



Sentence-internal *different* and lexical reciprocity

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Abstract

This paper draws a link between one type of sentence-internal readings of adjectives like *different* – here called the plural-dependent reading – and lexical reciprocity. The plural-dependent reading is most often discussed as a reading of *different* and *same* (e.g. Carlson 1987; Beck 2000; Brasoveanu 2011). I show that it is generally available with, and crucially limited to, lexically-reciprocal adjectives. I next show that plural-dependent readings behave like collective uses of lexically-reciprocal adjectives, in contrast to periphrastic and transitive uses of the same adjectives. Unlike periphrastic constructions, both plural-dependent readings and collective uses allow a lexical mass noun as an argument. Unlike transitive uses, both plural-dependent readings and collective uses force an interpretation which cannot be reduced to binary relations. These data indicate that plural-dependent readings don't contain covert reciprocal pronouns (contra Beck 2000; Charnavel 2015), and are not conjunctions of binary relations (contra Brasoveanu 2011). I propose to analyze plural-dependent readings in terms of semantically basic, collective predication (Winter 2018).

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KEYWORDS:

sentence-internal readings;
reciprocity; different; mass
nouns

TO CITE THIS ARTICLE:

Fishman, Alon. 2021.
Sentence-internal *different*
and lexical reciprocity. *Glossa:
a journal of general linguistics*
6(1): 80. 1–11. DOI: [https://
doi.org/10.5334/gjgl.1440](https://doi.org/10.5334/gjgl.1440)

This paper focuses on one type of reading of relational adjectives such as *different*, when occurring in attributive position. This reading – here called the *plural-dependent reading* (henceforth *PDR*) – arises in sentences like (1):

- (1) Mark and Raymond read different books.
 Interpretation: the book Mark read is different from the book Raymond read.
 (PDR)

The paper presents the first explicit attempt to characterize the set of adjectives which give rise to PDRs. Specifically, it correlates the availability of PDRs with lexical reciprocity, i.e. with the availability of a unary *collective use* in predicative position. The collective use is demonstrated in (2):

- (2) Mark and Raymond are different.
 Interpretation: Mark and Raymond are different from each other.
 (collective)

Thus, this paper advances the following empirical generalization:

- (3) The set of adjectives which give rise to PDRs is the set of lexically-reciprocal adjectives.

The most straightforward explanation for (3) is that PDRs are instances of the collective use of lexical reciprocals. To support this hypothesis, I show that PDRs behave like collective uses, in contrast to two other uses of the same adjectives, demonstrated in (4a-b). The data I present challenge existing accounts of PDRs, which cast them in terms of the uses in (4a-b) (Beck 2000; Brasoveanu 2011; Charnavel 2015).

- (4) a. Mark and Raymond are different from each other. (periphrastic)
 b. Mark is different from Raymond. (transitive)

The paper is structured as follows: §2 characterizes PDRs, distinguishing them from other readings of relevant adjectives. §3 characterizes lexical reciprocity, and establishes a correlation between lexical reciprocity and the availability of PDRs. §4 introduces contrasts between collective and other uses of lexical reciprocals, and shows that PDRs consistently pattern with the collective use. §5 discusses some theoretical consequences of the preceding sections.

2 Plural-dependent readings

PDRs arise for certain relational adjectives when these are used attributively. I characterize PDRs as [i] sentence-internal readings, [ii] licensed by a plural DP or a conjunction. PDRs are *sentence-internal* readings of an adjective in the sense that the relations expressed by the adjective are determined based on another phrase within the same sentence, the licenser (Carlson 1987). In the case of (1), which book is different from which is determined by the DP *Mark and Raymond*.

Sentence-internal readings contrast with *sentence-external* readings, where the relations expressed by the adjective are determined based on a previously introduced discourse entity, like the DP *Trainspotting* in (5a); or deictically, by reference to a salient object in the context, as in (5b). Thus, (5a-b) share a sentence-external interpretation:

- (5) a. Raymond read *Trainspotting*. Mark read a different book.
 b. [pointing at a copy of *Trainspotting*] Mark read a different book.
 Interpretation: the book Mark read is different from *Trainspotting*.
 (sentence-external)

Following Beck (2000) and Brasoveanu (2011), I distinguish PDRs from another type of sentence-internal reading. The second type, called the *Q-bound reading*, is demonstrated in (6).

This too is a sentence-internal reading: which books are different from which is determined by the universally quantified NP *every boy*.

(6) Every boy read a different book.

Interpretation: for every two boys *a, b*, the book *a* read is different from the book *b* read.
 (Q-bound)

Beck's (2000) motivation for distinguishing PDRs from Q-bound readings was the finding that the German sentences corresponding to (1) and (6) use two distinct lexical items in place of *different*: *verschieden* when the licenser is a plural DP, and *anders* when the licenser is a universally quantified NP:^{1, 2}

(7) a. Mark und Raymond lesen verschiedene/#andere Bücher.

Mark and Raymond read.PL different.PL books

'Mark and Raymond read different books.'

(Un)available interpretation: the book Mark read is different from the book

Raymond read.

b. Jeder Junge las ein anderes/*verschiedenes Buch.

every boy read.SG a different.N.SG book

'Every boy read a different book.'

Since one of the goals of the present paper is to characterize which adjectives give rise to PDRs, it would be circular to base the distinction between PDRs and Q-bound readings on a specific adjective, e.g. *verschieden*. A better starting point for present purposes is Brasoveanu's (2011) categorization of the licensors of sentence-internal readings, which is based on the grammatical number of the phrase containing the relational adjective. For example, a plural DP as in (1) licenses a sentence-internal reading only for plurals (e.g. *different books*), whereas a universally quantified NP as in (6) licenses a sentence-internal reading for both plurals and singulars (e.g. *a different book*). Brasoveanu & Dotlačil (2012) provide experimental evidence in support of this distinction.

Brasoveanu's (2011) categorization, however, requires amendment, given novel data to be reviewed in §4. Plural DPs may in fact license a sentence-internal reading for grammatical singulars when the adjective's complement is a lexical mass noun (e.g. *different jewelry*). Hence, a more accurate categorization of the licensors of sentence-internal readings should be based on whether or not they license countable singulars:

(8) a. Phrases which license sentence-internal readings for countable singulars:

every, each, whenever, N after N (Brasoveanu 2011).

b. Phrases which don't license sentence-internal readings for countable singulars:

plural DPs, conjunctions (Carlson 1987).

Throughout the paper, I refer to sentence-internal readings licensed by the licensors in (8a) as Q-bound readings, and to those licensed by the licensors in (8b) as PDRs. For simplicity, I use plural DPs in all examples of PDRs, and universally quantified NPs in all examples of Q-bound readings, but my arguments apply to other licensors as well.

Previous research has focused on *different* and *same* when discussing sentence-internal readings, but in fact these readings are available more generally. Despite the fact that Carlson (1987) has already noted that sentence-internal readings arise with other adjectives, including *distinct*, *separate* and *similar*, virtually all of the literature that follows him investigates *different*, *same*, or corresponding items in other languages (Moltmann 1992; Beck 2000; Tovina & Van Peteghem 2003; Barker 2007; Matushansky & Ruys 2007; Matushansky 2008; Dotlačil 2010; Brasoveanu 2011; but cf. Charnavel 2015). To my knowledge, nothing has been said about what "qualifies" an adjective for having either of the sentence-internal readings discussed here. In the next section, I argue that PDRs are only available to lexically-reciprocal adjectives.

1 The version of (7a) with *andere* is grammatical, but only has a sentence-external reading. I use # to mark an unavailable interpretation.

2 This difference in distribution also occurs in Romanian, between *diferit* and *alt*; and in Hebrew, between *šone* and *axer* (Brasoveanu 2011).

3 Plural-dependent readings and lexical reciprocity

A predicate is *lexically-reciprocal* if [i] it has a unary collective predicative guise, which [ii] has a reciprocal interpretation. For example, the adjectives *different*, *separate*, *similar* and *identical* are lexically-reciprocal, because the sentences containing them in (9a–b) are judged to “mean the same” with or without the reciprocal pronoun (Gleitman et al. 1996).³

- (9) a. Mark and Raymond are different/separate/similar/identical.
b. Mark and Raymond are different/separate from/similar/identical to each other.

Whether a predicate is lexically-reciprocal or not is not directly predictable from its semantics. Although many lexically-reciprocal predicates are logically symmetric, this is not a sufficient condition for lexical reciprocity. For example, the English adjectives *near*, *far*, and *close* (expressing proximity, rather than similarity or intimacy) are logically symmetric but not lexically-reciprocal. Thus, the sentences in (10) cannot receive a reciprocal interpretation, and can only express that Utrecht and Nijmegen are both near/far from/close to some salient reference point.

- (10) #Utrecht and Nijmegen are near/far/close.
Unavailable interpretation: Utrecht and Nijmegen are near/far from/close to each other.

Near-synonyms, near-translations, and different senses of the predicates in (10) are in fact lexically-reciprocal. This is shown below with *adjacent*, *close* (expressing similarity), and Hebrew *karov* ‘near’, which all have collective uses with reciprocal interpretations. Examples marked with [g] were retrieved online.

- (11) a. **angle ABC and angle ABD are adjacent** because they share the vertex B and ray BA. [g]
Interpretation: angle ABC and angle ABD are adjacent to each other.
b. Anyway, this bar was really sweet, and tasted A LOT like an Almond Joy. Not exactly, but **the tastes ARE close**. [g]
Interpretation: this bar’s taste and an Almond Joy’s taste are close to each other.
c. *Hebrew*
Herzliya ve-Raanana krovot.
Herzliya and-Raanana near.F.PL
‘Herzliya and Raanana are near each other.’

The data in (10–11) demonstrate that lexical reciprocity is an idiosyncratic property of adjectives. As such, we wouldn’t expect it to perfectly correlate with a completely unrelated property. Below I show that lexical reciprocity does correlate with the availability of PDRs, indicating that the two are indeed related. For comparison, I show that lexical reciprocity doesn’t correlate with the availability of Q-bound readings.

First, every adjective previously identified as giving rise to PDRs, including *different*, *same*, *distinct*, *separate*, *similar* (Carlson 1987), *identical*, *unrelated*, *mutually incompatible*, and *opposite* (Barker 2007), is lexically-reciprocal. Moreover, the contrasts in (10–11) can be reproduced with the adjectives in attributive position. Thus *near*, *far*, and *close* (expressing proximity) don’t give rise to PDRs. The sentences in (12) can only be interpreted sentence-externally, with respect to some salient reference point:

- (12) #Mark and Raymond live in near/far/close cities.
Unavailable interpretation: the city Mark lives in is near/far from/close to the city Raymond lives in.

In contrast, the lexically-reciprocal *adjacent*, *close* (expressing similarity), and *karov* ‘near’, do give rise to PDRs:

³ §4 shows that lexically-reciprocal predicates do in fact display semantic contrasts between collective uses on the one hand, and uses with reciprocal pronouns on the other hand. Nevertheless, the intuition that these predicates “describe a reciprocal situation” (Siloni 2012: 261) is robust, even if formalizing this intuition is far from trivial (Winter 2018).

- (13) a. **A cardinal and a squirrel sat on adjacent hickory branches**, both complaining loudly at the disappearance of their favorite pine tree. [g]
 Interpretation: the branch the cardinal sat on was adjacent to the branch the squirrel sat on.
- b. Thanks a ton, this just solidifies that I need to pay attention to what you read because **we have close tastes on lots of stuff**. [g]
 Interpretation: the speaker's tastes are close to the addressee's tastes.
- c. *Hebrew*
 Leon ve-Ruti garim be-arim krovot.
 Leon and-Ruti reside.M.PL in-cities near.F.PL
 'Leon and Ruti live in adjacent cities.'

These data show a correlation between adjectives' lexical reciprocity, and the availability of PDRs. Importantly, this correlation is not a logical necessity. There is no such correlation with the availability of the second type of sentence-internal readings introduced in §2, the Q-bound reading. Not all adjectives which give rise to Q-bound readings are lexically-reciprocal, and not all lexically-reciprocal adjectives give rise to Q-bound readings.

For example, German *anders* and Hebrew *axer* 'different' are not lexically-reciprocal, since they don't have a collective guise in predicative position; see (14). And yet both *anders* and *axer* give rise to Q-bound readings, as shown in (15):

- (14) a. *German*
 #Berlin und Hannover sind anders.
 Berlin and Hannover are different.PL
 'Berlin and Hannover are different.'
 Unavailable interpretation: Berlin and Hannover are different from each other.
- b. *Hebrew*
 #?Herzliya ve-Raanana (hen) axerot.
 Herzliya and-Raanana (are.F) different.F.PL
 'Herzliya and Raanana are different.'
 Unavailable interpretation: Herzliya and Raanana are different from each other.
- (15) a. *German*
 Jeder Junge lebt in einer anderen Stadt.
 every boy lives in a different.F.SG city
 'Every boy lives in a different city.'
- b. *Hebrew*
 kol yeled gar be-ir axeret.
 every boy resides.M.SG in-city different.F.SG
 'Every boy lives in a different city.'

On the other hand, English *close* (expressing similarity) and Hebrew *karov* 'near' are both lexically-reciprocal, as shown in (11b–c), and yet don't give rise to Q-bound readings:

- (16) a. #?Every one of these bars has a close taste.
 Unavailable interpretation: for every two bars *a,b*, the taste of *a* is close to the taste of *b*.
- b. *Hebrew*
 #kol yeled gar be-ir krova.
 every boy resides.M.SG in-city near.F.SG
 'Every boy lives in a nearby city.'
 Unavailable interpretation: for every two boys *a,b*, the city *a* lives in is near the city *b* lives in.

In this section I have shown that the availability of PDRs is correlated with lexical reciprocity, i.e. with the availability of a unary collective use in predicative position with a reciprocal

interpretation. Based on this data, I propose the generalization in (3), repeated in (17). (17) is to be read as an empirical claim regarding English and Hebrew, and as a strong testable hypothesis regarding other languages in which PDRs arise.

- (17) The set of adjectives which give rise to PDRs is the set of lexically-reciprocal adjectives.

(17) is straightforwardly derived if PDRs and lexical reciprocity are not distinct phenomena, but instead are different guises (in attributive and predicative position, respectively) of the same phenomenon. In the next section I pursue this account by looking beyond availability of readings, at the behavior of collective uses. I show that PDRs consistently pattern with collective uses, in contrast to two other uses.

4 Plural-dependent readings versus other uses of lexical reciprocals

A lexically-reciprocal predicate may appear in predicative position in (at least) three types of constructions: [i] unary collective constructions with a semantically plural subject, as in (18a); [ii] binary constructions with a semantically plural subject and a reciprocal pronoun complement (e.g. *each other*), as in (18b); and [iii] binary constructions with lexical items in both argument positions, as in (18c).⁴

- (18) a. Mark and Raymond are different. (collective)
b. Mark and Raymond are different from each other. (periphrastic)
c. Mark is different from Raymond. (transitive)

The construction in (18b) is traditionally called the *periphrastic* construction. For brevity, I call the construction in (18c) the *transitive* use of lexical reciprocals.

4.1 Plural-dependent readings versus periphrastic constructions

Early work on the collective use of lexical reciprocals derived it from the periphrastic construction (Gleitman 1965). This idea is echoed in Beck's (2000) account of PDRs of *different*. Beck posits that *different* in these cases takes a covert reciprocal pronoun as an argument, in what amounts to an elided periphrastic construction; see (19). Although the details of the two accounts are different, they rely on similar assumptions, that the periphrastic construction is semantically equivalent to the collective use – in Gleitman's case; and to the PDR – in Beck's case.

- (19) Mark and Raymond read different ~~from each other~~ books.

Later work on reciprocal constructions has established that the periphrastic construction and the collective use are not semantically equivalent (see Siloni 2012 for a review). However, this literature has centered around verbal phrases (e.g. *hug* versus *hug each other*), and the established contrasts are not easily extended to adjectival phrases.

I here present a novel contrast between the periphrastic construction and the collective use of lexical reciprocals: co-occurrence with lexical mass nouns. This contrast applies straightforwardly to adjectival (and verbal) phrases. It's also relevant to PDRs, in that they behave like the collective use and unlike the periphrastic construction. The upshot of this contrast is that PDRs are not equivalent to periphrastic constructions, and hence, should not be analyzed as derived from them, via ellipsis or otherwise.

A lexical mass noun, by itself, cannot be the antecedent of a reciprocal pronoun; hence (20a) is degraded. In contrast, a lexical mass noun can be the subject of a lexical reciprocal on its collective use. It can also be the argument of a relational adjective with a PDR: see (20b) and (21), respectively:

⁴ Many lexically-reciprocal adjectives also appear in unary constructions with a semantically singular subject, wherein they receive an anaphoric or deictic interpretation. I ignore this use here.

- (20) a. *Their jewelry was all different from each other.
b. Their jewelry was all different but blended so well together. [g]
- (21) I let my bridesmaids wear different jewelry to break the matchy-matchy up. [g]
Interpretation: the jewelry worn by bridesmaid *a* is different from the jewelry worn by bridesmaid *b*.

The contrast in (20a–b) might appear to be due to a morpho-syntactic constraint, e.g. that *each other* requires a grammatically plural antecedent. But building on data from Gillon (1992), I propose that it also has a semantic corollary. As shown in (22a), a conjunction of lexical mass nouns is acceptable as the antecedent of a reciprocal pronoun. However, such a periphrastic construction is limited in the range of interpretations it receives, relative to a construction with corresponding count nouns. Gillon observes that (22a) can only express that the drapery resembles the carpeting, and cannot be interpreted as in (22c). In contrast, (22b) can receive this interpretation. I call such interpretations, where no relation between the conjuncts is predicated, *Gillon-style* readings.

- (22) a. #The drapery and the carpeting resemble each other.
b. The drapes and the carpets resemble each other.
c. (Un)available interpretation: drapes resemble drapes, and carpets resemble carpets.

The data in (22) indicate that the constraint against a lexical mass noun antecedent in periphrastic constructions is not (just) morpho-syntactic, but semantic. Note that collective uses do have Gillon-style readings when their subject is a conjunction of lexical mass nouns, as do PDRs:⁵

- (23) a. The drapery and the carpeting (both) match.
Interpretation: drapes match drapes, and carpets match carpets.
b. Mark and Raymond bought similar drapery and carpeting.
Interpretation: the drapes Mark bought are similar to the drapes Raymond bought, and the carpets Mark bought are similar to the carpets Raymond bought.

Co-occurrence with lexical mass nouns and the availability of Gillon-style readings join a number of well-established contrasts between the periphrastic construction and the collective use of lexical reciprocals (Siloni 2012). Most pertinently, PDRs behave like the collective use in allowing a lexical mass noun be the (sole) argument of the adjective and in giving rise to Gillon-style readings. Periphrastic constructions, however, do not admit either one. This is a challenge for theories that assume that PDRs are equivalent to periphrastic constructions, such as Beck (2000). To reconcile the findings above with Beck's analysis, we would have to stipulate a semantic difference between overt and covert reciprocal pronouns, which would drastically reduce the explanatory power of the analysis.

Another account of PDRs which should be mentioned here is Charnavel's (2015). Similarly to Beck (2000), Charnavel posits that the relational adjective in PDRs takes a covert argument, but one which is underspecified, and can therefore have a wider range of interpretations. Charnavel uses this covert argument to capture PDRs, Q-bound readings, and sentence-external readings.

The covert argument posited by Charnavel is modelled after the Romance clitic *se/si*. If PDRs indeed contain such an argument, and if it behaves like the clitic it's modelled after, then the overt clitic is predicted to felicitously co-occur with lexical mass nouns, just as PDRs do. But the Italian data in (24a–b) suggest that this is not the case: my informants judge the clitic acceptable with the plural count noun *mobili* 'pieces of furniture', and unacceptable with the lexical mass noun *mobilio* 'furniture' (Carlo Milani & Giada Palmieri, personal communication).⁶

⁵ Presumably, the part-structure of a lexical mass noun is such that its subparts aren't available for the reciprocal pronoun to pick out. It's therefore puzzling that those same subparts seem to play a role in the interpretation of collective uses with a lexical mass noun argument. I briefly return to this puzzle in §5.

⁶ Notably, an anonymous reviewer reports conflicting judgments about data like (24), but adequately addressing this issue will have to be left for future research.

- (24) *Italian*
- a. I mobili si sono toccati.
 the.M.PL pieces.of.furniture SE have touched.PL
 ‘The furniture pieces rubbed against each other.’
- b. ??Il mobilio si è toccato.
 the.M.SG furniture SE has touched.SG
 ‘The furniture touched.’

The status of cases like (24) notwithstanding, Charnavel’s account of PDRs is weakened by observed differences between lexical reciprocals on one hand, and reciprocal constructions formed with Romance clitics on the other hand. Siloni (2012: §7.2) and Authier & Reed (2018: 23) discuss such differences – including within individual Romance languages – such as the (un)availability of sub-event readings, and restrictions (or lack thereof) on partial control. To reconcile these data with Charnavel’s account, we would again have to stipulate a difference between the covert argument and the overt clitic.

4.2 Plural-dependent readings versus transitive uses

Much of the literature on lexically-reciprocal predicates assumes that collective uses are derived from transitive uses (e.g. Hackl 2002; Dimitriadis 2008; Siloni 2012). Winter (2018) argues against this assumption and in favor of the irreducibility of collective uses.⁷ To illustrate, a transitive-derived account assumes a basic binary relation between entities, e.g. $\text{SIMILAR}_{\text{TRANS}}$, and derives the collective use as a conjunction of such relations between subparts of a plurality, along the lines of (25a). Conversely, Winter (2018) assumes a basic unary predicate on pluralities, e.g. $\text{SIMILAR}_{\text{COLL}}$, and derives the transitive use from it by forming a plurality out of its arguments; see (25b).

- (25) a. $\text{SIMILAR}_{\text{COLL}} = \lambda A. \forall x, y \in A: \text{SIMILAR}_{\text{TRANS}}(x, y) \wedge \text{SIMILAR}_{\text{TRANS}}(y, x)$
 b. $\text{SIMILAR}_{\text{TRANS}} = \lambda x. \lambda y. \text{SIMILAR}_{\text{COLL}}(x + y)$

I extend Winter’s argument to PDRs, and propose they too are irreducible. The argument is based on Goodman’s (1951) observation regarding examples like (26–27):

- (26) a. Mark, Raymond and Donovan are similar.
 Interpretation: Mark, Raymond and Donovan share feature x .
- b. Mark is similar to Raymond, Raymond is similar to Donovan, and Donovan is similar to Mark.
 Interpretation: Mark and Raymond share feature x , Raymond and Donovan share feature y , Donovan and Mark share feature z .
- (27) a. p , q and r are consistent.
 Interpretation: there is a situation s where p , q and r are true.
- b. p is consistent with q , q is consistent with r , and r is consistent with p .
 Interpretation: there is a situation s_1 where p and q are true, there is a situation s_2 where q and r are true, and there is a situation s_3 where r and p are true.

The collective use in (26a) is logically stronger than the conjunction of transitive uses in (26b). (26a) must be interpreted as Mark, Raymond and Donovan all sharing the same feature or features. In contrast, (26b) may attribute a different shared feature to each of the three pairs, e.g. shared looks to Mark and Raymond, shared interests to Raymond and Donovan, and shared values to Donovan and Mark. Similarly, the collective use in (27a) is logically stronger than the conjunction in (27b). For instance, (27a) is false whereas (27b) is true when $r = p \rightarrow \neg q$.

As Winter points out, it’s not clear how the strong interpretations of collective uses like (26a) and (27a) could even be expressed in terms of binary relations (I outline and address two

⁷ More precisely, Winter (2018) argues for the irreducibility of “plain” reciprocals, the subset of lexically-reciprocal predicates whose collective use is equivalent to their transitive use. Since apparently all lexically-reciprocal adjectives are plain reciprocals, this distinction is irrelevant here.

attempts to do this in a supplementary file). At the same time, expressing them in terms of unary predicates on pluralities is straightforward; consider that *share features* and *be true together* are such predicates. Winter takes this as support for the idea that collective uses represent a semantically basic form of predication, and are not derived from transitive uses.

Turning back to PDRs, we again find that they behave like collective uses of lexical reciprocals in that they force the same logically strong interpretations. Thus, on its sentence-internal reading, (28) expresses that the cities that Mark, Raymond and Donovan live in all share the same feature(s). Likewise, (29) expresses that the stories Mark, Raymond and Donovan told, could all be true in the same situation. I take this as evidence that PDRs, like collective uses, are not derived from transitive uses.

(28) Mark, Raymond and Donovan live in similar cities.
 Interpretation: the city Mark lives in, the city Raymond lives in, and the city Donovan lives in share feature *x*.

(29) Mark, Raymond and Donovan told consistent stories.
 Interpretation: there is a situation *s* in which the story Mark told, the story Raymond told, and the story Donovan told are true.

The data in (28–29) pose a potential challenge to Brasoveanu’s (2011) analysis of PDRs. Brasoveanu develops analogous accounts of “plural” and “singular” *different* (corresponding to what I call PDRs and Q-bound readings, respectively), which involve distributional quantification over a set, and predication of a binary relation (presumably equivalent to the transitive use of *different*) on each pair of individuals in that set. Since Brasoveanu’s analysis reduces the PDR to a conjunction of binary relations, it does not predict the strong interpretations of (28–29).

5 Conclusion

In this paper, I presented data that link PDRs to lexical reciprocity, defined as the availability of a unary collective use with a reciprocal interpretation. §3 showed that the availability of PDRs is correlated with lexical reciprocity. §4 showed that PDRs behave like collective uses, in allowing lexical mass nouns as arguments, giving rise to Gillon-style readings with lexical mass nouns, and forcing the same logically strong interpretations. Together, these data indicate that PDRs are simply instances of the collective use occurring in attributive position. Further research is needed to test whether these generalizations hold in other languages.⁸

§4 also established contrasts between collective uses and other uses of lexically-reciprocal adjectives. Periphrastic constructions disallow lexical mass nouns as arguments (outside of conjunctions), and don’t give rise to Gillon-style readings. Transitive uses cannot straightforwardly capture the logically strong interpretations of collective uses. These data suggest that collective uses – PDRs included – should not be analyzed in terms of (partially-elided) periphrastic constructions, nor (conjunctions of) transitive uses. This leads us away from most current analyses of PDRs (Beck 2000; Brasoveanu 2011; Charnavel 2015).

Fortunately, we no longer need a “bespoke” analysis of PDRs. All we need is a plausible account of the collective use, which PDRs could inherit.⁹ Winter’s (2018) proposal that collective uses of lexically-reciprocal predicates are basic, i.e. not derived from transitive uses, is such an account. It captures the strong interpretations of collective uses, and does not require a non-trivial stipulation regarding lexical mass nouns: if we were to derive collective uses from binary relations, we would have to posit that the subparts of lexical mass nouns are accessible as

⁸ Bantu languages may present an interesting case study. Dimitriadis (2008) shows that in discontinuous constructions, most languages only allow lexically-reciprocal verbs, but several Bantu languages also allow non-lexical reciprocals. These languages might be more “permissive” with regard to PDRs as well.

⁹ An account of PDRs inherited from the collective use would relegate to pragmatics the contribution of the licenser, e.g. determining which book is different from which in (i) below, parallel to the collective use in (ii). This is already the case for Beck’s (2000) and Charnavel’s (2015) analyses, which rely on pragmatic covers to get the correct interpretations (Schwarzschild 1996).

(i) Mark and Raymond read different books
 (ii) The books Mark and Raymond read are different.

arguments for those relations, somewhere along the derivation. Still, further research is needed in order to explain how basic collective predicates can apply to the denotations of both plurals and lexical mass nouns, but not to those of singular count nouns.

Finally, the finding that PDRs are generally available for lexically-reciprocal adjectives shows that this is a wider phenomenon than previously assumed. Most earlier work has implicitly adopted the view that PDRs are tied to specific adjectives, particularly *different* and *same*. This paper generalizes their availability to a well-defined set of adjectives. In fact, PDRs seem to be an even broader phenomenon, not limited to adjectives but available for other lexical categories; see (30). I predict that the availability of PDR-like readings for nouns in argument position and participles in attributive position would correlate with the availability of collective uses in predicate position, mirroring the picture with adjectives. I leave this question to future investigation.

- (30) a. Maroons speedsters Michael Morgan and Valentine Holmes — share a unique relationship: **they are dating sisters**. [g]
Interpretation: the women that Michael Morgan and Valentine Holmes are dating are sisters.
- b. **Meghan Markle and Prince Harry wore matching outfits** to the Queen's birthday. [g]
Interpretation: the outfits Meghan Markle and Prince Harry wore matched.

Abbreviations

M = masculine, F = feminine, N = neuter, SG = singular, PL = plural.

Additional file

The additional file for this article can be found as follows:

- **Supplementary file 1:** Deriving collective uses from binary relations. An outline and critique of two proposals for deriving the logically strong interpretations of collective uses from binary relations. DOI: <https://doi.org/10.5334/gjgl.1440.s1>

Acknowledgements

I thank Yoad Winter, Tal Siloni, Fred Landman, and audiences at IATL 34, the University of Göttingen, and Utrecht University, for insightful comments on earlier versions of this paper. I'm also grateful for the valuable suggestions by Min-Joo Kim and three anonymous reviewers. Finally, I thank Carlo Milani, Giada Palmieri and Patrick Grosz for their patient and nuanced assistance.

Funding information

This research was supported by the Israel Science Foundation (grant no. 1398/20 to Mira Ariel, and grant no. 1196/12 to Yeshayahu Shen).

Competing interests

The author has no competing interests to declare.

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References

- Authier, J.-Marc & Lisa Reed. 2018. Embedded predicate restrictions on partial control. *University of Pennsylvania Working Papers in Linguistics* 24(1). 19–27. <https://repository.upenn.edu/pwpl/vol24/iss1/4>
- Barker, Chris. 2007. Parasitic scope. *Linguistics and Philosophy* 30(4). 407–444. DOI: <https://doi.org/10.1007/s10988-007-9021-y>

- Beck, Sigrid. 2000. The semantics of different: Comparison operator and relational adjective. *Linguistics and Philosophy* 23(2). 101–139. DOI: <https://doi.org/10.1023/A:1005566722022>
- Brasoveanu, Adrian. 2011. Sentence-internal different as quantifier-internal anaphora. *Linguistics and Philosophy* 34(2). 93–168. DOI: <https://doi.org/10.1007/s10988-011-9096-3>
- Brasoveanu, Adrian & Jakub Dotlačil. 2012. Licensing sentence-internal readings in English: An experimental study. In Maria Aloni, Vadim Kimmelman, Floris Roelofsen, Galit W. Sassoon, Katrin Schulz & Matthijs Westera (eds.), *Logic, Language and Meaning*, 122–132. Berlin/Heidelberg: Springer. DOI: https://doi.org/10.1007/978-3-642-31482-7_13
- Carlson, Greg N. 1987. Same and different: Some consequences for syntax and semantics. *Linguistics and Philosophy* 10(4). 531–565. DOI: <https://doi.org/10.1007/BF00628069>
- Charnavel, Isabelle. 2015. Same, different and other as comparative adjectives: A uniform analysis based on French. *Lingua* 156. 129–174. DOI: <https://doi.org/10.1016/j.lingua.2014.12.005>
- Dimitriadis, Alexis. 2008. The event structure of irreducibly symmetric reciprocals. In Johannes Dölling, Tatjana Heyde-Zybatow & Martin Schäfer (eds.), *Event structures in linguistic form and interpretation*, 327–354. Berlin: Mouton de Gruyter. DOI: <https://doi.org/10.1515/9783110925449.327>
- Dotlačil, Jakub. 2010. *Anaphora and distributivity: A study of 'same', 'different', 'reciprocals' and 'others'*. Utrecht: Utrecht Institute of Linguistics OTS dissertation. <https://www.lotpublications.nl/anaphora-and-distributivity-anaphora-and-distributivity-a-study-of-same-different-reciprocals-and-others>.
- Gillon, Brendan S. 1992. Towards a common semantics for English count and mass nouns. *Linguistics and Philosophy* 15(6). 597–639. DOI: <https://doi.org/10.1007/BF00628112>
- Gleitman, Lila R. 1965. Coordinating conjunctions in English. *Language* 41(2). 260–293. DOI: <https://doi.org/10.2307/411878>
- Gleitman, Lila R., Henry Gleitman, Carol Miller & Ruth Ostrin. 1996. Similar, and similar concepts. *Cognition* 58(3). 321–376. DOI: [https://doi.org/10.1016/0010-0277\(95\)00686-9](https://doi.org/10.1016/0010-0277(95)00686-9)
- Goodman, Nelson. 1951. *The structure of appearance*. Cambridge, MA: Harvard University Press. DOI: <https://doi.org/10.1007/978-94-010-1184-6>
- Hackl, Martin. 2002. The ingredients of essentially plural predicates. In Masako Hirotani (ed.), *Proceedings of the North East Linguistic Society* 32(1), 171–182. Amherst: GLSA Publications. <https://scholarworks.umass.edu/nels/vol32/iss1/11>.
- Matushansky, Ora. 2008. More of the same. *Handout, presented at GLOW 31*, Newcastle University. <http://www.trees-and-lambdas.info/matushansky/Downloads/GLOW2008.pdf>. DOI: <https://doi.org/10.1007/s10988-008-9050-1>
- Matushansky, Ora & E. G. Ruys. 2007. Same in Russian. *Handout, presented at FSIM 3*, Moscow. <http://www.trees-and-lambdas.info/matushansky/Downloads/FSIM3.pdf>.
- Moltmann, Friederike. 1992. Reciprocals and same/different: Towards a semantic analysis. *Linguistics and Philosophy* 15(4). 411–462. DOI: <https://doi.org/10.1007/BF00627683>
- Schwarzschild, Roger. 1996. *Pluralities*. Dordrecht: Kluwer. DOI: <https://doi.org/10.1007/978-94-017-2704-4>
- Siloni, Tal. 2012. Reciprocal verbs and symmetry. *Natural Language and Linguistic Theory* 30(1). 261–320. DOI: <https://doi.org/10.1007/s11049-011-9144-2>
- Tovena, Lucia M. & Marleen Van Peteghem. 2003. Facets of 'different' in French: 'différent' and 'autre'. In Claire Beyssade, Olivier Bonami, Patricia Cabredo Hofherr & Francis Corblin (eds.), *Empirical Issues in Syntax and Semantics* 4, 63–79. Paris: Presses Universitaires de Paris Sorbonne. <http://www.linguist.univ-paris-diderot.fr/~tovena/papers/TovenavPeteghemCssp01.pdf>.
- Winter, Yoad. 2018. Symmetric predicates and the semantics of reciprocal alternations. *Semantics and Pragmatics* 11. DOI: <https://doi.org/10.3765/sp.11.1>

TO CITE THIS ARTICLE:

Fishman, Alon. 2021. Sentence-internal different and lexical reciprocity. *Glossa: a journal of general linguistics* 6(1): 80. 1–11. DOI: <https://doi.org/10.5334/gjgl.1440>

Submitted: 16 September 2020

Accepted: 22 May 2021

Published: 29 June 2021

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