

Wh-Correlatives in Early Modern English

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1 Introduction

This paper aims to analyse a fairly common class of Early Modern English (EModE) relative clauses, illustrated by examples such as the following.

- (1) a. In the very heat of these hurliments, the English burnt one of the milles beyond the water, and the daie following the other, [[which, when the French endeavoured to save ___], they were so galed by two demie-culveringes from the trenches, that they were constreyned to abandon the enterprise].
- b. Sweet Harte I haue sent by this bearer fourteen woodcockes and a brace of feasants which came to me by chance very fortunately. If you will, you may send them to my Lady Knyvett, [[which if you doe ___], I pray lett this bearer cary them and remember my humble servis to my Lor: and Lady].

These contrast with some unattested possibilities like the following.

- (2) a. *... [which the French were galed by two demie-culveringes from the trenches [when they endeavoured to save ___]]
- b. *... [the French were galed by two demie-culveringes from the trenches [which when they endeavoured to save ___]]

As a first pass, and staying as neutral as possible with respect to a structural analysis for now, here are two features of the robustly attested examples in (1) that jointly differentiate them from the unattested variants in (2).

- (3) a. The *wh*-word is at the left edge of a string which corresponds to a strong island.
- b. The strong island is an initial substring of the relative clause.

One puzzling thing about these examples (call them *Relatives with a Leftward Island*, or RLIs) is that, although they have essentially disappeared from the modern language, and although no particularly close equivalents have been discussed, to the best of my knowledge, in other languages, they certainly look like something that should exist, given certain current theoretical assumptions. To see this, firstly let's allow ourselves a class of *absolute islands*, out of which movement is uniformly impossible (as in most cases discussed by Ross 1967 and the cases falling under the Condition on Extraction

Domain of Huang 1982). Next, let's also suppose that at least some cases of piedpiping are repair-driven in the sense of Chomsky (1995), so that piedpiping is a process which allows derivations to converge when they would otherwise crash. Now, we can put these two together to predict the existence of *island piedpiping*: a *wh*-phrase which needs to reach [Spec,C] but can't get out of an island, carries that island along with it for convergence. Such a possibility has occasionally been suggested, particularly by Nishigauchi (1990), for cases of apparent island violations in Japanese covert *wh*-movement, and certainly minimalist theory predicts this to be a possibility, so it would be reassuring to find a language showing overt evidence of such a series of overt movement.

However, a closer examination suggests that such an analysis, applied to the EModE data in (1), would leave a good many distributional quirks unexplained. Without going into details here, firstly, there is no evidence in examples like (1) that the island actually moved from anywhere in the first place. Without movement, of course, there can be no piedpiping. Secondly, there is precious little evidence that the relative clause is syntactically subordinate to the DP that it apparently modifies. More specifically, the assumption that such relative clauses are DP-internal suggests that they should have similar distributions and interpretations to other types of DP-internal relative clauses. I will show below that this assumption doesn't hold.

So, if this isn't island piedpiping, and if the examples in (1) aren't DP-internal relatives, what are they? I suggest that what we have here is actually a member of the family that also includes correlatives. However, the EModE pattern is not a canonical example of this class of constructions. The usual understanding is that correlative contains some sort of overt proform within a relative clause, coindexed in some way with an overt demonstrative proform within the clause to which the relative clause is adjoined. Moreover, each of these proforms heads an *A'*-dependency within its own clause. Although there are some examples of RLIs which fit this description, it clearly doesn't hold of either of the cases in (1), and so these are clearly not correlatives in the traditional sense.

The spade-work in this paper therefore consists of justifying the inclusion of this construction within the broad family of correlatives. The payoff is, hopefully, a better understanding of the syntactic and semantic shape of that family. The final analysis will be that in cases along the lines of (1), the island is base-generated as an adjunct to the matrix clause, and in the vast majority of such cases, the relationships of the *wh*-pronoun to its apparent nominal antecedent, and of the island to the rest of the relative clause, are not encoded syntactically, but rather through a richer system of pronominal elements than we have in Modern English.

The paper is structured as follows. Section 2 sketches the first-pass island piedpiping hypothesis. Although we will end up rejecting this hypothesis, it is important to be explicit about why we do so, because it represents an obvious and intuitively quite reasonable way to approach these data. Once this is out of the way, I can turn in section 3 to an exposition of, and elaboration on, the major results of the burgeoning interest in the syntax and semantics of correlatives and related constructions over the past couple of decades. This leads in section 4 to an application of this syntactic analysis to the EModE data, which has the effect of instantly solving many of the problems raised with the earlier piedpiping proposal. However, this advance raises a new set of

challenges concerning the interpretation of this construction, in particular with respect to the aforementioned pronominals. Section 5 is dedicated to addressing them, while section 6 brings everything together.

2 The Island Piedpiping Analysis

Ever since the earliest days of locality theory, it has been common to assume the existence of two fundamentally different classes of locality domain. On the one hand, there are certain domains which simply cannot be extracted from. The locality domains discovered by Ross (1967) overwhelmingly fall into this class: note the exceptionless nature of the formulation of the Coordinate Structure Constraint, for example.

- (4) ‘In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct’ (Ross 1967:161).

However, this leaves us with no account of the successive cyclicity phenomena which have been documented since Chomsky (1973) first hypothesised that apparent cases of long-distance *wh*-movement were actually the overall result of multiple smaller movement steps. The standard approach to these phenomena is to assume that certain locality domains have a privileged region, an *edge*. Elements in that edge are accessible to movement operations which take them outside the domain, while elements not in the edge can only move within the domain. The effect of this is that licit domain-internal movement to an edge position opens up further movement possibilities, and so a pattern of successive cyclic movement from edge to edge will be able to cover a greater distance than could be covered in a single step. A typical constraint concerning domains with edges is the Specified Subject Condition from Chomsky (1973:239): the domain is α , the ellipsis immediately to the left of the specified subject *Z* marks the edge, and although the condition bars any rules involving domain-external *X* and domain-internal *Y*, nothing prohibits a rule involving *X* and anything contained within that edge.

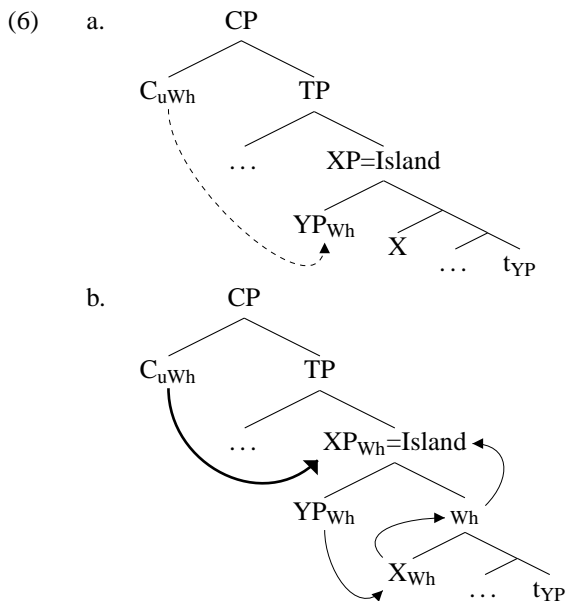
- (5) ‘No rule can involve *X*, *Y* in the structure
 $\dots X \dots [\alpha \dots Z \dots - WYV \dots] \dots$
 where *Z* is the specified subject of *WYV* in α ’ [α is a *cyclic node*, *S* or *NP*]

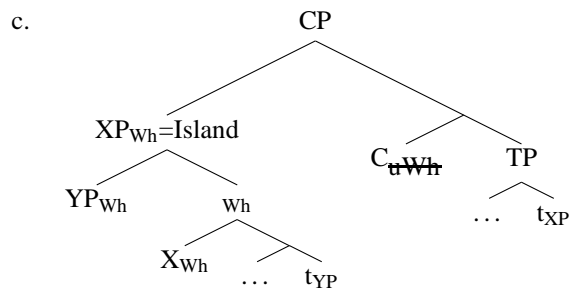
Let’s call a constraint like (4) an *absolute islands* constraint, and a constraint like (5) a *domains with edges* constraint. As stated above, it should be clear that absolute islands constraints are no use in accounting for the successive cyclicity phenomena that domains with edges were invented for. However, domains with edges *can* mimic the effect of absolute islands under certain circumstances. If the only way to get out of a domain *XP* is to stop off in some privileged edge position [*Spec*,*X*], but that position either doesn’t exist or is for some reason inaccessible, then *XP* will behave like an absolute island. That’s essentially how the Head Constraint of van Riemsdijk (1978) works to block any extraction from *PP* in non-*P*-stranding languages. If, on the other hand, we assume that it’s possible to miss one edge position, but that moving out of *two* domains without stopping off in either edge position leads to ungrammaticality, then we have Subadjacency, in the sense of Chomsky (1973, 1986). Subadjacency, of course,

derives the presumed fact that subject NPs are absolute islands, despite not having the form of an absolute islands constraint. If there is to be a reductionist locality theory, then, it is clear in which direction it has to proceed: domains with edges can mimic absolute islands, but not *vice versa*, and so the latter may prove to be dispensable. It therefore comes as no surprise that there have been a good many locality theories, most notably Chomsky (1986), that attempt to do without absolute islands as primitives.

However, there is one situation which reliably tells domains with edges apart from absolute islands. The whole point of the edge of a domain is that once you reach that edge, you can go further and leave the domain behind. Now, if we found a case in which a phrase reaches the edge of a domain, but still cannot move out of the domain, then we would know that we had found an absolute island. An absolute island doesn't care how close you get to its edge: you can't get off, regardless.

At first sight, it might look like this is precisely what we have in the case of the RLI construction in (1). One way of accounting for the universal leftward position of the island is as follows: we assume that the islands in those examples are absolute islands, so even if the *wh*-pronoun moves to the left edge of the island, it can't get any further (let's say for concreteness that it is invisible to probes outside the island, as indicated by the dotted arrow in (6a)). Next, standard mechanisms of Spec-head agreement and projection (Chomsky 1986) conspire to percolate the [wh]-feature from the pronoun in [Spec,X] up to the maximal XP node (6b). At this point, the [wh] feature becomes visible to island-external probes (as indicated by the bold arrow), so the whole island, but not the *wh*-pronoun alone, can move further (6c).





This seems like the natural first pass story to tell concerning the existence of RLIs like (1). Certainly, it accounts for the presence of RLIs across a huge range of islands.

- (7)
- a. **Coordinate structures:** the very gates of Rome, [which [he entered ___ & was received with Triumph, & obtained the Empire, not of 3 Kingdomes onely, but of all the then known World].
 - b. **Past participial absolutes:** a sarmon, somthing better then that in the morninge: [which ended ___, with all Ceremones], I returned to my lodginge.
 - c. **Temporal adverbials:** receive then this Draught [with which when thou art refresh'd ___], thou mayst more strongly proceed to other Matters which yet remain.
 - d. **Conditional clauses:** I make a square, that is G.H.K.L, [In which square if I draw crosse lines ___ from one side to the other, according to the diuisions of the line G.H], then will it appear plaine, that the theoreme doth affirme.
 - e. **Present participial absolutes:** A married Gentleman coming through Canterbury, his Horse threw him, [which a young Gentlewoman seeing ___] fell a laughing.
 - f. **Comparative correlatives:** For to try Doctrines is to enquire into the grounds and reasons of them; [which the better any man understands ___], the more firmly he will be established in the Truth.
 - g. **Concessives:** but not so easie work found Ethelfrid against another part of Britans that stood in arms, [whom though at last he overthrew ___], yet with slaughter nigh as great to his own souldiers.
 - h. **Because-clauses:** they would earnestly contend to maintaine the faith; which was once delivered vnto the Saints. [Which faith because wee cannot maintaine ___ except wee knowe perfectly, first against whom, secondly in what sort it must be maintained]; therefore in the former three verses of that parcell of Scripture which I haue read, the enimies of the crosse of Christ are plainly described.
 - i. **Purpose clauses:** This seemed to be done in distrust of the privy council, as if they might stifle his evidence; [which to prevent ___], he put it in safe hands.
 - j. **Fronted complements:** the Female Palms (which only Bear) will not Bring forth before they are Impregnated at the Roots with the Seed of the Male, first pounded into Meal and sprinkled about them; [which_i ____i how

- true]; I dispute not ___j; but certainly Tradition has confirmed the Practice, and they are not to be persuaded to neglect the Custom.
- k. **Nominal subjects:** by them, [whom whosoever despiseth ___], despiseth not them, but me.
 - l. **Clausal subjects:** there remayned a great dell or pitte without botome, [whiche to beholde ___] was horrible and lothsome.
 - m. **Complex noun phrases:** It may be said to be right two manner of waies, first, when the Horizon passeth through both the Poles of the world, cutting the Equinoctiall with right angles, [in which Spheare they that dwell ___] haue their Zenith in the Equinoctiall, which passeth right ouer their heads, to whom the daies and nights are alwaies equal.

Moreover, if we add in some economy condition with the effect that we always move as little as possible, as in Chomsky's 1995 discussion of piedpiping as a last-resort operation in which a feature carries along the minimal amount of material necessary for convergence, then we find a natural explanation for the fact that these piedpiping cases only ever involve islands. To be absolutely clear, EModE is not Basque or Imbabura Quechua. In those languages, clausal piedpiping is widespread, and most commonly involves complement clauses, but clausal adjuncts can be piedpiped under some circumstances ((8) gives examples from Imbabura Quechua and (9) from Basque — in each case, the (a) example demonstrates piedpiping of a complement clause and the (b) example demonstrates piedpiping of an adjunct clause).

- (8) a. [pi Utavalu -man ri- chun] -taj muna -ngui?
who Otavalo -to go -SUBJ -Q want -2
Who do you want to go to Otavalo? (Cole 1982:19)
- b. [may -pi Marya ka -jpi] -taj Juan ruwana -ta randi -rka?
where -in María be -ADV] -Q Juan poncho -ACC buy -PAST -3
Juan bought a poncho when María was where?¹(Cole 1982:22)
- (9) a. [Nor etorriko d- ela bihar] esan dizu Mireni?
who come AUX -that tomorrow said AUX Mary-D
That who will come tomorrow have you told Mary? (Ortiz de Urbina 1990:197)
- b. [Mikeli zer esan ondoren] joan zen etxetik?
Mikel-D what say after go AUX home-from
After saying what to Michael did he leave home? (Ortiz de Urbina 1990:198)

¹In fact, the island status of the Imbabura Quechua example in (8b) is not clear, as these clauses can apparently also be extracted out of.

- (i) [may -pi] -taj [___ Marya ka -jpi] Juan ruwana -ta randi -rka?
where -in -Q María be -ADV Juan poncho -ACC buy -PAST -3
Juan bought a poncho when María was where? (Cole 1982:22)

The same is not true in Basque, though.

- (ii) *Zer joan ziren hemendik [___ ikusi ondoren]?
What.A go AUX here-from see after

In contrast, the EModE pattern is all about islands. If that island happens to be a clause, it can be piedpiped, but a non-island clause is never piedpiped in EModE. A last-resort condition on piedpiping, such as Chomsky's, could explain this.

Initially, then, things look good for this analysis (and, as a consequence, for the existence of absolute islands as distinct entities from domains with edges). However, unanswered questions soon start to present themselves. The major one concerns the assumption that the island has *moved* to its final position. This would suggest, all else being equal, that we would find a clear gap corresponding to the island in some cases. While this is hard to detect in the case of adverbial gaps, we should see at least some cases where argumental strong islands leave a gap somewhere else in the clause. Two cases that come to mind are coordinated NP arguments and embedded subjects. As the Modern English mockups in (10) show, the gaps in these cases are quite obvious.

- (10) a. *John, [[who_i [____i and Bill]]_j Susan talked to ____j last night], ...
 b. *John, [[who_i [a friend of ____i]]_j Michael thinks [____j talked to Susan last night]], ...

However, nothing like either of these is ever found in the EModE examples, and given the frequency and general baroque-ness of the examples we do find, it seems unfair to blame this on the complexity of the structures involved.² The first problem for the movement analysis just sketched, then, is that there is no evidence that the island actually moved from anywhere, when we might reasonably expect to find some such evidence.

There are two other empirical areas where the movement analysis does not make a wrong prediction as such, but still has nothing obvious to say. The first of these concerns the distribution of RLIs across different constructions. The movement analysis sketched above ties the availability of this construction to properties of A'-movement. The null hypothesis would therefore be that island piedpiping constructions should be available in all A'-constructions. This seems not to be the case. In part, my data are limited here by the method I used to collect them (searches of the unparsed Helsinki corpus, diachronic portion, for *wh*-words). This reliance on specific lexical items rules out the possibility of finding island piedpiping in topicalisation constructions, for example. However, one possibility which we might expect to find, but don't, is island piedpiping in *wh*-questions. Even if confusion over the functioning of subject-AUX inversion might militate against the construction in matrix questions like (11a), we might still expect to find it in embedded questions like (11b).

What did they leave here after they saw? (Ortiz de Urbina 1989:252)

²In fact, there is one example roughly along the lines of (10b):

- (i) For that is it that of all men is most sought, [wiche by caus we suppose only good is hit, therefore we confesse that [to get ___] is all owre end].

I feel justified in ignoring this single example because of possible confounds involving the resumptive pronoun *hit* in the *because* clause. Resumption is extremely common in these constructions, and functions in a way that goes beyond its status in Modern English relatives as a strategy for ameliorating island violations. If the resumptive pronoun has the status of a trace, then this whole construction looks more like a parasitic gap construction or a case of Across The Board movement, which is another matter altogether.

- (11) a. *Which married Gentleman (did) a young Gentlewoman seeing ___ {fell/did fall} a laughing?
 b. *I wonder [which married Gentleman a young Gentlewoman seeing fell a laughing].

However, such examples are systematically absent from the Helsinki Corpus, and also from grammars (Jespersen 1927, Visser 1963) in which RLIs are extensively documented and discussed at length. Moreover, the examples in relative clauses are not evenly distributed across types of relatives, but are overwhelmingly found in appositive relatives (72 out of 75 unambiguous examples of RLIs in the Helsinki corpus). Restrictive examples like the following are expected under the movement analysis, but turn out to be extremely rare.

- (12) a. the ston [vpon the whiche ower Savyor stonding] ascendid in to hevyn
 b. By them [whose words, if men or Angels from heauen gaine saie], they are accursed; by them, [whom whomsoever despiseth], despiseth not them, but me

Although these facts are not incompatible with the movement analysis, they don't follow from it as things stand. The same is true of a further quirk in the external syntax of RLIs: in some cases (for example (7h)), they are separated from their antecedent by a full stop or other heavy punctuation (for example, a colon or semicolon plus a capital letter). While this is certainly not always the case, it is much more common in RLIs than in relatives in general: we find 13 cases (including 8 with full stop and capital letter) among the 75 unambiguous RLIs in the Helsinki corpus, compared to only three such examples in the first 100 non-RLI *which*-relatives in the same corpus, of which only one had a full stop and capital letter. It seems, then, that in a sense to be made clear below, RLIs are more likely to be syntactically independent of their antecedent than regular relatives are.

These three worries do not instantly show that the movement analysis sketched in this section is wrong. However, it is clear that, if that analysis is to be tenable, it will need to be supplemented with nontrivial orthogonal restrictions. In developing those restrictions in the rest of this paper, we will find that the island piedpiping postulated here comes to play no role in the theory developed. In a nutshell, the alternative to be proposed is that the leftward island in an RLI is base-generated in that position, adjoined to a constituent to its right (the *remainder*), with which it forms something along the lines of a correlative construction. If that argument goes through, we have no need to say that the island moves from anywhere, and so no evidence for island piedpiping. The next few sections are devoted to spelling out the details of this theory.

3 The Syntax and Semantics of Correlatives

3.1 Canonical Correlatives

A correlative is characterised by a cluster of properties which do not necessarily all cooccur. This gives correlatives the character of a family of constructions, with more

and less prototypical members. This will become clear if we start with a couple of examples of canonical correlative constructions, and then expand our horizons to include related, but less canonical, constructions. When we return in section 4 to a consideration of the correlative properties of RLIs, we will find that they are certainly not always typical members of the correlative family, but they nevertheless bear certain similarities which help to explain their unusual interaction with relativisation.

The two best-known examples of correlative constructions are the comparative correlative, as in English (13a) or Hindi (13b), and the relative correlative, as in Old English (14a) or Hindi (13b).

- (13) a. [[The more you eat], [the fatter you get]].
 b. [[*Jiitnaa suuraj chamk-aa*] [*utnii(-hii) ThanD baRh-ii*]].
 how.much sun shine.PF that.much(-only) cold increase.PF
 “The more the sun shone, the colder it got.” (den Dikken 2005:499)
- (14) a. [[*ǎa ǎe his leasungum gelyfaǎ*], [*ǎam he araǎ*]]
 Those.NOM that his lies believe, those.DAT he honours
 “Those that believe his lies, those he honours” (Allen 1980:110)
 b. [[*jo laRkii khaRii hai*] [*vo lambii hai*]]
 REL girl standing is DEM girl tall is
 “The girl who is standing is tall” (Srivastav 1991:639)

The most striking feature of these correlative constructions is the two loosely related syntactic units which form a semantic whole. The exact nature of this loose syntactic relationship is an open question: Culicover & Jackendoff (2005) argue that it is parataxis, pure and simple, while the majority view in the literature (Srivastav 1991, Bhatt 2003, den Dikken 2005) is that the first syntactic unit is base-generated as an adjunct to the second. The details of this debate are less important for our purposes here than acknowledging that the semantic unity of the construction is intuitively at odds with this relatively loose syntactic relation.

The second striking feature of these constructions is the paired elements introducing each one of them, *the...the*, *jiitnaa...utnii*, *ǎa...ǎam* and *jo...vo*, respectively. Note that none of these words are unique to these constructions. Rather, they form parts of pronoun and demonstrative systems outside these constructions. There is quite some variation in the nature of the element introducing the first clause. If den Dikken (2005) is correct, then it is typically a *wh*-pronoun, as in the above Hindi examples. However, it is also common to find a demonstrative element introducing the first clause, as in (14a), and we will extend the discussion below to include cases of complementisers introducing the first constituent.

There is less variation in the nature of the element introducing the second constituent: in the vast majority of cases, it is a demonstrative. This is true in all the above cases, with the probable exception of *the* in the English comparative correlative. This particular use of *the* developed from Early Middle English complementiser *ǎe*, and appears somewhat distinct from the regular definite article *the*. Exactly what it is, though, if not a definite article, is less clear (den Dikken analyses it as a degree head).

Intuitively, it seems that these paired elements are responsible for the semantic unity of the constructions as a whole. By the time we have these two elements, we

have a construction which starts to be recognisable as a correlative: two loosely connected constituents bound more closely together by the paired elements introducing them. However, there are two further characteristics of the above constructions that distinguish them from related constructions.

The first of these is that the two constituents are clausal. Although this is quite a basic property, we will see below that there are constructions which bear some resemblance to correlatives, but do not contain two clausal constituents.

The last distinguishing feature of these typical correlatives is that there is evidence for A'-movement within each constituent. There is a typical filler-gap dependency between the fronted phrases *the more* and *the fatter* in (13a) and the gaps in the typical argument positions of the verbs in their respective constituent. The same holds for the fronted pronouns in (14). Moreover, Culicover & Jackendoff (2005:511-2) show that this dependency has the characteristic locality profile of A'-dependencies, obeying a full set of island constraints. Again, we will see correlative-like constructions below which do not have this feature.

In sum, then, a typical correlative has four distinguishing characteristics:

- (15)
- a. Two major constituents standing in a loose, base-generated syntactic relation. The second constituent is the root, and the first constituent is dependent on it;
 - b. A pair of elements heading each of these constituents encoding a semantic relation between the two constituents. The second of these is typically a demonstrative;
 - c. The two constituents are clausal;
 - d. Each of the paired elements in the major constituents is the head of an A'-dependency with a gap site located within its respective constituent.

As a null hypothesis, there is no reason to expect any closer connections between these four properties: they look logically independent, and so we might expect to find one or more of them missing from correlative-like constructions. Indeed, this is exactly what we find. The rest of this section will show a number of less canonical correlative-like constructions.

3.2 Paired Clausal Constituents, No A'-movement

In many languages, correlatives are not restricted to the types of interpretation we saw in the previous section. In Indo-Aryan, for example, Bhatt (2005) gives a comprehensive list of different semantic classes of such relatives, in Hindi unless otherwise stated, as follows:

- (16)
- a. [dzar tyāne abhyās kelā] [tar to pās hoīl]
if he.ERG studying do.PST then he pass be.FUT
'If he studies, then he will pass.' (Conditional, Marathi)
 - b. [Rodman ke jitne tattoo hē] [Jordan ke-paas us-se zyaadaa
Rodman GEN how-many tattoo are Jordan near that-than more
khitaab hē]
title are

- ‘Michael Jordan has more scoring titles than Dennis Rodman has tattoos’
(Comparative)
- c. [John bhautiki-me jitnaa kushal hai] [John-kaa bhai ganit-me
John Physics-in how-much good is John.GEN brother math-in
utnaa kushal hai]
that-much good is
‘John’s brother is as good at math as John is at physics.’ (Equative)
- d. [jab mE kamre-me ghus-aa] [tab Mona gaa rahii thii]
when I room-in enter.PFV then Mona sing Prog be.PST
‘When I entered the room, Mona was singing.’ (*when*-clause)
- e. [jab tak John nahii aa jaa-taa] [tab tak mE yahī: rahūgaa]
when till John NEG come HAB then till I here stay-will
‘I will stay here until John arrives.’ (*until*-clause)
- f. [jab-se tum yahā: aa-ye ho], [tab-se Mona khush hai]
when-since you here come.PFV be then-since Mona happy be.PRS
‘Mona is happy since you came here.’ (*since*-clause) Bhatt (2005:2)

In general, these have all the characteristics of correlatives. However, (16a) is an exception to this: there is no clear evidence for the *A'*-dependency within either constituent. Rather, the paired elements introducing the two clauses are base-generated in the left edges of those clauses. In the absence of a relative correlative construction, this option is used in Modern English for many of the other interpretations listed above (den Dikken 2005:529) refers to these in passing by the slightly misleading name of ‘non-comparative correlatives’).

- (17) a. [If he studies], [then he will pass]. (Conditional)
b. [(Just) as his brother is good at maths], [so John is good at physics].
(Equative?)

Earlier stages of English also had at least the pairs *because ... therefore* and *(al)though ... yet*.

- (18) a. [And because I tell you the truth], [therefore ye beleve me not]. (Causal)
b. And [though the upper part of Weredale be not very fertile of corne];
[yet ys there very fine gresse in the dale self wher the ryver passith].
(Concessive)

Note that another way in which the above move away from the correlative norm concerns the nature of the paired elements. The second element is arguably still a demonstrative in every case. In the case of *if ... then* and *because ... therefore*, this is backed up by the morpho- or phonological signature of an initial /ð/, but an argument could be made on purely semantic grounds for *so* and *as* also being demonstrative. However, the first element of each pair is no longer a *wh*-element or a demonstrative as it was in the examples we saw in section 3.1. Perhaps this is linked to the absence of *wh*-movement in these types of correlative, but whether or not that is true is not immediately relevant to our concerns here. Moreover, whatever these elements are (the natural analysis as complementisers proves problematic in view of the fact that many

of these elements either cooccur with complementisers or have subject-AUX inversion within their c-command domain, as in (18b)), they don't appear to be determiners or pronouns as in the case of the canonical correlatives.

A still more inclusive list would include the pairs *either ... or* and *both ... and*. Maybe this will prove to be accurate, but these pairs seem to me to represent a different sort of interpretation, more along the lines of the logical connectives than the above. Moreover, there are no good grounds here for considering the second element to be demonstrative, unlike the other constructions in this section. I will have nothing more to say about *either ... or* and *both ... and* in this paper. If, however, it turns out that these pairs should also be included as more distant members of the correlative family, so much the better.

3.3 Paired Clausal Constituents without Paired Introducing Elements, No A'-movement

If we relax the requirement for paired elements introducing the two conjuncts, we allow in a host of adverbial constructions in which the adverbial precedes the main clause, is separated from it by an intonation break, and has an introducing element occurring without a demonstrative in the second constituent. Many constructions introduced above actually have variants which fit this description. For example, *then* can be omitted from an *if ... then* construction without a drastic effect on the syntax or interpretation. The same is true for *so*, *therefore* and *yet*.³

- (19) a. [If he studies], [he will pass].
 b. [(Just) as his brother is good at maths], [John is good at physics].
 c. For [though that he ne foond no good womman], [certes, many another man hath founden many a womman ful good and trewe].
 d. [Because I sayde vnto the, I sawe the vnder the fygge tree], [thou belevest].

A similar thing is true of the relative correlatives in section 3.1. Although there is always some anaphoric link back from the second constituent into the first, it does not have to be a fronted demonstrative as it was in (14). In the following Old English examples, the function is performed by a regular *in situ* pronoun, while in the Hindi examples in (21), the same function is performed by a quantified DP (21a) or by no overt element (21b) (Srivastav argues for the presence of a *pro*, a suggestion that I'll come back to in section 5).

- (20) a. ... forðam se ðe syngað hys sawul ne leofað
 because he that sins, his soul not lives

³One intriguing effect of the presence of this second element is that inversion is only possible with it in the second clause. This is found occasionally in earlier English examples, and is even marginally possible today, but it is impossible once the second introducing element is omitted.

- (i) a. ?If John wins the race, then will he celebrate.
 b. *If John wins the race, will he celebrate.

Although I do not have an explanation of this fact, it does seem to be somewhat orthogonal, as part of a larger set of scattered examples, maybe a relic of V2, in which an initial nonsubject allows inversion.

- ‘because he that sins, his soul does not live.’
- b. and ðone ðe ðu nu hæfst, nis se ðin were
and him.ACC that you now have, not-is he your husband
‘And the one that you now have, he is not your husband.’ (Allen 1980:110)

- (21) a. jo laRke khaRe hāi har ek meraa chaatr hai.
REL boys standing are each one my student is
(Srivastav 1991:654)
- b. [jo laṛki: khaṛi: hai] lambii hai
REL girl standing be.PRS tall be.PRS
[Which girl is standing] is tall. (Bhatt 2003:531)

Moreover, there are huge amounts of adverbials in English and countless other languages which follow the pattern of (19), but which don’t have the alternative of a paired element in the second constituent. (22) gives a far-from-complete sample from Modern English, covering both finite and nonfinite adverbials.

- (22) a. While you may not believe me, I stand by what I said.
b. When I entered the room, Mona was singing.
c. Until John arrives, I’ll stay right here.
d. Since you came here, Mona has been very happy.
e. As soon as I got here, John left.
f. Before I left, John arrived.
g. After John leaving, I was quite upset.
h. Without you keeping me on the straight and narrow, I would never have managed this.
i. In talking to me that way, you showed yourself to be a true gentleman.

A further step away from the prototypical correlative takes us to constructions without an obvious introducing element in either clause. These also feature in Culicover & Jackendoff (2005), in case like (23), where prosody alone marks the conditional interpretation of the relation between two otherwise independent finite clauses.

- (23) a. You get sick↑, you die↓.
b. GET DETAILS FROM C&J.

Returning to EModE, though, there are two major such constructions to be discussed. In the first, illustrated in (24), we find a gerundive clause with a subject, attached to the matrix.

- (24) a. [A married Gentleman coming through Canterbury], [his Horse threw him]
b. [Oronoko coming from the wars (which were now ended)] [after he had made his court to his grandfather, he thought in honour he ought to make a visit to Imoinda]

If the gerundive clause here were finite, we would assume that this is a typical progression of syntactically unrelated sentences: a similar range of interpretations of the relation between the two clauses is possible, and a pronominal subject in the gerundive

clause even takes nominative case, instead of the expected default accusative.

- (25) a. [he being gone a visiting his Friends at Black-Ladies], [I writ to him]
b. Male-Carps will follow a Female, and. . . [she putting on a seeming coyness], [they force her through weeds and flags]

However, the nonfinite nature of the initial clause suggests subordination to the following finite clause, and this is confirmed by V2 considerations in a parallel construction in Early Modern Dutch.

- (26) [Andre van Perouse tot Napels gekomen zijnde om Paerden te koopen],
Andre from Perugia to Naples come being for horses to buy,
werdt op eender nacht van dry wonderlijcke avontueren overvallen [. . .].
was at a night of three remarkable adventures visited
'Andre, having come from Perugia to Naples in order to buy horses, one night
was involved in three remarkable adventures' (Ackema & Neeleman 2007:86)

As Early Modern Dutch was a V2 language, one, and only one constituent can come before the finite matrix verb *werdt*. Here, that constituent must be the initial participial clause. This tells us two things: firstly, that clause forms a constituent (specifically, the subject *Andre* is part of it, and so doesn't c-command anything in the matrix clause, a point which will become more important in section 5). Secondly, the nonfinite clause is attached to the matrix clause, occupying the initial position therein.⁴ Given that this shows that such an option must be available in human grammars, the natural analysis of examples like (25) is then to treat their initial clause as similarly subordinated, an analysis which does away with the problem of explaining the nonfinite nature of that clause.

The second construction without an introducing element in either clause consists of an initial *to*-infinitive, interpreted as the purpose with which the action described in the matrix was performed.

⁴Of course, these findings raise the question of how *Andre* in (26) can simultaneously be interpreted as the matrix subject, when it is apparently in the wrong position for this. Ackema & Neeleman argue that there is an extremely restricted type of *pro*-drop in Early Modern Dutch, which, because of discourse accessibility conditions, is restricted to constructions like this. As far as I can see, if this analysis is tenable for Early Modern Dutch, it will transfer straightforwardly to EModE, accounting for the availability of similar constructions in the two languages. It can also derive the existence of a similar construction in German coordinate structures like (i), which I first encountered in Mayr & Schmitt (2007) with a quite different analysis.

- (i) Die Katze₁ hat Hans t₁ gestreichelt und hat den Hund getreten.
the cat has Hans stroked and has the dog kicked
Hans stroked the cat and kicked the dog.

Such examples initially appear as a sort of bracketing paradox. Given the principle of same-type coordination, the clear presence of *hat* in the second conjunct leads us to infer that the first conjunct is at least *hat Hans gestreichelt*. Moreover, the Coordinate Structure Constraint bars extraction from coordinate structures, and so the most attractive analysis is one in which the fronted *Die Katze* also doesn't leave the first conjunct. But then we have to explain how *Hans* can also function as the subject of the second conjunct, which it doesn't c-command. If we assume a highly restricted *pro*-drop here, too, then the conflicting demands are resolved.

- (27) a. [he, to avoid the being put on doing that], [was not apt to search for priests or mass-houses]
 b. This seemed to be done in distrust of the privy council, as if they might stifle his evidence; [which to prevent __], [he put it in safe hands.]
 c. GET BETTER EXAMPLES

Almost as a matter of semantic necessity, the subject of the two clauses is coreferential in these cases, which makes it hard to rule out an alternative analysis along the following lines, with the purpose clause as a parenthetical within the main clause.

- (28) [he, [to avoid the being put on doing that], was not apt to search for priests or mass-houses]

At this point in the paper, I cannot give a strong argument against this alternative analysis. Instead, I will note that, firstly, it would be entirely expected if the correlative structure were available, parallel to the participial examples in (24)–(26), in addition to the more regular structure in (28); and secondly, we will see some further evidence in favour of the existence of the correlative structure (27) when we return to RLIs in section 4. If, however, it should turn out that the correlative structure in (27) is unavailable for this class of purposive adjuncts, nothing much is lost: the participial examples in (24)–(26) alone are sufficient to illustrate a pair of clausal constituents with no A'-movement in either clause, and no introducing element in either clause.

By now, we have moved beyond constructions that are standardly considered as correlatives, but that is really the point. It is very hard to draw a principled line between a concessive *while* clause and a concessive *although* clause, between an *although* clause with and without *yet*, or between an *although ... yet* pair and the Hindi examples in section 3.2 with pairs of *wh*- and demonstrative pronouns, in such a way that the constructions on the one side of the line are correlatives and the constructions on the other side of the line are not. This is what makes it more appropriate to think of the correlative as a family of constructions.

3.4 More Distantly Related Constructions I: Left Dislocation

As we relax more of the criteria for correlativity listed in section 3.1, we inevitably move into constructions that apparently have only a little to do with correlatives, but nonetheless bear a family resemblance of sorts. I briefly mention a couple here, for completeness' sake.

Firstly, if we move even further along the path of the previous subsection, we may drop the requirement that both constituents be clausal. This gives us, basically, a left dislocation construction, as in (29).

- (29) John, I don't like him.

Here, we have two loosely syntactically related constituents, only the second of which is clausal. There is no clear evidence for A'-movement in either constituent, as shown most convincingly by Cinque (1990) for Italian, and there are not necessarily any privileged introducing elements in either clause (the pronoun or clitic within the clausal

constituent is clearly primarily responsible for mediating the semantic relationship between the two constituents, but it is not fronted as it would be in a canonical correlative). The similarity is therefore only due to the presence of the two loosely syntactically related constituents, which nevertheless have a certain semantic unity to them. However

3.5 More Distantly Related Constructions II: One Nonclausal Constituent, No Intonation Break

If we keep the paired elements heading the two constituents, but relax the condition that the two constituents are clausal, we admit a variety of constructions. Many of these can be illustrated by the Old English *swa . . . swa* construction. One basic use of this construction is broadly equivalent to Modern English *as*-comparatives.

- (30) a. Nat ic nan ðing [me swa cuð] [swa ic wolde ðað me god were]
 Not.know I no thing me so known as I would that me God were
 ‘I know of nothing so (well) known to me as I wish that God were.’
 b. ða wolde se wisa mon his fandian, hwæðer he [swa wis] wære
 Then would the wise man it examine, whether he as wise were
 [swa he sylf wende ðæt he wære]
 as he self thought that he was
 ‘Then the wise man desired to examine whether he was as wise as he himself thought that he was.’ (Allen 1980:165)

By pairing one of these constructions with a further constituent containing a fronted *swa X* phrase (but no second *swa*), we obtain a way of expressing a comparative correlative in Old English (see den Dikken 2005 for discussion of a different Old English comparative correlative).

- (31) for ðon swa micle swa he læs hæfde, swa micle hie wæron beteran &
 because as much as he less had, as much they were better and
 maran
 greater
 ‘Because the less he had, the better and greater they were.’ (Allen 1980:170)

A final use of *swa . . . swa* is as a way of forming free relatives in Old English.

- (32) Soðes is ðe sylle swa hwæt swa ðu me byddest
 Truly I you give so what.ACC as you me ask
 ‘Truly I give you whatever you ask of me.’; (Allen 1980:114)

Whether and how these multiple uses form a unified class is an intricate question which I won’t attempt to address here. The important points for our purposes are that, firstly, we have two syntactic constituents headed by paired instances of *swa*. However, while the first of these *can* in some circumstances be clausal (the comparative correlative in (31), on one analysis), it certainly doesn’t *have* to be. In the comparative case (30), the first constituent is something property-denoting, while in the free relative case (32), it is a *wh*-phrase.

Meanwhile, we also have some evidence of an A'-dependency within the second constituent. There is certainly a gap in the second constituent which could be filled by something broadly equivalent to the first constituent — roughly the type of configuration for which Chomsky (1977) initially proposed the analysis of A'-dependencies in terms of null operator movement. Moreover, the examples in (30) show that this dependency can be unbounded. Finally, I am unaware of any examples in which the gap is within an island. Here, of course, we run up against the problem of negative evidence in a dead language, but if this is accurate, then we have a typical A'-movement profile within the second constituent (perhaps, because the first constituent is nonclausal, we shouldn't expect A'-movement there too).

A further step away from the correlative norm brings us to the Modern English free relative, differing from its OE counterpart in the absence of elements introducing the two constituents.

(33) Who dares wins.

By this point, however, we have two constituents, only one of which is clearly clausal, and only one of which contains a distinctive fronted pronoun. Moreover, the loose syntactic relation has been replaced by a configuration in which the *wh*-DP occupies a typical argument position, with a corresponding predicate-argument relation in the semantics, however that may be derived. Moreover, a further major difference is the apparent lack of an intonation break between these two constituents, which appears natural, given the closer syntactic connection between them. I will take this intonation break to be a defining feature of the correlative family below, and so we will come, in the following section, to exclude these constructions from the correlative family. However, for the sake of completeness, their similarities to canonical correlatives in some respects shouldn't be ignored.

3.6 More Distantly Related Constructions III: Inverted Correlatives

As well as the canonical correlatives illustrated in section 3.1, we frequently find apparently similar constructions such as the following:

- (34) a. vo laRkii lambii hai jo khaRii hai
 DEM girl tall is REL standing is
 'The girl who is standing is tall' (Srivastav 1991:640)
 b. Mary got angrier and angrier, the more pictures she looked at. (Culicover & Jackendoff 2005:505)

At first sight, these look like standard correlatives, with two modifications: firstly, the order of the two constituents is flipped; secondly, fronting fails to occur in the matrix constituent. However, as the above authors have shown, there are good reasons to assume that these are actually quite distinct constructions.

Taking the Hindi case first, Srivastav demonstrates many differences between the correlative in section 3.1 and the inverted construction in (34a). For example, the correlative allows repetition of the head noun in each constituent, while the inverted con-

struction does not.

- (35) a. jo laRkii khaRii hai vo laRkii lambii hai.
 REL girl standing is DEM girl tall is
 b. *vo laRkii lambi hai jo laRkii khaRii hai.
 DEM girl standing is REL girl tall is (Srivastav 1991:647)

Secondly, and putting aside the apparent counterexamples in (21), only the inverted construction is possible without a fronted demonstrative in the matrix:

- (36) a. *jo laRkiyāā khaRii hāi do lambii hāi
 REL girls standing are two tall are
 b. do laRkiyāā lambii hāi jo khaRii hāi
 two girls tall are REL standing are (Srivastav 1991:648)

Finally, only the correlative construction allows multiple relativisation.

- (37) a. jis laRkiiNE_i jis laRkeKO_j dekhaa usNE_i usKO_j passand
 REL girl.ERG REL boy.ACC saw DEM.ERG DEM.ACC liked
 kiyaa
 b. *us laRkiiNE_i us laRkeKO_j pasand kiyaa jisNE_i jisKO_j
 DEM girl.ERG DEM boy.ACC liked REL.ERG REL.ACC
 dekhaa
 saw (Srivastav 1991:650–1)

The conclusion of Srivastav, and others following her, is that we account most naturally for these differences if we assume that the inverted construction is derivationally unrelated to the correlative, but instead derives from an English-style hypotactic relative construction, with rightward extraposition of the relative clause.

A similar story is true for the English comparative correlative. Culicover & Jackendoff note that, although there is a clear semantic similarity between the regular comparative correlatives in (13) and the inverted construction in (34b), the matrix clause has a syntactic freedom in the inverted construction which is lacking from the regular comparative correlative. This means, for example, that the matrix clause in the inverted construction does not have to be finite, but can show up as an imperative, for example, or a gerund. This is not true in the regular comparative correlative.

- (38) a. (Everyone) keep your mouth shut tighter, the more John eats, OK?
 b. Fred can well imagine (Joe) getting fatter, the more he eats.
 c. ?The more John eats, the tighter keep your mouth shut about it.
 d. (i) ?I can well imagine the more he eats, the fatter him getting.
 (ii) ?I can well imagine the more him eating, the fatter him getting (Culicover & Jackendoff 2005:506–7)

On the basis of this and several other tests, Culicover & Jackendoff conclude that, while a real comparative correlative has a purely paratactic relationship between the two clauses, with any subordination being purely semantic, the inverted construction

has a hypotactic syntax to match subordinated semantics. Although their claims regarding parataxis are controversial, clearly some syntactic distinction between the two constructions must be present, to account for differences such as that in (38).

In general, then, it seems that we have to exclude these inverted constructions from the class of correlatives, on the grounds that they do not have the same syntactic behaviour as the foregoing constructions. In the context of the four clustered properties of canonical correlatives, this is interesting. The Hindi inverted relatives, in particular, make use of the same paired introducing elements as the canonical relative correlatives from section 3.1, and yet they don't behave like correlatives once we lose the loose, base-generated left-adjunction structure. This suggests that there is at least one necessary condition for correlativity (I will refrain from speculating about whether this condition is sufficient), namely the presence of such a left-adjunction structure. A similar thing holds for the free relatives from the previous subsection: any semantic similarities that may or may not exist between free relatives and correlatives do not impact on the fact that, syntactically, they simply don't look alike, once the left-adjunction structure is replaced by a typical argumental configuration. I end this survey, then, by suggesting that this left-adjunction structure is the sole syntactic defining characteristic of a correlative construction, and that as a result, the inverse constructions discussed in this subsection, and the free relative and other constructions in the previous subsection, should be excluded from the correlative family for our purposes here.

3.7 Summary

So what makes a correlative, from a syntactic point of view? It is hopefully clear that I don't think this is a particularly helpful way to look at things. The syntactic *sine qua non* of this family of constructions is the loose base-generated left-adjunction configuration familiar from the well-studied left-dislocation construction. That gets our foot in the door, and rules out free relatives and the inverted constructions, despite their semantic similarities. At the other extreme, we saw that a canonical correlative supplements that left-adjunction configuration with the properties in (15), repeated below.

- (15)
- a. Two major constituents standing in a loose, base-generated syntactic relation. The second constituent is the root, and the first constituent is dependent on it;
 - b. A pair of elements heading each of these constituents encoding a semantic relation between the two constituents. The second of these is typically a demonstrative;
 - c. The two constituents are clausal;
 - d. Each of the paired elements in the major constituents is the head of an A' -dependency with a gap site located within its respective constituent.

In between these two extremes, we saw a progression of increasingly canonical constructions, admittedly not representing every logical possibility, but of sufficient richness to suggest that there is no natural subset of correlative constructions within the broader family of left-dislocated constructions. Rather, things look more or less correlative as they gain or lose any of the above properties. The following table gives a

broad summary.

(39)

Construction	Section	Properties
Left dislocation	3.4	(a)
<i>If S, S</i>	3.3	(a,c)
Relative correlative, no DEM in 2nd clause	3.3	(a,c)
Left-adjoined present participle	3.3	(a,c)
Left-adjoined <i>to</i> -purpose clause	3.3	(a,c)
<i>If S then S</i>	3.2	(a,b,c)
Comparative correlative	3.1	(a,b,c,d)
Regular relative correlative	3.1	(a,b,c,d)

Outside of this progression, things look significantly less correlative. In particular, once the intonation break, taken indicative of the loose syntactic relationship, disappears, constructions start to behave very differently, as we saw in the case of the otherwise very similar inverse constructions in section 3.6, and the *as*-relatives and free relatives in section 3.5.

Of course, so far, this discussion has been very heavily centred on the surface syntax of this family. We will see in section 5 that there is more to their group identity than the simple syntactic fact of left-dislocation: there is an intuitively recognisable correlative semantics, and we will return in this paper to a discussion of what that semantics consists of. First, however, I want to show that the RLIs with which we started this paper are a good fit within this broad family.

4 The Correlativity of RLIs

Let's return to the examples with which we started this paper.

- (1) a. In the very heat of these hurliments, the English burnt one of the milles beyond the water, and the daie following the other, [[which, when the French endeavoured to save __], they were so galed by two demie-culveringes from the trenches, that they were constreynd to abandon the enterprise].
- b. Sweet Harte I haue sent by this bearer fourteen woodcockes and a brace of feasants which came to me by chance very fortunately. If you will, you may send them to my Lady Knyvett, [[which if you doe __], I pray lett this bearer cary them and remember my humble servis to my Lor: and Lady].

In our discussion of the movement analysis in section 2, we stayed implicitly fairly close to the standard analysis of *wh*-relatives in Modern English. In that analysis, the highest [Spec,C] position in the relative clause contains a *wh*-phrase, presumably as a reflex of whatever clause-typing mechanism identifies the clause as a relative in the first place. Because of the mechanisms of Spec-head agreement and projection, the fact that the *wh*-phrases in the examples above gives the impression of not occupying the highest [Spec,C] position in the relative clause, but rather being buried somewhere inside that constituent, was taken to be illusory: the *wh*-phrase *which* could pass its [wh]-feature up to the larger phrases *which*, *when the French endeavoured to save* and

which if you doe. These larger phrases at least look like reasonable candidates for the occupants of that [Spec,C] position, and if they bear a [wh]-feature, they count as a *wh*-phrase. In that case, we could maintain the notion that a *wh*-relative has a *wh*-phrase in its highest [Spec,C] position.

However, we also saw in section 2 that the movement analysis left several unanswered questions. Perhaps the most immediately worrying was that there was never any evidence that the island actually moved from anywhere. I now want to take this seriously as a starting point for a new analysis of RLIs. I will assume that the island in an RLI is base-generated to the left of the matrix, and that its islandhood is unrelated to any piedpiping pattern, but rather follows simply from the fact that left branches in English are almost always islands (Ross 1967, Kayne 1983).

- (40) a. **Movement analysis:** [CP [Island Wh...t_{Wh}...] ...t_{Island}...]
 b. **Correlative analysis:** [CP [Island Wh...t_{Wh}...] [CP ...]]

Note, moreover, that in the majority of the examples collected, the island is separated from the matrix by a comma or other punctuation, taken to be indicative of the loose syntactic relation and intonational break identified as a defining characteristic of a correlative. This is the sense in which RLIs fit into the correlative family: they have the characteristic left-dislocated syntax and intonation, and they are also overwhelmingly clausal.⁵ Of course, many of the examples look more correlative than this baseline. Here are some examples with an element introducing the first clause.

- (41) receive then this Draught [with which when thou art refresh'd __], thou mayst more strongly proceed to other Matters which yet remain.

Here, we have a pair of elements, each introducing its own clause.

- (42) a. I make a square, that is G.H.K.L, [In which square if I drawe crosse lines __ frome one side to the other, according to the diuisions of the line G.H], then will it appear plaine, that the theoreme doth affirme.
 b. but not so easie work found Ethelfrid against another part of Britans that stood in arms, [whom though at last he overthrew __], yet with slaughter nigh as great to his own souldiers.
 c. they would earnestly contend to maintaine the faith; which was once delivered vnto the Saints. [Which faith because wee cannot maintaine __ except wee knowe perfectly, first against whom, secondly in what sort it must be maintained]; therefore in the former three verses of that parcell of Scripture which I haue read, the enimies of the crosse of Christ are plainely described.

And here, finally, we have an RLI built on a canonical comparative correlative.

- (43) For to try Doctrines is to enquire into the grounds and reasons of them; [which the better any man understands __], the more firmly he will be established in

⁵The few nonclausal examples I have, such as those in (12), are exceptional in other respects too — in those cases, because of their restrictive semantics, for example. I have nothing coherent to say about these very few exceptions at present.

the Truth.

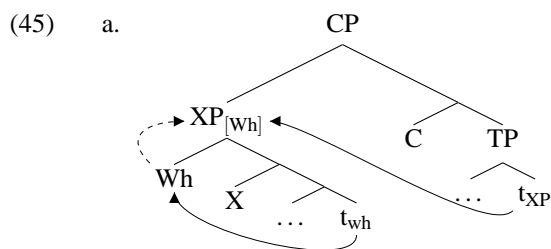
This range of more clearly correlative structures among the RLIs is to be expected if RLIs are actually correlatives.

Adopting the correlative analysis already loses us very little over the earlier movement analysis: we know why the island is an island, and why it occurs at the left edge of the RLI. We don't have an explicit story for why the *wh*-phrase moves to the left edge of the island, but A'-movement or a *wh*-phrase to the left periphery of a clausal constituent is hardly surprising, so I don't consider this to be a major worry. The correlative analysis also has two instant advantages over the movement analysis: it accounts for the fact that we never find t_{island} in (40a), and it explains the tendency to separate the island from the rest of the RLI with punctuation. Already, then, things are looking good for the correlative analysis compared to the piedpiping alternative.

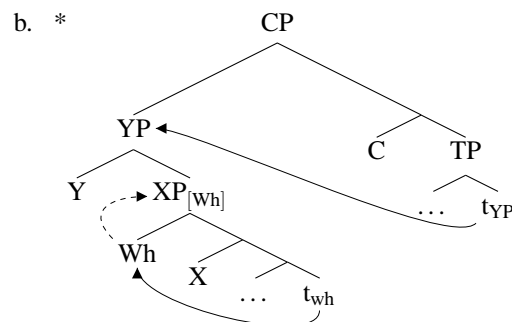
A further advantage of the correlative analysis is that it helps us to make sense of a group of examples in which the *wh*-phrase clearly does not occupy the highest specifier position within the island, as in (44).⁶

- (44) a. the Duke of Buckingham fyrste made humble peticion vnto him, on the behalfe of them all, that his grace woulde pardon them and lycence them to purpose vnto hys grace the intent of their commyng with oute his displeasure, [withoute whiche pardon obtayned], they dyrst not be bold to moue him of that matter.
- b. He toke the sayde Lorde Gray prysoner / and helde hym prysoner tyll contrarye his wyll he hadde Maryed the sayde Howens doughter / [After whiche Matrymony fynysshed] he helde the said Lorde styll in Walys tyll he dyed.

The crucial point here is the order of the prepositions *after* and *which*, and the *wh*-phrases. If the prepositions are the head of the island maximal projection, then the *wh*-phrases are clearly embedded within the complement of that head, rather than in its specifier. Under the movement analysis, this is unprecedented: we know of examples, like the Basque ones in section 2 above, where movement to [Spec,X] is followed by further movement, piedpiping XP. What we have never seen is movement to [Spec,X] followed by further movement of some YP properly containing XP.



⁶All the cases in which the *wh*-phrase is lower within the island are found in past participial phrases like those in (44). At present, I have no explanation for this fact.



Yet that is exactly what we have in (44). On the other hand, under the correlative analysis, there is no piedpiping, and so no problem in this respect. We no longer have any reason for the highest specifier within the island to be a privileged position for *wh*-movement. Examples like (44) cease to be a mystery, then.

There are a few good arguments for choosing the correlative analysis over the island piedpiping analysis, then. However, it is noticeable many of these arguments have the same form: the island piedpiping analysis is too strict, and the correlative analysis permits things that the island piedpiping analysis does not. For example, island piedpiping requires a gap in the main body of the RLI, corresponding to the position in which the island was base-generated. The correlative analysis has no such requirement. Also, the island piedpiping analysis requires the *wh*-phrase to be in the specifier of the highest projection within the island, while the correlative analysis doesn't give us an obvious reason to care about that position. The reason for this trend is clear: the correlative analysis encodes less information syntactically than the island piedpiping analysis. More specifically, the movement of the island represented in (40a) means that the island is syntactically represented as subordinate to (and so dependent on) the body of the RLI in the island piedpiping analysis, while it is less clear that this is true in the correlative analysis. Moreover, the fact that the island piedpiping analysis encodes this syntactic dependency specifically through movement and piedpiping gives rise to the prediction that this dependency will obey the specific, and fairly well-understood, constraints on movement and piedpiping. On the other hand, the correlative analysis makes no such prediction: the syntactic structure must simply obey the relatively few constraints that exist on the distribution of left-dislocation and correlative structures. In other words, we have so far removed one representation of the dependency of the island on the rest of the RLI, without putting anything else in its place.

The next section will take some steps towards remedying this. The guiding idea will be that the dependencies which the island piedpiping analysis assumed to be encoded syntactically, are actually due to the semantics of the various proforms occurring in these sentences. We have known since at least Evans (1980) that certain types of anaphoric dependency obey weaker constraints than regular syntactic dependencies do, but are not unconstrained. I will suggest that the anaphoric dependencies found within RLIs are along these lines. However, to make this argument, I need to emphasise one point which has been left implicit until now. It is this: *RLIs are misnamed. They are not relative clauses.*

To see this, consider what makes a relative clause, on our usual understanding of such things. Granted, people disagree about such things, but there is general agreement, broadly following Chomsky (1977), that a relative clause has a (possibly null) relative complementiser, which attracts a (possibly null) *A'*-moved phrase in its specifier. Moreover, this clause is the sister of some nominal projection.

In contrast, RLIs are clearly lacking at least the first two of these characteristics. There is, indeed, an *A'*-moved phrase within an RLI, but that movement doesn't target the highest [Spec,C] position within the RLI. Rather, it targets, if anything, the highest [Spec,C] position within the island embedded within the RLI. Similarly, we have no clear grounds for thinking that any matrix C^0 within the RLI is specifically relative. At least under minimalist assumptions, it makes more sense again to think that, if anything, the distinguished C^0 will be the highest one within the island within the RLI, rather than the highest complementiser within the RLI itself. Put simply, by denying the island piedpiping analysis, and instead opting for a base-generated left-dislocation structure, we remove the implication that there are necessarily any movement or agreement relations involving the highest CP layer within the RLI. Two major features of RLIs involve just such relations, though.

In fact, I wish to go further than this. Not only does the left periphery of an RLI look unlike the left periphery of a typical relative, but RLIs are also not typically sisters of nominal projections. The first hint of this in this paper came back in section 2, when I noted the existence of a minority tendency to punctuate RLIs as if they were part of a separate sentence from their antecedent.

- (46) they would earnestly contend to maintaine the faith; which was once delivered vnto the Saints. [Which faith because wee cannot maintaine ___ except wee knowe perfectly, first against whom, secondly in what sort it must be maintained]; therefore in the former three verses of that parcell of Scripture which I haue read, the enimies of the crosse of Christ are plainely described.

Another purely distributional fact which points in the same direction is this: RLIs never occur anywhere except at the right edge of sentences.⁷ RLIs aside, even appositive relative clauses are perfectly happy modifying subjects, and consequently occurring clause-medially, as in (47a). However, we never find anything like (47b).

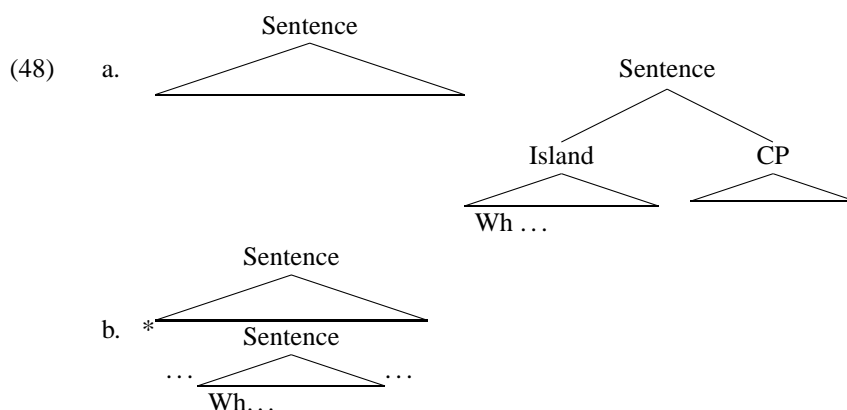
- (47) a. John, [who I've known for years], would never do that.
 b. *this Draught [[with which when thou art refresh'd ___], thou mayst more strongly proceed to other Matters which yet remain], contains only water, malt, hops, and yeast.

⁷A number of times in this paper, I have flagged up a few counterexamples which look like free relatives, and which consistently go against every generalisation I make concerning RLIs. Sure enough, these three examples also occur in positions other than the right edge of sentences. Here is one relevant example.

- (i) But by whom? [By them [whose words, if men or Angels from heauen gainesaie, they are accursed]; by them, [whom whosoever despiseth, despiseth not them, but me], saith Christ].

This tight clustering of exceptions to otherwise exceptionless generalisations just reinforces the conviction that these three examples fall outside the natural class of RLIs.

This makes immediate sense if RLIs are not part of the same sentence as their antecedent. I assume that syntactically, a string of sentences is just a string of sentences. There is no embedding of one sentence within another, even if there clearly is embedding of one clause within another. In that case, RLIs, constituting a different sentence from that containing their antecedent, can only precede or follow that sentence. We will see in section 5 that an RLI preceding its antecedent is, perhaps unsurprisingly, ruled out, and so the only option is for an RLI to follow the sentence containing its antecedent. The absence of examples like (47b) follows automatically.



A third type of evidence in favour of the claim that RLIs do not obligatorily take nominal sisters comes from their interpretation. A syntactic configuration in which a relative clause takes a nominal projection as a sister corresponds naturally to an interpretation in which the semantic antecedent of the relative clause is either some nominal property or an individual denoted by the noun phrase. However, RLIs frequently fit neither of these categories. In fact, perhaps the most common antecedent for an RLI is an entire event description, as in the following, where I have italicised the elements corresponding to the antecedent of *which*.

- (49) a. *a sarmon, something better then that in the morninge*: [which ended __, with all Ceremones], I returned to my lodginge.
 b. *A married Gentleman coming through Canterbury, his Horse threw him*, [which a young Gentlewoman seeing __] fell a laughing.
 c. This seemed to be done in distrust of the privy council, as if *they might stifle his evidence*; [which to prevent __], he put it in safe hands.
 d. *the Female Palms (which only Bear) will not Bring forth before they are Impregnated at the Roots with the Seed of the Male, first pounded into Meal and sprinkled about them*; [which_i ___i how true]_j I dispute not ___j; but certainly Tradition has confirmed the Practice, and they are not to be persuaded to neglect the Custom.

Once we have an interpretation in which the antecedent of the relative is not necessarily nominal, but frequently clausal, a syntax which assumes that relatives are sisters of

nominal projections becomes an active hindrance rather than a help.⁸ We have, then, a third source of evidence that RLIs are not embedded within noun phrases. This is the third major characteristic of standard relative clauses that RLIs lack. The conclusion that RLIs are not relatives seems inescapable.

Of course, though, the interpretation of RLIs *is* often pretty similar to that of standard relatives. We should ask how this comes about, despite their very different syntax. Although I don't have anything like a full answer to this question, the following section starts to sketch a way of approaching it, at least.

5 Interpretive Issues

The previous section advocated a view of the syntax of RLIs which differed in three major ways from the island piedpiping analysis.

- (50)
- a. No complementiser within the highest clause of an RLI enters into an agreement relation with the *wh*-phrase;
 - b. The *wh*-phrase is not in the highest [Spec,C] position within the RLI.
 - c. The RLI is not the sister of a nominal projection, but rather forms its own, unsubordinated sentence.

Given that the above properties are direct negations of three major properties of regular Modern English *wh*-relatives, we conclude that RLIs are not, in fact, relative clauses. However, that leaves us without a real understanding of what they *are*. More specifically, (50c) removes a sisterhood relation between an RLI and its supposed antecedent, while (50a) and (50b) leave us with the conundrum that, while we do indeed have an Agree relation between a C^0 head and the *wh*-phrase, and an A' -relation between a *wh*-phrase in [Spec,C] and its trace, the C^0 and the [Spec,C] positions involved are not the "right" ones for a standard account of *wh*-relatives. The major question I hope to address in this section is, how do we get anything like a coherent interpretation out of this mess?

I propose that the answer to this lies in the interpretation of the correlative structure on the one hand, and of the *wh*-proform on the other. Let's start with a full correlative RLI and identify the elements which are semantically dependent on some other constituent.

- (51) they would earnestly contend to maintaine the faith; which was once delivered vnto the Saints. [**Which faith** *because* wee cannot maintaine ___ except wee knowe perfectly, first against whom, secondly in what sort it must be maintained]; therefore in the former three verses of that parcell of Scripture which I haue read, the enimies of the crosse of Christ are plainely described.

As indicated, there are at least four such semantically dependent elements in the core correlative structure here: the *wh*-phrase, its trace, and the two paired correlative elements. I will have nothing much to say about the standard A' -dependency between

⁸Of course, similar interpretations are possible in Modern English, too, as noted by Jackendoff (1977) among others. We'll come back to them briefly in section 5.

the *wh*-phrase and the trace. I also have relatively little to say about the dependencies among the paired elements. I don't fully understand how these work, but what feels most natural to me is the following. Firstly, assume that the dependency of a *because*-clause, for example, on following material is syntactically mediated. A very rough description of the function of *because*-clauses is that they provide an explanation for the proposition, presupposed to be true, expressed in some other clause. Both orders of explanandum and explanans are possible, and the prosody, at least, suggests that the order explanandum–explanans has the hypotactic syntax of the inverted constructions described in section 3.6, while the order explanans–explanandum has the left-dislocated syntax of a correlative.

- (52) a. I borrowed *Ulysses*(,) because I wanted to read it.
 b. Because I wanted to read *Ulysses**,(,) I borrowed it.

Moreover, a *because*-clause can occur in isolation, but only as an explanans for some already contextually salient explanandum, not as a “dangling” explanans waiting for its explanandum to appear, as in the following contrast, where ↑ and ↓ should be taken as crude indicators of the prosodies typically associated with the left-dislocated clause and the matrix clause in, for example, (52b), respectively.

- (53) a. I borrowed *Ulysses*↓. Because I wanted to read it↓.
 b. And all because the lady loves Milk Tray↓. [1980s British TV advert, with salient preceding action sequence but no preceding linguistic content]
 c. *Because I wanted to read *Ulysses**↓. I borrowed it↓.

I take this as indicative that the typical behaviour of a *because*-clause is to act as an explanans for an already present explanandum, and that the opposite behaviour of acting as an explanans for a still-to-be-revealed explanandum is only possible in the correlative structure of (52b).⁹ In other words, the dependence of a *because*-clause on a following explanans is only possible when this particular syntactic configuration is present, and so the syntactic configuration is responsible for the availability of this pattern of interpretation.

So the dependence of a *because*-clause on the second clause in an example like (51) is mediated by the particular syntactic configuration. On the other hand, the de-

⁹Care has to be taken in formulating a more precise version of this intuition. It is possible for a *because*-clause to act as an explanans for a salient following action, in an out-of-the-blue context, but only if it maintains the characteristic intonation of the first clause in (52b).

- (i) a. Because I've always wanted to do this↑, [(smashes a watermelon to pieces with a giant mallet)]
 b. *Because I've always wanted to do this↓. [(smashes a watermelon to pieces with a giant mallet)]

On the assumption that a clause cannot be dependent on an action, the *because*-clause is apparently not syntactically dependent on any other clause here. I will put these difficulties aside here, noting that this may be indirect evidence for the parataxis-based approach to correlatives in Culicover & Jackendoff (2005) over an adjunction structure, as it is easier to imagine a paratactic relation between a clause and an action than a more hypotactic one like adjunction. In any case, it is clear that the primary signal of this dependence is the ↑-intonation, however we may ultimately represent the dependence.

pendence of the second clause on the *because*-clause is plausibly due to the presence of the deictic element *therefore*. The way *therefore* works is roughly by taking some salient proposition from the preceding discourse which is presupposed to be true, and treating this as an explanation for the proposition asserted by the complement of *therefore*. So *therefore* encodes an anaphoric dependency on a preceding proposition. And unlike *because*, this is the only thing that *therefore* can do — there is no cataphoric use of *therefore*. There are a few quirks in the semantics of *therefore* — it seems to insist on its antecedent being expressed in, roughly, a root clause, for example, unlike the fairly similar *so* — but these quirks needn't bother us here. All that we need to recognise is that the regular anaphoric dependence of *therefore* on the *because*-clause complements the syntactically encoded cataphoric dependence of the *because*-clause on the *therefore*-clause to form a tight interdependence between the two halves of a correlative construction.

This leaves the *wh*-pronoun. An intuition, articulated in different ways in various places, concerning the functioning of Modern English-style relative clauses is that the operator undergoes *A'*-movement to the [Spec,C] position within the relative, to establish a sufficiently local configuration with its antecedent to allow an appropriate semantic relation such as predicate modification to be established (this is even clearer within the raising analysis of relative clauses than it is within the matching analysis, as in the former analysis, a chain connects the antecedent to the gap within the relative). Clearly, this cannot be true in the case of RLIs, as there is no syntactic relation whatsoever between the *wh*-pronoun and its antecedent in some cases.

I want to suggest instead that the *wh*-pronoun in an RLI functions as an E-type pronoun, that is, as a covert definite description (Evans 1980). Clearly, the lack of speaker intuitions concerning these examples is a hindrance in this respect, but the following considerations suggest that something along those lines must be true.

Firstly, we have seen that the *wh*-pronoun in an RLI is not c-commanded by its antecedent. Under standard assumptions, this means that a treatment of the pronoun as a bound variable is out of the question. However, it is necessary for the pronoun to have *some* linguistic antecedent. Relying on texts for evidence again makes it hard to be certain about this, but examples like (54a) as the start of a reported utterance are conspicuous by their absence, while examples like (54b) are presumably unremarkable.

- (54) a. *[Which if you go to __], how can you after what is past, have the Confidence to deny me?
 b. [if you go to that], how can you after what is past, have the Confidence to deny me?

In other words, certain pronouns, such as demonstrative *that*, can occur without any linguistic antecedent within the same utterance. Others, such as the *wh*-pronoun, cannot. However, there is no syntactic relation holding between *which* in (54a) and its (obligatory) linguistic antecedent. This is enough to get us in the ballpark of E-type readings. Evans' original characterisation of the class was intended to deal with just such a configuration, in cases like the following.

- (55) a. Few congressmen admire Kennedy, and they are very junior. (Evans 1980:339)

- b. Few congressmen admire Kennedy, and the (few) congressmen (that admire Kennedy) are very junior.

In (55a), *they* is not *c*-commanded by its apparent antecedent *few congressmen*, but still behaves as if referentially dependent on it. Evans proposes that this is due to the pronoun functioning as a covert definite description, such that (55a) is semantically equivalent to something like (55b). Of course, definite descriptions routinely occur without linguistic antecedents, and some remarks in Elbourne (2001:247) suggest that the same may be true in E-type anaphora in certain limited circumstances, but certainly the main focus of the literature on E-type pronouns has been on explaining their referential dependence on a specifically linguistic antecedent. This appears to be the behaviour of *which* in an RLI — even if it should prove to be the case that E-type anaphora are possible in some cases without linguistic antecedents, this is apparently not true of the *wh*-pronoun in RLIs, which apparently behaves more like the above characterisation of *therefore* in this respect.

The classic application of E-type anaphora, of course, is to give an account of Geach's donkey-sentences, as in (56) (see Heim 1990, Elbourne 2001).

- (56) a. [Every man who has a donkey_i] beats it_i.
 b. [If a man_j has a donkey_i], he_j beats it_i.

This leads to a question about the *wh*-pronouns in RLIs: do they display the characteristic covariance with non-*c*-commanding antecedents? Unfortunately, I have been unable to find any examples of RLIs with quantified antecedents, which would be necessary to decide this matter. However, an absence of such covariance would not necessarily force us to conclude that the E-type characterisation is inaccurate. To see this, consider a class of Modern English *wh*-relatives in a separate sentence from their antecedent. In an example like (57), in which an appositive relative and its antecedent occur in the same sentence, the antecedent of *which* can either be a picture, covarying with the choice of child, or the invariant single event of every child looking at a picture.

- (57) Every child looked at the picture in front of him, which was completely unremarkable.

However, if we change the intonation to indicate that the relative forms a separate sentence, the reading in which *which* covaries with the pictures disappears.

- (58) [Every child_i looked at [the picture in front of him_i]_j]_k. Which_{*j/k} was completely unremarkable.

At first sight, then, *which* in such examples looks little like an E-type pronoun. However, note that a very similar thing is true if we substitute *which* for a clear definite description, following the logic of the E-type characterisation.

- (59) Every child_i looked at [the picture in front of him_i]_j. The picture_{?j} was completely unremarkable.

Again, the utterance is quite marginal if every child is indeed looking at a different picture, as the definite description in the second sentence seems to require a unique

picture as an antecedent. However, it seems that this utterance is more acceptable if the second sentence can be interpreted as reporting each child's opinion of their respective picture, rather than that of the speaker. This has something of the flavour of modal subordination phenomena: we can keep the covariance so long as we stay within the same type of situation (in a non-technical sense), but once we shift from the child's actions or opinions to the narrator's opinions, we lose this possibility. Whether this suggestion is tenable or not remains to be seen, but the conclusions for now are that the *wh*-pronoun in an RLI, like the *wh*-pronoun in modern examples like (58), is similar to an E-type pronoun in requiring a non-c-commanding linguistic antecedent, and even if we find that the apparent referent of *which* doesn't covary as expected in some cases, this shouldn't necessarily lead us to immediately drop the conclusion that EModE *wh*-pronouns had an E-type interpretation in some circumstances. Paucity of evidence prevents me from being completely confident in these conclusions, but the correlative analysis proposed in the foregoing sections certainly leads us to look for something like this, and the little evidence we have seems to go in the right direction, at least.

One immediate advantage of an E-type analysis in the above sense is that it explains the absence of RLI-like structures in *wh*-questions. The reason for this is simple: interrogative semantics is associated with a (possibly null) interrogative C⁰ head, just as regular relative semantics is associated with a (possibly null) relative C⁰ head. However, we saw above that RLIs are not actually relative clauses, despite their similar function. Specifically, there are no clear grounds to attribute anything more to the highest head within the island of an RLI than the purely syntactic function of inducing movement of the *wh*-phrase. All the semantic work comes from the *wh*-phrase itself, if the above argumentation is on the right lines. So we can get a relative-like function from an RLI simply by treating the *wh*-pronoun as an E-type pronoun which requires a linguistic antecedent. However, there is no similar move that we could make to obtain an interrogative-like function from an RLI-like structure. This is because, if current syntactic theories are on the right track, interrogative semantics is never determined by the nature of the pronoun alone. Rather, the pronoun *in conjunction with an interrogative complementiser* is responsible for the interrogative semantics. So the reason why RLI-like structures are limited to relative-like interpretations falls out naturally on this approach: the EModE *wh*-pronoun can be analysed as an E-type pronoun which needs a linguistic antecedent without caring about the syntactic configuration, but we don't have a corresponding class of pronouns which don't care about the syntactic configuration they find themselves in, but still require a listener to provide a suitable value to function as the answer to a *wh*-question.

Summing up, then, we have seen an intricate pattern of syntactic and semantic dependencies holding within an RLI. First, there is the syntactic dependency of the island on the main body of the RLI, which is somehow responsible for the availability of the semantic dependence of the island on the following clause. The demonstrative pronoun in the second half of the RLI picks up the proposition expressed in the first half of the RLI as a salient suitable antecedent. Although we don't have any strong reason for saying that this dependency isn't syntactically encoded, it works perfectly well if we assume that the demonstrative in an RLI functions like any other demonstrative, and so doesn't require an antecedent in any particular configuration. This certainly seems to be the most parsimonious explanation, then. Finally, the *wh*-pronoun can be

interpreted as an E-type pronoun. It apparently requires a linguistic antecedent, but without a c-command relation holding. This explained a few quirks in the distribution and apparent interpretation of RLIs, probably the most important of which was the absence of interrogative RLI-like structures.

Of course, not every RLI looks as neat as the canonically correlative examples I have discussed in this section. However, the story stays largely the same in less obliging cases. Let's go back to the following example.

- (60) A married Gentleman coming through Canterbury, his Horse threw him, [which a young Gentlewoman seeing ___] fell a laughing.

Here, we have no paired elements, and so the dependencies just detailed above are less obvious. However, the nonfinite nature of the participial phrase is sufficient to mean that it can't stand on its own, and so we are justified in assuming that the syntactic dependency on the main clause still holds. If the arguments above are correct, then this is the same syntactic configuration that we find in *because... therefore* constructions, and so we may assume that it licenses a semantic dependency of the island on the rest of the RLI in this case too. Moreover, we have no demonstrative element here to make explicit the semantic relationship between the two halves of the RLI. In cases such as these, the range of possible interpretations is limited to regular intersentential relations, which we may assume to be available as a sort of default. In (60), we see narrative progression, plus an implication that what the gentlewoman say was the cause of her mirth. This is far and away the most common interpretation of an RLI, in the absence of any overt paired elements to guide the interpretation. I assume, then, that the dependencies which we see in the canonical structures like *because... therefore* RLIs are more or less identically carried over to less canonical RLIs.

6 Conclusion

We started off with an analysis of RLIs which stays pretty close to Modern English relatives, only with piedpiping of islands. Over the course of this paper, we have changed most details of this analysis to arrive at an analysis in which RLIs are not relatives and are not subordinated. These two negative syntactic findings have had the effect of changing the semantic analysis of RLIs, and in particular of the *wh*-pronoun within them. Specifically, we claim that, in addition to the standard analysis of *wh*-pronouns, which treats them as pretty similar to indefinites, EModE *wh*-pronouns could also be used as E-type pronouns, referentially dependent on a non-c-commanding antecedent. Although I believe that empirical or theoretical considerations have left us with relatively little freedom at the major choice points in the development of this analysis, this paper seems like it raises some big questions, which I will have to leave to future work.

The first of these concerns the diachronic development of relativisation in English. This paper has given a variant on a recurring theme in diachronic generative syntax, namely two very different underlying analyses producing only subtly different surface effects. However, these two different underlying analyses are usually attributed to the grammars of successive generations of language learners, a classic case of reanalysis. Here, on the other hand, the tension between the two underlying analyses has been

purely a matter of theory construction. Moreover, we have good reason to presume that the island piedpiping analysis never really existed in the mind of any language learner — if it did, then the unattested configurations predicted by the island piedpiping analysis would surely be attested. So, this paper actually tells us next to nothing about the diachrony of RLIs. Where did they come from, and where did they go?

I believe that answering these questions will not be an easy task. The major reason for this is that our knowledge of the diachrony of the English *wh*-system is quite patchy in general. The two major differences between the EModE system as found in RLIs and the Modern English system, on this analysis, are, firstly, the existence of E-type *wh*-pronouns, and secondly, the possibility of *wh*-fronting to a position other than the specifier of an interrogative or relative CP. The second property looks deeply suspicious to me (it will be remarked that there are even some examples in this paper in which the fronting targets a projection other than CP), and it is quite possible that an analysis in which the *wh*-phrase is base generated at the left edge of the island and enters into a base-generated dependency with a null or resumptive pronoun in thematic position, will be more accurate in the fullness of time (see Bresnan & Grimshaw 1978 for an early analysis along these lines — the idea of distinguishing movement from base-generation in A'-dependencies has survived through Cinque 1990 into the current work of Jim McCloskey and Jeroen van Craenenbroeck, among others). However, either way, it seems like *something* was different in the EModE syntax, as well as the different semantics of the *wh*-pronouns. The obvious next question is whether any other possibilities came and went with the rise and fall of RLIs. For now, I know of nothing, and to be honest, I don't even know where to look.

The other major question raised by this work is the following: why doesn't island piedpiping exist? It certainly should do, if you make certain choices of underlying assumptions. Therefore, the natural approach to this question is to challenge the underlying assumptions which conspire to predict the existence of island piedpiping. One possibility would be to say that absolute islands really don't exist: locality domains are always domains with edges, and sometimes they mimic absolute islands. I don't want to go down this route, because there are independent arguments that absolute islands really do exist (Uriagereka 1999, Truswell 2007). However, one possibility that seems promising to me depends on modular encapsulation, and/or the timing of operations. Piedpiping, as construed here, is a narrowly syntactic operation: it affects which features appear on which nodes, and which constituents move where. On the other hand, many current arguments for absolute islands place the burden for delimitation of these absolute islands outside the narrow syntax. For Uriagereka, absolute islands are a byproduct of the way the PF-interface works, while Truswell (2007) relates absolute islands to event descriptions in a purely semantic representation of event structure. One plausible explanation for the nonexistence of island piedpiping could then rest on the following two premises.

- (61) a. Narrowly syntactic locality domains are domains with edges.
- b. Absolute islands arise at the interface of syntax and some other level of representation.
- c. Piedpiping is narrowly syntactic, and can only be triggered by narrowly syntactic factors.

Finding out whether anything like this is workable will have to wait for a more explicit theory of the relevant architectural considerations.

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