

THAT *KIND-OF* DEMONSTRATIVE: A SEMANTIC ANALYSIS OF ENGLISH DEMONSTRATIVES*

Crystal Chen
University of Toronto

Demonstratives have often been characterized as an extension of the definite article. This characterization is unsurprising given the similarities between the two determiners. Both are claimed to presuppose familiarity and uniqueness of their referent. In other words, *the/that NP* are only defined if it is presupposed that there is one (i.e. familiar) and only one (i.e.. unique) entity in the context of utterance which fits the descriptive content of the NP. Furthermore, demonstratives can almost always felicitously replace the definite article. Yet, a key distinguishing property of demonstratives is that they seem to trigger anti-uniqueness, which is the sense that when a speaker utters *that NP* to refer to a particular entity, then the referent is somehow 'discriminated' with respect to all other entities satisfying the same description (Reimer, 1991). However, analyses of anti-uniqueness in demonstratives have run into various issues. As such, the goal of this paper is to explore the uses of the demonstrative, identify the properties of demonstrative expressions and their difference to other definite expressions and to propose a semantic account of demonstrative expressions that presents a solution to the issues faced by other analyses.

1. Background

1.1 Demonstrative usage and properties

Demonstratives have a number of uses which can be characterized into one of six ways. Firstly, demonstratives can be split by whether or not the demonstrative phrase contains an NP complement. If so, the phrase is adnominal and if not, it is pronominal. Secondly, demonstratives can be characterized by how the referent is identified. If the referent is identified by pointing, eye gaze or some other extra-linguistic gesture (represented as '☞'), then the demonstrative phrase is deictic. If the referent was introduced previously in the linguistic context, then it is anaphoric. Finally, if the demonstrative phrase uses additional descriptive material such as a relative clause, to identify the referent, then it is descriptive. Note referents of descriptive demonstrative phrases may or may not be previously introduced in the discourse. Examples of each of these uses are shown in (1) and (2).

*Acknowledgements: Thank you to Michela Ippolito for all the help she provided during the writing of this paper.

- (1) a. **Deictic adnominal:** [That cake][↗] is expensive.
 b. **Anaphoric adnominal:** Look at [the beautiful cake in the window]_i. I made [that cake]_i.
 c. **Descriptive adnominal:** [That cake that the kids liked] is on the table
- (2) a. **Deictic pronominal:** I want [that][↗].
 b. **Anaphoric pronominal:** The old vase is ugly, but [the new vase]_i? Now [that]_i is beautiful.
 c. **Descriptive pronominal:** [Those who try] never fail.

Based on these uses, Ahn (2019) noted that while definite expressions can only refer to familiar entities, demonstratives can refer to both familiar and new referents. If a speaker wishes to introduce a new referent, they can use a demonstrative phrase with a deictic gesture if the referent was in the physical environment. For new referents that are not in the physical environment or if the context does not allow for a gesture, the speaker can use a relative clause attached to the demonstrative phrase to point out the referent. Ahn dubbed this property as introducing use.

Recall that anti-uniqueness is the sense that the referent of the demonstrative phrase is being contrasted with other entities in the context with similar properties. Here, we shall observe that anti-uniqueness is not merely a vague intuition. Nowak (2021) introduces the example in (3) where there is a contrast between the demonstrative phrases *that guy who wrote Waverley* and *that author of Waverley* which is absent if the demonstrative was replaced with a definite article. Specifically, *the/that guy who wrote Waverley* is felicitous but if the NP complement was changed to *author of Waverley*, only the definite article remains felicitous. Nowak argues that the infelicity arises out of anti-uniqueness because there can be other guys who did not write Waverley, but there cannot be other authors of Waverley. For the definite expression, both DPs are felicitous as the definite article does not carry an anti-uniqueness property.

- (3) a. That guy who wrote Waverley, also wrote Ivanhoe.
 b. #That author of Waverley, also wrote Ivanhoe.
 c. The guy who wrote Waverley, also wrote Ivanhoe.
 d. The author of Waverley also wrote Ivanhoe.

The explanation of the contrast in (3) may lead readers to the conclusion that the alternatives which arise alongside anti-uniqueness must exist in the real world. After all, the entire issue with *that author of Waverley* was that there is only one author of Waverley and thus, no alternatives are possible. However, (4) shows that a demonstrative expression is possible in a context where the referent is unique and whatever alternatives that the referent is compared to cannot actually exist in the context of utterance.

- (4) I love cats. All cats. If there were only one cat left on Earth, I would find that cat and adopt it. (Nowak, 2021)

Lastly, demonstratives have a proximal-distal contrast; the proximal demonstrative *this* often refers to entities close to the speaker while the distal demonstrative *that* refers to entities farther from the speaker. However, as this contrast does not have immediate relevance to the goals of the paper, I will set it aside in the subsequent discussion.

1.2 Previous analyses

Much work has been done to account for the semantics of demonstrative expressions. In this paper, I will review three theories that have attempted to account for various properties discussed in the previous section.

Ahn (2019) proposed that anaphoricity was what distinguished demonstratives from other definite expressions. Specifically, the structure of anaphoric DPs (i.e. definite expressions and pronouns) involve a nominal complement and an index in its specifier (see Figure 1). However, the specifier of demonstrative expressions may be occupied by a variety of other constructions (see Figure 2). Since an index is not necessarily present in demonstrative phrases, this accounts for why demonstratives have non-anaphoric uses, namely ones that introduce new referents.

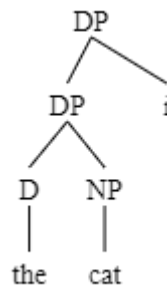


Figure 1. Syntactic structure for the definite expression *the cat*

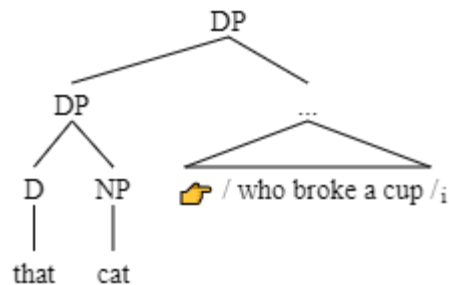


Figure 2. Syntactic structure for the demonstrative expression *that cat*

For Ahn, definite and demonstrative expressions are semantically identical in that the referent is merely the maximal entity which satisfies the argument(s). While Ahn's analysis seems to correctly characterize demonstratives usage and how it differs from definite expressions, it is unclear how her analysis would account for anti-uniqueness given that the difference between the expressions under her analysis is syntactic, but anti-uniqueness seems to be a semantic or pragmatic property.

One of the main goals of Wolter's (2003) proposal was to account for anti-uniqueness. She argued that demonstratives were syntactically distinguished from definite articles as DPs headed by demonstratives could take two arguments (i.e. *that F G*) while DPs headed by the definite article could only take one argument (i.e. *the F*). Alongside the presuppositions of familiarity and uniqueness, Wolter argues that demonstratives also presuppose that the intersection between the sets that satisfy the properties encoded by either argument is a singleton set. Satisfying these conditions, the demonstrative asserts the unique and familiar entity that satisfies the properties F and G. The denotation of the definite article and demonstrative is provided in (5).

- (5) a. $\llbracket \text{the} \rrbracket = \lambda F. \iota x: F(x) = 1$
 b. $\llbracket \text{that} \rrbracket = \lambda F \lambda G: |\{x: F(x) = 1\} \cap \{x: G(x) = 1\}| = 1. \iota x: F(x) = G(x) = 1$

Wolter argues that anti-uniqueness arises from a blocking effect. In contexts where there is only one entity matching the descriptive content provided by the first argument (i.e. F), a definite expression would be entirely adequate in referring to said entity. In fact, it would be more economical compared to a demonstrative expression as F already restricts the set of possible referents to a singleton and so the second argument is redundant in referent identification. For instance, if a room contained only one cat, then uttering *the cat* is enough to refer to said cat and no additional information is required. This effectively blocks demonstrative expressions from being uttered when referring to unique referents. As a result, if a speaker chooses to employ a demonstrative expression, then it must be the case that the context contains entities where the descriptive content of the first argument is not adequate in singling out a referent (i.e. G is not redundant in referent identification). This exactly describes anti-uniqueness because the context contains alternatives that also satisfy F and the referent is distinguished against said alternatives by satisfying G. Under Wolter's analysis, anti-uniqueness arises as a conversational implicature.

Unfortunately, there are a few issues with Wolter's account of anti-uniqueness. Starting with the characterization that anti-uniqueness is a conversational implicature, Wolter draws parallels between indefinite and demonstrative expressions. She notes that the two pattern alike and in contrast to the definite article as neither the indefinite article nor demonstratives can take a semantically unique nominal complement (see (7)). Furthermore, Wolter presents an example from Hawkins (1991) showing that anti-uniqueness in indefinites is cancellable (see (7))

- (6) *the/*a/*that smallest prime number*

- (7) A: There is no longest number in arithmetic.
 B: Oh, I don't know. I'm pretty sure there is a longest number in arithmetic.

Wolter concludes that since anti-uniqueness arises as a conversational implicature in indefinite expressions and since demonstratives pattern like indefinites, then anti-uniqueness must also arise as a conversational implicature in demonstratives even though she admits that “It’s not immediately obvious that the nonuniqueness condition on demonstratives can be cancelled in the same way” (pg 18). Whether Wolter makes a compelling argument for anti-uniqueness as a conversational implicature in indefinites is not relevant to this paper, but the lack of evidence that anti-uniqueness in demonstratives is cancellable raises doubt about their status as a conversational implicature triggered by the presence of a demonstrative expression.

Example (4) (repeated in (8)) presents another issue for Wolter’s proposal. If it is the case the demonstratives are blocked in contexts where the referent is unique, then *that cat* should be infelicitous—if not at the very least, marked—in (8) since the referent is explicitly specified as unique. Not only is the demonstrative phrase acceptable in (8), Nowak (2021) observes that it is preferred over (9) where *that cat* is replaced by *the cat*.

- (8) I love cats. All cats. If there were only one cat left on Earth, I would find that cat and adopt it. (Nowak, 2021)
- (9) I love cats. All cats. If there were only one cat left on Earth, I would find the cat and adopt it.

Nowak’s (2021) analysis comes closest to providing a more complete account of anti-uniqueness in demonstratives. Following King (2001) and Elbourne (2008), Nowak also proposes that demonstratives take two arguments, one in the complement and one in the specifier while definite expressions take only a single argument in the complement. Wolter and Nowak’s analyses do not stipulate that the specifier of a definite phrase must be occupied by an index. Unlike Wolter, Nowak characterizes anti-uniqueness as a presupposition, shown in (10). Instead of presupposing that the set of entities satisfying both arguments is a singleton set, Nowak claims that the set of entities that satisfy both arguments is a proper subset of the set of entities that satisfy the first argument. In a proper subset relation, the cardinality of the superset (i.e. $\{x: F(x) = 1\}$) must be larger than the cardinality of the subset (i.e. $\{x: F(x) = 1\} \cap \{x: G(x) = 1\}$) because crucially, the subset cannot be equivalent to the superset if it is a proper subset. The result is that there must be entities in the superset which do not belong in the subset, or there are entities that are F but not G.

- (10) $\llbracket \text{that} \rrbracket = \lambda F \lambda G: \{x: F(x) = 1\} \cap \{x: G(x) = 1\} \subset \{x: F(x) = 1\}. \iota x: F(x) = G(x) = 1$

In other words, if a speaker were to utter *that cat with the spots*, the demonstrative phrase is only defined in a context where there exists other cats but only the referent has spots.

This account neatly addresses how anti-uniqueness is triggered, but only the instances where alternatives exist in the context of utterance. This account explains the contrast in (3) (repeated in (11)). In (11a), the anti-uniqueness presupposition of the demonstrative is met as there does exist entities in the world that are guys but who did not write *Waverley*. However, not only is the second argument in the demonstrative expression in (11b) undefined, the first argument (i.e. *author of Waverley*) already defines a singleton set. As such, there does not exist a restriction G such that the intersection is a proper subset of $[x: \text{author-of-Waverley}(x) = 1]$. In other words, there does not exist alternatives to that author of *Waverley*. This is not an issue for (11c-d) because the definite article does not presuppose the existence of alternatives.

- (11) a. That guy who wrote *Waverley*, also wrote *Ivanhoe*.
 b. #That author of *Waverley*, also wrote *Ivanhoe*.
 c. The guy who wrote *Waverley*, also wrote *Ivanhoe*.
 d. The author of *Waverley* also wrote *Ivanhoe*.

Nowak's account is also unable to account for (8). Like Wolter's analysis, one could argue that the issue with Nowak's analysis is that the set of entities satisfying the NP cat is already a singleton set. But an alternative view, highlighted by the explanation for the contrast in (11), emphasizes that under Nowak's (and probably Wolter's) analysis, alternatives must exist in the context of utterance. However, one could easily intuit that the referent of that cat is being compared to alternatives that are hypothetical non-existent cats.

In conclusion, what we gain from this discussion is that a more complete theory of demonstratives should not only account for the wider usage of demonstratives, but also propose an analysis of how anti-uniqueness arises without assuming that alternatives are necessarily present in the context of utterance.

2. Proposal

In this section, I propose a syntactic and semantic analysis of demonstratives that accounts for its various uses in a way that also allows for anti-uniqueness. In previous approaches (see Wolter, 2003; Elbourne, 2008; Nowak, 2021 for a few examples), the demonstrative always refers to objects. The result was that additional entities had to be introduced to act as alternatives if one wished to also account for anti-uniqueness, which in turn led to the problematic conclusion that alternatives necessarily existed in the context. Instead of this approach, I argue that demonstratives refer to a unique kind where the referent is contrasted with the alternatives introduced as part of the kind. Because kinds include both real and hypothetical entities and alternatives are drawn from this set of entities, they are not required to exist in the context. The only remaining problem is that if demonstratives refer to kinds, my analysis also needs to explain how they can refer to objects. I will employ Derived Kind Predicate (Chierchia, 1998) to shift from reference to a kind to reference to an object. I will close this section by applying my proposal to several examples introduced in Section 1.1.

Following Ahn (2019), I propose that demonstratives involve two arguments, one in the complement of DP and the other in the specifier. The specifier can be occupied by a variety of constructions, but the complement can only be occupied by the descriptive material supplied by the noun. The only deviation from Ahn’s syntactic account is that I propose there is a covert *kind-of* modifying the restrictors of the NP (see Figure 3).

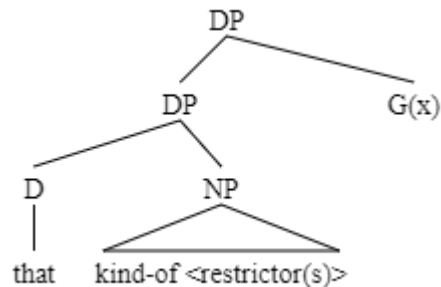


Figure 3. Proposed syntactic structure for demonstrative expressions

I draw upon Carlson’s (1977) analysis of *that kind of NP* to provide a denotation for *kind of*. Moving forward, ‘k’ is reserved for kind variables while ‘x’, ‘y’, ‘z’ are reserved for object variables in any proposed denotation. Lastly ‘ \cup ’ maps kinds to properties (Chierchia, 1998). Carlson proposes the denotation in (14). Note that $R'(z, k)$ is a special version of Chierchia’s (1984) predication operator which associates a quality from one variable to another. For current purposes, $R(z, k)$ is paraphrased as “z is a realization of k”. In essence, the denotation in (12) can be paraphrased as given a predicate Q and a kind k, *kind of Q* is a kind such that for all objects z where z is a realization of this kind k, then z has the property of being Q. For instance, *kind of rectangle* in (13a) has the denotation in (13b) where *kind of rectangle* refers to a kind such that all the realizations of this kind are also rectangles. I use this particular example because I want to emphasize the importance of the uni-directional conditional in the denotation of *kind*. In instances where something is asserted to be a kind of something else (i.e. *P is a kind of Q*), the unidirectionality of the conditional is vital in capturing that the opposite is not necessarily true. In other words, a square is a rectangle, but not all rectangles are squares.

$$(12) \llbracket \text{kind} \rrbracket = \lambda Q. \lambda k. [\forall z \square [R'(z,k) \rightarrow Q(z)]]$$

(13) a. A square is a kind of rectangle.

b. $\llbracket \text{kind of rectangle} \rrbracket = \lambda k. [\forall z \square (R'(z,k) \rightarrow \text{rectangle}(z))]$

In (14a), I propose a denotation for *that* where the first conjunct is essentially the denotation of *kind* from (12). As such, I simplify the denotation to (14b). The denotation of *that* can be paraphrased as “for a unique kind k, k is a kind of F and there is an object x that is of this kind k and is G”.

- (14) a. $[[\text{that}]] = \lambda F. \lambda G. \iota k: [\forall z \square [R'(z,k) \rightarrow F(z)] \ \& \ \exists x[\iota k(x) \ \& \ G(x)]]$
 b. $[[\text{that}]] = \lambda F. \lambda G. \iota k: [\text{kind}'(F)(k) \ \& \ \exists x[\iota k(x) \ \& \ G(x)]]$

Recall that there are three properties that a semantic analysis of demonstratives must account for: uniqueness, introducing use and anti-uniqueness. Uniqueness is satisfied by the iota operator. The only difference from previous analyses is that demonstratives refer to a unique kind rather than a unique object. Introducing use is satisfied by employing Ahn's syntactic structures for both demonstratives and anaphoric expressions. As the argument in the specifier does not necessarily have to be occupied by an index in the case of a demonstrative expression, the demonstrative is not limited to only anaphoric use, unlike definite expressions. Lastly, anti-uniqueness is satisfied by referring to a unique kind. Once a kind entity is evoked, the interlocutors have access to all possible realizations of that kind, which includes both actual and hypothetical realizations. This solves the issue Nowak's account faced in (4) (repeated in (15)). If *that cat* makes salient a cat kind, then the alternatives that are also made salient do not have to exist as kinds include both real and hypothetical entities. This is exactly what is desired given the antecedent of the conditional.

- (15) I love cats. All cats. if there were only one cat left on Earth, I would find that cat and adopt it. (Nowak, 2021)

Let us now consider how the current analysis can be applied to various uses of the demonstrative. We return to the deictic use of the adnominal demonstrative *that cake* from (1a) (repeated in (16) below with additional context).

- (16) Context: Paul and Pru are at a bakery and Pru sees a familiar cake.
 Pru: Mary made [that cake]^{↗^A} yesterday.

The utterance in (18) is ambiguous between two interpretations. One possible interpretation—which I call the unique instantiation interpretation—is where Mary made the exact cake that Pru is pointing to. This is possible in a context where Mary is an employee at the bakery that Paul and Pru are visiting. The alternative interpretation—called the kind interpretation—is one where Mary made the same kind of cake that Pru is pointing to. For example, Mary made a strawberry cheesecake yesterday and the one Pru has noticed is also a strawberry cheesecake. Crucially, the cake that Mary made is a different instantiation of the cake that Pru is pointing to.

In (17a-c), I present the denotation of each component of the demonstrative expression. The noun *cake* satisfies the first argument of the demonstrative, introducing a kind of cake. The deictic gesture, which locates an object *x* at a location *A*, picks out a specific instantiation of the kind of cake *k* that is at *A*. In sum, the demonstrative expression in (16) can be paraphrased as ‘the unique kind *k* such that *k* is a kind of cake and there is an object *x* such that *x* has the property of being of the kind *k* and *x* is at *A*.’

- (17) a. $\llbracket \text{that} \rrbracket = \lambda F. \lambda G. \lambda k. [\text{kind}'(F)(k) \ \& \ \exists x[\cup k(x) \ \& \ G(x)]]$
 b. $\llbracket \text{cake} \rrbracket = \lambda x. x \text{ is a cake}$
 c. $\llbracket \text{is at } A \rrbracket = \lambda x. x \text{ is at } A$
 d. $\llbracket \llbracket \text{that cake} \rrbracket \text{ is at } A \rrbracket = \lambda k. [\text{kind}(\text{cake})(k) \ \& \ \exists x[\cup k(x) \ \& \ x \text{ is at } A]]$

Issues arise when we consider how the demonstrative expression combines with the rest of the utterance because $\llbracket \text{that cake} \rrbracket$ refers to a kind and the verb *make* needs an object argument. We can resolve this type mismatch by employing Derived Kind Predicate (DKP) which is defined in (18).

- (18) Derived Kind Predicate (DKP; Chierchia 1998): If P applies to objects and k denotes a kind, then $P(k) = \exists x[\cup k(x) \ \& \ P(x)]$ where ' \cup ' maps a kind to a property

The logical form of the utterance in (16) is presented in (19). The bolded portion is contributed by DKP while the underlined portion is contributed by the demonstrative expression. Moving forward, I will continue to employ bolding and underlining to differentiate between contributions made by DKP versus the demonstrative respectively.

- (19) $\llbracket \text{Mary made } \llbracket \text{that cake} \rrbracket \text{ is at } A \rrbracket = 1 \text{ iff}$
 $\exists z[\cup k(z) \ \& \ \text{made}(z)(\text{Mary}) \ \& \ \exists x[\cup k(x) \ \& \ \underline{x \text{ is at } A}]]$
 Presupposes: there is a unique kind k where k is a kind of cake

Notice that while the demonstrative contributes an object variable x to the logical form, DKP contributes a second object variable z and both variables are crucial towards accounting for the two interpretations of (18). If the two objects are one in the same (i.e. z = x), then we get the unique instantiation interpretation where there is a unique object that is a cake which Mary made and is at A. If the two objects are not the same (i.e. z ≠ x), then we reach the kind interpretation where there are two objects, one of which is made by Mary and the other of which is at A, but both crucially have the property of being the unique kind k, which is a specific kind of cake. How interlocutors determine whether or not the two objects are identical depends on additional contextual information and shared knowledge (e.g. whether or not Mary works at the bakery, etc.).

Let us consider the anaphoric use of demonstratives with (1b) (repeated in (20)) with the logical form of the demonstrative expression in (21). As expected, the only difference between the anaphoric and deictic use of the demonstrative is a difference in what occupies the second argument and (21) shows that an anaphoric demonstrative expression involves an index in the second argument.

- (20) Look at $\llbracket \text{the beautiful cake in the window} \rrbracket_i$. I made $\llbracket \text{that cake} \rrbracket_i$.

- (21) $\llbracket [\text{that cake}]_i \rrbracket = ik. [\text{kind}(\text{cake})(k) \ \& \ \exists x[\cup k(x) \ \& \ x = g(i)]]$
 where $g(i) = [\text{the beautiful cake in the window}]$

Just like the account of (16), (20) requires an application of DKP in order for *[that cake]_i* to act as an argument of *made*. This results in the denotation of (22) as there exists an object *z* such that *z* is a realization of the kind *k* and the speaker made *z* and there also exists an object *x* such that *x* is also a realization of *k* and *x* is the beautiful cake in the window.

- (22) $\llbracket [\text{I made } [\text{that cake}]_i \rrbracket = 1 \text{ iff}$
 $\exists z[\cup k(z) \ \& \ \text{made}(z)(\text{speaker}) \ \& \ \exists x[\cup k(x) \ \& \ x = g(i)]]$
 Presupposes: there is a unique kind *k* where *k* is a kind of cake

Unsurprisingly, (20) is also ambiguous between the unique instantiation interpretation and the kind interpretation. The unique instantiation is reached if $z = x$ so that the speaker made the exact cake that is displayed in the window (e.g. the speaker is a baker). The kind interpretation is reached when $z \neq x$, then perhaps the cake in the window was featured in a magazine along with a recipe and the speaker made a separate cake following said recipe (i.e. both are the same kind of cake, but two different instantiations).

Lastly, let us consider the descriptive use of the demonstrative in (1c) (repeated in (23) with the logical form of the demonstrative *that cake that the kids liked* in (24).

- (23) *[That cake that the kids liked] is on the table.*

- (24) $\llbracket [\text{that cake that the kids liked}] \rrbracket$
 $= ik. [\text{kind}(\text{cake})(k) \ \& \ \exists x[\cup k(x) \ \& \ \text{liked}(x)(\text{the kids})]]$
 Presupposes: there is a unique kind *k* where *k* is a kind of cake

The logical form of (23) is presented in (25) where DKP has been applied to allow the demonstrative expression to combine with the predicate *is on the table*. Supposing that (23) was uttered in a context where the speaker brought home a large cake last week that the kids tried but did not finish and now the rest of the cake is on the table. By equating the two object variables, we can reach the unique instantiation where there is a single object that is a kind of cake where the kids liked this object and it is on the table. Alternatively, if the kids liked and finished the cake brought home last week and now the speaker has brought home another cake of the same kind (i.e. kind interpretation), then we can reach this interpretation by establishing that the two object variables are different instantiations of the same kind.

- (25) $\llbracket [\text{That cake that the kids liked}] \text{ is on the table} \rrbracket = 1 \text{ iff}$
 $\exists z[\cup k(z) \ \& \ \text{on}(\text{the table})(z) \ \& \ \exists x[\cup k(x) \ \& \ \text{liked}(x)(\text{the kids})]]$
 Presupposes: there is a unique kind *k* where *k* is a kind of cake

Here, I note that the availability of possible interpretations may depend on factors such as the lexical properties of specific verbs and nouns as well as the position of the demonstrative expression in the clause. These considerations are beyond the scope of this paper as my main goal was to account for the properties of the demonstrative as well as how DKP can affect the interpretation of a clause.

In sum, demonstrative expressions of the form *that F (that is) G* actually denote ‘that kind-of F (that is) G’. Because demonstrative expressions first and foremost refer to a kind, DKP must be applied in order for the expression to combine with predicates that take object arguments. Both the demonstrative expression and DKP introduce an object variable and whether or not the two object variables are interpreted as equivalent allow different interpretations of the overall utterance.

3. Conclusion

In this paper, I showed that when it comes to demonstratives, there are three main properties that need to be accounted for—uniqueness, introducing use and anti-uniqueness. I proposed an analysis where demonstrative have a covert kind-of in their complement, so that *that NP* actually means ‘that kind of NP’. The demonstrative expression presupposes a unique kind and the presence of a salient kind means that other realizations of the kind can be evoked to serve as alternatives. Chierchia’s (1998) Derived Kind Predicate is then employed in instances where a demonstrative expression combines with predicates requiring objects. The introduction of a second object variable through DKP allows this analysis to account for multiple interpretations of a given clause. The current analysis radically shifts the kinds of entities that demonstratives are associated with; rather than being connected to objects, this analysis argues for the viewpoint that demonstratives may be more deeply connected to kinds than previously suggested.

References

- Ahn, Dorothy. 2019. THAT thesis: A competition-based mechanism for anaphoric expressions. Doctoral dissertation. Harvard University.
- Carlson, Greg N. 1977. Reference to Kinds in English. Doctoral Dissertation. University of Massachusetts, Amherst.
- Chierchia, Gennaro. 1984. Topics in Syntax and Semantics of Infinitives and Gerunds. Doctoral Dissertation. University of Massachusetts, Amherst.
- Chierchia, Gennaro. 1998. Reference to Kinds Across Languages. In *Natural Language Semantics* 6(4), 339-405.
- Elbourne, Paul. 2005. *Situations and individuals*. Cambridge: MIT Press.
- Elbourne, Paul. 2008. Demonstratives as individual concepts. In *Linguistics and philosophy* 31(4), 409-466.
- King, Jeffrey C. 2001. *Complex demonstratives: A quantificational account*. Cambridge: MIT Press.
- Nowak, Ethan. 2021. Complex demonstratives, hidden arguments, and presupposition. In *Synthese* 198(4), 2865-2900.

- Reimer, Marga. 1991. Demonstratives, demonstrations, and demonstrata. In *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 63(2). 187-202.
- Wolter, Lynsey. 2003. Demonstratives, definite descriptions, and definiteness. In *Ms., University of California at Santa Cruz* 2. 1-42.