

OBSERVATIONS AND SPECULATIONS ON RESUMPTION (IN IRISH) *

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This paper is concerned with the apparent fact that natural languages build \bar{a} -dependencies either by way of a filler-gap dependency or by way of a resumptive dependency. Its principal empirical goal is to clarify the circumstances under which a choice is made between gaps and resumptive pronouns in \bar{a} -binding constructions in Irish. It is shown that when in competition with gaps pronouns are disfavored to an overwhelming degree and that they are tolerated only in positions where heightened parsing pressures come to bear. The implications of this finding for the theory and typology of resumption are considered. It is argued that, for Irish and English at least, the relevant parameter makes no reference to pronouns but only to properties of the functional head c .

I A CHOICE

On the face of things, the syntax of natural language seems to make available two options at least for the construction of binding-relations between a clause-peripheral position α (higher) and a clause-internal position β (lower):

- The creation of a filler-gap dependency between position α and position β , β empty.¹
- The binding of a pronoun in position β from position α . Pronouns so bound are known as ‘resumptive’ pronouns.

These options are exemplified for English in the examples of (1), the first illustrating the filler-gap dependency, the second the resumptive dependency – an option deployed fairly frequently, it seems, at least in informal registers (see, for instance, Bennett (2008)).

- (1) a. the guy that I was talking to
b. the kind of guy that you never know if he’ll be on time or not

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¹The syntactic operation which links filler and gap is often taken to be movement (or Internal Merge in recent work); for my purposes here, however, it will mostly not matter how the syntax of that relationship is understood.

Much of the discussion around this pair of options has drawn a distinction between two kinds of language – in one group, the grammar defines both options as well-formed (varieties of Arabic, Hebrew, Irish), while in the other only the filler-gap dependency is well-formed (this class includes English, German, and Greek on most accounts). On this view, (1b) is not a well-formed expression of English but is rather an instance of ‘intrusive’ resumption (Chao and Sells (1983)). On this view, the use of the resumptive pronoun in (1b) reflects the use of an extragrammatical ‘last resort’ mechanism under various sorts of performance pressures (for discussion, see Asudeh (2004, 2012), Alexopoulou (2006, 2010), Alexopoulou and Keller (2007), Heestand et al. (2009), Ackerman et al. (2014), Beltrama and Xiang (2016) among many others). For that reason, discussions of resumption often raise difficult and useful questions about the relation between formal grammars and the mechanisms of production.

Irish has been regarded as one of the exemplary members of the ‘true resumption’ club of languages. And it is indeed very clear why one might conclude that resumption is a grammatically licensed option in that language. Clauses which host filler-gap dependencies are introduced by the ‘direct relative’ complementizer, while those which host resumption dependencies are introduced by the ‘indirect relative’ complementizer. The ramifications of THAT choice in turn spread through the morphosyntactic system of the language – determining how verbs are inflected, what verb-stems are used when, what form is taken by certain functional elements (the copula, certain aspectual particles) and so forth (Duffield (1995: chap. 3), McCloskey (2001), Oda (2012), Acquaviva (2014), Ostrove (2015, 2016)). Since the morphological alternations are determined by complementizer choice and since complementizer choice is in turn determined by the choice between a filler-gap dependency and a resumptive dependency, that option in turn, it seems, must be represented in the grammar of the language. Because the contrast between these two complementizers in Irish will be important for what follows, I will use ‘C.WH’ to gloss the complementizer which heads clauses which host filler-gap dependencies and ‘C.PRO’ to gloss the complementizer which heads clauses into which a relation of resumptive binding reaches.

The availability of both options to speakers of Irish is vividly illustrated by the two examples in (2), which were used within minutes of one another by the same radio reporter to describe the same situation (an emergency at sea):

- (2) a. an bheirt a bhí siad ag iarraidh a shábháil
 the two C.WH be.PAST they PROG try SAVE-NONFIN
 ‘the two that they were trying to save’ RADIO REPORT
- b. an bheirt a raibh siad ag iarraidh iad a shábháil
 the two C.PRO be.PAST they PROG try them SAVE-NONFIN
 ‘the two that they were trying to save them’ RADIO REPORT

(2a) involves a filler-gap dependency; (2b) involves a resumptive dependency. In this case, the

difference between the two complementizers is reflected primarily in the different suppletive allomorphs triggered on the finite verb – the ‘independent’ form *bhí* in (2a) triggered by C.WH, the ‘dependent’ form *raibh* in (2b) triggered by C.PRO (on the mechanisms involved here, see Duffield (1995: chap. 3), McCloskey (1996, 2001), Oda (2012), Acquaviva (2014) and especially Ostrove (2015, 2016)).

The examples of (2) were spontaneous oral productions; the same pattern of optionality is illustrated in the written medium by the two examples of (3), which were used in the same text by the same author within a page of one another. In this case the syntactic position which hosts either a gap (in (3a)) or a resumptive pronoun (in (3b)) is the subject position of a nonfinite clause, itself a complement to the modal expression *ní mór (do x)* (‘must (to *x*)’).

- (3) a. na tréithe nár mhór a bheith ann
 the traits that+must be-NONFIN in-him
 ‘the traits that it is necessary for him to have’ CTP 153
- b. na tréithe eile nár mhór don mhúinteoir iad a bheith aige
 the traits other that+must to-the teacher them be-NONFIN at-him
 ‘the other traits that it is necessary for a teacher to have them’ CTP 154

The kind of optionality seen in (2) and (3) is available for a fairly broad range of syntactic positions, including at least the following (see McCloskey (1990/2011) for documentation and details):

- direct object position in a matrix clause,
- subject and object positions in complement clauses (finite and nonfinite),
- object of a verb in progressive aspect,
- subject position of finite verbless clauses – so-called ‘copula’ clauses.

Many of these patterns of optionality (the first and second in particular) will be illustrated in some detail as the discussion proceeds.

Optionality breaks down under two circumstances. There is, in the first place, one position (and only one as far as is currently known) from which resumptive pronouns are excluded – in the highest subject position of a verbal clause (reflecting the so-called Highest Subject Restriction):

- (4) a. *an fear a raibh sé breoite
 the man C.PRO be.PAST he sick
 ‘the man that (he) was sick’
- b. an fear a bhí breoite
 the man C.WH be.PAST sick
 ‘the man who was sick’

On the other side of the coin, resumption is the only option for positions out of which movement is impossible:

- prepositional object position
- possessor position
- within islands
- within coordinate structures

See McCloskey (1985, 1990/2011, 2002), Maki and Ó Baoill (2011) for documentation and details; the repertoire of island effects observed is remarkably familiar from theoretical discussion and from discussions of other languages and language-families and the general patterns of obligatoriness, impossibility and optionality for the resumptive are also fairly familiar (see for instance Doron (1982), Borer (1984), Shlonsky (1992), Sichel (2014) on Hebrew).

My focus in this paper will be on this interesting fact – that two distinct mechanisms for establishing \bar{A} -binding relations seem to coexist, in general and within particular languages. My first goal is empirical – to provide a better understanding than has been available to date of the distributional patterns found within one language (Irish), when options like those in (2) and (3) are in play. The second goal will be to use the answers that emerge from that investigation to engage in some more speculative discussion of what linguistic theory should have to say about resumption, the typology of resumption, the status of islandhood and weak crossover effects. In the course of that discussion, the validity of the distinction between true (that is grammaticized) resumption on the one hand and intrusive resumption on the other will come to seem problematic or, at the very least, in need of re-thinking.

2 THE DATA-BASE

In pursuing these goals I will rely heavily on a data-base of naturally occurring Irish examples that I have built up over several decades of observation. The material of that data-base is drawn principally but not exclusively from published sources. Alongside books, newspaper and journal articles, many examples are drawn from audio sources like radio broadcasts, podcasts, spoken word CD's and observation of casual conversation. All of the major dialects, including many now extinct, are represented, the oldest from late in the 19th century, the newest contemporary (that is, the corpus covers a span of 120 years or so). About 150 distinct idiolects are represented. At the time of writing, the data-base contains just over 12,000 annotated examples, coded for 250 syntactic properties (most 'examples' are sentences; some are short texts). It is searchable by syntactic feature and by dialect and for most examples the total context is easily recoverable. Material has been extracted from 303 published texts in addition to the various audio sources, suggesting an overall 'corpus-size' of something like

23 million words.² For almost all of the phenomena relevant to the discussion here, my goal over the years has been to extract every relevant example found in that ‘corpus’. This makes possible some useful observations about the relative frequencies of various patterns and some deductions about the factors which drive speakers’ choices when choices are available.

3 A QUESTION

Say one took the view (naive perhaps, but not irrational) that natural language has been so shaped as to allow people to express what they feel they need to express as efficiently as possible – with minimal effort and with a minimum of troublesome ambiguity. Considered in that light, it is very puzzling why the filler-gap option (the movement option) should exist at all as a way of forming \bar{A} -dependencies, given the obvious advantages enjoyed by resumption-based dependencies over filler-gap dependencies.

ONE: EFFABILITY Resumptive-binding, at least of the kind found in Irish, is not island-sensitive. This means that examples like (5) and (6) are unremarkable and are relatively common.

- (5) a. caisleán a mbéifidhe i ndiaidh na scafail a bhí ag baint an mhaise
 castle C.PRO be-COND-IMPERS after the scaffolding C WAS PROG take the beauty
 de a chaitheamh anuas
 of-it cast-NONFIN down
 ‘a castle that the scaffolding that was depriving it of its beauty would have recently
 been taken down’ MRE 253
- b. chun an ghoirt úd a mbraithim pé díth sláinte a bhíonn orm
 to the field DEMON C.PRO I-feel whatever lack health.GEN C is on-me
 ag dul ann dom ag scaradh liom le linn é a fhágaint dom
 PROG go into-it to-me PROG separate from-me as it leave-NONFIN to-me
 ‘to that field which I feel whatever ill-health I suffer from as I enter it falling away
 from me as I leave it’ AI 238
- c. Chuartaigh sé uaigh a raibh sé ag déanamh nach raibh sé i bhfad ó
 sought he grave C.PRO WAS he PROG think C.NEG.FIN WAS it long since
 cuireadh corp inti
 put.PAST-IMPERS body in-it
 ‘He sought out a grave that he was thinking that it wasn’t long since a body had been
 put in it.’ CR 86

²The average length of the texts from which material has been drawn is 218 pages; a standard publisher’s measure suggests 350 words per page.

- (6) a. an fear ar fhág sé a thír féin fiche bliain roimis sin ag teiche
 the man_j C.PRO left he_k his_k country REFL.LOG twenty year before that PROG flee
 le n'anam uaidh
 with his-soul from-him_j
 'the man_j that he_k had left his_k own country twenty years before, fleeing for his_k life
 from him_j' SBN1 63
- b. fear gur mheas an uile dhuine des na Fíninibh nár mhair an fear
 man C.PRO thought the every person of the Fenians C.NEG-PAST lived the man
 san ariamh a bhí níba dílse ná é
 DEMON ever C was more loyal than him
 'a man that all the Fenians thought that there had never lived a man who was more
 loyal than him' MSF 117
- c. hata go ligfeadh bligeard sráide fead dá siúlódh bean thairis
 hat C.PRO let-COND blackguard street.GEN whistle if walk-COND woman by-him
 síos sráid mhór an Daingin ag caitheamh a leithéid ar a ceann
 down street main the Dingle PROG wear it's like on her head
 'a hat that a street-tough would whistle if a woman should walk by him down the
 main street of Dingle wearing the like of it on her head' PI 54
- d. rud neamhshaolta a gcaithfeadh do shamhlaíocht bua a bhreith ar
 thing other-wordly C.PRO MUST-COND your imagination victory win-NONFIN ON
 do thuiscint le go gcreidfeá a leithéid a bheith sa saol seo
 your rationality with C believe-CONDS2 its like be-NONFIN in-the world this
 'an other-worldly thing that your imagination would have to overcome your rational-
 ity if you were to believe that the like of it could be in this world' M
 136

Attested island-violating structures like those in (5) and (6) are often very complex syntactically; in (5b), for example, the resumptive binding relation reaches into an adjunct island which is in turn contained within a relative clause island; in (6c) the binding relation reaches into a possessor position within a nominal, which is in turn within an adjunct island, that island itself then contained within a larger adjunct island (a conditional clause).

Nevertheless, such examples are well-attested in the corpus just described – 165 examples in all. As a point of comparison, there are 439 examples in which an \bar{a} -dependency of one kind or the other reaches into an embedded clause which is not an island – as in the three illustrative examples of (7). The first has a subject gap, the second an object gap, and the third a resumptive pronoun.

- (7) a. na fir a d'inis Fionnbhráid damh a tháinig an bealach seo
 the men C.WH tell.PAST to-me C.WH come.PAST the way this

- ‘the men that Fionnbhráid told me had come this way’ SRNF 51
- b. Rúitín a cheap sé a ghortaigh sé.
 ankle C.WH think.PAST he C.WH hurt.PAST he
 ‘It was an ankle that he thought he had injured.’ RNG 260616
- c. an té a gceapann siad go bhfuil airgead aige
 the one C.PRO think-PRES they C be-PRES money at-him
 ‘the one that they think has money’ DGD 216

The relative frequency of such complex structures in our corpus presumably means that speakers find it useful to be able to express the complex properties that they encode. And if relative frequency can stand as a rough proxy for relative usefulness, we can say that the probability that an island example will be pressed into service is 37% of the probability that a biclausal dependency like (7) will be. And it is striking that the island examples are in turn enormously more frequent than examples like (8), which incorporate a dependency which reaches across two clausal boundaries. Of these exactly three examples turn up, by comparison with the 165 island examples:

- (8) an rud is dóigh leat ba mhian léi a dhéanfá
 the thing C.WH likely with-you C.WH desire with-her C.WH DO-CONDS2
 ‘the thing that you think that she would like for you to do’ DPB 12

That is, island examples are 55 times more likely to be deployed than are structures like (8).

And indeed there is no reason that I know of to imagine that our cognitive apparatus has any particular difficulty in creating, grasping or manipulating complex properties like those expressed in (5) and (6) – the property, say, of being an x such that unspecified people had just removed the scaffolding that was marring the beauty of x (see (5a) above). And such complex properties are easily expressible by way of resumptive binding. They are not so easily expressible using a filler-gap dependency, a fact which becomes immediately clear when one tries to render such examples in grammatical English (as I have many times) without reaching for an intrusive resumptive pronoun. Filler-gap dependencies are hobbled by an array of locality and other kinds of restrictions and constraints which have been one of the major foci of work in theoretical syntax since Ross (1967). Such restrictions considerably reduce the expressive capacity of syntactic systems which rely exclusively on the filler-gap mechanism for negotiating \bar{A} -binding relationships. Resumptive dependencies are not similarly restricted.

TWO: TROUBLESOME AMBIGUITIES: Use of the filler-gap mechanism frequently results (in a VSO language) in ambiguity of a supposedly debilitating kind, one in which it is impossible to tell whether the relativization site is the subject or object of a transitive verb. These ambiguities emerge for Irish because it makes no case distinction between non-pronominal subjects and objects. Given then a relative clause consisting of a transitive verb and a single audible nominal,

it is often impossible to tell whether the gap is a subject-gap or an object-gap (see McCloskey (1985), Hoyne (2016)). The examples in (9) illustrate the ambiguity with verbs that select two animate arguments:

- (9) a. *i ndiaidh bhás an tiománaidhe a mharbh an taoiseach*
 after death the driver _{C.WH} killed the chieftain
 ‘after the death of the driver who killed the chieftain’
 ‘after the death of the driver whom the chieftain killed’ IFDT 171
- b. *na daoine a dhíbir Cromail ó thalamh na hÉireann*
 the people _{C.WH} expelled Cromwell from land the _{.GEN} Ireland _{.GEN}
 ‘the people that expelled Cromwell from the land of Ireland’
 ‘the people that Cromwell expelled from the land of Ireland’ AT 18

This troubling and common-place ambiguity has its source in the awkward fact that, by definition, filler-gap dependencies terminate in phonologically empty positions. The corresponding examples involving resumption are of course unambiguous:

- (10) *na daoine ar dhíbir Cromail ó thalamh na hÉireann iad*
 the people _{C.PRO} expelled Cromwell from land the _{.GEN} Ireland _{.GEN} them
 ‘the people whom Cromwell expelled from the land of Ireland’

A language which exclusively used resumptive dependencies in its \bar{A} -binding constructions would not be burdened with potentially troublesome ambiguities like those illustrated in (9). Now of course such subject-object ambiguities are hardly unknown – they are pervasive in the Germanic *v2* languages for example (see Kaan (1996), Bader and Meng (1999) for overviews and references). But that literature has revealed widespread garden-path effects in the event that the expected parse (subject precedes object) turns out not to be the parse actually required. There is a strong processing cost entailed by such confounded expectations – one that would not be paid in the present case if all \bar{A} -dependencies were resumptive dependencies and therefore gave rise to no ambiguity. It has in fact often been claimed that object resumption in Irish serves principally to avoid the kind of ambiguities seen in (9), a claim we return to shortly.

THREE: PROCESSING LOAD: There is an old intuition (one which appears in many versions and in many different theoretical frameworks and contexts) that the processing costs associated with resolving resumptive dependencies are less than, or are in some sense preferable to, the processing costs associated with the resolution of filler-gap dependencies (Givón (1975), Keenan and Comrie (1977), Wanner and Maratsos (1978), Maling and Zaenen (1982), Erteschik-Shir (1992), Hawkins (1994, 1999), Ariel (1999), Alexopoulou and Keller (2007)). One of the most important developments in this area in recent years has been that the ques-

tions that arise in assessing these ideas have been greatly sharpened in the exciting explosion of work on resumption that the last twenty years or so has seen – in the emerging frameworks of experimental syntax and experimental psycholinguistics in particular.

Most of this work (until very recently at any rate) has been concerned with languages in which resumption is taken to be intrusive in the sense already discussed – not part of the competence grammar *sensu strictu*. A result that has emerged with particular clarity for such languages is that use of a resumptive pronoun does not result in full acceptability for the relevant structures, or even in a measurable increase in acceptability by comparison with identical structures involving a gap (Alexopoulou (2006, 2010), Alexopoulou and Keller (2007), Heestand et al. (2009), Clemens et al. (2012), Han et al. (2012)). This finding has sometimes been presented as being surprising or unexpected, though why this is so is unclear to me. To say that resumption is ‘intrusive’ in a given language is exactly to say that the syntax of that language makes no provision for \bar{A} -binding relations which terminate in pronouns. That being the case, we should expect that resumptive structures will be judged unacceptable just like any other class of expressions defined as not fully well-formed by the syntactic system of the language. And this is precisely what is observed.

But what is genuinely striking, of course, is that such expressions, though flawed, are produced and used. That they are usable (and used) is evident from both production studies and corpus studies – Prince (1990), Ariel (1999), Ferreira and Swets (2005), Cann et al. (2005), Bennett (2008), Ackerman et al. (2014), Morgan and Wagers (2015). Now it is in no sense paradoxical *per se* that expressions which are ill-formed to some degree should be used by native speakers. Or at least it is not paradoxical if we adopt the kind of framework for investigation urged by Chomsky since at least the middle 1980’s – one in which the distinction between E-language (a set of productions) and I-language (an internal symbolic system) has a central place (Chomsky (1986)). Within such a conception, our expectation will be that certain expressions which are defined as fully well-formed will be in practice unusable (maybe they involve many degrees of center-embedding or 35 levels of clausal subordination), and equally that certain expressions defined as not fully well-formed will be interpretable and will, for whatever reason, turn out to be useful and usable. This seems to be exactly the situation that we observe in English or Greek or German with regard to resumptive structures.

But such flawed structures would presumably not be pressed into service if they did not provide some value, despite their ill-formedness, either for those who produce them or for those who must comprehend them. There have been various proposals over the years about what that added value might be in the case of resumptive dependencies. Tony Kroch (1981) suggests that resumption emerges in English in response to poor initial planning on the part of producers; Ash Asudeh suggests (2004, 2012) that they are useful because they express the intended meaning and guarantee local (if not global) well-formedness; Beltrama and Xiang (2016) present evidence that resumptive structures, while they do not improve acceptability,

increase comprehensibility by comparison with similar structures containing gaps. And Philip Hofmeister and Elizabeth Norcliffe (2013) argue for a very particular kind of processing advantage linked with resumption. They use the self-paced reading methodology to argue that resumptive pronouns show a measurable processing advantage over gaps – but only in high difficulty contexts. That is, reading times in the region of a resumptive pronoun in English are faster than those measured in the context of a gap – but only if the relevant region is already a region of high difficulty. In this circumstance, resumption is clearly facilitative. Furthermore, resumptive pronouns in such high-difficulty contexts are judged more acceptable than those which occupy less challenging positions. Neither effect, however, is detected in regions where the processing load is low.³ In such contexts the only measurable consequence of using a resumptive element rather than a gap is lowered acceptability. We will return to this finding in the following section and present some additional evidence in its favor.

For now, though, the general conclusion is that there does seem be evidence of an interesting kind for a processing advantage pertaining to resumptive, as opposed to filler-gap, dependencies. So our naive question remains – why isn't every language a resumption-only language?⁴

There has been a note of embarrassment in this discussion – it could well be that it is fruitless, or worse, given our current level of understanding, to even entertain such naive design questions. But the asking perhaps helps to fend off complacency and may encourage us to be appropriately puzzled by the commonplace (in this case the ubiquity of filler-gap dependencies). And, as it turns out, the concerns and observations that have been to the fore here will help frame the discussion of the more tractable questions that follow – how the choice between the two dependency-types works itself out in the production of Irish sentences.

4 INSIDE IRISH

If it is strange that resumption is not more widespread crosslinguistically as a means of building \bar{A} -dependencies, it is all the more strange that, in a language such as Irish which offers its users a choice in the matter, resumption is massively disfavored in usage, when it is in competition with the gap option. I want to document here the extent to which this is true and to consider what the factors are which push producers of Irish utterances towards one choice or the other. In doing this, I will in part be making good on a trail of promissory

³For the purposes of their study, what determines heightened difficulty is length of the dependency – cases in which the dependency must cross a complement clause boundary are difficult; monoclausal dependencies are not.

⁴The only case known to me which might qualify as a 'resumption only language' is Palauan, as described by the late Carol Georgopoulos (1991).

notes scattered through my own earlier work on these topics (McCloskey (1985: 64–65), McCloskey (1990/2011: fn. 41, p. 116) for instance). I have claimed that the grammar of Irish makes available a free choice between resumption and filler-gap dependencies and that the choices actually made reflect performance factors. That is probably correct, but I have to confess that I have been shocked to discover, in looking more closely at the facts, how extreme the prejudice against resumption is.

Consider, to begin with, cases like (11), in which a resumptive pronoun appears in the highest object position of a relative clause.

- (11) a. jab a-r fhág an oiread sin oibrithe é
 job C.PRO.PAST leave.PAST SO many workers it
 ‘a job that so many workers left (it)’ AT 138
- b. na tithe seo nár fhág aon duine fós iad
 the houses DEMON C.NEG-PAST leave.PAST any person yet them
 ‘those houses that no-one had yet abandoned (them)’ LAN 141

66 examples of this type have appeared in my data-base⁵ in the course of the three decades or more during which I have been keeping track. This is barely a third of the number of island-violating cases like (5) or (6) detected in the same period). I have not kept a count of the corresponding set of examples involving gaps in direct object positions. Given their frequency, recording every such example would have been an enormous task. However it is possible to estimate their frequency – by choosing 100 pages at random from among the texts out of which the data-base was constructed, counting the number of unembedded object gaps found in those pages, and then scaling up to the estimated total page-size of the corpus. That process yields a conservative estimate of around 64,000 examples for the filler-gap strategy in the case of unembedded direct objects. Given the uncertainties involved in its calculation, that number is very unlikely to be accurate; but the exercise gives a sense of how enormous the disparity in frequency is between the two patterns.

For more deeply embedded positions, the overall numbers are smaller (the relevant structures being more complex and rarer), but there is also more reason to be confident in the count, since from the start my goal has been to record every example of the relevant types. This effort has yielded 353 examples in which a filler-gap dependency crosses a clause-boundary and terminates in embedded subject or object position (see (7) above). These are positions in which there is again a choice – either a gap or a resumptive pronoun can in principle be used. In fact, there are just 34 examples of the type in (12), in which the pronoun appears:

⁵This count excludes cases in which appearance of the object resumptive is forced by a weak crossover configuration. This issue will be taken up shortly.

- (12) a. na caiple sin a n-abrann sealgairí go mbíonn siad ag léimnigh agus
 the horses DEMON C.PRO SAY-PRES hunters C be-PRES.HABIT they PROG leap and
 ag damhsa
 PROG dance
 ‘those horses that hunters say leap and dance’ SS 238
- b. Chonnaic mé iongantais nach gcreidfeadh fear ar bith go bhfeiceadh sé iad.
 see.PAST I wonders C.NEG.FIN believe-COND man any C see-COND he them
 ‘I have seen wonders that no man would believe that he would see them.’ UMI 216

That is, gaps are favored over pronouns in this context by a margin of of 91.2% to 8.8%.

Why are these patterns as they are? In addressing that question, I want to begin with unembedded object resumptives like those of (11) and with a negative conclusion – arguing that a factor which has been claimed to be central is in fact irrelevant or of marginal importance at most. We have seen (at (9) above) that use of the filler-gap syntax can give rise to ambiguity – it is sometimes unknowable from the form of the relative clause itself whether one is encountering a subject gap or an object gap. (13a) is an additional example – which could have been disambiguated, but was not, by the addition of a single unaccented syllable – the object pronoun seen in (13b).

- (13) a. an t-oifigeach sgannruighthe a tharrtháil mé an oidhche roimhe sin
 the officer frightened C.WH SAVE.PAST I/me the night before that
 ‘the frightened officer that I had saved the night before’
 ‘the frightened officer that had saved me the night before’ FFF 180
- b. an t-oifigeach sgannruighthe a-r tharrtháil mé an oidhche roimhe sin
 the officer frightened C.PRO.PAST SAVE.PAST I/me the night before that
 é
 him
 ‘the frightened officer that I had saved the night before’

It is claimed in some contemporary pedagogical grammars that the principal function served by the object resumptive pattern of (11) is that of avoiding ambiguities like those of (9) and (13a) (Anonymous (1960: §664, p. 336), Mac Giolla Phádraig (1963: 121), Ó Dónaill (2008: 148–149)). But this seems to be incorrect. There are almost as many attested ambiguous examples of this type (there are 51) as there are cases of object resumption itself. Furthermore, of the 66 attested cases of short object resumption, only 10 would be ambiguous if rendered as a filler-gap dependency (as in (13a)). Ambiguity of the type in (9) and (13a) seems, then, to be easily tolerable for speakers. And even if we were to grant that a strategy of ambiguity avoidance is at work in the 10 potentially ambiguous examples in which a pronoun appears, it would

remain true that five times as many examples of the same type in the same corpus remain ‘un-repaired’. And it would remain true that with respect to the prevalence of object resumption, the hypothesis of ambiguity-avoidance can account for at most 15% of our observations (10 out of 66 cases). Overall then, ambiguity-avoidance seems to play at most a very minor role in shaping speaker choices – a conclusion reached independently in a careful recent discussion by Mícheál Hoyne (2016: 65–67).

It turns out moreover that for the ten cases in which ambiguity-avoidance might be thought to play a role, there is another factor which equally well predicts use of the resumptive dependency. Furthermore that factor extends in a natural way to a much larger proportion of the attested examples – 50 out of 66. The factor in question is animacy. Object resumptive pronouns are most frequently attested in the context of an animate head for the relative clause.

The relevant observations are summarized in the table of (14), which provides a breakdown of all attested examples of unembedded object resumptives, with respect to three characteristics – animacy of the head, animacy of the object resumptive (these two linked of course), and animacy of the subject of the relative clause. It distinguishes four types of clause by these criteria, all of which are exemplified in the example blocks that follow ((15)–(18)).

(14)

| | HEAD | RC-SUBJECT | OBJ-RESUM | |
|------------|----------|------------|-----------|---------|
| TYPE ONE | -Animate | -Animate | -Animate | 7 exs. |
| TYPE TWO | -Animate | +Animate | -Animate | 9 exs. |
| TYPE THREE | +Animate | +Animate | +Animate | 21 exs. |
| TYPE FOUR | +Animate | -Animate | +Animate | 29 exs. |

(15) TYPE ONE (7 examples)

- a. Trí rud ná leanfadh aon rath iad
 three thing C.NEG.FIN follow-COND any good-fortune them
 ‘three things that no good fortune would come of (them)’ PF 188

- b. sa tigh go mbuail an buama é
 in-the house C.PRO strike.PAST the bomb it
 ‘in the house that the bomb struck (it)’ PI 169

(16) TYPE TWO (9 examples)

- a. bíonn siad ag gearán faoi rud go dtuigeann tú é
 be-PRES.HABIT they PROG complain about thing C.PRO understand-PRES you it
 ‘they complain about something that you understand (it)’ RNG 100914

- b. i ngoire aon talún a n-itheann an coinín é
 in vicinity any land.GEN C.PRO eat-PRES the rabbit it

- ‘in the vicinity of any land that the rabbit grazes on (it)’ FNF 26
- (17) TYPE THREE (21 examples)
- a. daoine sa cheantar ar mharuigh an t-IRA iad
 people in-the district C.PRO.PAST kill.PAST the IRA them
 ‘people in the district that the IRA had killed (them)’ RNG 120813
- b. cailín ná facaigh an t-ógánach riamh í
 girl C.NEG.FIN see.PAST the young-man ever her
 ‘a girl that the young man had never seen (her)’ TMGB 239
- (18) TYPE FOUR (29 examples)
- a. an té nach gcorródh gol Phádraig é an oíche sin
 the one C.NEG.FIN move-COND weeping Patrick him the night DEMON
 ‘the one that Patrick’s weeping would not move (him) that night’ PI 211
- b. duine ar bhuail brabach éigin é as lá an éisc mhóir
 person C.PRO.PAST strike.PAST profit some him out-of day the fish.GEN great.GEN
 ‘a person that some profit came his way as a consequence of the day of the great catch’ ATDS 72

The verb-type which most favors object resumption is the fourth – the class of verbs which take an inanimate external argument and an animate internal argument – a marked alignment pattern. One sub-class of this type is the class of object experiencer verbs (*satisfy*, *shock*, *frighten* and so on) and these verbs are indeed well-represented in our sample.⁶ However other verb-types which exhibit the crucial alignment-pattern (certain causatives for instance) are also well-represented:

- (19) a. páiste a ndúiseodh drochbhrionglóid as a shuan é
 child C.PRO wake-COND bad-dream out-of his sleep him
 ‘a child that a bad dream would waken (him) from his sleep’ SG 116
- b. an bhean go rúnóch an bhróg a bhí aige í
 the woman C.PRO fit-COND the shoe C.WH be.PAST at-him her
 ‘the woman that the shoe that he had would fit (her)’ SMB 14

But the most striking result here is that 50 out of 66 attested cases of unembedded object

⁶It is striking in this context that Sichel (2014: 666) reports that object experiencer verbs in Modern Hebrew forbid object gaps and require resumption under object relativization. In Hebrew this is a hard grammatical constraint, it seems, whereas in Irish, as we will see shortly, we are dealing with tendencies and preferences. As she notes, however, (fn. 7, p. 666) given the proposals of Landau (2009), such apparent direct objects will in fact be objects of a null preposition, in which case the facts more clearly fall into place.

resumption – 76% of cases – involve animate heads. This pattern reverses the normal distribution, since in general, in the same corpus, just 30.5% of relative clauses have animate heads. It seems, then, that animacy of the head favors deployment of resumptive pronouns in cases of object relativization. Why should this be so?

Given the results reported in Hofmeister and Norcliffe (2013), our expectation will be that resumptive pronouns will be strongly disfavored in positions which are not loci of high processing difficulty, but will be favored (or less dis-favored) in regions of heightened processing difficulty. The crucial observation now is that there is in fact a large and rich literature in experimental psycholinguistics which shows that the combination of animate head with object relativization is problematic for processing and, crucially, rare in production. The effect is plain for the English equivalent of our Type Four verbs (inanimate external arguments and animate internal arguments) and is palpable in the discomfort one feels on encountering English examples like those in (20):

- (20) a. People that these claims shock should get a life.
 b. I haven't met many linguists who this claim surprises.
 c. I've worked with many children who this video has disturbed.

The reality of the effect suggested intuitively by (20) has been demonstrated in many studies and by way of an impressively broad range of methodologies – see, among others, Traxler et al. (2002), Mak et al. (2002, 2006), Gennari and MacDonald (2008, 2009), Lowder and Gordon (2014) and Wagers and Pendleton (2015). Gennari and MacDonald (2008, 2009) in particular present the results of two production studies, two corpus studies and two comprehension studies, all of which demonstrate in various ways that examples like (20) are at low probability in terms of production (in the lab and in the wild) and are difficult to comprehend. Roland et al. (2007) and Wagers and Pendleton (2015) provide additional corpus-based evidence establishing similar conclusions. Lowder and Gordon (2014) confirm the core finding with two studies involving eye-tracking while reading and Wagers and Pendleton (2015) add a new kind of evidence. Focusing on English relative clauses, they show, by way of two self-paced reading experiments using the filled-gap paradigm (Crain and Fodor (1985), Stowe (1986), Lee (2004), Wagers and Phillips (2014)), that animate relative clause heads (but not inanimate relative clause heads) lead the comprehender to expect a gap in subject position – an expectation necessarily confounded in the case of object relatives, with the ultimate result of increased reading times at the relative clause subject.

This finding is fairly well understood as far as parsing is concerned. If processing is in general active, probabilistic and predictive (Frazier (1987), Omaki et al. (2015) among many others), then when a comprehender encounters an animate relative clause head an implicit expectation is induced that a subject gap will be encountered and that it will complete the dependency. This is a reasonable expectation, since to a first approximation, subjects will

be animate and inanimates will be non-subjects (see for instance Hopper and Thompson (1980), Aissen (1999) among many others). However reasonable such an expectation may be in general, though, it is bound to fail in the cases we care about here – animate heads in the context of object relativization. When the expectation founders and recalibration is called for, the processor struggles. Therefore an object gap in a relative clause headed by an animate nominal is inevitably a position of heightened processing pressure. Given the results of Hofmeister and Norcliffe (2013) then, we should expect that position to be relatively hospitable to resumptive pronouns and the observations summarized in table (14) are understandable.⁷

Or at least we expect them if certain structures which are hard to process are also rarely used. It is hardly obvious why processing and production should be linked in this way, but the fact that they are so linked is well established for the effect we are concerned with (Roland et al. (2007), Gennari and MacDonald (2009), Wagers and Pendleton (2015)). This is why the discussion about animacy and object relativization has been at the heart of recent debates about the mechanisms which connect processing and production (see, for one example, Macdonald (2013) and the various commentaries on that article).

This feels like progress, but the account is not yet complete. Our discussion links patterns in the distribution of resumptives in Irish with a certain class of processing difficulties. As far as I know, however, the same processing issues in English do not result in increased use of resumptive pronouns. The typical response to the difficulties of (20) is that the relative clauses are rendered instead as passives, so that the content expressible as (20) is in fact expressed by (21):

- (21) a. People who are shocked by stories like this should get a life.
 b. I haven't met many linguists who are surprised by such claims.
 c. I've worked with many children who have been disturbed by this video.

In the passive structures of (21), animate heads are paired with subject gaps and the problematic pairings are eliminated. It is for this reason that discussions of animacy and object relativization in English have been almost exclusively concerned with issues of voice and argument alignment. And of course it is unsurprising that English speakers would respond as in (21) to the difficulties represented by (20) – in English, resumption is not fully well-formed but passivization is.

⁷A question I must sadly leave open is the question of whether or not the animacy of the relative clause subject is a significant factor here. At the level of intuition, it seems to me that the English examples involving inanimate subjects pose more severe difficulties than those with animate subjects; but this is only an intuition. Similarly, in Irish there are more cases involving resumption in the context of an inanimate subject than in the context of an animate subject – this is the difference between TYPE THREE and TYPE FOUR in table (14). However it's not clear that the numerical difference between the two types is significant, especially in the absence of a baseline (on which see below). A similar uncertainty runs through much of the discussion of the English data.

But the equivalent of (21) is not available to speakers of Irish, because the language lacks a promotional passive of the English type. The functions served by passive in English are for the most part served in Irish by an impersonal inflection on the finite verb (known as the ‘autonomous’ form), which licenses a null impersonal subject but triggers no realignment of grammatical relations (Stenson (1989), Nolan (2006), McCloskey (2007, 2010)):⁸

- (22)a. Gortaíodh anuraidh é.
hurt-PAST.IMPERS last-year him
‘He was hurt last year.’
- b. Cuirfear amárach sa reilg áitiúil í.
bury-FUT.IMPERS tomorrow in-the graveyard local her
‘She will be buried tomorrow in the local graveyard.’

It follows that the ‘repair’ standardly used in English is not available to speakers of Irish. In the face of the processing pressure described earlier, then, the prejudice against resumptive pronouns is overcome.⁹

The analytical logic used here extends to other cases of optional resumption. Dependencies terminating in embedded subject and object positions also tolerate resumptive pronouns (see the discussion around (7) above); such long dependencies are well known to give rise to heightened processing difficulty and so we would expect a degree of tolerance in this context too for the resumptive option. For unembedded objects also, among the 16 (out of 66) attested examples that do not fall under the animacy generalization, five appear either in coordinated or stacked relative clauses, in which the resumptive pronoun is separated from its binder by a substantial linear distance. It is well established that increasing the linear distance between

⁸There are two constructions which show the formal, but not the functional, properties of passive structures and which do involve promotion of the direct object to subject. However these constructions involve the expression of aspect – perfective or progressive – and are in no way semantically equivalent to their non-passive counterparts. See McCloskey (1996) for discussion of the Perfective Passive and Nolan (2006) for more general discussion.

⁹Some of the verbs which in Irish favor resumption in the context of an animate head and object relativization do not passivize in English. See (19b) above.

- (i) a. The beard suits you.
b. These shoes don’t fit me very well.
- (ii) a. *You are suited by the beard.
b. *I’m not fitted very well by these shoes.

The reasoning of the text might then lead one to expect heightened acceptability for examples like (iii) in English:

- (iii) a. Men that full beards suit them are hard to find,
b. The guy that those shoes didn’t fit him very well is really pissed off.

filler and gap strains short-term memory resources and leads to processing pressures.

(23) COORDINATED RELATIVE CLAUSES

- a. scamall dorchadais ... a d'imigh ar an dtoirt agus ar lean
 cloud darkness.GEN C.WH leave.PAST on the moment and C.PRO follow.PAST
 fuarallas é
 cold-sweat it
 'a cloud of darkness that dissipated immediately and which was followed by a cold
 sweat' CPCC 113
- b. carraig a nochtfadh ar trá mhara agus go gclúdódh an lán mara í
 rock C.WH bare-COND on low-tide and C.PRO COVER-COND the high-tide it
 'a rock that would reveal itself at low tide and which would be concealed by the high
 tide' CFOC 31
- c. i ngúna bainise mo mháthar, ar tháinig Neilí air sa tronc
 in dress wedding.GEN my mother.GEN C.PRO.PAST come.PAST Nelly on-it in-the trunk
 agus ar chuir sí i dtaisce dom é blianta roimhe sin
 and C.PRO.PAST put.PAST she in safe-keeping for-me it years before that
 'in the wedding dress of my mother, which Nelly had come across in the trunk and
 which she had kept for me years before' NGTTS 128

(24) STACKED RELATIVE CLAUSES

- ní raibh an t-athrach ba lughá a tháinig ar ghnúis a
 C.NEG-PAST be.PAST the change smallest C.WH come.PAST on face his
 chomráidhe nach dtug sé fá dear é
 comrade C.NEG.FIN take.PAST he under-notice it
 'there wasn't the slightest change that came over the face of his comrade that he
 didn't notice' AM 63

If all of this can be maintained, we are left with a residue of 11 (out of 66) examples in which tolerance of the pronoun cannot be attributed to any processing pressure so far identified.¹⁰

The patterns observed so far can be summarized as in (25):

- (25) ○ When the grammar of Irish seems to offer a choice between using a gap and using a resumptive pronoun, speakers decline the option of using a pronoun by overwhelmingly large margins.
 ○ The extreme prejudice against pronouns is overcome under the kinds of conditions described by Hofmeister and Norcliffe (2013) for resumptive pronouns in

¹⁰Inanimacy (or perhaps non-agentivity) of the relative clause subject seems to play a role in some of these cases, both in Irish and in English. See footnote 7 above.

English – hardly at all under light processing loads, more frequently at points of heightened processing pressure.

- o Even in this circumstance, however, if the embedded subject/object condition is representative, pronouns are used only in about 9% of cases in which they might in principle be used.

At this point the supposed distinction between ‘intrusive resumption’ languages and ‘true resumption’ languages begins to look suspect. If the grammar of Irish simply makes available a free choice between the two options (and this is how the distinction is usually characterized), it is very puzzling that there should be such a dramatic disparity in frequencies of use between the two options. And the ideas I have been relying on here to describe the Irish facts are exactly those used by Hofmeister and Norcliffe (2013) to describe ‘intrusive’ resumption in English. In fact the description of the Irish facts in (25) could well have been (apart from the first bullet point) a description of what it means to be an ‘intrusive resumption’ language.

But there is undeniably SOME difference with respect to resumption which distinguishes the grammar of Irish from the grammar of English. I return to the question of what that difference might be in the next (and final) section. In anticipation of that discussion, though, there are certain other facts which should be highlighted.

The calculations concerning optionality and relative frequency that we have principally been concerned with here so far are simply irrelevant in certain configurations. The list of such configurations is very unsurprising – in positions from which movement (on standard assumptions) is impossible, gaps never appear. So there are, as already reported, 165 examples in our corpus in which an \bar{A} -dependency reaches into an island. In none of those does a filler-gap dependency cross an island-boundary (see (5) and (6) above).¹¹

Although the numbers are much smaller, the same is true for weak crossover configurations – of which there are 15 examples in our corpus, all of them involving resumption:

- (26) a. fear ... ar fhág a bhean é
 man C.PRO.PAST leave.PAST his wife him
 ‘a man that his wife left him’ TC 164
- b. páistí ar thréig a n-athair nó a máthair iad
 children C.PRO.PAST leave.PAST their father or their mother them
 ‘children that their father or their mother abandoned them’ TS 135
- c. fear eile ... ar thóg a thuarastal as an bhochtaineacht é
 man other C.PRO.PAST lift.PAST his salary out-of the poverty him
 ‘another man that his wages lifted him out of poverty’ TD 138

¹¹The same observations hold for what would in the absence of resumption be violations of the coordinate structure constraint. Here too there are no instances of filler-gap dependencies and resumption is the only option. Our corpus yields 20 examples of the relevant type.

- d. fear ... ar lean a mhadra go dtí an tsochraid é
 man C.PRO.PAST follow.PAST his dog to the funeral him
 ‘a man that his dog followed him to the funeral’ DR 98

There is a reason why Tom Wasow in his dissertation (1972) named this effect the ‘weak’ crossover effect – in English at least, it is famously variable and famously hard to detect and measure. Weak it may be, but in Irish it seems to be strong enough to overcome the anti-pronominal prejudice, as we see in (26) and in the absence of corresponding examples containing gaps in direct object position. In every case that would have been a WCO violation had there been movement from object position, the pattern in (26) emerges instead. The ill-formedness of movement in this context is furthermore confirmed by native speaker consultants.¹²

None of this departs from previous accounts and none of it is very surprising – as long as the relevant constraints (island constraints, the coordinate structure constraint, the weak crossover constraint) are part of the grammar of Irish rather than reflections of parsing pressures. It is important to remember that these apparently categorical effects contrast starkly with the preferences we have mostly been concerned with so far. Resumptive pronouns appear only in a small minority of such cases when in competition with gaps. Even when conditions favor object resumptives, for instance, it is easy to find examples in which the facilitative pronoun is not used, as in (27) and (28).¹³

- (27)a. Fear farraige ná scanródh faic
 man sea.GEN C.NEG.FIN frighten-COND anything
 ‘a seaman that wouldn’t be frightened by anything’ GLL 9
- b. scairt chroíúil gáire ná-r fhreagair ach macalla i gciúnas na
 cry hearty laughter.GEN C.NEG-PAST answer.PAST but echo in quiet the.GEN
 reilige
 graveyard.GEN
 ‘a hearty cry of laughter that was answered only by an echo in the silence of the
 graveyard’ SD 96
- (28)a. an sagart a mharaigh na Dúchrónaigh ina dhiaidh sin
 the priest C.WH kill.PAST the Black and Tans after that
 ‘the priest that the Black and Tans subsequently killed’ M 23I
- b. na daoine a dhíbir Cromail ó thithe agus ó thalamh na
 the people C.WH expell.PAST Cromwell from houses and from land the.GEN

¹²Though interestingly with a degree of variability comparable to that observable for English – compare McCloskey (1990/2011: 119–111) with Duffield (1995: 165).

¹³The datum that I would most like to have, but do not have, is a measure of the frequency of examples like (27) and (28) in the corpus discussed here.

- hÉireann
Ireland.GEN
'the people that Cromwell expelled from the houses and land of Ireland' AT 18
- c. fear a thóg mé den bhóthar in aice le Ros Cré
man C.WH lift.PAST I of-the road near Roscrea
'a man that I gave a lift to on the road near Roscrea' SD 3

5 THE THEORETICAL AND TYPOLOGICAL LANDSCAPE

Where does all of this leave us in the task of understanding the crosslinguistic typology of resumption? The clearest conclusion seems to be that a simple distinction between languages in which resumption is grammaticized and languages in which resumption is 'intrusive' hardly does justice to the complexity of the facts, which are much richer and more interesting than this would suggest. The 'grammaticized' resumptive pronouns of Irish seem to be disfavored to the same degree and for the same reasons as the 'intrusive' resumptive pronouns of English, and the factors which work against the anti-pronominal prejudice seem to be similar in the two languages.

And Irish does not seem to be exceptional in this. Similarly complex patterns seem to hold for other 'true resumption' languages. Ariel (1999) presents a corpus-based study of direct object resumption in Hebrew whose results seem to be very close to those reported here for Irish (10% resumption, 90% gaps in unembedded direct object position). Farby et al. (2010), furthermore, report the results of an acceptability study in Hebrew which mirror the frequency results reported here for Irish in the sense that, outside islands, resumptive pronouns are judged less acceptable (by a small but measurable and reproducible margin) than gaps in the same position, particularly for unembedded direct objects. Meltzer-Asscher et al. (2015) confirm and refine the finding.¹⁴ More recently Tucker et al. (2016) report a very complex set of facts for Modern Standard Arabic (based on two acceptability studies); among their clear conclusions however (p. 36) is 'that resumption is dis-preferred in certain long-distance dependencies,' and that 'in certain grammatical corners, a grammaticalized resumption language can behave like an intrusive resumption language in penalizing the presence of a pronoun'.

But there is clearly some relevant difference between the grammar of Irish and the grammar of English. And interestingly, as our brief overview at page 2 above makes clear, those differences center on the category *c*. The complementizer *c.PRO* triggers dependent forms on verbs which appear to its immediate right, the complementizer *c.WH* does not. The com-

¹⁴Inside islands, both studies found that resumptive pronouns were judged more acceptable than gaps, consistent with what has been reported for Irish over many years and consistent with our corpus-based findings here.

plementizer C.WH (but not the complementizer C.PRO) optionally triggers the appearance of WH-forms (so-called ‘relative’ forms) of verbs to its immediate right (as seen in (29)):

- (29)a. an luach a shíleas tú is fiú thú
 the price C.WH think-PRES.WH YOU C.WH-COP.PRES worth you
 ‘the price that you think you are worth’ SILAS 90
- b. an freagra is dóiche a gheobhas tú uaidh
 the answer C.WH-COP.PRES probable C.WH get-FUT.WH you from-him
 ‘the answer that it’s probable you’ll get from him’ CNM 115

Such morphological effects must be linked with whatever properties give rise to the syntax of filler-gap dependencies (successive-cyclicity, island-effects, across the board effects, weak crossover especially), none of which show themselves in clauses headed by C.PRO. All of this is relatively straightforwardly accomplished if we take it that the complementizer C.WH in Irish is defined in part by whatever combination of morphosyntactic features is implicated in the creation of filler-gap dependencies (C.WH is a driver of movement to its specifier position in the theories within which I have mostly worked).

C.PRO shows none of these properties and so must be distinguished from C.WH. It is also distinguished from the default declarative complementizer *go* by the fact that it characteristically appears in \bar{A} -binding structures. In McCloskey (2002) and in ongoing work I have argued that the best way to capture this three-way distinction is as in (30):

- (30)a. c whose specifier is unfilled is realized as *go*.
 b. c whose specifier is filled by way of movement (INTERNAL MERGE) is realized as C.WH.
 c. c whose specifier is filled by EXTERNAL MERGE is realized as C.PRO.

Questions arise about how precisely these proposals should be implemented, but (30), as it stands, is probably sufficient for our present purposes. On the view encapsulated in (30), the connection between choice of C.PRO and use of a resumptive pronoun, is indirect (see also Duffield (1995)); among the elements which can be merged in the specifier of c (triggering appearance of C.PRO) is an element which will often ultimately end up binding a pronoun which it happens to find in its scope. But other possibilities are also open. In particular, certain high-attaching adverbials, such as reason adverbials, may satisfy (30c) in the absence of either movement or resumption:

- (31) Cad chuige a-r éirigh tú as?
 why C.PRO.PAST rise you out-of-it
 ‘Why did you resign?’

In addition, the variable that is critical for semantic well-formedness can be supplied not by

a pronoun but rather by the implicit argument of a relational noun (or a noun which can be coerced relatively easily into a relational interpretation), as seen in (32):

- (32) a. Chuir sé an cheist uirthi a raibh faitíos air roimh an bhfreagra.
 put he the question on-her C.PRO WAS fear on-him before the answer
 ‘He put the question to her that he was afraid of the answer.’ NGTTS 32
- b. obair sheasta aige anois a raibh sé ag déanamh pá mhaith
 work steady at-him now C.PRO WAS he make PROG pay good
 ‘and he now had steady work that he was making good pay’ IM 123
- c. Seo é an fadcheirnín a-r hiarradh ormsa focla na n-amhrán
 this it the LP record C.PRO.PAST ask-IMPERS.PAST ON-me words the.GEN SONGS.GEN
 a scríobh.
 write-NONFIN
 ‘this is the LP that I was asked to write out the words of the songs’ SOH 263
- d. Má bhí fear ann a raibh bean ’e dhíobháil sa teach
 if be.PAST man in-it C.PRO be.PAST woman of need in-the house
 ‘if there was a man that there was a need for a woman in the house’ UAN 19
- e. seanbhallaí loma uaigneacha a bhfuil an t-eidheann agus an caonach ag
 old-walls bare lonely C.PRO be-PRES the ivy and the moss PROG
 fás taobh amuigh agus neantóga taobh istigh
 grow side out and nettles side in
 ‘lonely bare old walls that there’s ivy and moss growing outside and nettles inside’
 CCH 2

Crucially, in such cases the relation between the relative clause head and the variable it binds is not island-sensitive. In (33), the implicit variable associated with the noun *crann* (tree) and bound by the relative clause head *ull* (apples), is contained within a WH-island (a cleft clause):

- (33) faoi anam a raghadh ag priocadh ull nach ina ghairdín
 about soul C.WH GO-COND PROG pick apples C.NEG.FIN-COP.PRES in-his garden
 féin a d’fhás an crann
 self C.WH GROW.PAST the tree
 ‘about a spirit that would go picking apples that it wasn’t in his own garden that the tree grew’
 NBN 162

A crucial consequence of this view is that in a clause headed by C.PRO there is no morphosyntactically visible connection at all between the resumptive pronoun (if there is one) and its ultimate binder; rather, there is a purely semantic relation of variable-binding.¹⁵ This is why

¹⁵This view is at least apparently at odds with much current work on resumption which, on the basis of

resumption is useful (it is not bound by the kinds of locality restrictions that govern syntactic relations like agreement and movement) and it is why it is ordinary – resumptive pronouns are just pronouns that enter into the kinds of semantic and pragmatic interactions that all pronouns enter into.

For our purposes here, a consequence that should be highlighted is that we now expect no difference in status between the resumptive pronouns of English, say, and the resumptive pronouns of Irish. Neither language has in its grammar a paragraph devoted to the topic of resumption.

Their grammars do, of course, differ however in relevant ways: in the inventory of *C*-elements that they possess. In English, all of the complementizers which appear in \bar{A} -binding configurations are elements which force movement into their specifier positions. It follows that for a relative clause which includes a relativization site within an island (or in any position from which movement is impossible) there are no good outcomes. Derivations can either violate the selectional properties of the crucial complementizer, or they can include derivational steps which violate conditions on movement. All outcomes will be ill-formed to one degree or another, depending on the exact calculus by which degrees of ill-formedness for island violations are determined.

Irish will be different. If in a given structure the complementizer *C.PRO* is deployed, movement will be impossible. But basic principles of semantic composition will require that there be a variable within the clause headed by *C.PRO*. That variable may come in the syntactic guise of a pronoun, or it may be found in the implicit variable associated with relational or quasi-relational nouns, as in (32) and (33). On this view, there is no reason to expect any difference in status between English resumptive pronouns and Irish resumptive pronouns. Both should be subject to the prejudice which discriminates against \bar{A} -bound pronouns and both should feel the small amelioration effects identified by Hofmeister and Norcliffe (2013) when they appear in positions or regions associated with heightened processing difficulty. The structures which contain those pronouns, however, will be crucially different in the two languages. An example of unembedded object resumption in Irish (like (34), for instance, repeated from (11) above):

- (34) *jab a-r fhág an oiread sin oibrithe é*
 job C.PRO.PAST leave.PAST so many workers it
 ‘a job that so many workers left it’

AT 138

will be assessed in the following way: it is syntactically and semantically fully well-formed, but in reacting to it, speakers will be aware that because of the anti-pronominal prejudice

evidence from apparent reconstruction effects, assumes that resumptive elements (or some resumptive elements) are derived by movement. See McCloskey (2015) for an overview and for a particularly persuasive case see Sichel (2014).

it should be infrequent (an awareness that their experience of the language will amply bear out), its rarity in this case un-modulated by the kinds of processing effects discussed earlier. The anti-pronominal prejudice, on this view, is a bias influencing the work done by the system of production, one that is finely tuned by the nuances of linguistic experience and finely sensitive to issues of processing pressure. The corresponding English example (the translation of (34)) will be syntactically ill-formed (because it fails to respect the requirements of the complementizer) and will in addition be subject to the same anti-pronominal prejudice as the Irish example.

These of course are quite subtle predictions, but they hardly seem crazy. My own experience with native speaker consultants over the years has been that they will respond to examples like (34) by saying something like: ‘Well you *COULD* say it that way, but you probably wouldn’t.’ It’s not clear to me how that reaction would be transduced into a number on a 7-point acceptability scale, but it may be that this is the kind of effect identified for Hebrew by Meltzer-Asscher et al. (2015) and described in the following terms (p. 71):

gapped versions of the sentences ... received higher ratings than the RP versions even when items were auditorily presented. Although the difference in ratings was small (~ 0.5 points on a 7-point scale) it was consistent and reliable. This suggests that in general gaps and RP’s are both acceptable, but that nonetheless the alternation between gaps and RP’s is not completely free in Hebrew, as there is a slight preference for gaps. Given that in Ariel’s (1999) corpus, 90% of object relative clauses included a gap and only 10% a resumptive, one might have expected a larger difference ...

Morgan and Wagers (2015), by contrast, replicate earlier studies in finding English resumptive pronouns ‘highly unacceptable and nearly uniformly so across varying syntactic contexts’.

6 CONCLUSION

The principal empirical goal of this paper has been to clarify the status of Irish with respect to the contrast between ‘intrusive resumption’ languages and ‘true resumption’ languages. The empirical picture that emerges seems to be very consistent with results that are emerging for other languages thought to be among the ‘true resumption’ languages. The overall picture suggests a more nuanced view of what the difference is between ‘intrusive resumption’ and ‘true resumption’. In making sense of the empirical landscape, issues about the interactions among grammaticality, frequency, production, and processing quickly come to the fore – in subtle and useful ways. The deepest mystery in all of this, though, it seems to me, is why there should be an anti-pronominal prejudice and why it should have such force. This is the question of section 3.

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