

```
         κP: anchoring                              κP: anchoring
        /          \                               /          \
   Utt-ind          κ                         Utt-ind          κ
                   /    \                                     /    \
                 κ       Ref-ind                            κ       Ref-ind
             [+ident]                                   [-ident]
```

What is crucial in this analysis, is that 1st and 2nd person pronouns are not intrinsically indexical. Instead, indexicality is supplied by abstract arguments, which

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[6] I address the question concerning the difference between 1st and 2nd person pronoun in section **Error! Reference source not found.**.

come with the anchoring category. In the absence of an antecedent, this pronominal argument corresponds to the utterance argument. Accordingly, fake indexicals must be analyzed as structures in which the abstract argument is bound to an appropriate antecedent, i.e., in the presence of an antecedent it is interpreted as a pronominal argument (*Pro-ind*), as in (18).

(18)　　　"fake indexicals"

κP: anchoring

Pro-ind　　κ

　　　κ　　*Ref-ind*
　　[+ident]
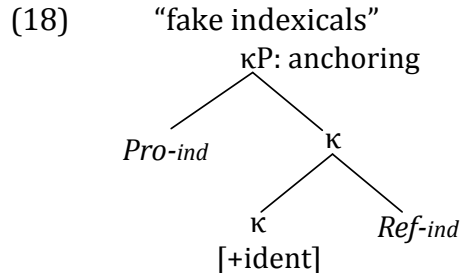
4　　Consequences

In this section, I discuss three consequences of the analysis just introduced. First, I discuss the impersonal use of 1st and 2nd person pronouns (4.1); second I show independent evidence that the basis for local pronouns is the identity predicate (4.2). And finally, I discuss the properties of 3rd person pronouns in more detail (4.3).

4.1　　Impersonal uses of 1st person pronouns

Fake indexicals of the type discussed in section 2.1, are not the only instances where 1st and 2nd person pronouns are used in a non-indexical way. In particular, they can also be used as impersonal generic pronouns (Gruber 2013, Malamud 2012, Zobel 2010). Illustrative examples are given in(19) and (20).

(19)　　　Context: Edith und Brigitte are talking about their sister Bettina who claims not to be able to come home for Christmas because she has to work on her dissertation. Edith says:
Wenn **ich** *zu Weihnachten wirklich zuhause sein will,*
If　I　at christmas　really　at.home be　want
*...dann　schaff　***ich*** *das　auch irgendwie*
...then　manage I　　that　too　somehow
'If I really want to spend christmas at home, then I will somehow manage.'

Gruber 2013: 160 (76)

(20)　　　*Wenn* **ich** *als Mannschaft gewinnen will,*

> If   I   as team   win   want
> *…dann   muss   **ich** motiviert   auf den Platz gehen*
> …then   must   I   motivated   on the field go.inf
> 'If (one as) a team wants to win, then one/they has/have to enter the field motivated.'

<div align="right">Zobel 2010: 293</div>

Note that the example in (20) is particularly revealing as it adds the modifier *'als Mannschaft'* ('as a team') to the 1st person pronoun. Since one person cannot make up a team, it clearly shows that in this case the 1st person pronoun has a different referent: it express a general statement about how teams that want to win have to act.

The impersonal or generic use of local pronouns is thus another instance of a fake indexical, i.e., a non-indexical use of an otherwise indexical form, as illustrated in Figure 23.
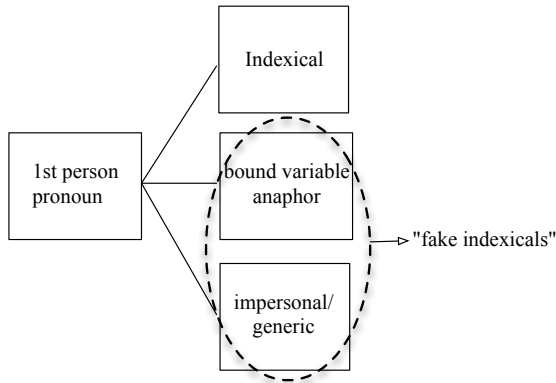
Figure 23: Another fake use of 1st person pronouns

The logic of the analysis developed in section 3.2.2 leads us to identify the source of the impersonal generic interpretation in the abstract argument associated with the anchoring argument. In particular, suppose that this abstract pronominal argument can be interpreted generically. In this way, the abstract argument is reminiscent of arbitrary PRO and *pro* (Williams 1980, Suñer 1983; see Sigurdsson and Egerland 2009 for a recent overview) . Hence I have labelled the pronominal argument as *Pro-arb* in (21).[7]

(21)   The impersonal generic use of 1st person pronouns

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[7] On the affinity between 1st person, arbitrary *pro* and genericity see Moltmann 2006.

```
                κP: anchoring

        Pro-arb          κ

                   κ         Ref-ind
                [+ident]
```
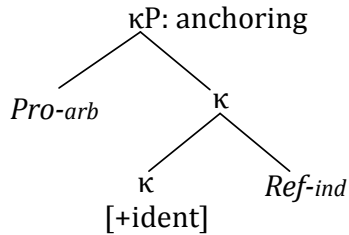
Both, arbitrary pro and the impersonal use of 1st person pronouns have in common that they are restricted to pick out human referents. Consider the examples in (22) which involve impersonal passives and thus no overt subject. In place of the subject, this construction has a silent pronominal element with arbitrary reference (pro_{arb}) Crucially, this arbitrary pronoun is restricted to [+human] individuals. This can be seen based on the fact that the verb in such impersonal passives cannot be one that requires a non-human subject. For example, *essen* (22)a is the German verb that is used for humans consuming food, while *fressen* (22)b is the equivalent verb used for animals consuming food. The infelicity of (22)b is due to the incompatibility between the verb's selectional restriction and the requirement for the arbitrary pronoun to be restricted to humans.

> (22)   a.   *Im   Winter wird pro_{arb}   weniger gegessen*
>   in.the winter AUX pro_{arb}   less   eat.part
>   'People eat less in the wintertime
>   b.   *#Im   Winter wird pro_{arb}   weniger gefressen*
>   in.the winter AUX pro_{arb}   less   feed.part
>   'People feed less in the wintertime.'

Similarly, the first person pronoun when used as an impersonal must refer to a human individual (Gruber 2013). Hence, we find the same contrast as with silent arbitrary pronouns: it cannot function as the agent of a verb that requires a human agent. This is illustrated in (23).

> (23)   a.   *Wenn ich im   Winter weniger   esse, ...*
>   when I   in.the winter less   eat ...
>   *... dann kann ich auch weniger leisten.*
>   ...then can I   also less   achieve
>   'If I eat less in the winter, then I can also achieve less.'
>   b.   #*Wenn ich im   Winter weniger   fresse, ...*
>   when I   in.the winter less   feed...
>   *...dann kann ich auch weniger leisten.*
>   ...then can I   also less   achieve

As with local pronouns used as bound variable anaphors, we also have the impression that the impersonal use of these pronouns is somehow less basic – hence fake. In case of the impersonal use this is so because this interpretation requires the entire utterance to be a generic statement. That is, the impersonal use of the local pronoun is not available in episodic statements, as shown in (24).

(24)   *#Wenn **ich** als Mannschaft gestern   gewinnen wollte,*
         If   I   as team   yesterday win   wanted
         *…dann   musste   **ich** motiviert   auf den Platz gehen.*
         …then   must.PAST   I   motivated   on the field go.inf
         'If (one as) a team wanted to win yesterday, then one had to enter the field motivated.'

Thus, under this analysis, an impersonal pronoun is constructed with an arbitrary pronominal argument serving as the abstract argument with which the referent is identified by the identity feature. This predicts that an argument of a similar type is also available in the verbal domain, as in (25).

(25)   generic anchoring

            κP: anchoring
           /   \
    Pro-arb   κ
                      /   \
                   κ   *Ev-sit*
                [+coin]
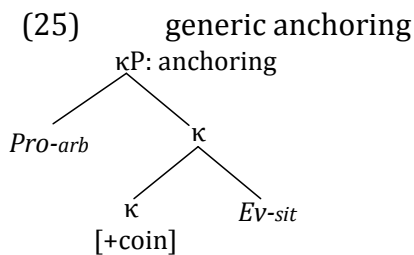
This is indeed so as evidenced by the well-known fact that present tense does double duty as a marker of genericity, i.e., it does not always express present time. This is shown (26) where present tense on the verb does not indicate that the time of spoiling coincides with the time of utterance. Instead, it is a general statement about what happens when too many cooks work on the broth.

(26)   *Viele Köche verderben den Brei.*
         Many cooks spoil   the mash
         'Too many cooks spoil the broth.'

Note that it is unclear how this impersonal use of the 1st person pronoun can be accounted for under Kratzer's 2009 analysis of fake indexicals, though it too is an instance of a non-indexical, thus fake use. In particular, since it is not interpreted indexically, it would have to be borne as a minimal pronoun acquiring its 1st person feature in the course of the post-semantic syntactic derivation. However, unlike

what Kratzer 2009 argues to be the case for the bound variable use, there is no obvious trigger as to why a first person feature would have to be added in this context.

4.2 *ich* as the spell out of the identity predicate

The core of the analysis developed in section 3.2.2 has it that a local pronoun is not intrinsically indexical but instead that it acquires its indexicality by the syntactic context. The intrinsic contribution of local pronouns is to value the identity feature associated with the anchoring category as [+ident]. This amounts to saying that local pronouns serve as identity predicates. In this subsection, I address the question as to how 1st and 2nd person pronouns differ from each other. And I present some independent evidence that German *ich* is indeed an identity predicate.

Everything else being equal, the analysis presented thus far cannot distinguish between 1st and 2nd person pronouns: they both value the identity feature as [+ident] asserting that the referent is identical to an utterance participant. I follow Wiltschko 2014 where this proposal is modified as follows. Suppose that *ich* is the identity predicate and the difference between 1st and 2nd person is encoded by means of agreement. While in their nominative instantiations this is not immediately obvious it is in the accusative, as shown in (27). Both 1st and 2nd person pronouns are composed of an invariant stem *ich* and a prefix *m-* for 1st person and *d-* for 2nd person.

(27)   a.   *m-ich*   1ST PERSON ACCUSATIVE
        b.   *d-ich*   2nd PERSON ACCUSATIVE

Independent evidence for the decomposition of these accusative pronouns comes from a number of considerations (see Leiss 2004 and Wiltschko 2014 for a more detailed discussion). Consider the paradigm of German personal pronouns.

	1	2	3		
			MASC	FEM	NEUT
NOM	*ich*	*du*	*er*	*sie*	*es*
ACC	*mich*	*dich*	*ihn*	*sie*	*es*
REFL			*sich*		
DAT	*mir*	*dir*	*ihm*	*ihr*	*ihm*

POSS	*m*ein	*d*ein	*s*ein	ihr	sein

Table 1 German personal pronouns

A closer look at the shaded cells reveals that in the 1st person all but the nominative pronoun start with *m-*. In contrast, all 2nd person pronouns start with *d-*. This appears to be more than accidental, as what remains of the pronominal forms is – except for the nominative form – identical: *-ich* is the accusative stem, *-ein* is the possessive stem[8], and *–ir* is the dative stem (except for the 1st person). This is illustrated in (28).

(28)　　a.　**Accusative**

1st　　$[[\mathbf{m}]_1\text{-}[ich]_1]_1$
2nd　　$[[\mathbf{d}]_2\text{-}[ich]_1]_2$
3rd　　$[[\mathbf{s}]_3\text{-}[ich]_1]_3$

　　b.　**Possessive**

1st　　$[[\mathbf{m}]_1\text{-}[ein]_3]_1$
2nd　　$[[\mathbf{d}]_2\text{-}[ein]_3]_2$
3rd　　$[[\mathbf{s}]_3\text{-}[ein]_3]_3$

　　c.　**Dative**

1st　　$[[\mathbf{m}]_1\text{-}[ir]_3]_1$
2nd　　$[[\mathbf{d}]_2\text{-}[ir]_3]_2$
3rd　　　　$[ihr]_3$

Incidentally note that the same decomposition is possible in the French pronominal paradigm (Kayne 2000), where the cognate prefixes *m-, t-,* and *s-* serve the same function as in German.

| | 1 | 2 | 3 | |
			MASC	FEM
NOM	*me*	*tu*	*il*	*elle*
ACC	*me*	*te*	*li*	*la*
REFL			*se*	
DAT	*me*	*te*	*lui*	*elle*

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[8] See Brandner 2014 for a detailed discussion regarding the decomposition of *s-ein*.

POSS	*m*on	*t*on	*son*	*leur*

Table 2 German personal pronouns

Thus, I analyze German *m-, d-*, and *s-* as agreement prefixes that attach to the pronominal stem *ich*, which in turn serves as the identity predicate. This is illustrated in (29).

(29) Decomposing accusative pronouns

κP: anchoring
Pro-*ind* κ
κ Ref-*ind*
1: *m-* κ
2: *d-* [+ident]
3: *s-* *ich*
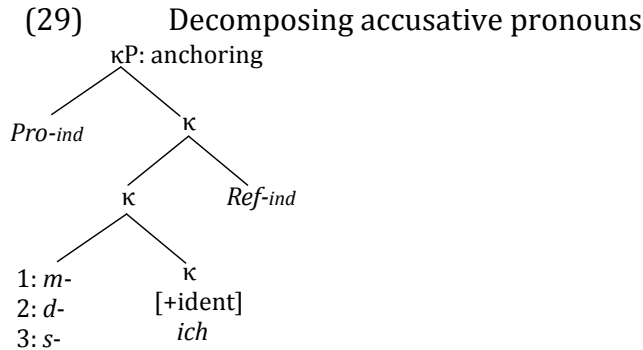
If this analysis is on the right track, we have independent evidence for the analysis of *ich* as an instantiation of the identity predicate as opposed to being intrinsically a 1st person indexical pronoun. If it was intrinsically 1st person, then the fact that the same form also occurs in 2nd and 3rd person pronouns would be unexpected. In fact, if that were the case it would seem to make the decomposition in (28) impossible.

Further evidence that *ich* is not intrinsically an indexical first person pronoun stems from the fact that it may be used inside of compounds, without referring to the speaker, i.e., another fake use of indexical pronouns. This is illustrated in (30).

(30) a. *Ich-sucht*
          me-addiction
          'self-absorption'
      b. *Ich-gesellschaft*
          me-society
          'self-absorbed society'
      c. *das kleine Ich-bin-ich*[9]
          the little I-am-I

Note that on this analysis, the 3rd person accusative pronoun (*sich)* too contains the identity predicate *ich*. At first sight, this seems to contradict the

---

[9] This is the title of a children's book authored by the Austrian writer Mira Lobe. Its main character (*das kleine ich-bin-ich*) is a creature in search of its identity.

analysis of 3rd person I have introduced in section 3.2.2. In particular, there I assumed that 3rd person pronouns are best analyzed as valuing the identity feature as [-ident] thereby asserting that the referent does not coincide with the utterance participant. However, note that the 3rd person pronoun containing what I take to be the identity predicate (*sich*) is in fact not an ordinary 3rd person pronoun, but it is instead a reflexive. And crucially, it is the hallmark of reflexives that they encode an obligatory local dependency. Thus, while reflexive 3rd person pronouns do not assert an identity with the utterance participant, they do assert identity with an appropriate antecedent (see Cresswell 1973, Keenan 1988, Gast 2006 for analyses of reflexives as identity predicates). Hence we only need to assume that *s-ich* is always associated with a syntactic category where the abstract argument is pronominal and thus requires an antecedent. In this way, the reflexive pronoun receives a similar analysis as fake indexicals (see also Kratzer 2009 for arriving at this conclusion albeit for different reasons). Further support for the assumption that the identity predicate may serve as the basis for both 1st person pronouns as well as reflexives stems from the fact that in many languages the former is contained in the latter (Leiss 2004). This is shown in Table 3.

	REFL	1ST NOM
Russian	seb**ja**	*ja*
German	s**ich**	*ich*
Old Icelandic	s**ik**	*ik/ek*
Gothic	s**ik**	*ik*
Modern Icelandic	s**ig**	*eg/ég*
Norwegian	s**eg**	*jeg*

Table 3: "First person" contained in reflexives

I take this to establish the proposed analysis of German *ich* as instantiating an identity predicate, thus valuing the identity feature associated with the nominal anchoring category as [+ident]. Its indexical reference to the speaker comes about by being associated with the syntactic structure, which serves as an indexical shell. Thus, the relation between the form *ich* and its interpretation as an indexical first person is mediated by the syntactic structure. This is summarized in (31).

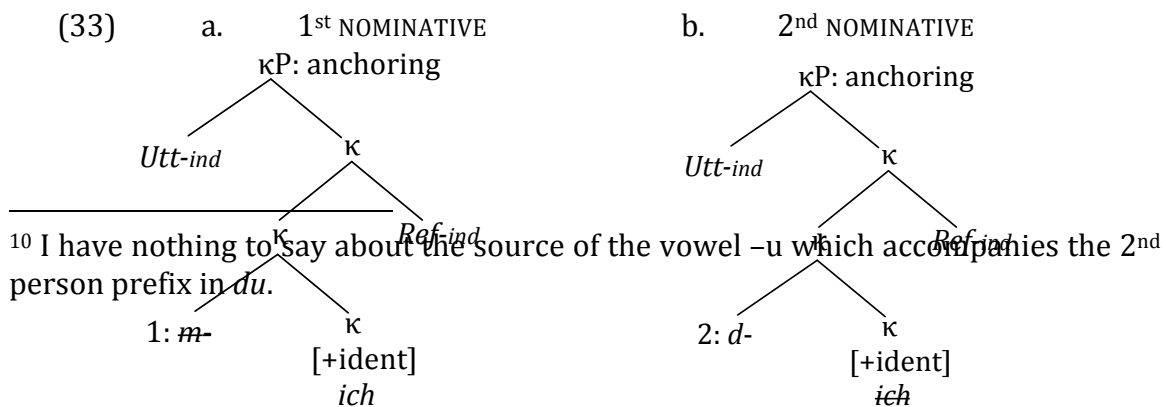   (31)   Inserting the identity predicate into the indexical shell
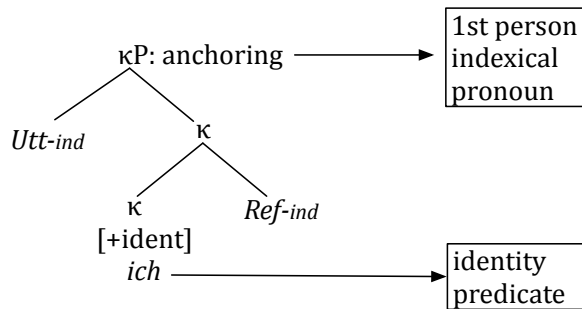
Note in passing that this pattern cannot be straightforwardly accounted for under Kratzer's 2009 analysis of fake indexicals. In particular, in this case *ich* cannot be borne as a fully specified form, because if it were it would have to be interpreted indexically. But at the same time there is no source for 1st person agreement that would trigger the occurrence of the 1st person form in this context.

What remains to be accounted for under the analysis presented here however, is the forms of the nominative accusative pronouns:

(32) a.   *ich*   1st PERSON NOMINATIVE
      b.   *du*   2nd PERSON NOMINATIVE
      c. i)   *er*   3rd PERSON MASCULINE NOMINATIVE
          ii) *sie*   3rd PERSON FEMININE NOMINATIVE
          iii) *es*   3rd PERSON NEUTER NOMINATIVE

Among these pronouns only the 1st person pronoun contains the identity predicate, and in fact there is no marker of 1st person to be found (i.e., the expected 1st person prefix *m-* is missing). But neither the second nor the third person nominative pronouns are composed with *ich.* I suggest, that this pattern be analysed as involving zero marking. Hence, the first person pronoun is analyzed as containing a silent 1st person agreement marker (otherwise spelled out as *m-*), as in (33)a while the second person pronoun is analyzed as containing a silent (possibly elided) version of the identity predicate but an overt form of the pronominal agreement, in the form of the *d-* prefix, as in (33)b.[10]

(33) a. 1st NOMINATIVE   b. 2nd NOMINATIVE

[10] I have nothing to say about the source of the vowel –u which accompanies the 2nd person prefix in *du.*

29

For 3rd person non-reflexive pronouns the absence of the identity predicate is unsurprising: they don't express identity with an utterance participant. However, 3rd person pronouns still present us with an analytical challenge to which I turn in the next section.

4.3   A closer look at 3rd person pronouns

Recall the analysis of fake indexicals repeated below as (34). There are two ingredients to capture the bound variable interpretation: the abstract argument is interpreted as anaphoric (*Pro-ind*) and the identity feature is valued as [+ident]. This derives the result that the referent is identical to the pronominal argument.

(34)   Local pronouns as bound variables

κP: anchoring

Pro-ind κ

            κ *Ref-ind*
        [+ident]
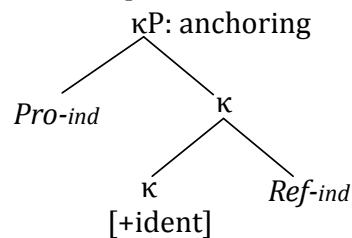
This presents us with a dilemma in dealing with 3rd person pronouns. On the one hand 3rd person pronouns differ from local pronouns in that they value the identity feature as [-ident] (see Ritter & Wiltschko 2014) but on the other hand, they too can function as bound variables. Thus, everything else being equal we would expect then that they too should be valued as [+ident] to assert identity with the pronominal argument. And indeed that is the analysis for 3rd person reflexives. So how can we reconcile this dilemma?

While I will not present an analysis here I will present some data which suggest that this conundrum may in fact be a virtue of the analysis. In particular, in Upper Austrian German, 3rd person pronouns come in two forms: in addition to the

regular pronouns there are also phonetically reduced ones. The relevant paradigm is given in Table 4.[11]

		NOMINATIVE		ACCUSATIVE	
		full	reduced	full	reduced
SG	MASC	*ea*	*a*	*eam*	*n*
	FEM	*sie*	*s*	*sie*	*s*
	NEUT	*es*	*s*	*n/a*	*s*
PL		*sie*	*s*	*sie*	*s*

Table 4 Upper Austrian pronouns: full and reduced forms

What is interesting from the present perspective is the fact that these two paradigms differ in the way they may be interpreted. First, as shown in (35), only full but not reduced forms can be used deictically

(35)   As an answer to the question: Who sang yesterday and uttered while pointing at individual in sight of utterance context
       *Gestan   hot **ea/*a**   gsunga.*
       Yesterday has he$_f$/he$_r$ sung$_{part}$
       'Yesterday he sang.'

Second, both full and reduced forms can be use to refer to a salient discourse referent (i.e., endophorically), as show in (36).

(36)   *Wasst   eh, da Peta is gestan   auf Besuch kumma…*
       know-2nd prt det peter is yesterday to   visit   come.part…
       *…Zeast homa olle gessn, und donn hot **ea/a**   gsunga.*
       …First have.we   all   eaten and then has he$_f$/he$_r$ sung.part
       'You know, Peter came for a visit yesterday. First we all ate and then he sang.'

In this respect it appears that both forms can be used anaphorically. However, when we turn to instances of bound variable anaphors the situation is different. In that case only the reduced form is well formed; the full form cannot be interpreted as a bound variable, as shown in (37).

(37)   *Neta do Hons hot a Frog   kriagt wos ***ea/a** vastondn   hot.*
       Only det Hans has a question gotten which he$_f$/he$_r$ understood has

---

[11] Note that the regular forms do not necessarily bear stress, though they can if they are focussed.

'Only Hans got a question which he understood.'

Finally, neither full nor reduced forms can be used for generic impersonal uses (38)a. Instead a dedicated impersonal pronoun *man* has to be used (38)b.

(38) a. *Des tuat **ea/a** ned.*
    that does he$_f$/he$_r$ not
    'He doesn't do that. '
    i) = talking about a specific individual
    ii) ≠ talking about people in general
  b. *Des tuat **ma** ned.*
    that does one not
    'One doesn't do that. '
    i) ≠ talking about a specific individual
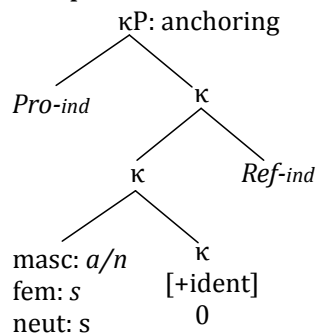   ii) = talking about people in general

The range of meanings associated with the full and reduced 3rd person pronominal forms are summarized in Table 5.

	full	*reduced*
deictic	✔	✗
endophoric	✔	✔
BVA	✗	✔
generic	✗	✗

Table 5: The range of interpretation associated with full and reduced pronouns

This distribution suggests that endophoric coreference is not achieved in the same manner as bound variable anaphora. There are a few conclusions we can draw from this pattern. First, it appears that weak pronouns do not serve to value the identity feature. This is so because as a 3rd person pronoun the identity feature would be valued as [-ident] but as a bound variable it would have to be [+ident]. This may suggest that reduced pronouns serve as modifiers of a silent [+ident] head as in (39).

(39) 3rd person bound variables

      κP: anchoring
     /   \
   Pro-ind   κ
        / \
       κ   *Ref-ind*
     / \
  masc: *a/n* κ
  fem: *s* [+ident]
  neut: *s*   0

Note that both ingredients of this analysis are independently needed: modificational prefixes were necessary to analyse reflexives, and a silent identity predicate was needed to account for 2nd person pronouns. The assumption that 3rd person gender pronouns are qualitatively different than local pronouns is not unique to this analysis. It is also what's assumed in Kratzer 2009. In particular, Kratzer assumes that 1st and 2nd person features are irreducibly referential in that they refer to speakers and hearers as in (40).

(40)　　　Participant features
　　　　　$[| [1^{st}]_N |]^{g,c}$ = the speaker(s) in c
　　　　　$[| [2^{nd}]_N |]^{g,c}$ = the hearer(s) in c
　　　　　$[| [1^{st} + 2^{nd}]_N |]^{g,c}$ = the sum of speaker(s) and hearer(s) in c
　　　　　　　　　　　　　　　　　　　　Kratzer 2009: 220 (70)

In contrast, 3rd person features are assumed to be the absence of person features but are instead made up of descriptive features such as gender features, as in (41).

(41)　　　"3rd person" descriptive features
　　　　　$[| [male]_N |]^{g,c}$ = $\lambda x.$ x is one or more males.
　　　　　$[| [female]_N |]^{g,c}$ = $\lambda x.$ x is one or more females.
　　　　　$[| [thing]_N |]^{g,c}$ = $\lambda x.$ x is one or more things
　　　　　　　　　　　　　　　　　　　　Kratzer 2009: 221 (73)

In contrast, full 3rd person pronouns may be analysed as valuing the identity feature as [-ident] deriving the fact that they neither refers to the utterance participant nor do they allow for a bound variable interpretation.[12]

5　　Conclusion

In this chapter, I have explored the formal underpinnings of fake forms, where this term was taken to be a descriptive label for linguistic forms that are associated with more than one interpretation and there is some sense in which one of the interpretations is considered real (basic) and the other one fake (derived). We

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[12] A detailed analysis of difference between pronouns that may or may not be bound variables is developed in Baltin, Déchaine & Wiltschko, in preparation.

started the discussion with two prominent instances of fake forms: fake indexicals and fake past. In reviewing the analyses developed in the papers that introduced the terms fake indexical (Iatridou 2000) and fake past (Kratzer 2009) we have seen that i) they don't in fact reflect a sense of fakeness and ii) they develop fundamentally different ways of viewing fakeness. Iatridou 2000 argues that there is an abstract underlying form, which serves as the basis for both the 'real', and the 'fake' use of so called past tense morphemes. In contrast, Kratzer 2009 argues that there are two ways pronouns may start out as: i) as minimal pronouns without feature specifications yielding the fake (bound variable) use and ii) with fully specified features yielding the real (indexical) use. Crucially, in both analyses, syntax plays an important role in the mediation between form and interpretation, albeit in different ways. For Iatridou 2000, the syntactic context affects the interpretation of linguistic form while for Kratzer 2009; the syntactic context affects the form of a linguistic form. These analyses are thus in line with two very different principles, both of which are typically ascribed to Frege (but see Pelletier 2001 for a critical review). In particular, Iatridou's 2000 approach adheres to the principle of contextuality (42) while Kratzer's 2009 analysis adheres to the principle of compositionality (43).

(42) Principle of contextuality
      A word has a meaning only in the context of a sentence.
                                                    Baker & Hacker 1980: 258
(43) Principle of compositionality
      The meaning of any complex expression is a function of the meanings of its parts and of the way they are syntactically combined.
                                                    Partee 2014:9 (10)

I have adopted an alternative that uses key ingredients of both approaches and which allows us to reconcile he tension between the two – apparently contradictory – principles. In particular, I developed an analysis of German 1st person pronouns within the framework of the universal spine hypothesis. According to this analysis a local pronoun is borne as an identity predicate. Evidence for this basic interpretation comes from the use of *ich* inside of compounds as well as from the fact that *ich* is a core ingredient in the construction of reflexives. Its indexical use comes about by virtue of associating with the spine, which in turn comes equipped with two sources that can add meaning to a linguistic form: syntactic heads are intrinsically endowed with an identity feature (or the verbal counterpart in the form of the coincidence feature). Moreover, these heads relate abstract arguments whose interpretation is contextually determined. Specifically, the anchoring category, with which the local pronouns associate with comes with a pronominal argument. In the absence of an antecedent (thus in indicative matrix clauses) this argument is (by

default) interpreted as the utterance argument yielding the indexical interpretation. In the presence of an appropriate antecedent, it is interpreted anaphorically yielding the bound variable interpretation. And in the context of a generic statement it may be interpreted arbitrarily yielding the impersonal interpretation.

In this way the universal spine hypothesis allows us to reconcile the two opposing principles: on the one hand certain linguistic forms (namely those that associate with the spine early) receive different interpretations depending on the syntactic context, in accordance with the principle of contextuality. Since patterns of multi-functionality, including fake forms of the type discussed here are ubiquitous in natural languages, the principle of contextuality is empirically supported. On the other hand however, the principle of compositionality is also obeyed. In particular, syntactic computation is based on the syntactic spine, which does itself add meaningful parts (such as the abstract arguments).

In as much as the analysis presented here is successful it supports the view that the relation between form and interpretation is mediated by syntax, not only in the domain of complex expressions, but also in the domain of seemingly simplex forms.

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