

Weak Uniqueness: The Only Difference Between Definites and Indefinites

This paper offers a unified analysis of predicative and argumental definites and indefinites, designed to account for: (i) anti-uniqueness effects that exclusive adjectives like *only* and *sole* give rise to with definites, and more broadly, the absence of an existence implication on the predicative use; (ii) the dependency between exclusivity and definiteness shown by the ungrammaticality of **an only student*. Our proposal is that definite and indefinite articles are fundamentally identity functions on predicates and give rise to existence implications in argument position through their association with a discourse referent. They differ only in that definites, unlike indefinites, presuppose a weak form of uniqueness that is independent of existence.

The following examples illustrate the anti-uniqueness effects in question:

- (1) a. He is the sole/only student. [1 student]
b. He is not the sole/only student. [1+ students]

While (1a) means that there is only one student, (1b) can mean that there is strictly *more than one* student. (This implication arises only on the *predicative* reading ‘not only he is an student’, as opposed to the *equative* reading ‘he is the same person as the only student’.) This anti-uniqueness implication entails that the cardinality of the predicate *only student* is zero. In other words, there is no existence implication.

This phenomenon is not specific to exclusives; in general, predicative definite descriptions do not presuppose existence. One is not committed to the existence of a queen of the world when declaring *You’re not the queen of the world*, nor must one believe that the addressee is attached when asking *Is that your boyfriend?*

We therefore need an analysis of definites on which existence is not implied in the predicative use. Another desideratum for an analysis of predicative definites is that they be treated as predicates of type $\langle e, t \rangle$, as suggested by Strawson (1950), Graff (2001), and Winter (2001). Evidence for this comes from the distribution of the overt copula in Hebrew and verbs like *consider* (Doron 1983). Winter (2001, pp. 153–4) offers a ‘Frege-Strawson’ analysis of predicative *the* according to which it denotes the identity function on predicates P , defined only if $|P| = 1$. For their argumental use, definites are converted into quantifiers via the introduction of a choice function. This gets the types right, but it predicts that (1b) is self-contradictory, because in (1b), the predicate that *the* combines with has cardinality 0 rather than 1; since there are multiple students, there is no *only student*.

Predicative definites. We propose that definites are initially predicative and presuppose a weak form of uniqueness (*weak uniqueness*), which is an implication from existence to uniqueness: if there is an F , then there is only one (cf. Büring to appear; Schwarzschild 1994; Löbner 2000). The existence component comes into play when a definite description is used in an argument position. Effectively, we are *splitting up the existence and uniqueness components of the meaning of the definite article*, so that uniqueness is contributed by all uses of definites, predicative and non-predicative alike, but existence is implied only when definites are used in argument positions. The proposed basic lexical entry for *the* is (2), where W is a contextually given set of worlds.

$$(2) \text{ THE} = \lambda P : \text{UNIQUE}_W(P) . P$$

$$(3) \text{ UNIQUE}_W = \lambda P . \forall w, x, y [w \in W \wedge P(x)(w) \wedge x \neq y \rightarrow \neg P(y)(w)]$$

The set of worlds W with respect to which **UNIQUE** is evaluated will typically correspond to the set of open possibilities in the current state of the discourse.

To analyze anti-uniqueness effects, we use a lexical entry for adjectival *only* based on Coppock and Beaver (2011) which, applied to, say, OWNER, gives:

$$(4) \quad \text{ONLY}(\text{OWNER}) = \lambda x. \lambda w : \text{OWNER}(x)(w) . \forall y [x \sqsubset y \rightarrow \neg * \text{OWNER}(y)(w)]$$

where \sqsubset is the proper part-of relation among individuals, \oplus denotes the sum operation over individuals, and $*$ is defined such that $P(x) \rightarrow *P(x)$ and $P(x) \wedge P(y) \rightarrow *P(x \oplus y)$. Crucially, this predicate satisfies the uniqueness presupposition of the definite article for any set of worlds W , so (1b) is correctly predicted to be acceptable. Furthermore, we predict the anti-uniqueness inference, viz. that John is an owner and so is somebody else.

Plural definite descriptions with *only* give rise to analogous implications; (5) means that John and Mary are owners, and there are more as well.

$$(5) \quad \text{John and Mary are not the only owners.}$$

We assume that plurals denote cumulative predicates, and, following Winter (2001), we propose to apply a *maximum sort* filter to the cumulative predicate before applying *the*.

$$(6) \quad \text{MAX_SORT} = \lambda \mathcal{P}_{\tau p}. \lambda X_{\tau}. \mathcal{P}(X) \wedge \forall Y \in \mathcal{P} [X \sqsubseteq Y \rightarrow X = Y]$$

This filters out all but the supremum of the part-of (\sqsubseteq) lattice. So *the teachers* in a sentence like *These women are the teachers* will denote: $\text{THE}(\text{MAX_SORT}(*\text{TEACHER}))$. Analyzing *the only owners* as $\text{THE}(\text{MAX_SORT}(\text{ONLY}(*\text{OWNER})))$, we correctly predict that (5) means that John and Mary are owners, and so are others. The presupposition of *the* is necessarily satisfied here because the description characterizes a unique entity in all worlds.

Indefinites. We propose that the indefinite article, like the definite article, is fundamentally an identity function on predicates. Because definites and indefinites are presuppositional variants, they can compete under *Maximize Presupposition!* (Heim 1991; Schlenker 2011): Facing a choice between *the* and *a*, speakers will choose *the* whenever weak uniqueness is satisfied (regardless of whether the expression is to be used predicatively or as an argument). It is then correctly predicted that **an only woman* is bad, because the exclusive guarantees that weak uniqueness is satisfied.

Argumental descriptions. According to Winter’s (2001) analysis, definites are initially predicative but when they are in argument positions, they combine with a choice function. This approach effectively gives us a Russellian analysis of (the existence component of) definite descriptions, because the existence of the choice function is part of the at-issue content.

Under our proposal, the existence implication that arises with a definite or indefinite in an argument position is intimately tied to the presence of a discourse referent to which the description applies. The predicate fundamentally denoted by a definite or indefinite description must be ascribed to the discourse referent. Whether the discourse referent is old or new, whether the ascription is at-issue or presupposed, an existence implication will arise. If the discourse referent is old and the ascription is presupposed, then existence will be a presupposition; otherwise it will be at-issue. For definites, existence is typically presupposed, but we assume that the discourse status of the existence component can be influenced by the question under discussion (Simons et al. 2010).

Summary. Our proposal, motivated by data from predicative nominals and adjectival exclusives, radically minimizes the difference between the definite and indefinite articles. Both make a trivial contribution to the at-issue meaning, and they differ only in one of the presuppositions traditionally associated with definite descriptions. Definites presuppose *weak uniqueness*, which is independent of existence. The existence component is common to definites and indefinites; existence implications arise for both definites and indefinites when they are used in argument positions, as a consequence of their association with a discourse referent to which the description applies.