Alternations and Theta-Induced Knight Move Binding
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1. Introduction

- It is well known that in German, as well as in English, possessive pronouns can be used anaphorically, or they can be bound.

(1)   a. *Udo zeigte   Peter   seine Tasche.*
            Udo showed   Peter   his   bag.
            (i)   'Udo showed Peter$_i$ his$_i$ bag.'
            (ii)   'Udo$_j$ showed Peter his$_j$ bag.'
            (iii)   'Udo$_i$ gave Peter$_j$ his$_k$ bag.'

- However, such optionality is not available in every construction. In the extra-argumental (or "possessor") dative construction in German ("Free Datives" henceforth), the binding possibilities are restricted. In this construction, the possessors of possessive-marked DPs are always bound by the dative. The possessive-marked DPs alternate freely with Bound Bridging Definites.[1]

(2)   a. *Die Paula trat   dem Ede   gegen sein/das Schienbein.* (Free Dative construction)
            the Paula kicked the   Ede$_{DAT}$ against his/the shin
            (i)   'Paula kicked Ede$_j$ in his$_j$/the$_j$ shin.'
            (ii)   *'Paula$_j$ kicked Ede in his$_j$/the$_j$ shin.'
            (iii)   *'Paula$_i$ kicked Ede$_j$ in his$_k$/the$_k$ shin.'

- We submit that a voice or theta head introduces the dative DP into the structure, much like Kratzer's (1996) Voice or Pylkkänen's (2002) High Applicatives. We thus extend Kratzer's (1996) claim that external arguments are introduced by verbal functional heads to non-lexical arguments such as Free Dative arguments.

Question: How can we account for the fact that the obligatory binding of a (co-phasal) possessive may be triggered by arguments introduced by a verbal theta-head, but not by lexical arguments?

Answer:

> "[S]emantic binders (λ-operators represented as binder indices) are introduced by verbal functional heads, rather than by ''antecedent'' DPs, as assumed in Heim and Kratzer 1998, for example. Verbal functional heads, rather than DPs, are then the true syntactic antecedents for bound pronouns." Kratzer (2009: 193)

- **Theta-induced binding:** Binder indices are tied to verbal functional heads (theta heads), not to so-called antecedent DPs (Kratzer 2009, Hole 2008, 2012, 2014).

- We want to propose that quite a few argument alternations can successfully be described in terms of theta-induced binding.

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[1] Bound-bridging definites are definite DPs which receive an interpretation equaling (or being very similar to) that of the same DP with a possessive pronoun, instead of the definite determiner. Crucially, the possessive pronoun in such a paraphrase is locally bound (Hole 2008, 2012, 2014).

(4) *Der Paul trat   dem Ede   gegen   das Schienbein*   (Free Dative Alternation)
the Paul kicked the Ede$_{DAT}$ against the shin
'Paul kicked Ede in the shin.'

(5) *Der Gang   steht   voll   mit   Kartons.*   (Stative Locative Alternation)
the hallway$_{NOM}$ stands full   with cardboard boxes
'The hallway is [standing] full of cardboard boxes.'

(6) *Peter ist Schauspieler von Beruf.*   (Predicative construction with bare NPs)
Peter is   actor   by profession
'Peter is an actor by profession.'

The structure of the talk:
Section 2: We introduce our general proposal (Hole 2008, 2012, 2014)
Section 3: We extend this proposal to the Stative Locative Alternation.
Section 4: We extend our proposal to predicative constructions.
Section 5: We provide the summary of the paper.

2.   Free Landmark Datives: previous analysis and its implications (Hole 2008, 2012, 2014)

2.1.   Against Movement Accounts

- The majority of generative analyses of Free Datives in German and other languages advocates a movement account for datives, as in (7), in terms of possessor raising (cf. among many others Aissen 1983 for Relational Grammar, Gallmann 1992, Landau 1999, Lee-Schoenefeld 2005, 2006).
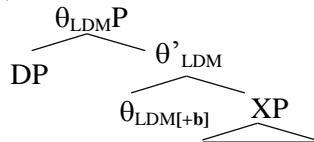

(7) *Die Paula strich   [dem Paul]$_i$ über den   **t**$_i$ Kopf.*
The Paula stroked the Paul$_{DAT}$ over the   head.
'Paula stroked Paul on the head.'

- Problems for the possessor raising analyses
    i) Selectional requirements for DP-internal possessors and "possessor datives" differ (Hole 2005a, Hole 2006: 387-388).
(8)   a. [The king died first.]   b. [The king died first.]
      Dann starb sein Sohn.   *#Dann starb ihm der Sohn.*
      'Then his son died.'   '#Then his son died on him.'
    ii) The kind of movement ought to be A-movement, but the landing site is a theta position, and thus the theta criterion is not abided by. Although a type of movement which combines different theta-role related presuppositions and conjoins theta entailments has been argued to exist (cf. Hornstein 1999, or Lee-Schoenfeld 2006 for German "possessor" datives, for instance), it is certainly not undisputed (cf. Hole 2012, 2014 for arguments against such movement).
    iii) The trace of the dative DP under a movement account may always receive spell-out as a possessive pronoun in German; i.e., (8b) has the variant (9). While the spell-out of traces as pronouns does occur (Fanselow & Mahajan 1995), it has never been postulated for movements with extremely short movement paths as in (9).

(9) *Dann starb ihm$_i$ sein$_i$ Sohn.*
then   died   him   his   son
'Then his son died on him.'

2.2 The Landmark theta-head with a binder feature

- Hole (2008, 2012, 2014) analyses Free Datives as in (11)-(13) in terms of theta heads which license the extra arguments, combined with a reflexivization mechanism as in Kratzer (2009).

- **The theta heads:** Landmark theta heads or P-Experiencer theta heads (where "P-experiencer" refers to a modalized experiencer predicate).

(10)

$\theta_{LDM}P$

DP θ'_{LDM}

$\theta_{LDM[+b]}$ XP

(11) *dem Ede* θ_i *gegen   das$_i$ Schienbein   treten*   (Landmark (& P-Experiencer))
the Ede$_{DAT}$ against the   shin   kick
'kick Ede in the shin'

(12) *der Kamera* θ_i *die$_i$ Linse   zuhalten*   (Landmark)
the camera$_{DAT}$ the lens   hold.closed
'hold the camera lens closed'

(13) *jedem$_{DAT}$* θ_i *streng   auf sein$_{i/*j}$ /das$_{i/*j}$ Steak   gucken* (P-Exp (& Landmark))
everyone$_{DAT}$ strictly on   his   /the   steak   look
'look at everybody's steak in a strict manner'

- The Free Dative voice turns out to be very similar to run-of-the-mill cases of reflexivity, which must likewise be modeled as a kind of voice (Kratzer 2009) under the theoretical assumptions of Kratzer's (1996) agent severance. The Free Dative, just like a reflexive antecedent in German, binds a variable in the local tense domain.

- This is particularly striking with Bound Bridging Definites. Binding of their implicit possessor variable across clause boundaries is impossible (14), just as between whole sentences (15). (Anaphoric dependencies are independent of this.)

(14) *Klara guckte jedem* θ_i *so streng auf sein$_{i/*j}$/das$_{i/*j}$ Steak, dass sein$_j$/der$_{*i}$ Appetit verschwand.*
Klara looked everyone$_{DAT}$ so strictly on his   /the   steak that his/the   appetite disappeared
'Klara was looking at everybody's steak in such a strict manner that their appetite disappeared.'
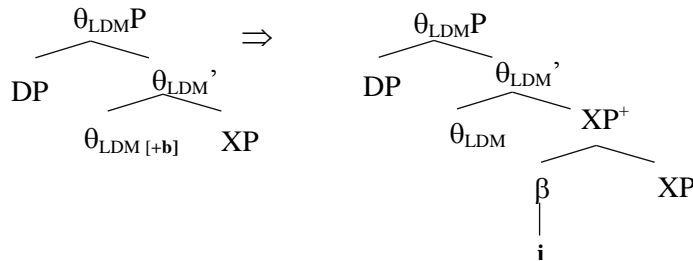
(15) a. *They passed through every small village. #The church was locked.*
b. *They arrived in a small village. The church was locked.*

- Semantically, the Landmark head entails that the complement state or event denoted by its sister holds within the neighborhood regions of the Landmark referent.

(16) $[\![\theta_{LDM}]\!] = \lambda x \, \lambda s \, \exists s'$ [s holds in the neighborhood of x(s') & s is a part of s']

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- The Landmark theta head comes with a binder feature [+b] which leads to structure expansion along the lines of Hole's (2014) Generalized Binder Rule in the tradition of Büring's (2005) Binder Rule; cf. (17).

(17) Binder Rule (Hole 2008, 2012, 2014)

$$\theta_{LDM}P \Rightarrow \theta_{LDM}P$$

DP θ_{LDM}'   DP θ_{LDM}'

$\theta_{LDM\ [+b]}$ XP θ_{LDM} XP$^+$

β   XP

i

- The output of (17) with the bare index c-commanding the VP makes sure that, after Predicate Abstraction, a variable in the VP gets a value that is determined by the Landmark DP.
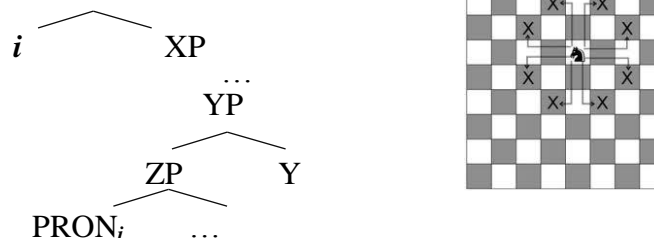
  (If you don't like this because of inclusiveness, never mind. (17) is quite a superficial feature of the proposal; it could easily be reformulated so as to conform to inclusiveness.)

2.3   Knight Move Binding

- Definition

(18) Knight Move Binding
      Binding configuration in which the binder targets the left branch of a c-commanded co-phasal DP.

i   XP

…

YP

ZP   Y

PRON*i*   …

Description: Knight Move Binding is the single massively privileged binding configuration in natural language.
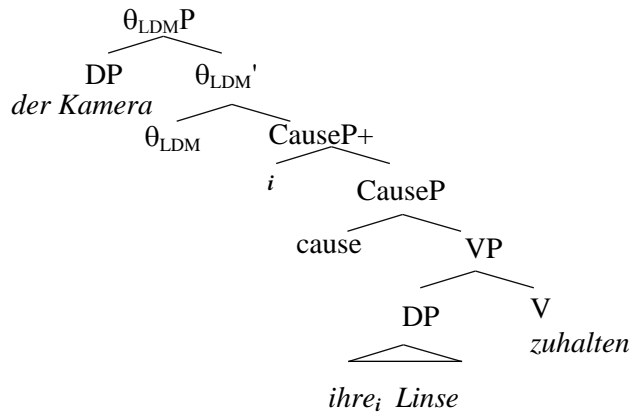
(i)   grammaticalization of reflexive pronouns from body-part DPs 'x's body-part',
      never from representation nouns like 'picture/statue/… representing x'

(ii) bound pronouns in argument position move to the left edge of their DPs (Reu-land 2011: 275)

(iii) free datives and other extra arguments typically bind in a Knight Move
      Binding configuration

- If DPs and VoicePs are phases, Knight Move Binding is a consequence of spell-out by phases.

2.4   A complete example

(20) Free Landmark Dative (cf. Hole 2008, 2014)
   a. *der   Kamera   ihre$_i$ Linse   zuhalten*
      the   camera$_{DAT}$ its   lens   hold.closed
      'hold the camera lens closed'

   b.

Interpretation: The camera is the landmark of an event that causes the result state of the camera lens being closed (the event holds in the neighborhood of the camera).

2.5   Supporting evidence for the binding analysis

(i) effects of (non-)redundancy
the bound variable may invariably be made explicit as a possessive pronoun

(ii) distributed reading with the quantifier *jeder* 'each'

(21) Paul hielt [*jeder Kamera*]$_i$ *die$_i$ Linse zu*
      Paul held each camera   the lens closed

(iii) Obligatory sloppy identity

(22) a. *Peter hat dem Fotoapp.   seine Linse zugehalten   und dem Fernglas   auch.*
         Peter has the camera$_{DAT}$ its   lens hold.closed and the binocular$_{DAT}$ too

      b. ^{OK} Peter held [the camera]$_j$ its$_j$ lens closed and [the binocular]$_i$ **its$_i$** lens, too.
         (sloppy; bound)
      c. *Peter held [the camera]$_j$ its$_j$ lens closed and [the binocular]$_i$ **its$_j$** lens, too.
         (strict identity)

(23) *Udo   zeigte   seine Tasche, und Peter auch.*
      Udo   showed   his   bag   and Peter too
      (i) 'Udo$_j$ showed his$_j$ bag and Peter$_i$ showed his$_i$ bag, too.' (sloppy identity; bound)
      (ii) 'Udo$_j$ showed his$_j$ bag and Peter$_i$ showed his$_j$ bag, too. (strict identity)

2.6   Widening the perspective: theoretical significance and generality

- **Hypothesis 1: Managing complexity**
  The integration of binder indices with theta heads increases the complexity of event structure without increasing the number of discourse referents in a given event description. This is a way of restricting complexity in natural language.

- **Hypotheses 2/3: Theta-Induced Binding**
  H2: All theta heads come in one flavor which triggers co-phasal binding relationships.
  H3: Only theta heads may trigger co-phasal binding relationships.

- **Hypotheses 4/5: Knight Move Binding**
  H4: All clause-level binding relationships involve Knight Move Binding.
  H5: Derivation-and-interpretation by phases necessitates local Knight Move Binding.

3.   The Stative Locative Alternation

- The Stative Locative Alternation of German (SLA) is the understudied stative counterpart of dynamic locative alternations of the *spray/load*-type.
- It has no direct counterpart in English, even though the *swarm*-type alternation is similar.

(24) a. *Kartons   stehen im   Gang.*   (base alternant)
          cardboard.boxes stand in.the hallway
          'There are cardboard boxes [standing] in the hallway.'

      b. *Der Gang   steht   voll mit Kartons.*   (SLA$^+$)
          the   hallway stands full with cardboard.boxes
          'The hallway is [standing] full of cardboard boxes.'

- It is productive with few verbs (mainly *sitzen* 'sit', *stehen* 'stand', *liegen* 'lie', *stecken* 'stick', *hängen* 'hang', *kleben* 'stick')
- If features locative subjects and has an embedded small clause structure headed by *voll* 'full'.

3.1   Against movement accounts

- Mulder & Wehrmann (1989) and Hoekstra & Mulder (1990)

(25) a.   [NP**MATERIAL**   LOC]$_{SC}$ V   (base alternant)
          dass [**Kisten**$_i$ [t$_i$ im   *Gang*]   *stehen*]
          that   boxes   in.the   hallway
          'that boxes are [standing] in the hallway'
      b.   [NP**LOC** *voll* MAT   ]$_{SC}$ V   (SLA$^+$)
          dass [**der Gang**]$_i$ [t$_i$ *voll* *mit Kisten*]   *steht*
          that   the hallway   full   with boxes   stands
          'that the hallway is [standing] full of boxes'

- a problem for the raising analysis:
  Bona fide raising structures like the stative passive and the SLA don't share the same behavior with certain conjoined material nominals. The ribbons and the lights in the stative passive in (26) may easily be located at different substructures of the tree.

(26) stative passive
  [*Der Baum*]$_i$ *ist* [t$_i$ *geschmückt mit Bändern und Lichtern*].
  'The tree has been decorated with ribbons and lights' (stative passive)

(27) SLA$^+$ (analysis along the lines of Mulder & Wehrmann 1989, Hoekstra & Mulder 1990)
  [*Die Weihnachtsorange*]$_i$ *steckt* [t$_i$ *voll mit Nelken* (#*und Vitaminen*)].
  'The Christmas orange is [sticking] full of cloves (#and vitamins).'

- In (27) both the cloves and the vitamins must be located at the same substructure of the orange, both being either inside or on its surface. This is contrary to world knowledge, hence the comical effect.

3.2 Analysis based on theta-induced Knight Move Binding

- If we assume the structures in (28), the deviance of (27) with its conjoined material nominals can be derived.

(28) **DP$_{LDM}$** θ_{LDM} [REL.NOUN   *voll* **MATERIAL**]   V

  dass [*die Orange*] θ_{LDMi} pro$_i$'s OBERFLÄCHE   *voll* **mit Nelken**   *steckt*
  that   the orange   pro$_i$'s SURFACE   full of   cloves   stucks
  'that the orange is [stuck] full of cloves {at its surface}.'

- The empty relational element inside the small clause is restricted to one of two possible instantiations: SURFACE or INSIDE. Like this, we can capture the effect found in (27).

- Moreover, an otherwise puzzling lack of entailment relations can be explained.

(29) a. *Die Orange steckte voll mit   Nelken.*
         the orange   stuck   full   with   cloves
         'The orange was [stuck] full of cloves.'
     b. *Die Zitrone steckte voll mit Saft.*
         the lemon   stuck   full   with juice
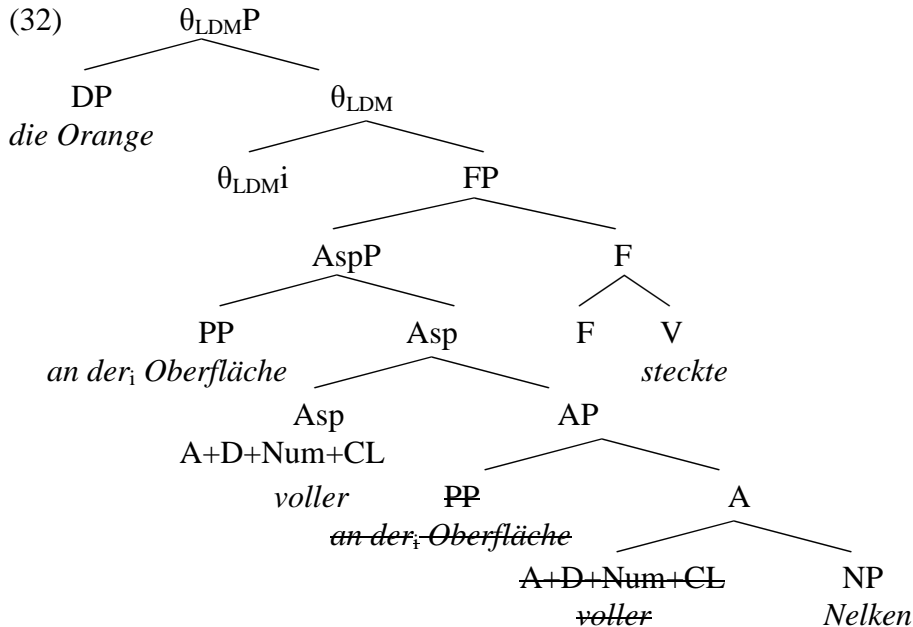   'The lemon was [stuck] full of juice.'

(29a/b) do not entail (30a/b)

(30) a. *Die Orange war voll mit Nelken.* 'The orange was full of cloves.'
     b. *Die Zitrone war voll mit Saft.* 'The lemon was full of juice.'

- The 'full' property is not really predicated of the subjects of (31a/b), but of substructures of those referents. The lack of entailments among (29) and (30) thus follows.
- Moreover, the covert relational element may always be pronounced as a PP or as a relational adverb without changing the truth-conditions.

(31) a. *...dass die Orange* θ_{LDMi} *(an der$_i$ Oberfläche)   voller   Nelken   steckte.*
　　　 that   the orange　　　 on   the SURFACE   full.of   cloves   stuck
　　　 '…that the orange was [stuck] full of cloves at its$_i$ surface.'

　 b. *...dass die Zitrone* θ_{LDMi} *(innen$_i$)   voll   mit   Saft   steckte.*
　　　 that   the lemon　　　 INSIDE   full   with   juice   stuck
　　　 '…that the lemon was [stuck] full of juice inside.'/'…that the lemon was bursting
　　　 with juice (inside).'

(32)

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                θ_LDM P
              /         \
           DP            θ_LDM
        die Orange      /      \
                   θ_LDM i       FP
                            /          \
                         AspP            F
                       /      \        /   \
                     PP        Asp    F     V
         an der_i Oberfläche  /    \      steckte
                            Asp      AP
                       A+D+Num+CL   /    \
                          voller   P̶P̶        A
                            a̶n̶ ̶d̶e̶r̶_i̶ ̶O̶b̶e̶r̶f̶l̶ä̶c̶h̶e̶  /    \
                                      A̶+̶D̶+̶N̶u̶m̶+̶C̶L̶   NP
                                         v̶o̶l̶l̶e̶r̶    Nelken
```

　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　(Hole in prep.)

4.　Predicative construction

4.1　The data

- In some Germanic and Romance languages, nominals denoting roles of humans (profession (*Schauspieler* 'actor'), religious denomination (*Katholik* 'catholic'), nationality (*Italiener* 'Italian'), hobby (*Alpinist* 'alpinist'), etc.) occur bare in predicate position. Alternatively, such nouns can be used with an indefinite article.

(33) a. *Peter ist Schauspieler.*　　　　　　 b. *Peter ist **ein** Schauspieler.*
　　　 Peter is   actor　　　　　　　　　　　　 Peter is   an   actor

- well-established, institutionalized activity	- the activity need not be institutionalized
- the bare predicate specifies an aspect of the individual (<u>partial predication</u>, Mari & Martin 2008)	- the indefinite predicate identifies the individual as a whole (Roy 2014)

- The restriction to a particular aspect of the individual can be made explicit by the so-called qualifier expressions such as *von Beruf* 'by profession'.

(34)　a. *Peter ist Schauspieler* (*von Beruf*).　　 b. *Peter ist **ein** Schauspieler* (**von Beruf*).
　　　　 Peter is actor　　　　 by profession　　　 Peter is an   actor　　　　 by profession

- Syntactic analyses of copular sentences, such as Moro's (1997), among others, assume that predicational copula sentences are derived from a structure as in (35), but this analysis does not account for the difference between bare and non-bare predicate NPs in German.

(35) [John$_i$ is [$_{SC}$ t$_i$ the teacher]]

- There are many analyses of the alternation bare/indefinite predicate in Germanic and Romance languages (e.g. Mari/Martin 2008, Roy 2014, de Swart et al. 2007, Zamparelli 2008). However, most of them do not capture the co-occurrence of partiality of predication and institutionalization.

- For the semantic analysis of bare predicate NPs, de Swart et al. (2007) introduce the new ontological category "capacity", while Mari/Martin (2008) make use of the category of tropes. We think that for a proper analysis of copular sentences, we don't need to extend our ontology with new categories.
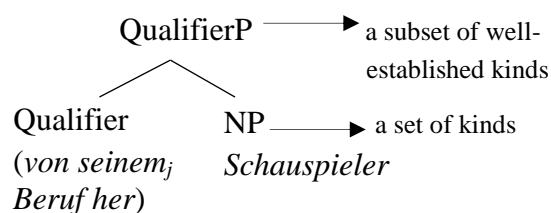
4.2   Analysis based on theta-induced Knight Move Binding

- The restriction to a social aspect of the individual, what we refer to as "partiality of predication", and institutionalization, can be captured in the binding analysis along the lines of our analysis of Free Datives and Stative Locative Alternation.

- How is the denotation of the bare predicate NP related to the indefinite NP? In (36), where the evaluative adjective *gut* 'good' is added, the indefinite article must be used, irrespective of whether Peter is an actor by profession or not.
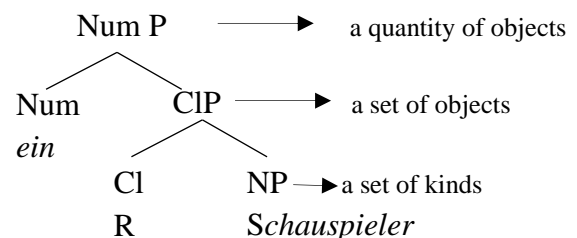
(36)   *Peter ist *(ein) guter Schauspieler.*
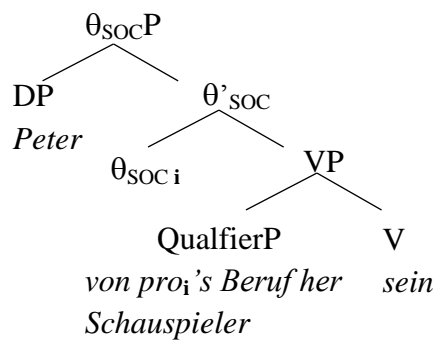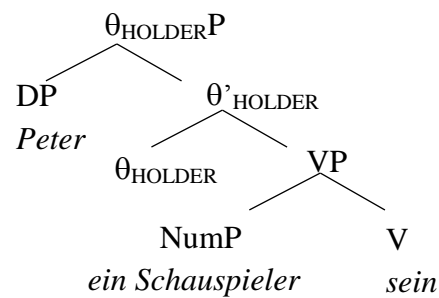   Peter is   a   good actor

- This suggests that the noun *Schauspieler* itself is underspecified for institutionalized or non-institutionalized meaning. To account for this we assume, following McNally & Boleda (2004), that nouns have an implicit kind argument and denote a set of subkinds. *Schauspieler* denotes a set of subkinds, such as amateur actor subkind, professional actor subkind, an actor subkind of people who just behave like actors, etc.

- Thus, the well-established subkind of professional actors is part of the actor kind. This well-established subkind can be singled out by the qualifier expression *by profession*, (Geist in prep.).

(37)   a. *Peter ist* [*Schauspieler*]   b. *Peter ist* [*ein Schauspieler*]

(38) a. *Peter ist Schauspieler.*   b. *Peter ist ein Schauspieler.*

$\theta_{SOC}P$ tree:
DP *Peter* — θ'_{SOC} — $\theta_{SOC\,i}$ — VP — QualfierP *von pro$_i$'s Beruf her Schauspieler* — V *sein*

$\theta_{HOLDER}P$ tree:
DP *Peter* — θ'_{HOLDER} — θ_{HOLDER} — VP — NumP *ein Schauspieler* — V *sein*

- The subject of a copula sentence with a bare predicate NP in (38a) is introduced in the specifier of a theta head. We call it Social Individual theta head θ_{SOC}. Analogous to the Landmark theta head applied to spatial aspects of objects, this head maps the human referent to some social aspect of it, and entails that the state denoted by the VP holds for this social aspect. This captures the intuition of partiality of predication.

(39) $[\![\,\theta_{SOC}\,]\!] = \lambda y_o\,\lambda s\,\exists s'$ [s holds for the social aspect of $y_o(s')$ & s is part of s']

- The Social Individual theta head comes with a binder feature that requires some variable in its local domain to be bound by the DP in its specifier.
- Other social aspects of Peter can be targeted by other qualifier expressions.

(40) a. dass Peter $\theta_{SOC\,j}$ {von pro$_j$'s NATIONALITÄT her}   Deutscher ist
          that Peter   by   nationality   PRT   German is
      b. dass Peter $\theta_{SOC\,j}$ {von pro$_j$'s KONFESSION   her} Katholik ist
          that Peter   by   religious denomination PRT   catholic is

4.3   Supporting evidence for the binding analysis

(i) effects of (non-)redundancy
the phrase containing the bound variable may invariably be made explicit in the qualifier phrase {*von seinem Beruf her*}, {*von ihrer Nationalität her*}, etc.;

(ii) distributed reading with the quantifier *jeder* 'each'

(41) [*Jedes Kind*]$_j$ *in dieser Gruppe will* {von seinem$_j$ Beruf   her} *Kosmonaut werden.*
      every child   in this   group   wants by his   profession PRT cosmonaut become
      'Every child in this group wants to become a cosmonaut professionally.'

- The predicative alternation extends the domain of application of theta-induced Knight Move binding originally used for modeling of spatial regions of individuals (surface, inside etc.) (but also for experiencerhood with beneficiency and for social relationships (kinship, friendship, colleagues etc, not discussed here but cf. Hole 2014) to social aspects of individuals (profession, nationality etc.).

5.   Conclusion

- In this paper we have shown that different syntactic constructions require obligatory binding of co-arguments. To analyze such constructions, we elaborated on the idea going

back to Kratzer and further developed in Hole (2008, 2012 and 2014) that verbal theta heads introduce binder indices into the structure.

(42) *dass Paul dem Ede* $\theta_{\text{LDM j}}$ *gegen das$_j$ / sein$_j$ Schienbein trat* (Free Dative construction)
  that Paul the Ede$_{\text{DAT}}$ against the / his   shin   kicked
  'that Paul kicked Ede in the shin'

(43) *dass der Saal* $\theta_{\text{LDM j}}$ *{an seinen$_j$ Wänden} voll mit Gemälden hing.* (SLA)
  that the hall$_{\text{NOM}}$ on its   walls   full of   pictures   hung
  'that the hall was [hanging] full of paintings (on its walls)'

(44) *dass Peter* $\theta_{\text{SOC j}}$ *{von seinem$_j$ Beruf   her} Schauspieler ist* (Predicative constr.)
  that Peter   by his   profession PRT   actor   is
  'that Peter is an actor by profession.'

- Variables bound by theta-heads may sit in possessive pronouns, in bridging articles. They may be pronounced or not (material in curly brackets).We assume two binder heads.

Table 1

Verbal theta heads	Landmark θ_{LDM}	Social individual θ_{SOC}
Function	to capture reference to substructure	to capture partiality of predication
Sem. content	$\lambda y \, \lambda s \, \exists s'$ [s holds in the neighborhood of y(s') & s is part of s']	$\lambda y \, \lambda s \, \exists s'$ [s holds for a social aspect of y(s') & s is part of s']
Which aspect of the individual is involved in predication	neighborhood region (spatial region, social relationships)	social aspect of a human

- We conclude that the account in terms of theta-induced binding allows a more insightful explanation of the data, while also having wider coverage than previous accounts.
- This proposal predicts that no clause internal binding may have an internal argument as "antecedent". This prediction has to be tested in the future.

Appendix:
Some other constructions from Levin (1993) to which an analysis in terms of theta-induced binding can be applied:

- *Spray/load* Alternation
(1) a. Jack sprayed paint on the wall. (locative variant)
   b. Jack sprayed the wall with paint. (*with* variant)
     [Jack sprayed the wall$_i$ with paint [ON pro$_i$'s SURFACE]]
- Clear alternation
(2) a. Henry cleared dishes from the table. (locative variant)
   b. Henry cleared the table of dishes. (*of* variant)
     [Henry cleared the table$_i$ of dishes [FROM AT pro$_i$'s SURFACE]]

- Container Subject Alternation
(3)   a. I incorporated the new results into the paper.
      b. The paper incorporates the new results.
          [The paper$_i$ incorporates the new results [IN pro$_i$]]

Selected References

Beyssade, C. and C. Dobrovie-Sorin. 2005. A syntax-based analysis of predication. Georgala, E. and J. Howell (eds). *Proceedings of Salt* XV. Ithaca, Cornell University, 44-61.

Büring, Daniel (2005) *Binding Theory*. Cambridge: Cambridge University Press.

Doron, Edit (2003). Agency and Voice: The Semantics of the Semitic Templates'. *Natural Language Semantics* 11. 1 - 67 .

Doron, Edit & Malka Rappaport Hovav (2009) A Unified Approach to Reflexivization in Semitic and Romance. *Brill's Annual of Afroasiatic Languages and Linguistics 1 (2009) 75–105.*

Dowty, David (1991) Thematic Proto-roles and Argument Selection. *Language.* 67, 547-619.

Geist, Ljudmila (in prep.) Bare predicate nominals in German: a binding analysis. Ms.

Geist, Ljudmila (2014) Bare predicate nominals in German. In: Veselovská, Ludmila and Markéta Janebová (eds.) *Complex Visibles Out There. Proceedings of the Olomouc Linguistics Colloquium* 2014: Language Use and Linguistic Structure, Olomouc: Polacký University, 83-106.

Geist, Ljudmila & Daniel Hole (2015) Theta-head Binding in German Locative Alternations. Poster presented at Sinn und Bedeutung (Tübingen, September 9-12 2015)

Hole, Daniel (2012) German free datives and Knight Move Binding. In: Artemis Alexiadou, Tibor Kiss und Gereon Müller (Hrsg.). *Local Modelling of Non-Local Dependencies in Syntax.* Berlin/Boston: de Gruyter, 213-246.

Hole, Daniel (2014) *Dativ, Bindung und Diathese*. Berlin/Boston: de Gruyter Mouton.

Hole, Daniel (in prep.) *Der Himmel hängt voller Geigen* – The German Stative Locative Alternation. Manuscript University of Stuttgart.

Hole, Dativ (2008) *Dativ, Bindung und Diathese*. Habilitationsschrift. Humboldt-Universität zu Berlin.

Kratzer, Angelika (2009) Making a pronoun – fake indexicals as a window into the properties of pronouns. *Linguistic Inquiry* 40, 187-237.

Kratzer, Angelika (2005) Building resultatives. In: Claudia Maienborn und Angelika Wöllstein (Hrsg.), *Event Arguments: Foundations and Applications.* 177-212.

Kratzer, Angelika (1996) Severing the external argument from its verb. In: Johan Rooryck und Laurie Zaring (Hrsg.). *Phrase Structure and the Lexicon*. Dordrecht: Kluwer, 109-137.

Lee-Schoenfeld, Vera (2006) 'German possessor datives – raised and affected'. *Journal of Comparative Germanic Syntax* 9, 101-142.

Lee-Schoenfeld, Vera (2005) 'Beyond coherence: The syntax of opacity in German'. *PhD dissertation*. University of California at Santa Cruz.

Levin, Beth (1993) *English Verb Classes and alternations. A Preliminary Investigation*. Chicago: University of Chicago Press.

Mari, Alda and Fabienne Martin (2008) Bare and Indefinite NPs in Predicative Position in French. In *Working Papers of the SFB 732 Incremental Specification in Context* 1, edited by Florian Schäfer, 119–144. Stuttgart: OPUS.

McNally & Boleda (2004) Relational adjectives as properties of kinds. In *Empirical Issues in Formal Syntax and Semantics* 5, Olivier Bonami & Patricia Cabdreo Hofherr, eds., http://www.cssp.cnrs.fr/eiss5, 179–196.

Reuland, Eric (2011) *Anaphora and Language Design*. Cambridge, MA: MIT Press.

Roy, Isabelle (2013) *Nonverbal Predication: Copular Sentences and the Syntax–Semantics Interface* Oxford: Oxford University Press.

de Swart, Henriette, Yoad Winter, and Joost Zwarts (2007) Bare Nominals and Reference to Capacities. *Natural Language and Linguistic Theory* 25: 195–222.