

English pseudo-locative relatives with resumptives: two acceptability studies

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1 Pseudo-locative relatives

The grammatical status of resumptive pronouns (RPs) in present-day English remains unclear. One leading idea is that they are not grammatically licensed but are either a rescue strategy for islands (Kroch 1981, see Ackerman *et al.* 2018) or a production effect (Asudeh 2004, Heestand *et al.* 2011, Ferreira & Swets 2005). In this paper we consider a syntactic context in English that allows RPs as a matter of course: a relative clause found in colloquial varieties of English introduced by *where*, but which lacks any obvious locative flavour (Adamson 1992, Comrie 1999, Pullum 2008, Brook 2011, Brook 2019). Below are examples from Brook (2011).

- (1) *Pseudo-locative RCs (PLRs)*
- a. He got a haircut **where** it looks like a bag around his head.
 - b. There were people at my school **where** they couldn't write legibly.
 - c. My understanding is that there are organs in France **where** they are tuned as high as 456.
 - d. I know that an ideal password is one **where** it looks like my cat took a 12-hour nap on the keyboard.
- (Naturally occurring examples from Brook 2011)

The head nouns in these relatives do not describe locations or times but ordinary individuals, like haircuts and people and passwords. We call these Pseudo-locative relatives (PLRs).¹

Using naturally-occurring data, Brook (2011) found that PLRs tend to have heads modified by *kind* and *type*. This comports with the gradient judgments we (speakers of two different varieties of Canadian English) share for constructed examples like those in (2).

¹There are a number of Germanic languages where the relativizer is *wo*, which might have a locative source, being homophonous with the *wh*-word *wo* 'where':

- (i) Alemannic, Bavarian (*wo*):
- | | | | | | | | |
|----------------------------------|-----|----------|----|-------|-------|---------|-----|
| dea | Mo | (dea) | wo | seine | Schu | verlora | hot |
| the | man | PRON.DEM | WO | his | shoes | lost | has |
| 'the man who has lost his shoes' | | | | | | | |
- (Brandner & Bräuning 2013)

However, Brandner & Bräuning (2013) have argued that *wo* in (i) is in fact *not* derived from a locative source but rather equative *so*. It suffices to say here that PLRs have properties that do not seem to hold of *wo*-RCs.

- (2) a. ?the man **where** he has lost his shoes
 b. the kind of man **where** he always loses his shoes
 cf. the man **who** has lost his shoes

Brook (2011) also found that PLRs tend to describe characteristic properties of their head nouns, also borne out by our judgments in (2). We hypothesize that PLRs will therefore be more acceptable when they are generic rather than episodic (Carlson 1977). We conducted acceptability studies verifying this hypothesis. Experiment 1 compares PLRs with generic and episodic embedded sentences, using canonical relatives headed by *that/which* as a baseline. Experiment 2 tests Brooks' conjecture that the head nouns of PLRs prefer to be *kind*-denoting. Our hypotheses in both experiments are confirmed. We then use these results, which establish what features make PLRs highly acceptable, to construct sentence that apply diagnostics probing the structure of PLRs and the nature of resumption in English.

2 The experiments

Brook (2011, 2019) found many instances of the words *sort/kind/type* in the head noun of PLRs as well as cases where relative clause describes an inherent property, characteristic, or state of the head noun. This predicts generic clauses might be better than episodic ones. We conducted two naturalness rating studies to verify and further explore these observations:

- Experiment 1: Do PLRs prefer generic over episodic descriptions in the RC?
- Experiment 2: Do PLRs prefer heads with *kind* in them?

We found evidence both that PLRs prefer to be generic and that they are rated as more natural when they contain head nouns that include the word *kind*.

2.1 Experiment One

Experiment 1 tests the hypothesis that PLRs prefer to describe generic situations rather than episodic ones.

2.1.1 Materials

The experimental stimuli crossed two two-levels factors to create the four conditions shown in Table 1: RC-TYPE: Canonical vs. Where $\times$ CLAUSE-TYPE: Episodic vs. Generic. The generic conditions used an adverb like *always/usually* to promote genericity; the episodic conditions had a definite time adverbial and the preterite form of the verb.

RC-TYPE/CLAUSE-TYPE	
Canonical/Episodic	She's that friend of mine who I introduced to other friends last night.
Canonical/Generic	She's that friend of mine who I always introduce to other friends.
Where/Episodic	She's that friend of mine where I introduced her to other friends last night.
Where/Generic	She's that friend of mine where I always introduce her to other friends.

Table 1: Experiment One sample stimuli set

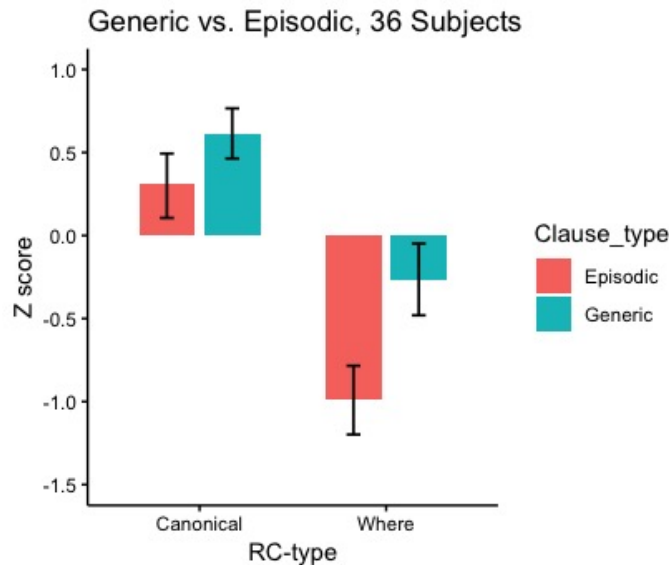
Twenty target items were constructed with the design in Table 1 and distributed over four lists in a Latin Square design, along with 30 filler items testing an unrelated phenomenon. Half the items had animate heads, half inanimate; further, half of the items had subject RPs/subject gaps and half object RPs/object gaps (as in the sample stimuli in Table 1).

2.1.2 Participants and procedure

We recruited 36 self-reported native English speakers living in the United States via Prolific.ac. They were paid £3.00 for their participation. They were asked to rate sentences for naturalness on a 7-point Likert scale.

2.1.3 Results

Naturalness ratings were transformed to z-scores, the means and standard errors of which are plotted in Figure 1.

**Figure 1:** Experiment One results

We analyzed the ratings by means of a mixed-effects model in R (R Development Core Team 2012), with RC-TYPE and CLAUSE-TYPE as fixed effects and Participant and Item as random effects. The lme4 package was used to fit the model (Bates *et al.* 2012), and the lmerTest package was used to obtain *p*-values (Kuznetsova *et al.* 2014). Predictors in all analyses reported here were sum coded, with one of the levels coded as 1, and the other as -1. There was a significant

main effect of RC-TYPE (Est.=-0.547, std.error = 0.037, $t = -14.690$, $p < 0.001$), CLAUSE-TYPE (Est.=0.258, std.error = 0.037, $t = 6.944$, $p < 0.001$) and a significant interaction (Est.=0.10212, std.error=0.037, $t = 2.745$, $p < 0.01$). Pairwise comparisons revealed that the effect of CLAUSE-TYPE was significant for both Canonical ($p < 0.001$) and Where-relatives ($p < 0.001$)

2.1.4 Discussion

The effect of RC-TYPE, with Canonical relatives being overall rated higher than Where-relatives, is likely attributable to the colloquial status of PLRs. The effect of CLAUSE-TYPE, with Generic clauses being rated higher than episodic ones regardless of RC-TYPE, suggests an overall preference for generic relatives. We have no explanation for this difference.²

Importantly, we found an interaction between CLAUSE-TYPE and RC-TYPE. We interpret this as showing that Generic clauses have a greater advantage over episodic clauses in Where-relatives than in Canonical-relatives. The very low ratings for Episodic Where-RCs suggests that these are degraded in naturalness compared to the other three conditions.

In sum we found that PLRs prefer to be generic in a way that canonical RCs do not. Nonetheless, PLRs are still somewhat degraded in comparison to canonical RCs even when they include generic clauses. In the next experiment, we attempt to make PLRs as good as they can be.

2.2 Experiment Two

Experiment Two tests the hypothesis that the head nouns in PLRs prefer to describe kinds rather than tokens (object-level reference (Carlson 1977)).

2.2.1 Materials

The experimental stimuli crossed two two-levels factors to create the four conditions shown in Table 2: RC-TYPE: Canonical vs. Where $\times$ HEAD-TYPE: Kind vs. Object. All relative clauses were generic. The Kind conditions simply added the phrase *the kind of* whereas the Object conditions used the simpler definite description.

RC-TYPE/HEAD-TYPE	
Canonical/Kind	This is the kind of doctor who patients always trust immediately.
Canonical/Object	This is the doctor who patients always trust immediately.
Where/Kind	This is the kind of doctor where patients always trust them immediately.
Where/Object	This is the doctor where patients always trust them immediately.

Table 2: Experiment Two sample stimuli set

Twenty target items were constructed with the design in Table 2 and distributed over four lists in a Latin Square design, along with 30 filler items. Half the items had animate heads, half inanimate; further, half of the items had subject RPs/subject

²Paula Meéndez-Benito has suggested to us that perhaps episodic sentences are less acceptable out of the blue than generic sentences because they require the accommodation of a topic time.

gaps and half object RPs/object gaps (as in the sample stimuli in Table 2). Of the 30 filler items, six included ‘island-rescuing’ resumptive pronouns in canonical relative clauses. Three of these are given in (3).

- (3) a. This is the couch **that** my mother wondered whether **it** would look good in her den.
 b. The director hired an actor **who** the screenwriter asked whether **he** knew the producer.
 c. This was a problem **that** I spent more than a year thinking about before solving **it**.

2.2.2 Participants and procedure

We recruited 40 self-reported native English speakers living in the United States via Prolific.ac. They were paid £2.25 for their participation. They were asked to rate sentences for naturalness on a 7-point Likert scale.

2.2.3 Results

Naturalness ratings were transformed to z-scores, the means and standard errors of which are plotted in Figure 2. The filler sentences with resumption are also plotted in red.

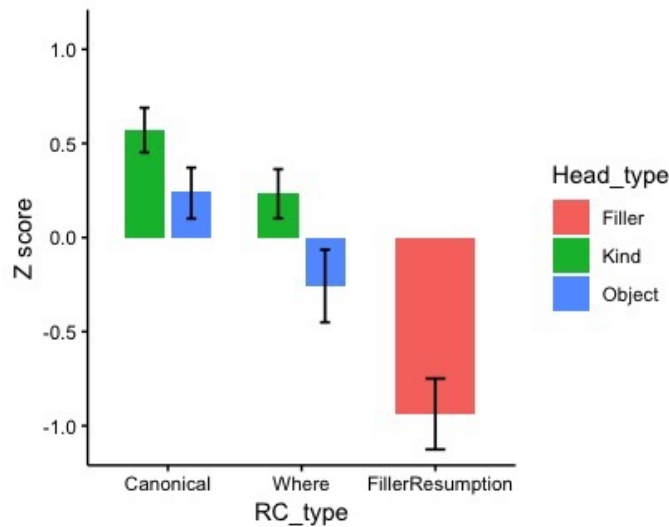


Figure 2: Experiment Two results

We analyzed the ratings by means of a mixed-effects model in R (R Development Core Team 2012), with RC-TYPE and HEAD-TYPE as fixed effects and Participant and Item as random effects, with random slopes for Participants but not Items. The lme4 package was used to fit the model (Bates *et al.* 2012), and the lmerTest package was used to obtain *p*-values (Kuznetsova *et al.* 2014). Predictors in all analyses reported here were sum coded, with one of the levels coded as 1, and the other as -1. There was a significant main effect of RC-TYPE (Est.=-0.217, std.error

= 0.053, $t = -4.071$, $p < 0.001$), HEAD-TYPE (Est.= -0.206, std.error = 0.041, $t = -5.019$, $p < 0.001$) and a marginal interaction (Est.= -0.047, std.error=0.027, $t = -1.723$, $p < 0.1$).

2.2.4 Discussion

We found again that overall, PLRs were rated less natural than canonical relatives, and that kind-denoting heads were rated higher than object-denoting heads. The lack of a significant interaction suggests that having an (overtly) *kind*-including head is not required for PLRs in a way that is significantly different from canonical RCs. However, the presence of the kind-head help makes PLRs highly natural—on par with some canonical relatives. We interpret these results as showing what can improve PLRs, but we do not think an analysis needs to enforce that the head be kind-denoting.

We included RPs in islands within canonical RCs ($n=6$) in our fillers (see (3) for examples). While not paired systemically with the PLRs, the overall acceptability for such RPs (z-score: -0.94; raw score: 4) was much lower than PLRs (z-score: 0.2; raw score 5.7). We think this suggests that PLRs with resumptives are acceptable in a way that ‘island rescuing’ RPs are not. We provide further evidence for this conclusion in the next section using constructed sentences and informal judgments.

2.3 Conclusions from Experiments One and Two

The key findings from the rating experiments are that PLRs want to express generic properties and PLRs improve further with *kind* head nouns, but not strongly. We use these findings in the next section to construct PLRs that are as acceptable as possible to probe more confidently the syntactic properties of this colloquial construction.

3 Probing the properties of PLRs and resumption

To diagnose syntactic properties of PLRs, we make use of our experimental results and construct PLRs that describe generic properties and, when possible, include kind-denoting head nouns. We begin with some basic properties in the next subsection before moving to resumption.

3.1 Basic Properties

First, PLRs form a constituent with the head noun, as shown by the leftward dislocation tests in (4):

- (4) a. [A password where it looks like my cat took a 12-hour nap on the keyboard], (that) is an ideal one.
- b. [The kind of guy where people always talk about him], (that kind of guy) generally annoys me.

Second, PLRs disallow gaps, as shown by (Brook 2011):

- (5) a. There were people at my school where {they/*__} couldn't write legibly.

- b. He's the kind of guy where people always talk about {him/*__ }.

Instead a resumptive pronoun (RP) is needed to refer back to the head noun (we show below that PLRs can even lack both gaps and RPs). The position and function of the RP is unconstrained. Unlike most RPs that can (marginally) appear in present-day English, RPs in PLRs are acceptable in non-islands, including highest subject position (6a), as well as in islands (6b) and in deeply embedded clauses (6c).

- (6) a. He's the kind of guy where/*who he always talks too much.
 b. He's the kind of guy where/?who people wondered if he ever shaved.
 c. He's the kind of guy where/?who people say that people think that he is a fraud.

While the grammatical status of RPs in canonical RCs is not fully understood (see Ackerman *et al.* 2018 for a recent discussion), RPs in PLRs appear to have a different status.

As to the question of whether PLRs require either a gap or an RP, we first turn to 'gapless' RCs documented elsewhere in the literature, including canonical relatives with *which/that/who* relativizers as in (7) from Collins & Radford (2015) and *such that* relatives as in (8) from Pullum (1985).

(7) *gapless/RP-less canonical RCs*

- a. Laura Maxwell is someone [who I think, Laura, that's happened]
 b. He's a fellow [who it often seems that the glass is half empty]
 (naturally occurring examples from Collins & Radford 2015)

(8) *gapless/RP-less such that relative*

- a. Over many years, it had become clear that Lee and Sandy were just one of those couples such that people always reported loving her but hating him.
 b. every triangle such that two sides are equal
 (Pullum 1985:(1a,2a))

PLRs can be both gapless and RP-less to the same extent as the RCs in (7) and (8) as shown in (9):

(9) *Gapless PLR*

- a. He's a fellow **where** it often seems that the glass is half empty.
 b. every triangle **where** two sides are equal

Collins & Radford (2015) suggest there are hidden gaps in gapless RCs—introduced by 'ghosted' prepositions or predicates. van Riemsdijk (2003), who documents PLR-like constructions, suggests that gapless RCs involve a silent locative adjunct gap, which bears an aboutness relation to the content of the RC.

There are, indeed, several similarities between PLRs and *such that* relatives that suggest they are of a kind in certain respects. Like *such that* RCs, PLRs can have quantified head nouns, as in (9b) and also in the naturally occurring examples in (10). (We return to examples with quantified heads in discussing RPs below.)

- (10) Either way you're going to end up with something where you don't want it.
(Naturally occurring example from Brook 2011)

Moreover, PLRs cannot modify Proper nouns (i.e. be non-restrictive) (11b) just like *such that* RCs (11b).

- (11) a. This is the guy where/such that I didn't know whether to talk to him or not.
b. *This is John, where/such that I didn't know whether to talk to him or not.
c. This is John, who I didn't know whether to talk to (him) or not.

In this respect, PLRs and *such that* relatives are distinct from the gapless relatives studied by Collins & Radford (2015). These appear to allow proper noun heads, as shown in (12).

- (12) They're complaining to the referee about Cristiano Ronaldo, who possibly it was a foul on Gonzalez.
(Collins & Radford 2015: 195(5a))

Collins & Radford (2015) explicitly characterize the example in (12) as having *Cristiano Ronaldo* as the head noun. Given this difference, we do not pursue further comparison to the gapless RCs documented by Collins & Radford (2015).

As for the comparison between *such that* RCs and PLRs, the question arises as to whether the former also show a preference for a generic over episodic RC like PLRs. The fact that *such that* relatives are stilted makes judgments difficult. Pullum (1985) provides the following examples, of which he says: "These sentences are about as natural and stylish as can be achieved using the rather stiff and pedantic *such that* construction. But they are fully grammatical."

- (13) a. Lee and Sandy were just one of those couples such that people always reported loving her but hating him.
b. The magician placed the balls in a peculiar way such that the yellow one was touching all of the purple ones.
c. It's depressing to see two people who have a relationship such that every time she goes out of town he gets on the phone to all her friends to try and find out what she's doing.
d. It was one of those situations such that I was forced to just slink out of the door when no one was looking and pretend the whole thing had been a nightmare.
e. The old crone had a manner such that even the children who saw her pass in the street would shudder and turn away.
f. Lord Gallstone had a lack of tact such that hardly anyone in the entire county had failed to be offended by his boorish actions and thoughtless remarks.
g. When she saw the camel, the governess gave it a look such that only by marshaling all of its reserves of haughtiness could the beast recover its normal composure.
(Pullum 1985: 293(1))

It would require a deeper study of *such that* relatives to determine if they impose the genericity restrictions of PLRs. Looking at the cases in (13), however, several are clearly generic RCs (13a,c) and some involve states and modalized sentences (13b,e,g). In all of Pullum's examples, *such that* can be successfully replaced by *where*, even (13d) whose RCs appears to describe a particular episode of "being forced to slink out". This might, at first blush, call into question our generalization about PLRs, but it in fact highlights a crucial subtlety between two types of noun-modifying "RC-like" clauses headed by *where*, our PLRs and what we call Abstract Locative Relatives. We turn to these now.

3.1.1 PLRs vs. Abstract Locative RCs

In his discussion of gapless relatives, van Riemsdijk (2003) provides several cases that superficially appear to be PLRs (14). For reasons we document immediately below, we call these *Abstract Locative RCs*.

- (14) *Abstract Locative RCs*
- a. This is a *wh*-island violation **where** a *wh*-phrase is extracted from an indirect question.
 - b. There are few families **where** the youngest son takes over the business.
- (adapted from van Riemsdijk 2003)

These kinds of RCs are distinct from true PLRs in that they allow an alternative phrasings using a preposition and a *wh*-relativizer in place of *where* as in (15). This is not possible with PLRs, as shown in (16).

- (15) *Abstract locative RCs ✓ Preposition+which*
- a. This is a *wh*-island violation **in which** a *wh*-phrase is extracted from an indirect question.
 - b. There are few families **in which** the youngest son takes over the business.
- (16) *PLRs ✗ Preposition+which*
- a. *There were people at my school **in/of/about/for which** they couldn't write legibly.
 - b. *My understanding is that there are organs in France **in/of/about/for which** they are tuned as high as 456.
 - c. *I know that an ideal password is one **in/of/about/for which** it looks like my cat took a 12-hour nap on the keyboard.

Our working hypothesis is that Abstract Locative RCs involve a head noun that describes an abstract location, or at least an object with a part structure that can be spoken of using locational language, e.g. *violations* and *families*. For instance, such nouns can be introduced by a quasi-locative *in* (perhaps expressing some abstractly spatial properties internal to violations and families) as shown in (17). This is not possible for the head nouns that are possible in PLRs, as shown in (18).

- (17) a. In that family, the youngest son takes over the business.
b. In that violation, the *wh*-phrase is extracted from an indirect question.
- (18) a. *In those people, they can't write legibly.
b. *In those organs, they are tuned as high as 456.
c. *In that password, it looks like my cat took a 12-hour nap.

This highlights just how *non*-locative PLRs are. Abstract Locative RCs also appear not to place a genericity requirement on the RC, as shown by the following examples:

- (19) *Episodic Abstract Locative RCs*
 - a. At the park, there was one family where the children grilled the meat while the parents drank rosé.
 - b. I witnessed a traffic violation where the perpetrator got out of his car quickly and ran into the bushes.

We caution that it is important, then, to ensure that we are examining PLRs, not Abstract Locative RCs. Sticking to a head noun that cannot even abstractly stand in for a location (individual-denoting expressions like *people*, *guy*, *password*) helps ensure this.

Having diagnosed the basic properties of PLRs, and distinguished them from related, but distinct constructions, we now turn to examining the relationship between the head noun and the RP, when there is one.

4 The dependency between head and RP: binding

In languages with grammatical RPs (e.g. Hebrew, or Swiss German, Salzmann (2006), Salzmann (2017)), the head noun can exhibit reconstruction effects. In PLRs, however, the head exhibits anti-reconstruction effects. For instance, there is no reconstruction for variable binding (20a) or idiom reconstruction in (21a). (Baseline examples with canonical RCs are given the (b) examples.)

- (20) a. This is the kind of picture of his_{*i/j} face where everyone_i typically wants to rip it up.
b. This is the kind of picture of his_{i/j} face that everyone_i typically wants to rip it up.
- (21) a. *This is the kind of headway where you rarely make it quickly.
b. This is the kind of headway that you rarely make quickly.

Both of these facts suggest that there is no representation of the head noun (via movement or deletion-under-identity) in the RC portion of PLRs.

PLRs also differ from canonical relatives in terms of their islandhood. Canonical RCs sometimes allow A-bar extraction from them, as shown in (22a) from McCawley (1981). PLRs, however, resist this kind of extraction (22b).

- (22) Then you look at what happens in languages that you know . . .
- a. . . and languages_i that you have [a friend [who knows _____i]].
 - b. * . . and languages_i that you have [a kind of friend [where they always know _____i]].
 - cf. I have a kind of friend where they know funny languages.

The reason *why* certain RCs fail to be islands (even though they are in principle both adjuncts and *wh*-islands) is in itself a topic of current investigation. Sichel (2018) has argued that such examples must involve a raising analysis of the RC (Vergnaud (1974), Bhatt (2002)). There is no evidence for reconstruction in PLRs, which follows if they do not involve a raising analysis. The impossibility of extraction also follows.

PLRs are also different from canonical RCs in being scope islands. Quantifiers in the RC portion of a canonical RC can out-scope an indefinite head as shown in (23a). This is not possible from a PLR, as shown in (23b).

- (23) a. There's a kind of cigarette that every sailor always wants to smoke.
compatible with: a different kind for each sailor
- b. There's a kind of cigarette where every sailor always wants to smoke it.
not compatible with: a different kind for each sailor

Hulsey & Sauerland (2006) claim that canonical RCs are not scope islands; the data above suggest that PLRs are scope islands.

At this juncture, it would appear that PLRs have little in common with relatives altogether, suggesting perhaps that the RC portion of the PLR does not in any way modify the head noun. We think this is not the case, however, as can be appreciated by examples where the PLR involves a quantified head noun. To begin with, to the extent English allow RPs (e.g. in islands as 'rescuing' RPs) (24a), these do not allow quantified heads (24b) (Chao & Sells 1983).

- (24) a. I met the linguist that Kate forgot if Thora had seen him before.
- b. *I met no/every linguist that Kate forgot if Thora had seen him before.

RPs in resumptive languages (e.g. Hebrew as shown in (25)) do allow quantified heads.

- (25) Kol gevev še-Dina xoševet še-**hu** ohev et Rina.
Every man that-Dina thinks that-he loves ACC Rina
'Every man that Dina thinks that he loves' (Chao & Sells 1983)

As shown in the previous section, PLRs also allow quantified heads:

- (26) a. There's no kind of fireplace available on the market where/*which the smoke it makes is ever clean.
- b. We bought every kind of wine available where/*which you have to open it long before you serve it.

These data confirm two important things about PLRs: (i) they are distinct from the

marginal ‘island’ rescuing RPs in English and (ii) they involve a structure where the RC component of the PLR restricts the head. The conclusion in (ii) follows from the fact that the RP is quantificationally bound by the external quantifier and further by the fact that negative polarity items (NPIs) are licensed in PLRs headed by *every* (27). As (28) demonstrates, NPIs are only licensed in the restrictor of *every* (28a) and not outside of it (28b) (See also *ever* in the restrictor of *no* in the PLR of (26a).)

- (27) We bought every kind of wine where it was ever recommended by a celebrity chef.
- (28) a. Every student [who has ever come to class] has received a good mark.
b. *Every student [who has come to class] has ever received a good mark.

This shows that the RC portion of the PLR is a restrictor of the head noun, just as in a canonical relative.

Turning to resumption specifically, we add further evidence that RPs in PLRs are distinct from those in canonical RCs. This comes from cases where PLRs contain islands which in turn contain the RP, as in (29a) and (30a). The counterpart canonical RCs with RPs, in (29b) and (30b), are less acceptable.

- (29) a. He’s the kind of guy **where** you wonder if he will ever shut up.
b. ?He’s the kind of guy **who** you wonder if he will ever shut up.
- (30) a. This is the kind beer **where** you have to chill some glasses before you open it.
b. *?This is the kind beer **which** you have to chill some glasses before you open it.

There is a possible confound in the above contrasts though, since if the *where*-clause of a PLR is “more” of an island than in canonical RCs (see discussion of islandhood above) then perhaps the PLRs involve yet one more island violation than any canonical RC. Perhaps this excess of islands gives greater license to an RP. In the pairs in (31), however, the number of islands crossed is the same (namely, 1) and the PLR in (a) is still more acceptable than the canonical RC in (b).

- (31) a. He’s the kind of guy **where** people always say that he’s in trouble.
b. *He’s the kind of guy **who** people always say if he’s in trouble.

Yet again, it would seem that RPs in PLRs are of a very different nature than other RPs in English. In PLRs, RPs are robustly grammatical.

Taking stock, we have come to following conclusions about PLRs:

- The RC is a restrictor of the head noun.
- The RP is a grammatical RP (in contrast to English ‘island rescuing RPs’) and can appear in both island AND non-island contexts and can be bound.
- There is no copy of the head noun in the RC. Hence, PLRs have neither the syntax of a matching nor raising RC; instead the head is base generated where it is spoken.

All in all, these results suggest that PLRs involve binding of the RP by an op-

erator in the C-field, close to the Kratzer & Heim (1998) account of *such that* RCs. Further confirmation that this is binding, and not movement comes from examples involving parasitic gaps (*pg*). In some languages, RPs can license parasitic gaps, as in Hebrew in (32).

- (32) ha'iša še [[ha-anašim še šixnati levaker *pg*] te'aru ota
the-woman who the-people that I-convinced to-visit described her.
(Sells 1986: 63(8))

However, PLRs do not license PGs as shown in (33a), unlike canonical relatives in English (34). Note that the PLR is grammatical as long as there are no gaps, as in (33b).³

- (33) *No PGs in PLRs*
a. *He's the kind of pundit [where [the people I convince to listen to *pg*] always end up hating him].
b. He's the kind of pundit [where [the people I convince to listen to him] always end up hating him].
(34) *PGs in Canonical relatives*
He's the kind of pundit [who [the people I convince to listen to *pg*] always end up hating ____].

Given the PG data available to us, we conclude that PLRs do not involve even covert movement.

5 Conclusion

In this short report we have introduced a number of properties of Pseudo-locative relatives. We began by establishing, through two naturalness rating studies, that PLRs are more acceptable if they contain generic descriptions in the RC and, to a lesser extent, are headed by nouns that transparently describe kinds. We leave an explanation for these properties for future research (see Moulton & Brook In prep.). What we did in the remainder of this report was to take heed of our experimental findings in constructing suitable examples to further probe the structure of PLRs. We were able to determine a number of properties of PLRs, particularly how they are distinct from other gapless relatives in English and RCs with so-called 'island rescuing' or 'intrusive' RPs. PLRs allow RPs in a grammatically robust way, made particularly clear by the fact that RPs can be bound by a quantificational head in PLRs. In this respect, RPs in PLRs are similar to RPs that are squarely part of the grammar in languages such as Hebrew. However, we found the PLRs do not involve

³When the PG is part of an adjunct clause the sentences strike our small sample of consultants as better (ia), on par, in fact, with a gapped canonical relative (ib):

- (i) a. This is the kind of book where people always give it back to you without reading *pg*.
b. This is the kind of book which people always give back to you without reading *pg*.

We do not have an explanation for this contrast since the accounts of PGs that we are aware of, even Nissenbaum (2000)'s extension to subjects, does not distinguish between these kinds of PGs.

any movement, either of the head (lack of reconstruction effects) or covertly of the RP itself (no parasitic gap licensing). In this respect, RPs in PLRs differ from RPs in some languages (see Salzmann 2017). We hope these observations are informative for further study of RPs in English and beyond.

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