

Complex demonstratives are definite descriptions

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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
 (1) involves a *deictic* use, (2) a *non-deictic* use.
- Standard—i.e., direct reference—approaches to complex demonstratives are wrong; they under-generate.
- Next-generation ‘hidden argument’ semantic theories are also wrong; they over-generate.
- I’ll introduce a theory that fits the data; it is productive enough, but not too productive.

2 The standard view: direct reference

- Kaplan (1977) claimed demonstratives are directly referential.
 - In other words, the propositional contribution of a demonstrative is an individual.
 - Contrast definite descriptions, which contribute a property or cluster of properties that might (or might not) be *satisfied* by an individual.
- Kaplan’s formal treatment makes clear that demonstratives are rigid designators:
 - (3) $[[\text{that } F]]^{c,w} = [[\text{dthat (the } F)]]^{c,w} = [[\text{the } F]]^{c,w_c}$
- Rigidity is a design feature of the semantics; it is meant to explain the contrast between (4) and (5):
 - (4) **The guy who invented bifocals** might not have been **the guy who invented bifocals**.
 - a. = (!) Ben Franklin might not have been Ben Franklin.
 - b. = Ben Franklin might not have invented bifocals.
 - (5) **That guy in the purple shirt** might not have been **that guy in the purple shirt**.
 - a. = (!) Ibrahim might not have been Ibrahim.
 - b. \neq Ibrahim might not have worn a purple shirt.
- But demonstratives do not in general designate rigidly:
 - (6) If Simone_{*i*} had won the election, she_{*i*} would definitely have embraced **that elector who cast the deciding vote**.
 - (7) If there were a left-handed puck-moving defenseman available at the draft, **that player** would be the one to pick.
 - (8) 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**.²
 - (9) [Every boy]_{*i*} is looking for **that girl who makes his_{*i*} heart beat faster, his_{*i*} stomach flutter, and his_{*i*} mind wander**.³
- CONCLUSION: Direct reference is wrong.

¹Compare King (2001).

²From Anthony (2013).

³Love Quote #6748505 from <http://www.wittyprofiles.com/q/6748505>, accessed May 1, 2014.

3 Hidden argument theories

- King (2001) and Elbourne (2005) offer versions of a theory that covers both deictic and non-deictic demonstratives.
- They say that complex demonstratives are interpreted like definite descriptions that involve a hidden argument place:

$$(10) \text{ [that } F] = \text{[the } x : [Fx \wedge Gx]]$$

- The overt argument is supplied by the predicate from which the complex demonstrative is formed. So:

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

is represented by means of a completion of the following template:

$$(12) \text{ [the } x : \text{[hockey player}(x) \wedge Gx]]$$

- When a demonstrative is used deictically, an identificational property occupies the covert argument position:

$$(13) \text{ [the } x : \text{[hockey player}(x) \wedge \text{Amanda Kessel} = x]]$$

It is easy to see that (13) predicts the right extension for (11).

Since the representation involves an identificational property, the demonstrative will pick out Kessel at every world at which it picks out anything.

- When a demonstrative is used non-deictically, as in:

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

a trivial property occupies the covert position:

$$(15) \text{ [the } x : \text{[guy who wrote 'Lear'}(x) \wedge x = x]]$$

which essentially turns the demonstrative into a definite description.

- So, the hidden argument theory predicts that:

(6) 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:

(16) 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:

$$(17) \text{ [the } x : \text{[elector who cast the deciding vote}(x) \wedge x = x]]$$

This seems intuitively correct, and similar reasoning applies to non-deictic demonstratives generally.

- BUT, not every demonstrative can be interpreted as a definite description.

– Consider the pair:

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

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

The infelicity of (19) suggests that something rules out:

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

As we saw, however, (14) is ok:

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

– There appears to be a general problem here:⁴

(21) #I climbed **that tallest mountain**.

(22) **#That fastest racer** won the prize.

(23) **#That founder of Microsoft** is Gates.

(24) **#That inventor of bifocals** was a genius.

- CONCLUSION: The hidden argument theory over-generates.

4 A job for presupposition

- The data from the previous section can be explained by amending the hidden argument theory as follows:

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

- (25) has no effect on the predictions we make about deictic data. Consider (11) again:

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

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

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

which results in a representation that is the same as the hidden argument theory's.

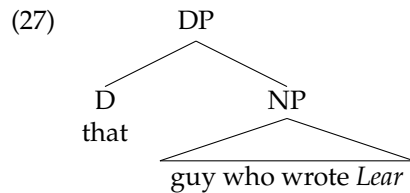
- But (25) allows us to explain the pattern in the distribution of non-deictic data, too.

– On standard thinking, the demonstrative from:

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

is modeled as per:

⁴Thanks to Seth Yalcin for pointing out that superlatives belong to this class.

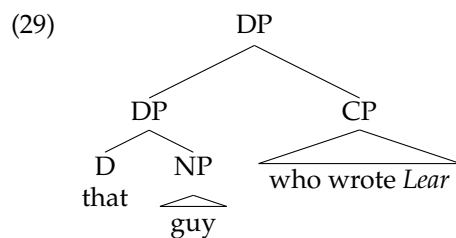


This means we should expect the following semantic representation:

(28) [the x : [guy-who-wrote- $Lear(x) \wedge G(x)$]]

But (28) will not compute, since it involves an unbound variable over properties, G .

- We can avoid this problem by employing an alternative structural analysis:⁵



On (29), *that* ends up with two arguments: *guy* and *who wrote 'Lear'*.

Since there are guys who did not write *Lear*, these two arguments meet our presupposition and we end up with the following representation for the demonstrative:

(30) [the x : [guy(x) \wedge wrote $Lear(x)$]]

- Demonstratives like the one from:

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

are ruled out, since there is no way to extract two arguments from the predicative material they involve.

- If we treat *author of 'Lear'* as a single argument, we get:

(31) [the x : [x is an author of $Lear \wedge Gx$]]

which does not compute.

- If we split *author of 'Lear'* into its basic constituents, we end up with a two-place relation and an individual:

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

which is nonsense.

- Similar reasoning can be applied to rule out non-deictic readings for the strings involving superlatives, etc.

- 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:

⁵Compare Bach and Cooper (1978), Wolter (2006).

- (33) **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:

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

And the demonstrative from:

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

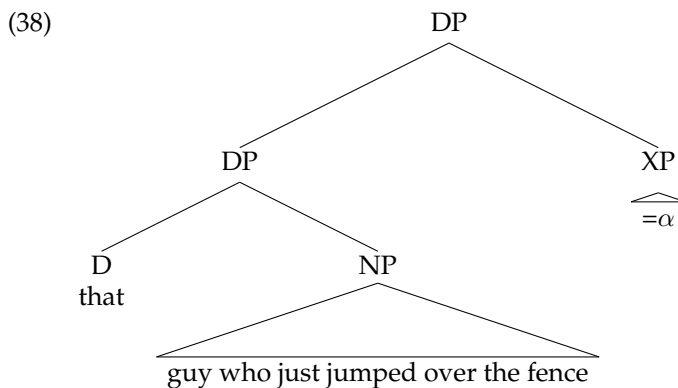
to be interpretable as follows:

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

- Importantly, we can allow relative clauses to occur in *both* structures, so as to allow demonstratives like:

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

to receive deictic interpretations along the lines of:



5 Summary

- In addition to explaining familiar deictic data, a semantics for demonstratives should explain what licenses the non-deictic reading for:

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

and explain what rules out such a reading for (19):

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

- Direct reference and the hidden argument theory fail to do this, but a semantics based on (25) succeeds.
- There is a lot more to say, of course. Here are a few more things I want to look at:⁶

⁶Thanks to Brian Leahy for these data.

– Discourse referential uses:

(39) a: Some jerk's been playing loud music at six every morning.
b: (later) **That jerk** was playing music again this morning.

(40) a: A friend of mine is dreading her final exam.
b: (later) **That friend of yours** passed the final she was dreading.

– Implicated discourse referents:

(41) A: 4 of my students have already sent me their thesis proposals.
B: **That straggler** better get cracking.

– Intonation contours:

(42) a: Who in the world wrote *Waverley*? For the life of me, I just can't remember.
b: (later) I remembered! **That author of *Waverley***? It's Scott!

6 References

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