

Complex demonstratives and selection presuppositions

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1 Introduction

- Complex demonstratives are expressions of the form ‘that F ’:
 - (1) **That route** looks amazing. (pointing at a certain route)
 - (2) [Every professor] _{i} cherishes **that first paper she _{i} published**.¹
- The classic philosophical approach to demonstratives undergenerates, ruling out (2).
- Next-generation semantic theories fail to distinguish demonstratives from definite descriptions.
- I’ll describe a ‘Goldilocks’ position similar to Wolter’s (2006), and say why it deserves attention.

2 The standard view: direct reference

- On Kaplan’s (1977) treatment, demonstratives are obligatory rigid designators:²
 - (3) $\llbracket \text{that } F \rrbracket^{c,w} = \llbracket \text{dthat (the } F) \rrbracket^{c,w} = \llbracket \text{the } F \rrbracket^{c,w_c}$
- But demonstratives do not in general designate rigidly:³
 - (4) If Simone _{i} had won the election, she _{i} would definitely have embraced **that elector who cast the deciding vote**.
 - (5) If there were a left-handed puck-moving defenseman available at the draft, **that player** would be the one to pick.
 - (6) The real worry, I think, for men is that they will have to change their ways. They will have to monitor what they say to female students and colleagues. They will have to think twice before chatting up **that attractive graduate student they see at a conference**.⁴
 - (7) [Every boy] _{i} is looking for **that girl who makes his _{i} heart beat faster, his _{i} stomach flutter, and his _{i} mind wander**.⁵

3 Hidden argument theories

- King (2001) and Elbourne (2005) offer a unified treatment of deictic and non-deictic demonstratives.
- They say that complex demonstratives are definite descriptions that involve a hidden argument place:
 - (8) $\llbracket \text{that } F \rrbracket = \llbracket \text{the } x : [Fx \wedge Gx] \rrbracket$
 - The first argument is supplied by the predicate from which the complex demonstrative is formed, the second is provided by context.
- When a demonstrative is used deictically, the covert argument is *identificational*:
 - (9) **That hockey player** won a silver medal for the United States in the 2014 Winter Olympics. (pointing at Amanda Kessel)

¹From King (2001).

²See also Borg (2000), Salmon (2002), Braun (2008), and Georgi (2012).

³Compare King (2001), Roberts (2002), Nowak (2014).

⁴From Anthony (2013).

⁵Love Quote #6748505 from <http://www.wittyprofiles.com/q/6748505>, accessed May 1, 2014.

(10) [the x : [hockey player(x) \wedge Amanda Kessel = x]]

- When a demonstrative is used non-deictically, the covert argument is *trivial*:

(11) **That guy who wrote *King Lear*** also wrote *Romeo and Juliet*.

(12) [the x : [guy who wrote '*Lear*'(x) \wedge x = x]]

- The HAT predicts that:

(4) If Simone_{*i*} had won the election, she_{*i*} would definitely have embraced **that elector who cast the deciding vote**.

will be truth-conditionally equivalent to:

(13) If Simone_{*i*} had won the election, she_{*i*} would definitely have embraced **the elector who cast the deciding vote**.

since the following representation is available:

(14) [the x : [elector who cast the deciding vote(x) \wedge x = x]]

- In fact, the HAT predicts that demonstratives and definite descriptions should be interchangeable.

– But this is wrong:

(15) **The author of *King Lear*** also wrote *Romeo and Juliet*.

(16) **#That author of *King Lear*** also wrote *Romeo and Juliet*.

– There appears to be a phenomenon here:

(17) I climbed **#that tallest mountain / that mountain which is taller than all others**.

(18) **#That inventor of bifocals / that guy who invented bifocals** was a genius.

(19) **#That responsible person / that person who is responsible will be punished**.⁶

- In summary, an empirically-adequate treatment will have to explain this alternation:

(11) **That guy who wrote *King Lear*** also wrote *Romeo and Juliet*.

(16) **#That author of *King Lear*** also wrote *Romeo and Juliet*.

4 Adding some presuppositions

- This amendment to the HAT will allow us to turn the trick:

HAT': [that F] = $\begin{cases} \text{[the } x : [F(x) \wedge G(x)]] \text{ iff } (F \cap G) \subset F \\ \text{otherwise undefined} \end{cases}$

- HAT' has no effect on the predictions we make about deictic data. Consider (9) again:

(9) **That hockey player** won a silver medal for the United States in the Winter Olympics.

⁶From Wolter (2006).

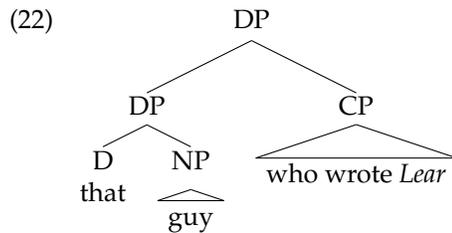
Since there are hockey players other than Amanda Kessel, we are free to apply our schema:

(20) [that hockey player] = [the x : [hockey player(x) \wedge Amanda Kessel = x]]

- But (on reasonable assumptions) HAT' rules out (16), by ruling out trivial second arguments:

(21) [the x : [author of *King Lear*(x) \wedge $x = x$]]

- How do we explain the good non-deictic demonstratives if we can't use trivial arguments?
 - We feed the demonstrative determiner a second non-trivial argument, by using this structure for relative clause:⁷



- No permutation of this strategy seems likely to save:

(16) #**That author of *King Lear*** also wrote *Romeo and Juliet*.

- Even if it were syntactically plausible to split *author of 'Lear'* into its basic constituents, we'd end up with a two-place relation and an individual:

(23) [the x : [x is an author of y \wedge *Lear* = x]]

- The fact that relational genitive constructions are OK when they *would* support restriction provides further support for our proposal. We expect the first demonstrative from:

(24) **That author of *Principia*** (gesturing at Russell) looks friendly, but I wouldn't try to get an autograph from **that one** (gesturing at Whitehead).

to be interpretable as follows:

(25) [the x : [author of *Principia*(x) \wedge Russell = x]]

And the demonstrative from:

(26) **That author of *Principia*** who spent time in jail was well-known for his political views.

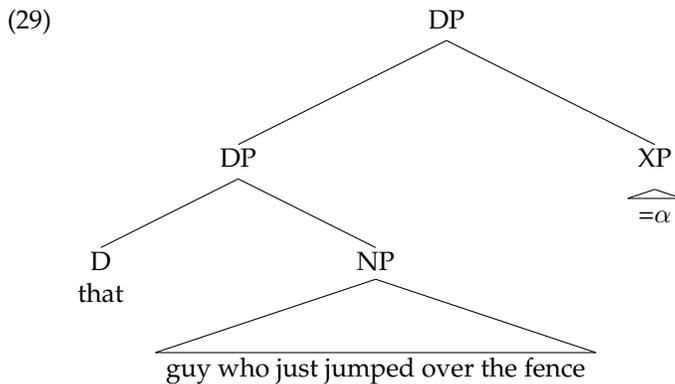
to be interpretable as follows:

(27) [the x : [author of *Principia*(x) \wedge spent time in jail(x)]

- Importantly, we can allow relative clauses to occur in *both* structures:

(28) See **that guy who just jumped over the fence?**

⁷Compare Bach and Cooper (1978), Wolter (2006).



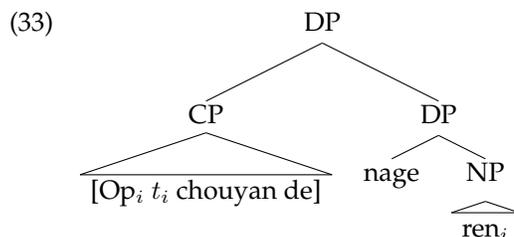
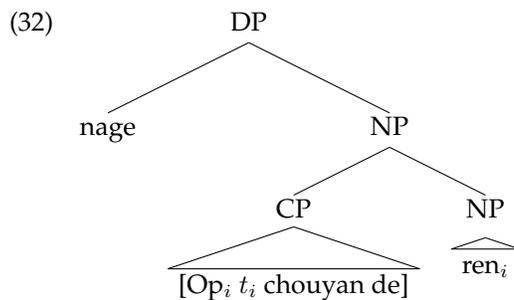
5 High relative clauses (beyond Hittite)

- Chinese demonstratives involving relative clauses are (apparently) interpreted differently depending on where the clause attaches.⁸

– Consider the following examples from Del Gobbo (2003, pg. 63):

(30) na-yi-ge [chouyan de] ren
that-one-CL smoke DE person
'That person that smokes'

(31) [chouyan de] na-yi-ge ren
smoke DE that-one-CL person
'The person that smokes'



– Both Lin and Del Gobbo claim that these two structures produce exactly the interpretations we claim for the two English possibilities—(30) is interpreted deictically, while (31) is treated like a definite description.

* Lin offers a Fregean semantics on which the determiner takes two arguments and returns their unique joint satisfier.

⁸See Lin (2003), Del Gobbo (2003). Thanks to Peter Jenks for pointing this out to me.

- * Del Gobbo treats the determiner in quantificational terms, in roughly the way King (2001) does.
- Indeed, there may even be explicit evidence for high-attached relatives in English:
 - (34) A man entered the room and a woman went out who were quite similar. (Perlmutter and Ross, 1970, pg. 350)
 - Since the predicate *be quite similar* requires a plural antecedent, the relative clause cannot be generated ‘downstairs’, as it were, to modify either *man* or *woman*:
 - (35) *A man who were quite similar entered the room and a woman went out.
 - (36) *A man entered the room and a woman who were quite similar went out.
 - (37) Landlords and tenants who hate each other will always find something to argue about. (Link 1984, pg. 143)
 - On the natural reading of this string, the relative clause cannot be interpreted as a sister to *landlord* or *tenant*; it has to be interpreted in a position that is higher than either of the NPs that form the conjunction.
 - (38) (A/the/some/every) man and (a/the/some/every) woman who wrote poems about each other showed up at the conference.
 - This permutation of Link’s example suggests that in the case of relative clauses with split antecedents, the clause attaches above the determiners involved.

6 References

- [1] Louise Anthony. Academia’s fog of male anxiety. *The New York Times*, 2013, September 3.
- [2] Emmon Bach and Robin Cooper. The NP-S analysis of relative clauses and compositional semantics. *Linguistics and Philosophy*, 2(1):145–150, 1978.
- [3] Emma Borg. Complex demonstratives. *Philosophical Studies*, 97:229–249, 2000.
- [4] Francesca del Gobbo. *Appositives at the Interface*. PhD thesis, University of California at Irvine, 2003.
- [5] Paul Elbourne. *Situations and Individuals*. MIT Press, Cambridge, MA, 2005.
- [6] Geoff Georgi. Reference and ambiguity in complex demonstratives. In William P. Kabasenche, Michael O’Rourke, and Matthew H. Slater, editors, *Reference and Referring*, pages 357–384. MIT Press, Cambridge, MA, 2012.
- [7] David Kaplan. Demonstratives. In J. Almog, J. Perry, and H. Wettstein, editors, *Themes from Kaplan*, pages 481–563. Oxford University Press, Oxford, UK, 1977/1989.
- [8] Jeffrey C. King. *Complex Demonstratives: A Quantificational Account*. MIT Press, Cambridge, MA, 2001.
- [9] Jo-Wang Lin. On restrictive and non-restrictive relative clauses in Mandarin Chinese. *The Tsing Hua Journal of Chinese Studies*, 33(1):199–240, 2003.
- [10] Godehard Link. Hyrdas. on the logic of relative clause constructions with multiple heads. In F. Landman and F. Veltman, editors, *Varieties of Formal Semantics*, pages 245–257. Dordrecht, 1984.
- [11] Ethan Nowak. Demonstratives without rigidity or ambiguity. *Linguistics and Philosophy*, 37(5):409–436, 2014.

- [12] David Perlmutter and John Robert Ross. Relative clauses with split antecedents. *Linguistic Inquiry*, 1(350), 1970.
- [13] Craige Roberts. Demonstratives as definites. In Kees van Deemter and Roger Kibble, editors, *Information Sharing*. Stanford: CSLI, 2002.
- [14] Nathan Salmon. Demonstrating and necessity. *Philosophical Review*, 111(4):497–537, 2002.
- [15] Lynsey Wolter. *That's that; the Semantics and Pragmatics of Demonstrative Noun Phrases*. PhD thesis, University of California at Santa Cruz, 2006.