

# Unbound Reflexives

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Hillary R. Clinton said



*Difference between Obama and MYSELF is that I am a woman.*

# Goals

- In prescriptive grammar, unbound reflexives are normally regarded as incorrect forms produced by **less educated persons** or **non-native speakers** with low proficiency in English.
- However, exploring large English data reveals that even highly educated English native speakers (e.g. **Hillary R. Clinton**) sometimes use the form in speech.
- The present study delves into the distributional property of the forms, **using the BYU corpora**.
- Building upon the corpus-based findings, **a grammar formalism** can be developed.

# Unbound Reflexive Pronouns across Languages

- Unbound reflexives roughly refer to **reflexive forms without a sentence-internal antecedent**.
- Languages with Unbounded Reflexives
  - Norwegian (Lødrup, 2007)
  - Icelandic (Lundquist, 2014)
  - Korean, Japanese (Kang, 1988)
  - North Sami (Outakoski, 2003)
- Unbounded reflexive pronouns as a universal feature
  - There must be **specific conditions** for allowing reflexive pronouns to be locally unbound.
  - Unbound reflexives exist **even in English**.
  - The overt presentation of the expression may **vary greatly** between languages.

# Unbound Reflexive Pronouns in COCA

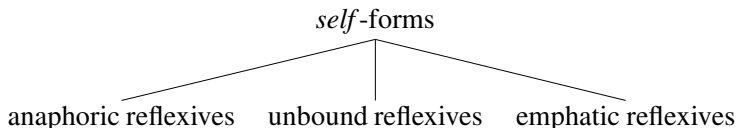
- (1) a. My brother and **myself** didn't do drugs.  
(COCA:2011:SPOK:CNN\_DrDrew)
- b. Realists like Truman and Eisenhower understood that defending Europe and **ourselves** from the Soviets required a strong military.  
(COCA:2007:MAG:WashMonth)
- c. He can not possibly refuse to marry in front of both the council and **yourself**. (COCA:2009:FIC:Read)
- d. It is much better to wait and cook dinner at home for Lu and **herself**.  
(COCA:1992:FIC:Iris)
- e. For the safety of the other crewmembers, and **himself**, he would be going back to Earth in a little over a week. (COCA:2010:FIC:Analog)

# Proforms

- ① Anaphora: referring backwards
  - a linguistic entity which indicates a co-reference tie to another preceding linguistic entity in the same text
- ② Cataphora: referring forward
  - the use of an expression that depends on a postcedent expression
- ③ Exophora: person deixis (i.e., the speaker and the addressee)
  - the reference of which is preset not directly in the linguistic context but in the situational context
- ④ Logophora: non-clause-bounded reflexive pronouns
  - the binding relation that holds between a special class of pronouns and their antecedents
  - a point of view

# Three Types of Reflexives

- König and Gast (2000)
  - Unbound reflexives share features both with intensifiers and reflexive anaphors, but are also differentiated from these two categories in their distribution and their interpretation.



# Taxonomy of Unbound Reflexive Pronouns

- Lange (2006:262)
  - ① 'Group' constructions: *like/as well as/but/except himself*
  - ② Coordination: *myself and John*
  - ③ Comparatives: *taller than myself*
  - ④ Prepositional phrases: *wrapping the cloak around himself*



# Representative Studies

- **Minimal SC** (Zribi-Hertz 1989)
  - An unbound reflexive pronoun is allowed iff it refers back to a **minimal subject of consciousness within the discourse**.
    - ① the nearest available NP or combination of NPs which occurs in discourse to the left of the pronoun, and is read as **logophoric**
    - ② the **speaker**, the **addressee**, or a **group including either one or both**, whether or not explicitly mentioned in discourse.
- **Principle R** (Pollard and Sag 1992; Pollard and Xue 2001; Pollard 2005)
  - Every r-pronoun is either
    - ① coindexed with a local d-commander, or
    - ② interpreted according to certain pragmatic constraints involving **logophoricity, contrastiveness, or discourse prominence**.

# Logophoricity

- Typology (Clements 1975; Maling 1984; Curnow 2002)
  - ① logophoric pronouns
  - ② verbal markings of logophoricity
  - ③ long-distance reflexive forms
- Discourse Representation Structure
  - ① Sells (1987): SOURCE, SELF, and PIVOT
  - ② Stirling (1993): one semantic role; namely, the epistemic validator

# Data Compilation

- COCA (1990-2015): basic analysis, genre analysis
- COHA (1810-2009): diachronic changes in modern English
- GloWbE (20 countries): regional analysis (Irish English)

Table: # of data points

COCA	30,634
COHA	23,966
GloWbE	80,405
Total	<b>135,005</b>

# Features

- Binding type

- 1 unbound
- 2 anaphora
  - 1 immediately before
  - 2 partially
  - 3 genitive
- 3 cataphora
  - 1 immediately after
  - 2 partially
  - 3 genitive
- 4 etc.

- Sibling type

- 1 pronouns (PRO)
- 2 genitive forms with the same feature as the reflexive pronouns (SAME)
- 3 genitive forms with the different feature (DIFF)
- 4 the other nouns (NOUN)
- 5 proper names (NAME)

## Proportion

Table:  $\neg$ anaphora

TYPE	% out of REFL	
1sg	<b>2.43%</b>	<b>2.40%</b>
1pl	2.30%	
2sg	1.27%	<b>1.28%</b>
2pl	1.58%	
3sg	0.56%	<b>0.60%</b>
3pl	0.72%	
total	<b>0.99%</b>	

Table: unbound

TYPE	% out of REFL	
1sg	<b>1.18%</b>	<b>1.11%</b>
1pl	0.90%	
2sg	0.78%	<b>0.77%</b>
2pl	0.56%	
3sg	0.29%	<b>0.30%</b>
3pl	0.33%	
total	<b>0.49%</b>	

# Binding Types in Coordination

Table: COCA

TYPE	#	%
anaphora	10,380	66.71%
<b>unbound</b>	<b>2,407</b>	<b>15.47%</b>
agen	742	4.77%
cgen	454	2.92%
apart	370	2.38%
chk	325	2.09%
after	256	1.65%
<b>cataphora</b>	<b>244</b>	<b>1.57%</b>
before	189	1.21%
cpart	175	1.12%

# Binding Types in Coordination(cont'd)

Table: 3rd

TYPE	#	%
anaphora	8,174	77.58%
<b>unbound</b>	<b>1,058</b>	<b>10.04%</b>
agen	478	4.54%
cgen	286	2.71%
chk	245	2.33%
after	107	1.02%
<b>cataphora</b>	<b>99</b>	<b>0.94%</b>
before	50	0.47%
apart	26	0.25%
cpart	5	0.05%

Table: 2nd

TYPE	#	%
anaphora	666	50.49%
<b>unbound</b>	<b>375</b>	<b>28.43%</b>
agen	59	4.47%
before	45	3.41%
cgen	43	3.26%
<b>cataphora</b>	<b>38</b>	<b>2.88%</b>
after	37	2.81%
apart	22	1.67%
cpart	4	0.30%

# Binding Types in Coordination (cont'd)

Table: 1st

TYPE	#	%
anaphora	1,540	41.57%
<b>unbound</b>	<b>974</b>	<b>26.29%</b>
apart	322	8.69%
agen	205	5.53%
cpart	166	4.48%
cgen	125	3.37%
after	112	3.02%
<b>cataphora</b>	<b>107</b>	<b>2.89%</b>
before	94	2.54%

Table: myself

TYPE	#	%
anaphora	1,045	38.85%
<b>unbound</b>	<b>775</b>	<b>28.81%</b>
apart	233	8.66%
cpart	146	5.43%
agen	143	5.32%
after	93	3.46%
before	82	3.05%
<b>cataphora</b>	<b>80</b>	<b>2.97%</b>
cgen	47	1.75%



# Siblings in Coordination

Table: Proportion

TYPE	PRO	NOUN	NAME	SAME	DIFF	ETC
BOUND	23.68%	28.28%	10.34%	35.69%	1.05%	0.96%
UNBOUND	9.45%	34.12%	23.34%	30.12%	1.30%	1.67%
DIFF	<b>-14.24%</b>	5.84%	<b>13.00%</b>	-5.57%	0.25%	0.71%
¬BOUND	11.08%	32.14%	21.86%	32.29%	1.38%	1.25%
DIFF	<b>-12.61%</b>	3.86%	<b>11.53%</b>	-3.40%	0.32%	0.30%

Table: Collostructional Analysis

P	LEFT	RIGHT
1.94E-80	ETC NAME PRO SAME	DIFF NOUN
1.54E-78	ETC NAME SAME	DIFF NOUN PRO
6.55E-75	DIFF NOUN SAME	ETC NAME PRO
2.78E-73	DIFF NOUN PRO SAME	ETC NAME
1.86E-72	ETC NAME NOUN PRO SAME	DIFF

# Siblings in Coordination (3rd)

Table: Proportion

TYPE	PRO	NOUN	NAME	SAME	DIFF	ETC
BOUND	24.17%	28.30%	9.94%	35.47%	1.02%	1.10%
UNBOUND	11.35%	35.92%	12.88%	34.98%	1.37%	3.50%
DIFF	<b>-12.83%</b>	7.62%	2.95%	-0.48%	0.34%	2.40%
-BOUND	11.39%	34.30%	12.85%	37.76%	1.09%	2.61%
DIFF	<b>-12.78%</b>	6.00%	2.91%	2.29%	0.07%	1.50%

Table: Collostructional Analysis

P	LEFT	RIGHT
2.36E-25	ETC NAME NOUN PRO SAME	DIFF
4.69E-23	ETC NAME NOUN SAME	DIFF PRO
1.59E-17	ETC NAME PRO SAME	DIFF NOUN
8.42E-17	ETC NAME SAME	DIFF NOUN PRO
5.18E-16	ETC NAME NOUN PRO	DIFF SAME

# Siblings in Coordination (2nd)

Table: Proportion

TYPE	PRO	NOUN	NAME	SAME	DIFF	ETC
BOUND	25.55%	30.83%	4.94%	37.65%	0.68%	0.34%
UNBOUND	7.53%	46.35%	7.08%	38.36%	0.23%	0.46%
DIFF	<b>-18.02%</b>	<b>15.51%</b>	2.14%	0.71%	-0.45%	0.12%
¬BOUND	12.90%	41.22%	5.73%	39.43%	0.36%	0.36%
DIFF	<b>-12.65%</b>	<b>10.38%</b>	0.79%	1.78%	-0.32%	0.02%

Table: Collostructional Analysis

P	LEFT	RIGHT
5.48E-15	ETC NAME NOUN SAME	DIFF PRO
1.14E-14	ETC NAME NOUN PRO SAME	DIFF
1.81E-14	DIFF PRO SAME	ETC NAME NOUN
3.64E-14	ETC NAME NOUN PRO	DIFF SAME
1.12E-09	ETC NOUN SAME	DIFF NAME PRO

# Siblings in Coordination (1st)

Table: Proportion

TYPE	PRO	NOUN	NAME	SAME	DIFF	ETC
BOUND	20.43%	27.16%	14.53%	36.05%	1.36%	0.48%
UNBOUND	8.45%	28.74%	37.33%	23.39%	1.59%	0.51%
DIFF	<b>-11.99%</b>	1.58%	<b>22.80%</b>	<b>-12.66%</b>	0.23%	0.03%
¬BOUND	10.28%	27.69%	34.19%	25.57%	1.91%	0.36%
DIFF	<b>-10.16%</b>	0.53%	<b>19.67%</b>	<b>-10.48%</b>	0.55%	-0.11%

Table: Collostructional Analysis

P	LEFT	RIGHT
4.82E-45	DIFF ETC NOUN PRO SAME	<b>NAME</b>
1.74E-44	DIFF ETC NOUN PRO	<b>NAME SAME</b>
3.40E-44	DIFF ETC NOUN SAME	<b>NAME PRO</b>
6.58E-44	NAME PRO SAME	DIFF ETC NOUN
1.83E-40	ETC NAME PRO SAME	DIFF NOUN

## Genre

Table: Proportion

TYPE	ACAD	FIC	MAG	NEWS	SPOK
BOUND	27.15%	19.51%	19.25%	16.65%	17.44%
UNBOUND	22.24%	17.70%	18.56%	13.89%	27.61%
DIFF	-4.92%	-1.81%	-0.68%	-2.76%	<b>10.17%</b>
¬BOUND	21.09%	19.11%	19.18%	13.51%	27.10%
DIFF	-6.06%	-0.39%	-0.06%	-3.14%	<b>9.66%</b>

Table: Collostructional Analysis

P	LEFT	RIGHT
2.51E-32	ACAD FIC MAG NEWS	<b>SPOK</b>
2.93E-20	ACAD FIC NEWS	<b>MAG SPOK</b>
3.86E-16	ACAD MAG NEWS	<b>FIC SPOK</b>
8.03E-14	FIC MAG SPOK	ACAD NEWS
2.52E-13	ACAD FIC MAG	NEWS SPOK

## Genre (3rd)

Table: Proportion

TYPE	ACAD	FIC	MAG	NEWS	SPOK
BOUND	31.03%	19.37%	18.40%	17.09%	14.10%
UNBOUND	32.76%	21.84%	17.41%	16.98%	11.01%
DIFF	1.73%	<b>2.47%</b>	-1.00%	-0.11%	<b>-3.10%</b>
¬BOUND	31.64%	23.70%	17.33%	16.79%	10.55%
DIFF	0.60%	<b>4.33%</b>	-1.07%	-0.30%	<b>-3.56%</b>

Table: Collostructional Analysis

P	LEFT	RIGHT
3.97E-03	ACAD FIC MAG NEWS	<b>SPOK</b>
5.19E-03	ACAD FIC NEWS	MAG SPOK
7.59E-03	MAG NEWS SPOK	ACAD FIC
2.70E-02	ACAD FIC MAG	NEWS SPOK
4.85E-02	ACAD MAG NEWS SPOK	FIC

## Genre (2nd)

Table: Proportion

TYPE	ACAD	FIC	MAG	NEWS	SPOK
BOUND	6.64%	19.59%	27.43%	12.27%	34.07%
UNBOUND	8.90%	11.19%	36.76%	8.68%	34.47%
DIFF	2.26%	-8.40%	<b>9.33%</b>	-3.59%	0.40%
-BOUND	8.24%	12.37%	38.89%	7.71%	32.80%
DIFF	1.60%	-7.23%	<b>11.46%</b>	-4.56%	-1.28%

Table: Collostructional Analysis

P	LEFT	RIGHT
1.78E-05	ACAD MAG SPOK	FIC NEWS
1.76E-04	FIC NEWS SPOK	ACAD MAG
2.83E-04	ACAD MAG NEWS SPOK	FIC
1.40E-03	ACAD FIC NEWS	MAG SPOK
1.74E-03	ACAD FIC NEWS SPOK	MAG

## Genre (1st)

Table: Proportion

TYPE	ACAD	FIC	MAG	NEWS	SPOK
BOUND	15.48%	20.16%	20.30%	16.16%	27.90%
UNBOUND	17.55%	16.25%	13.79%	12.92%	39.49%
DIFF	2.07%	-3.92%	-6.51%	-3.23%	<b>11.59%</b>
¬BOUND	15.81%	17.15%	15.08%	12.40%	39.57%
DIFF	0.33%	-3.01%	-5.22%	-3.76%	<b>11.66%</b>

Table: Collostructional Analysis

P	LEFT	RIGHT
3.54E-13	FIC MAG NEWS	<b>ACAD SPOK</b>
5.71E-11	ACAD FIC MAG NEWS	<b>SPOK</b>
6.67E-09	ACAD NEWS SPOK	FIC MAG
2.22E-08	ACAD FIC SPOK	MAG NEWS
3.77E-06	ACAD FIC NEWS SPOK	MAG



# My Tentative Proposal

- There are **multiple conditions** for allowing unbound reflexive pronouns.
  - ① Minimal SC: The binding theory can be violated iff ...
  - ② Principle R: Logophoricity, contrastiveness, and discourse prominence can function as a trigger of using reflexive forms even though the antecedent is implicit.
- Using a reflexive pronoun is largely motivated
  - ① when there is a **sufficiently salient coreferent** for the reflexive pronoun or
  - ② when the **narrative point of view** is changed.

# Discourse Salience

- Proper names
  - ① Downing (1996) and Huang (2000) argue that proper names normally take precedence over definite descriptions across languages as a predominant referential form for introducing a known referent into the current dialogue.
  - ② Van Langendonck (2007) argues that when a proper name denotes a unique entity, psychologically it plays a role to make the entity more salient.
  - ③ Stojanovic (2010) argues that proper names serve as a pragmatic device to help the addressees understand which the speaker is referring to.
- These previous studies commonly argue that **the choice of proper names is pragmatically relevant**, and **choosing a proper name instead of the alternatives renders the referent more salient**.

# Logophoricity

- (2) a. Tom<sub>i</sub> believed that the paper had been written by Ann and himself<sub>i</sub>.
- b. John<sub>i</sub> thinks that Mary is taller than himself<sub>i</sub>; (Kim, 2000:93).
- The reflexives above are not bound in the local domains, but they are licensed by the discourse factor, viz. **point of view**.
    - In the examples, *himself* is used to denote the logophoricity: the sentences are delivered from the viewpoint of Tom and John respectively.
    - When *him* is used instead of *himself*, it indicates an objective report of the speaker.

# Open Questions for Formalism

- The other type of unbound reflexives is being analyzed.
- (3) It felt only awkward that a boy two years older **than myself** was responsible for my laundry.
- Is it indeed necessary to implement those instances into our grammar?
  - If so, how can we implement unbound reflexives within the HPSG and MRS formalism? (CONT and CTXT)
    - ① non-anaphoric proforms: cataphora, exophora, and logophora
    - ② binding: speaker and hearer
    - ③ specific constructions: *and myself*, *than myself*
    - ④ pragmatic conditions: discourse salience, logophoricity
  - Unbound reflexives in other languages; e.g., Norwegian.