Definite Meaning and Definite Marking

Manfred Sailer
largely based on joint work with Assif Am David

Goethe University, Frankfurt a.M.

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Overview

Object languages

- Yiddish (Y)
- Esperanto (Eo)
- Papiamentu (P)

Example

Oyfn pripetchik brent a fayerl,
Un in shtub iz heys,
Un der rebe lernt kleyne kinderlekh,
Dem alef-beys.

On the hearth, a fire burns,
And in the house it is warm.
And the rabbi is teaching little children,
The alphabet.

M.M. Warshawsky (18481907)

Introduction

- Look at definiteness marking in three environments (proper nouns, unique nouns, anaphoric definites)
- Problems for existing approaches
- Semantic map of definiteness (Am-David, 2014, 2016)
- Semantic analysis of the three contexts
- Syntactic analysis of the nominals and the articles
- Conclusion

Overview

Overview

Articles in Esperanto (Eo)

- (Distirbution similar to Metropolitan English)
- Definite article: *la*
- (To be ignored: Contracted form with some prepositions ending in vowels: *de l'* 'to-the', *pri l'* 'about-the', . . .
  —mainly used in poetry, not in spoken Eo (Wennergen, 2016, p. 102))
- No indefinite article
- Main sources:
  - ▶ Reference grammars: Kalocsay & Waringhien (1985), Wennergen (2016)
  - ▶ Textbasis: Tekstaro de Esperanto (http://www.tekstaro.com/); webpages in Eo.

Articles in Papiamentu

- Definite article: *e(l)*
- (To be ingored: Contracted form with *di* 'of': *dje* 'of-the')
- Indefinite article: *un*
- Main sources:
  - ▶ Textbook and reference grammar: Putte & van Putte-de Windt (1992, 2014)
  - ▶ Linguistic analyses: Kester & Schmitt (2007)
  - ▶ Textbasis: webpages in P.

Articles in Yiddish

- (Distribution similar to Standard German as in Schwarz (2009))
- Definite article: *der*, *die*, *dos*, . . .
- With prepositions:
  - ▶ Full form of the article: *in der shtub* 'in the house'
  - ▶ Contracted form with some prepositions: *afn pripetshik* 'on-the hearth'
  - ▶ Preposition with bare noun: *in shtub* 'in (the) house'
- Indefinite article: *a(n)*
- Main sources:
  - ▶ Reference grammars: Mark (1978), Katz (1987)
  - ▶ Textbasis: Corpus of Modern Yiddish (web-corpora.net/YNC)

Envirnoments

- Proper names
- Uniques
- Anaphoric definites

Proper names: no article

- Primary use: referring to an individual bearing that name (von Heusinger, 2010)
- Eo: without article

  (1)   En 1873 li transloĝis al <u>Varsovio</u> kun la tuta familio
          in 1873 he moved   to Warsaw with the entire family
          (tekstaro)

- P: without article

  (2)   I   Korsou ta un isla   chiki,
          and Curaçao is an island small
          'And Curaçao is a small island . . .' (www)

- Y: without article (Mark, 1978, p. 120):

  (3)   khaym kumt bald.
          Khaim comes soon
          'Chaim is coming soon.'

Proper names: Article when modified?

Y: article used when syntactically modified, (Mark, 1978, p. 120)):

(4)   a.   (*der) khaym kumt bald.
               the   Khaim comes soon
               'Chaim is coming soon.'

        b. *(der) royter khaim kumt bald.
              the   red   Kaim comes soon
              'The red Chaim comes soon.'

Unique nominals

- Definition: There is exactly one referent in any utterance situation. The referent is an individual.
- Examples (see Löbner (2011) (p. 284)): *sun, pope, US president, weather,* . . .
- Eo: with article

   (5)   La <u>suno</u> subite   sin   montris el   la nuboj, . . .
               the sun suddenly itself showed from the clouds
               'Suddenly the sun showed itself out of the clouds . . . '
               (tekstaro)

Unique nominals: P and Y

- P: no article

  (6)   (*E) <u>Solo</u> ta   brila sin   miserikòrdia.
         (the) sun PRES burn without mercy
         'The sun is burning without mercy' (Kester & Schmitt, 2007,
         p. 113)

- Y: with article; if possible: in contracted form

  (7)   az der <u>meylekh</u> hot gehert di   zakh, . . .
         as the king   has heard the affair . . .
         'as the king has heard about the affair, . . . ' (CMY)

  (8)   iz   yuov gekumen tsum <u>meylekh</u>, un hot gezogt:. . .
         has Yuov come   to.the king   and has said: . . .
         'Yuov came to the king and said: . . . ' (CMY)

Uniques: Summary

- What is unique depends on the context
- . . . and may vary from one language to the other.
- Trend: languages seem to prefer/require the weakest possible form of definite marking for uniques.

Anaphoric definites

- Anaphoric definites refer to a previously introduced referent.
- In Eo, the article is used:

(9)   Mi havas grandan domon. La domo havas du etaĝojn.
      I   have   big   house   the house has   two floors
      'I have a big house. The house has two floors.' (Wennergen, 2016,
      p. 80)

Anaphoric definites in P

The definite article is used in P:

(10) Mi a   kumpra un bolo.
      I PAST buy   a cake

      *(E) bolo a   wòrdu kome den 10 minüt.
      the cake PART been eat   in 10 minutes

      'I bought a cake. The cake was eaten in 10 minutes.' (Kester &
      Schmitt, 2007, p. 119)

Anaphoric definites in Y

The definite article is used in Y.

(11) hot im gefunen a man, ...; un <u>der man</u> hot im gefregt,
      has him found   a man   and the man has him asked
      azoy tsu zogn: ...
      so   to say
      'A man found him and the man asked him to say ...' (CMY)

Also with a preposition:

(12) un   a man iz   gegangen .... un der   nomen fun   the man
      a man is   gone   and the name of   the man
      <u>dem man</u> iz   gewen   elimelekh ...
      is   been Elimelekh
      'And a man went from .... And the name of the man was
      Elimelekh ...' (CMY)

Data summary

	proper name	unique nominal	anaphoric definite
Esperanto	–	la	la
Papiamentu	–	–	e
Yiddish	–	der P-n	der

Overview

Overview

- Basic ingredients of the analyses
- Rough sketches of problematic aspects

Basic ingredients

- ι-operator: $\iota x : \phi$

  (13) $[\![\iota x : \phi]\!]$
    a.   is only defined if there is exactly one individual a such that $[\![\phi]\!]^{g[x \mapsto a]} = 1$
    b.   when defined, then $[\![\iota x : \phi]\!]$ is that a.

- Situations taken to be partial worlds (Kratzer, 1989; Elbourne, 2002; Schwarz, 2009)
- Presupposition: Need to be satisfied for a formula to be interpretable, as in (13-a).
  Can be accommodated locally, i.e., end up in the scope of some operator.
- Conventional implicature (CI, Potts (2005)): has a truth value independent of that of the rest of the sentence; cannot be accommodated in the scope of an operator (except for speech operators)

Problem with ι

- ι is commonly used in the semanitcs of definites.
- ι treats existence and uniqueness both as presuppositions.
- Need to separate existence and uniqueness (Horn & Abbot, 2013; Coppock & Beaver, 2015):

  (14)   Cancelling existence:
  He is not the ambassador to Spain, because Spain doesn't have an ambassador here.

  (15)   Uniqueness cannot be cancelled:
  a. #He's not the ambassador to Spain—there are two.
  b. #There are two ambassadors to Spain; therefore, he is not the ambassador to Spain.

- Any approach that glues together existence and uniqueness is problematic. (Elbourne, 2002; Schwarz, 2009)

Scope of the analyses

- Focus on the article: Hawkins (1991), Elbourne (2002), Schwarz (2009)
  Focus on the nominal: Löbner (2011)
  Need both:
  - Both articles and nominals have inherent uniqueness requirements.
  - Partially idiosyncratic interaction (proper nouns vs. unique nominals)

- If interaction with preposition in focus, other cases neglected (Schwarz, 2009)

- Assumption of phonologically empty determiners for cross-linguistic parallels without discussion (Kester & Schmitt, 2007).

Overview

Definite meaning: Outline

- Based on Am-David (2016) and several conference presentations with Am-David (*2nd European HPSG Workshop*, Paris, 2014; *Semantics and Philosophy in Europe Eighth Colloquium*, Cambridge, 2015)
- Components of the analysis:
  - ▶ asserted content (AC): individual
  - ▶ presupposition (Pres): existence
  - ▶ conventional implicature (CI): uniqueness
- Differences between the three environments:
  - ▶ Proper names just like uniques, but with naming presupposition
  - ▶ Unique nominals require uniqueness in all "typical" situations.
  - ▶ Anaphoric definites require uniqueness in the current situtation and coreference with accessible antecedent.

Typology of definiteness: Am-David (2016)

- Languages with several definite articles (at most: 3 in Ferring Frisian)
- Wider range of contexts
- Three inferences: for *the N*:
  - A (Maximality): There is exactly one maximal individual a that satisfies $[\![N]\!]$ in the current situation.
  - B (Common ground uniqueness): In every situation s in the common ground, if there exists an object satisfying $[\![N]\!]$ in s, then there is exactly one such object in s.
  - C (Anaphoricity): There is exactly one object satisfying $[\![N]\!]$ in the current situation and this object is part of the current universe of discourse.
- Semantic map: B . . . . . . A&¬(B C) C
- We only look at B and C here!

Our languages in this map

		B	C
Eo	la	ok	ok
P	e	*	ok
Y:	der	(ok)	ok
	P+n	ok	*

Arguments for CI status of A–C

CI vs. presuppositions:

- Am-David & Sailer (in prep.)
- Two criteria: (i) independ truth values, (ii) non-global accommodation

Independ truth values

- The truth value of an utterance can vary independently of that of a CI.

- The truth value of an utterance is only defined if its presupposition is true.

  (16)   Ŝi   ĉesis   fumi   sed ŝi ankoraŭ drinkas.   (Eo)
         she abandoned smoke but she still   drinks-alcohol
         'She stopped smoking but she is still drinking.'

      a.   Presup: She smoked before. She drank before.
      b.   CI: Not smoking and drinking in contrast

(17)   Alex hat Sie   gestern   gesehen. (German)
       Alex has you.FORMAL yesterday seen
       'Alex saw you yesterday.'

    a.   Denotation of *Sie*: addressee
         CI of *Sie*: formal relation between speaker and addressee

Independent truth values for definites

- Denotation of the definite: an individual meeting its descriptive content.
- CI of the definite: uniqueness

(18)   Hano aĉetis   la   libron. (Eo)
       Hano bought the book
       a.   Denotation: Hano bought something that is a book.
       b.   CI: There is a unique book in the situation.

Local accommodation

- The truth of CI must hold at the overall utterance level.
- A presupposition can be accommodated in the scope of an operator (negation, conditional, interrogative)

  (19)   Ŝi ne ĉesis fumi   — Ŝi neniam fumis. (Eo)
         she not abandoned smoking   she never smoked
         'She didn't stop smoking — she never smoked.'

        a.   Pres: She smoked before.

  (20)   #Sie haben nicht mit dem Rauchen aufgehört —
         you.FORMAL have not with the smoking stopped
         wir sind nämlich per Du.
         we are indeed on informal terms

        a.   Ci of *Sie*: speaker and addressee are in a formal relation

Formalization of definite meaning: Proper name

s_0: Current situation

(21)   _Franjo_ (Eo)

    a.   Asserted content (AC): x
        (The name refers directly to an individual)

    b.   Presupposition (Pres): $\exists x(\textbf{franjo}(x, s_0)$
        There is a person that is called Franjo in the current situation)

    c.   Presupposition (Pres): $\textbf{franjo}(x, s_0)$
        (The referent x is called Franjo in s_0)

    d.   conventional implicature (CI):
        $\textbf{Gn } s(\exists x(\textbf{franjo}(x, s)) \rightarrow \exists! x(\textbf{franjo}(x, s)))$
        If there is a person called Franjo in the common ground, there is exaclty one such person.

Formalization of definite meaning: Uniques

Instead of ι, use $\iota_\exists$:

(22) a. Expression: $\iota_\exists x : \phi$

b. Denotation: $[\![\iota_\exists x : \phi]\!]^g = a$, such that $[\![\phi]\!]^{g[x \mapsto a]} = 1$

Formalization of definite meaning: Uniques

(23)   <u>suno</u> 'sun' (Eo)

    a.   Asserted content (AC): $\iota_\exists x : \textbf{sun}(x, s_0)$
        (The nominal refers to some object that satisfies its
        descriptive content in s_0.)

    b.   Presupposition (Pres): $\exists x(\textbf{sun}(x, s_0)$
        There is a sun in the current situation)

    c.   conventional implicature (CI):
        $\textbf{Gn } s(\exists x(\textbf{sun}(x, s)) \rightarrow \exists! x(\textbf{sun}(x, s)))$
        If there is a sun in the common ground, there is exactly one
        such thing.

Formalization of definite meaning: Anaphoric definites

(24)   Anaphoric link: identity with an element from the current discourse:

    a. $x = y$ (identity)

    b.   **d(iscourse)-acc(essible)**(y, s_0) (y occurs in the current discourse)

Formalization of definite meaning: Anaphoric definites

(25)   *la studento* 'the student' (Eo)
   a.   Asserted content (AC): $\iota_\exists x : \mathbf{student}(x, s_0)$
        (The nominal refers to some object that satisfies its
        descriptive content in s_0.)
   b.   Presupposition (Pres): $\exists x(\mathbf{student}(x, s_0)$
        There is a student in the current situation)
   c.   conventional implicature (CI):
        $(\exists x(\mathbf{stud}(x, s_0))) \rightarrow (\exists! x(\mathbf{stud}(x, s_0) \wedge x = y \wedge \mathbf{d\text{-}acc}(y, s_0)))$
        If there is a student in the current situation, there is a unique
        such student that is identical with some y which accessible
        within the current discourse.

Summary: Definite meaning

- 3-dimensional represenation of definite meaning.
- AC: some individual (satisfying the descriptive content if there is such)
- Pres: existence presupposition
- CI: uniqueness, though with respect to varying situational requirements
- Missing?
  - Representation of the three dimensions in HPSG
  - Marking (Names and uniques are both situationally unique, but only the latter require an article in Y and Eo.)

Framework

- HPSG
- Techniques of underspecified semantics Bos (1996); Copestake et al. (2000); Egg (1998, 2010); Pinkal (1996); ...
- Lexical Resource Semantics (LRS), Richter & Sailer (2004)
- General idea: Words and phrases constrain the semantic representation of their utterance (specifying what must occur in the representation and where)
- Proposal for integration of multidimensional semantics:
  - ▶ Bonami & Godard (2007): CIs for evaluative adverbs
  - ▶ Hasegawa & Koenig (2011): Structured meaning for focus
  - ▶ Plan: Use a standard HPSG-mechanism of perlocation and retrieval for projective meaning

General architecture of LRS

(26) every student:

$$
\begin{bmatrix}
\text{PHON } \langle \textit{every, student} \rangle \\[4pt]
\text{SYNS LOC}
\begin{bmatrix}
\text{CAT} & \begin{bmatrix} \text{HEAD } \textit{noun} \end{bmatrix} \\[4pt]
\text{CONT} & \begin{bmatrix} \text{DR} & x \\ \text{MAIN} & \textbf{student} \end{bmatrix} \\[8pt]
\text{CONTEXT} & \begin{bmatrix} \text{SPEAKER} & \dots \\ \text{HEARER} & \dots \end{bmatrix}
\end{bmatrix} \\[8pt]
\text{LRS}
\begin{bmatrix}
\text{EXCONT} & \forall x(\alpha{\rightarrow}\beta) \\
\text{PARTS} & \langle \forall x(\alpha{\rightarrow}\beta) \rangle
\end{bmatrix}
\end{bmatrix}
$$
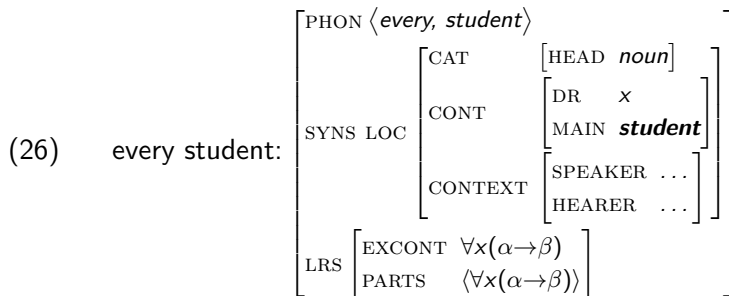
(27) External Content Principle:
In every utterance, every subexpression of the EXCONT value of
the utterance is an element of its PARTS list, and every element of
the utterance's PARTS list is a subexpression of the EXCONT
value. (Richter & Sailer, 2004)

LRS Encoding of presuppositions and CIs

- Encoding closer to Potts (2005) than Bonami & Godard (2007), but allowing for intermediate retrieval of CIs.
- List-valued attributes PRESUP(POSITION) and CI.
- Elements of PRESUP and CI also occur on the PARTS list-
- Percolation and retrieval for PRESUP:
  At clauses: All elements from the daughters' PRESUP lists are on the mother's PRESUP list unless they appear in the clause's EX-CONT value. In the latter case they occur in the scope of some appropriate semantic operator.
- Percolation and retrieval for CI:
  At matrix utterances and clauses marking embedded utterances: All elements from the daughters' PRESUP lists are on the mother's CI list unless they appear in the clause's EX-CONT value. In the latter case, they must occur in the immediate scope of some speech act operator.

Example: *Franjo*

Notation: $\alpha[\textbf{franjo}(x, s_0)]$: some underspecified expression that contains a given subexpression

(28)   Semantic specification of a proper name:

$$
\begin{bmatrix}
\text{PHON} \; \langle \textit{Franjo} \rangle \\
\vdots \\
\text{LRS}
\begin{bmatrix}
\text{EX-CONT} & x \\
\text{PARTS} & \langle x, \boxed{1}, \boxed{2}, \boxed{3} \rangle \\
\text{PRESUP} & \langle \boxed{1}(\ldots \wedge \exists x(\alpha(\textbf{franjo}(x, s_0)]))), \boxed{2}(\ldots \wedge \alpha[\textbf{franjo}(x, s_0)]) \rangle \\
\text{CI} & \langle \boxed{3}\textbf{Gn } s \; (\exists x(\alpha[\textbf{franjo}(x, s)] \rightarrow \exists ! x(\alpha[\textbf{franjo}(x, s)])))) \rangle
\end{bmatrix}
\end{bmatrix}
$$

Overview

Definite marking

- Lexical entries of nouns and articles
- Yiddish: special attention to P+N combinations

Proper names

- Unique definite semantics as in (28)
- Optional determiner

(29)   Sketch of the lexical entry of the name *Franjo*:

$$
\begin{bmatrix}
\text{PHON } \langle \textit{Franjo} \rangle \\[4pt]
\text{SYNS LOC}
\begin{bmatrix}
\text{HEAD } \textit{noun} \\[4pt]
\text{VAL}
\begin{bmatrix}
\text{SUBJ} & \langle \rangle \\
\text{SPR} & \langle (\text{DET}) \rangle \\
\text{COMPS} & \langle \rangle
\end{bmatrix}
\end{bmatrix} \\[20pt]
\text{LRS}
\begin{bmatrix}
\text{EX-CONT } \textit{x} \\
\text{PARTS} & \langle x, \boxed{1}, \boxed{2}, \boxed{3} \rangle \\
\text{PRESUP} & \langle \boxed{1}(\ldots \wedge \exists x(\alpha[\textbf{franjo}(x, s_0)])), \boxed{2}(\ldots \wedge \alpha[\textbf{franjo}(x, s_0)]) \rangle \\
\text{CI} & \langle \boxed{3}(\ldots \wedge \textbf{\textit{Gn s}} \ (\exists x(\alpha[\textbf{franjo}(x, s)] \rightarrow \exists! x(\alpha[\textbf{franjo}(x, s)])))) \rangle
\end{bmatrix}
\end{bmatrix}
$$

Uniques

(30) Sketch of the lexical entry of the unique noun in Eo and Y, *suno/zun* 'sun':

$$
\begin{bmatrix}
\text{PHON } \langle \textit{suno/zun} \rangle \\[4pt]
\text{SYNS LOC }
\begin{bmatrix}
\text{HEAD } \textit{noun} \\[4pt]
\text{VAL }
\begin{bmatrix}
\text{SUBJ} & \langle \rangle \\
\text{SPR} & \langle \text{DET} \rangle \\
\text{COMPS} & \langle \rangle
\end{bmatrix}
\end{bmatrix} \\[30pt]
\text{LRS }
\begin{bmatrix}
\text{EX-CONT} & \boxed{0}\ \iota_\exists x : \phi \\
\text{PARTS} & \langle \boxed{0}, \boxed{1}, \boxed{2} \rangle \\
\text{PRESUP} & \langle \boxed{1}(\ldots \wedge \exists x(\alpha[\textbf{\textit{sun}}(x, s_0)])) \rangle \\
\text{CI} & \langle \boxed{2}(\ldots \wedge \textbf{\textit{Gn s}}\ (\exists x(\alpha[\textbf{\textit{sun}}(x, s)] \rightarrow \exists! y(\alpha[\textbf{\textit{sun}}(x, s)])))) \rangle
\end{bmatrix}
\end{bmatrix}
$$

Definite article: Eo

- Semantics that is compatible with all types of nouns.
- Existence and uniqueness are only assumed for the current situation.

(31) Sketch of the lexical entry of the Eo definite article *la*:

$$
\begin{bmatrix}
\text{PHON } \langle la \rangle \\[2pt]
\text{SYNS LOC} \begin{bmatrix}
\text{HEAD } \textit{def} \\[2pt]
\text{VAL} \begin{bmatrix}
\text{SUBJ} & \langle \rangle \\
\text{SPR} & \langle \rangle \\
\text{COMPS} & \langle \rangle
\end{bmatrix}
\end{bmatrix} \\[20pt]
\text{LRS} \begin{bmatrix}
\text{EX-CONT} & \boxed{0}\, \iota_\exists x : \phi \\
\text{PARTS} & \langle \boxed{0}, \boxed{1}, \boxed{2} \rangle \\
\text{PRESUP} & \langle \boxed{1}(\ldots \wedge \exists x \phi) \rangle \\
\text{CI} & \langle \boxed{2}(\ldots \wedge (\exists x \phi \rightarrow \exists! x \phi)) \rangle
\end{bmatrix}
\end{bmatrix}
$$

Definite article: P

- Semantics that is only compatible with anaphoric definites.
- Unique nouns can only combine with it if they are at the same time used anaphorically.

(32)   Sketch of the lexical entry of the P definite article *e*:

$$
\begin{bmatrix}
\text{PHON } \langle e \rangle \\[4pt]
\text{SYNS LOC} \begin{bmatrix} \text{HEAD } \textbf{\textit{det}} \\[4pt] \text{VAL} \begin{bmatrix} \text{SUBJ} & \langle\rangle \\ \text{SPR} & \langle\rangle \\ \text{COMPS} & \langle\rangle \end{bmatrix} \end{bmatrix} \\[30pt]
\text{LRS} \begin{bmatrix} \text{EX-CONT} & \boxed{0}\,\iota_{\exists}x : \phi \\ \text{PARTS} & \langle \boxed{0}, \boxed{1}, \boxed{2} \rangle \\ \text{PRESUP} & \langle \boxed{1}(\ldots \wedge \exists x \phi) \rangle \\ \text{CI} & \langle \boxed{2}(\ldots \wedge (\exists x \phi \rightarrow (\exists ! x \phi \wedge x = y \wedge \textbf{\textit{d-acc}}(y, s_0)))) \rangle \end{bmatrix}
\end{bmatrix}
$$

(33)   *E   Maria ta   yama bèk.   *E solo ta   kema.
       the Maria PRES call   back   the sun PRES burn

Definite article: Y (der)

- Semantics of the independent word definite article is compatible with all types of nouns.
- Existence and uniqueness are only assumed for the current situation.

(34)   Sketch of the lexical entry of the Eo definite article *der*:

$$
\begin{bmatrix}
\text{PHON } \langle \textit{der} \rangle \\[2pt]
\text{SYNS LOC}
\begin{bmatrix}
\text{HEAD } \textit{det} \\[2pt]
\text{VAL}
\begin{bmatrix}
\text{SUBJ} & \langle\rangle \\
\text{SPR} & \langle\rangle \\
\text{COMPS} & \langle\rangle
\end{bmatrix}
\end{bmatrix} \\[4pt]
\text{LRS}
\begin{bmatrix}
\text{EX-CONT} & \iota_\exists x : \phi \\
\text{PARTS} & \langle x, \boxed{1}, \boxed{2}\rangle \\
\text{PRESUP} & \langle\boxed{1}(\dots \wedge \exists x\phi)\rangle \\
\text{CI} & \langle\boxed{2}(\dots \wedge(\exists x\phi \rightarrow \exists! x\phi))\rangle
\end{bmatrix}
\end{bmatrix}
$$

Syntax of P+D combinations

- P+D behaves externally like a PP, but internally like an article.
- P+D has the same 3-dimensional semantics as a unique nominal.
- Thus: only compatible with unique nominals and proper names!

$$
\begin{bmatrix}
\text{PHON } \langle \textit{afn} \rangle \\[2pt]
\text{SYNS LOC}
\begin{bmatrix}
\text{HEAD}
\begin{bmatrix}
\textit{prep} \\
\text{MOD } N\,[\text{LOC CONT DR } y]
\end{bmatrix} \\[10pt]
\text{VAL}
\begin{bmatrix}
\text{SUBJ} & \langle \rangle \\
\text{SPR} & \langle \rangle \\[4pt]
\text{COMPS} & \left\langle N
\begin{bmatrix}
\text{HEAD}
\begin{bmatrix}
\text{NUM } \textit{sg} \\
\text{GEN } (\textit{masc } \textbf{or } \textit{neutr})
\end{bmatrix} \\[6pt]
\text{SPR} & \langle \text{DET} \rangle
\end{bmatrix}
\right\rangle
\end{bmatrix}
\end{bmatrix} \\[30pt]
\text{LRS}
\begin{bmatrix}
\text{EX-CONT} & \boxed{0}\,\iota_\exists x : \phi \\
\text{PARTS} & \langle \textbf{\textit{on}}(\boxed{0}, y), \boxed{0}, \boxed{1}, \boxed{2} \rangle \\
\text{PRESUP} & \langle \boxed{1}(\ldots \wedge \exists x \phi) \rangle \\
\text{CI} & \langle \boxed{2}(\ldots \wedge \textbf{\textit{Gn}} \ \textbf{\textit{s}} \ (\exists x \phi \to \exists! x \phi)) \rangle
\end{bmatrix}
\end{bmatrix}
$$
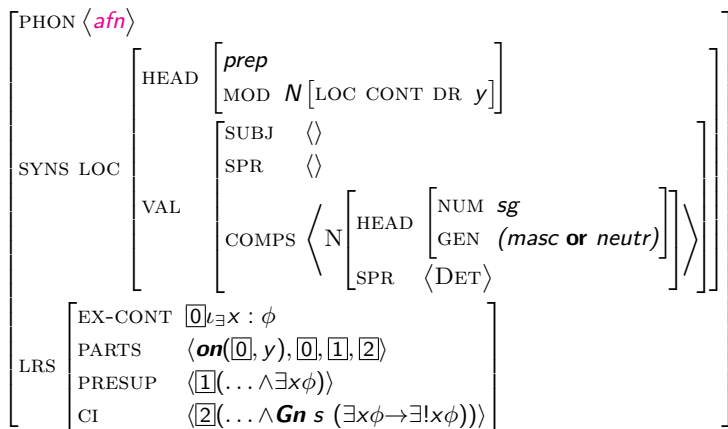
Syntax of P+NP combinations?

- Problem: While contracted, semantically restricted forms exists for singular nominals in some genders, this is not the case for all genders.
- For those P and D that have P+D forms, we must require that there are P-counterparts that select for a full NP and that the NP complement does not have a unique-nominal CI.

$$
\begin{bmatrix}
\text{PHON } \langle \textit{af} \rangle \\[4pt]
\text{SYNS LOC}
\begin{bmatrix}
\text{HEAD}
\begin{bmatrix}
\textit{prep} \\
\text{MOD } \textbf{\textit{N}}\,[\text{LOC CONT DR } y]
\end{bmatrix} \\[10pt]
\text{VAL}
\begin{bmatrix}
\text{SUBJ} & \langle \rangle \\
\text{SPR} & \langle \rangle \\[6pt]
\text{COMPS} & \left\langle \text{NP}
\begin{bmatrix}
\text{HEAD}
\begin{bmatrix}
\text{NUM } \textit{sg} \\
\text{GEN } (\textit{masc } \textbf{or } \textit{neutr})
\end{bmatrix} \\[8pt]
\text{DR} \quad x
\end{bmatrix} \right\rangle
\end{bmatrix}
\end{bmatrix} \\[30pt]
\text{LRS}
\begin{bmatrix}
\text{PARTS} & \langle \textbf{\textit{on}}(x, y) \rangle \\
\text{PRESUP} & \langle \rangle \\
\text{CI} & \langle \boxed{2}(\ldots \wedge \neg \textbf{\textit{Gn}}\ \textit{s}\ (\exists x \phi \rightarrow \exists! x \phi)) \rangle
\end{bmatrix}
\end{bmatrix}
$$
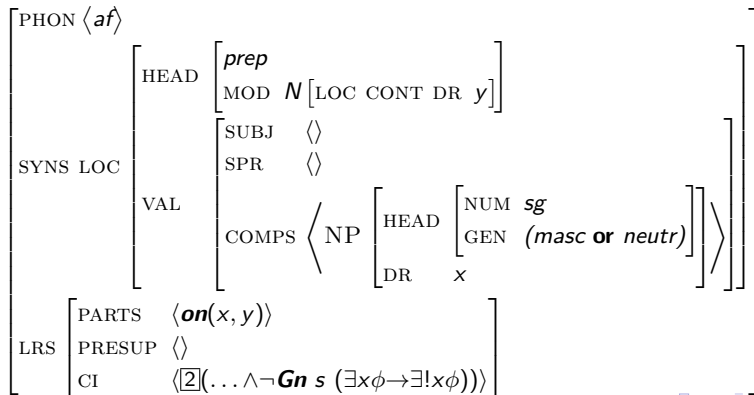
Definite marking:Summary

- Syntactic selection accounts for difference between proper names and unique nominals.
- While unique nominals in P can, in principle, take a determiner, a definite article is excluded unless an anaphoric use is present.
- Single-word analysis of contracted prepositions in Y. Non-contracted forms of contractable prepositions with special CI.

Overview

Summary

- Theory of definiteness applied to three langauges.
- Interaction of syntax and semantics
- Multi-dimensional semantics is very natural in HPSG, given its perlocation-retrieval approach.
- Little previous work on Y, Eo, and P in HPSG:
  - Y: Müller & Ørsnes (2011)
  - Eo: Li (1995) (inflectional morphology); one exercise sheet for LKB course (http://www.delph-in.net/courses/09/cl/esperanto.pdf)
  - P: (none?)

Extension to demonstratives and pointing gestures

- Anaphoric definites require uniqueness within the universe of discourse.
- Hawkins (1991): Uniform analysis of definites and demonstratives. Different p-set requirements, i.e., difference with respect to where uniquness holds (in discourse, in visual perception, . . .)
- Lücking et al. (2015): Space for uniqueness requirement can be determined through pointing gestures.

Articleless languages?

- Because of inherent semantic definiteness, proper names and unique nominals do not need an article.
- Anaphoric definites: The relevant presuppositions and CIs could come from the construction (word order etc.).

Some other open issues

- More contexts: bridging, generics, . . .
- Explicit link to accessibility theory for anaphoric definites
- Connection to indexicals (Maier, 2009)
- Secondary uses of proper names (von Heusinger, 2010)
- . . .

sailer@em.uni-frankfurt.de

a sheynem dank!

Multan dankon!

Mashá danki!

References

Am-David, Assif. 2014. A semantic typology of definiteness. The crosslinguistic distribution of definiteness markers. Saarbrücken: Lambert.

Am-David, Assif. 2016. Semantic typology of multiple definite articles. Manuscript Goethe University Frankfurt a.M.

Am-David, Assif & Manfred Sailer. in prep. Conventional implicature as a meaning component in definites. Manuscript Goethe University Frankfurt a.M.

Bonami, Olivier & Danièle Godard. 2007. Parentheticals in underspecified semantics: The case of evaluative adverbs. Journal of Research on Language and Computation 5(4). 391–413. Special Issue on Semantic Compositionality.

Bos, Johan. 1996. Predicate logic unplugged. In Paul Dekker & Martin Stokhof (eds.), Proceedings of the tenth amsterdam colloquium, 133–143. ILLC/Department of Philosophy, University of Amsterdam.

Burge, Tyler. 1973. Reference and proper names. The Journal of Philosophy 70. 425–439.

Copestake, Ann, Dan Flickinger, Ivan Sag & Carl Pollard. 2000. Minimal recursion semantics. an introduction. Manuscript, Stanford University.

Coppock, Elizabeth & David Beaver. 2015. Definiteness and determinacy. Linguistics and Philosophy 38. 377–435. doi:DOI10.1007/s10988-015-9178-8.

Egg, Markus. 1998. Wh-questions in Underspecified Minimal Recursion Semantics. Journal of Semantics 15. 37–82.

Egg, Markus. 2010. Semantic underspecification. Language and Linguistics Compass 4(3). 166–181.

Elbourne, Paul. 2002. Situations and individuals: MIT dissertation.

Hasegawa, Akio & Jean-Pierre Koenig. 2011. Focus particles, secondary meanings, and lexical resource semantics:
the case of japanese shika. In Stefan Müller (ed.), Proceedings of the 18th international conference on Head-Driven Phrase Structure Grammar, University of Washington, 81–101.
http://cslipublications.stanford.edu/HPSG/2011/hasegawa-koenig.pdf.

Hawkins, John A. 1991. On (in)definite articles: implicatures and (un)grammaticality prediction. Journal of Linguistics 27(2). 405–442.
doi:DOI:10.1017/S0022226700012731.

von Heusinger, Klaus. 2010. Zur Grammatik indefiniter Eigennamen. Zeitschrift für germanistische Linguistik 38(1). 88–120.

Horn, Laurence R. & Barbara Abbot. 2013. ¡the, a¿: (in)definiteness and implicature. In William P. Kabasenche & Matthew H. Michael O'Rourke, Slater (eds.), Reference and referring, vol. 10 Topics in Contemporary Philosophy, 325–355. Cambridge, Mass.: MIT Press.

Kalocsay, Kálmán & Gaston Waringhien. 1985. Plena analiza gramatiko de Esperanto. Rotterdam: Universale Esperanto Asocio 5th edn. http://luisguillermo.com/PAG/Plena_Analiza_Gramatiko_(K._Kalocsay,_G._Waringhien).pdf

Katz, Dovid. 1987. Grammar of the Yiddish language. Duckworth, London.
http://dovidkatz.net/dovid/PDFLinguistics/2-1987-Grammar-Yiddish.pdf.

Kester, Ellen-Petra & Cristina Schmitt. 2007. Papiamentu and Brasilian Portuguese: A comparative study of bare nominals. In Marlyse Baptista & Jacqueline Guéron (eds.), Noun phrases in creole languages. a multi-faceted approach, vol. 31 Creole Language Library, 107–143. Amsterdam, Philadelphia: Benjamins.

Kratzer, Angelika. 1989. An investigation of the lumps of thought. Linguistics and Philosophy 12. 607–653.

Li, Wei. 1995. Esperanto inflection and its interface in HPSG. In Proceedings of 11th north west linguistics conference (nwlc), Victoria, Canada.

Löbner, Sebastian. 2011. Concept types and determination. Journal of Semantics 28. 279–333. doi:doi:10.1093/jos/ffq022.

Lücking, Andy, Thies Pfeiffer & Hannes Rieser. 2015. Pointing and reference reconsidered. Journal of Pragmatics 77. 56–79.

Maier, Emar. 2009. Proper names and indexicals trigger rigid presuppositions. Journal of Semantics 26. 253–315. doi:doi:10.1093/jos/ffp006.

Mark, Yudel. 1978. Gramatik fun der yidisher klal-shprakh/grammar of Standard Yiddish. New York: Congress for Jewish Culture.

Müller, Stefan & Bjarne Ørsnes. 2011. Positional expletives in danish, german, and yiddish. In Stefan Müller (ed.), The proceedings of the 18th international conference on head-driven phrase structure grammar, 167–187. Stanford: CSLI Publications.
http://cslipublications.stanford.edu/HPSG/2011/.

Nübling, Damaris, Fabian Fahlbusch & Rita Heuser. 2012. Namen. Eine Einführung in die Onomastik. Tübingen: Narr.

Pinkal, Manfred. 1996. Radical underspecification. In Paul Dekker & Martin Stokhof (eds.), Proceedings of the tenth Amsterdam Colloquium, 587 – 606. ILLC/Department of Philosophy, University of Amsterdam.

Potts, Christopher. 2005. The logic of conventional implicatures Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.

Putte, Florimon van & Igma van Putte-de Windt. 1992. Dòsplak'i boka. Papiaments beginnerscursus. Zutphen: Walburg Pers.

Putte, Florimon van & Igma van Putte-de Windt. 2014. Grammatica van het Papiaments. vormen en communicatieve strategiën. Zutphen: Walburg Pers.

Richter, Frank & Manfred Sailer. 2004. Basic concepts of lexical resource semantics. In Arne Beckmann & Norbert Preining (eds.), Esslli 2003 – course material i, vol. 5 Collegium Logicum, 87–143. Vienna: Kurt Gödel Society Wien.

Sailer, Manfred. 2004. Local semantics in HPSG. In Olivier Bonami & Patricia Cabredo Hofherr (eds.), Empirical issues in formal syntax and semantics, vol. 5, 197–214. www.cssp.cnrs.fr/eiss5/sailer/index_en.html.

Schwarz, Florian. 2009. Two types of definites in natural language: University of Massachusetts, Amherst dissertation.

Wennergen, Bertilo. 2016. Plena manlibro de Esperanta gramatiko. http://bertilow.com/pmeg/.