Variation in resumption requires violable constraints – a case study in Alemannic relativization[*]

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Variation in dative resumption among and within Alemannic varieties of German strongly favors an Evaluator component that makes use of optimality-theoretic evaluation rather than filters as in the Minimalist Program (MP). At the same time, the variation is restricted to realizational requirements. This supports a model of syntax like the Derivations and Evaluations framework (Broekhuis 2008) that combines a restrictive MP-style Generator with an Evaluator that includes ranked violable (interface) constraints.

Keywords: resumption, Swiss German, variation, evaluator, Reference Set, Candidate Set, dative, constraints, oblique case, relative clauses

1 Introduction

Optimality Theory (OT) and the Minimalist Program (MP) are usually seen as two mutually exclusive models of grammar that differ fundamentally in their architecture. Broekhuis (2008), however, shows convincingly that the similarities are in fact much larger than is normally assumed: Both models contain a Generator which is responsible for the universal properties of language, and both make use of an Evaluator which is responsible for (certain

types of) cross-linguistic variation. While in early MP, variation between languages was solely attributed to the lexicon (differences in feature strength), more recent versions of MP (since Chomsky 2001) also make use of output filters/interface constraints. The difference in the treatment of language variation between OT and MP is thus narrowed down; in many cases it boils down to the question whether the Evaluator takes recourse to output filters or to ranked constraints. Language variation is thus a very important domain to test the validity of a given framework.

In this article I will investigate variation in dative resumption in a number of Alemannic dialects. I will first introduce the basic facts about Swiss German relativization. In section 3 I will explain the distribution of resumptive pronouns as a last resort. Thereafter, I show that resumptive relatives are best analyzed as involving base-generation. Section 5 compares MP and OT-analyses of the basic facts. Section 6 introduces various types of variation which show that an Evaluator with ranked constraints is descriptively as well as explanatorily more adequate than one based on filters. Section 7 concludes the paper.

2   Resumption in Swiss German relative clauses

Swiss German relative clauses are introduced by an invariant complementizer *wo* (*won* before unstressed vowels). There are no relative pronouns as in Standard German (except in certain adverbial relations).[1] In certain grammatical relations, a resumptive pronoun appears instead of a gap. In the default case those resumptives behave like weak personal pronouns and are fronted to the Wackernagel position or are cliticized onto C (or, in case of oblique objects, onto the governing preposition). According to earlier descriptions, the distribution of resumptive pronouns in restrictive local relativization follows the

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[1]   See Salzmann (to appear a, fn. 2) for qualifications.

Accessibility Hierarchy by Keenan & Comrie (1977): Resumptive pronouns are found from the dative object on downwards, but crucially not for subjects and direct objects. This is illustrated by the following examples from the High Alemannic dialect spoken in the canton of Zurich (cf. Weber 1964, Van Riemsdijk 1989):[2]

(1) a) d   Frau,   wo **(*si)** immer z   spaat chunt
         the woman   C   (she)   always too   late   comes
         'the woman who is always late'   (SU: gap)

     b) es Bild,   wo niemert **(*s)** cha   zale
         a picture C   nobody   (it)   can   pay
         'a picture that nobody can afford'   (DO: gap)

     c) de Bueb, wo mer ***(em)**   es Velo versproche händ
         the boy   C   we   (he.DAT)   a   bike promised   have.1PL
         'the boy we promised a bike'   (IO: res.)

     d) d   Frau,   won i von ***(ere)** es Buech überchoo han
         the woman   C   I   from (she)   a   book   got   have.1SG
         'the woman from whom I got a book'   (P-object: res.)

Additionally, resumptive pronouns also occur inside islands, cf. 3.1 below.

3 Resumption as a last resort

Languages that employ resumptive pronouns come in at least two types: In some, e.g. Irish, certain Italian dialects, Hebrew etc. (e.g. McCloskey 1990, Bianchi 2004), resumptive and gap relatives exist side by side, at least in certain

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[2] For the transcription see Salzmann (2006: 320, fn. 259). Long-distance relativization, where resumptive pronouns appear across the board, can be argued to instantiate a different construction, cf. Salzmann (2006, chapter 4.9), van Riemsdijk (2008). For possessor relativization, cf. Salzmann (to appear b). Free relatives require *wh*-relative pronouns that leave gaps, cf. van Riemsdijk (1989). Appositive relatives behave like restrictive relatives with respect to resumption, except for the indirect object. Resumptive pronouns also occur in comparatives, cf. Salzmann (2006), but not, or at least not systematically, in topicalization and wh-movement, cf. Salzmann (2006: 376: fn. 297) and Salzmann (to appear b, section 4) for details.

positions. In other words, resumptive pronouns represent a strategy that is in principle freely available. In others, resumptive pronouns only come into play when gap derivations fail (e.g. Shlonsky 1992, Pesetsky 1998, Rouveret 2008). I would like to argue that Swiss German belongs to the second group. Strong evidence for this position comes from the complementary distribution between gaps and resumptive pronouns. Whenever a gap is possible, a resumptive pronoun is not, and vice versa (as we will see in section 6 below, things are more complex with datives). The occurrence of resumptive pronouns can be related to two different grammatical constraints: locality and the realization of oblique case.

3.1   Resumptive pronouns amnesty locality violations

Resumptive pronouns also occur in positions from where extraction is impossible. This is illustrated by the following pair contrasting wh-extraction with relativization of a DO from a temporal adjunct clause (Salzmann 2006: 331, Salzmann to appear b; islands are henceforth enclosed in angled brackets):[3]

(2) a)   de Sänger, won i mi fröi,   <wänn i ***(en)** gsee>
          the singer   C   I me be.happy.1SG when I him   see.1SG
          'the singer such that I am happy when I see him'

   b) * [Wele Sänger]₁ fröisch   di, < wänn t __₁/en gseesch >?
        which singer   be.happy.2SG you   when you him see.2SG
        lit.: 'Which singer are you happy when you see?'

Resumptive pronouns thus occur to prevent a locality violation. This immediately accounts for resumptive pronouns after prepositions as in (1d) since

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[3]   The *wh*-extraction does not improve with resumption. In Salzmann (to appear b, section 4), I have linked this to the fact that *wh*-operators (as apposed to silent relative operators, cf. section 4.2) are case-marked and therefore cannot be base-generated in the operator position. If they were, their case-feature could not be checked, and the derivation would crash. Since resumption is analyzed as base-generation here (cf. section 4), there is no possibility for resumption under (regular) *wh*-movement.

complement PPs form strong islands in German and its varieties, as shown by example (3): The PP *vo wem* cannot be extracted from the PP introduced by *a* 'at'.

(3)   * [Vo wem]$_1$ häsch   < a d Schwöschter __$_1$ > tänkt?
         of   who.DAT have.2SG   at the sister   thought
         lit.: 'Who did think of the sister of?'

This interpretation of the facts is strengthened by the observation that the same obtains when non-individual denoting types are relativized. In the following pair, a predicate is relativized on; in (4a) it originates in a transparent position, in (4b) it originates within a PP (i.e. within an island). While resumption is impossible in the first example, it is obligatory in the second (Salzmann 2006):

(4) a)   Er isch de **gliich Idiot**, wo scho   sin Vatter **(*das)** gsii   isch.
           he is   the same   idiot   C   already his father that   been is
           'He is the same idiot his father already was.'

     b)   Isch de Hans würkli de **Trottel**, won en   all ***(de)**füür   haltet?
           is   the John really the idiot   C   him all   there.for hold
           'Is John really the idiot everyone regards him as?' [4]

Importantly, amnestying a locality violation is not to be understood in a processing sense: Relative clauses with resumptive pronouns inside islands are perfectly natural in Swiss German and do not have a repair flavor like intrusive pronouns in English, cf. Chao & Sells (1983).

3.2   Dative resumptive pronouns realize oblique case

Dative resumptive pronouns cannot be related to locality since they occur in positions from where extraction is readily possible:

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[4]   In the b-example the resumptive pronoun is an R-pronoun, the pronominal part of a pronominal adverb. Pronominal adverbs occur when prepositions take an inanimate pronominal complement (cf. Salzmann 2006: 325f. for details). This extends to resumption. In the present case, the resuming element for a predicate would be *das*, which is turned into *de-*.

(5)   [Welem   Maa]₁ häsch   __₁ es Buech ggëë?
         which.DAT man   have.2s   a   book   given?
         'To which man did you give a book?'

Instead, the occurrence of dative resumptive pronouns can be related to a language-internal constraint that requires the overt realization of oblique case: As in Standard German (cf. Bayer et al. 2001), dative, the only oblique case in the Swiss German case system (genitive has been lost), requires special morphological licensing. Bayer et al. (2001) discuss a number of contexts two of which I will repeat here: First, complement clauses cannot directly fill the slot of a dative argument (Bayer et al. 2001: 471):

(6) a) Wir bestritten,(die   Behauptung)[dass wir verreisen   wollten].
         we denied   the.ACC claim   that we travel.away wanted
         'We denied that we wanted to go away.'

     b) Wir widersprachen * (der   Behauptung), [dass wir … wollten].
         we objected   the.DAT claim   that we … wanted
         'We rejected the allegation that we wanted to go away.'

Since CPs cannot realize morphological case in German, a DP has to be inserted to rescue example (6b). The non-oblique (i.e. direct) cases nominative and accusative do not require this extra licensing, a DP realizing such a case is therefore optional (6a). Second, Topic Drop is possible with nominative (subjects) and accusative (direct objects), but not with datives, cf. Bayer et al. (2001: 489):

(7) a) [_acc_] Hab' ich schon gesehen. b)* [_dat_] Würde ich nicht vertrauen.
              have I   already seen   would I   not   trust
              'I have already seen (it).'   'I wouldn't trust (him).'

The fact that the dative also stands out in Swiss German relativization is simply a consequence of the constraint that requires overt realization of oblique case. The fact that there are no resumptive pronouns for subjects and direct objects

follows automatically: They are realized by non-oblique cases which do not require any special morphological licensing.[5]

The direct/oblique-split in resumption is by no means exotic. It is found in a number of languages in the sample of Keenan & Comrie (1977: 93). Toman (1998: 305) reports the same pattern for colloquial Czech and Alexopoulou (2006: 63) for restrictive relatives in Greek.[6]

4   Resumption in Swiss German as Base-Generation

4.1   Movement or Base-generation?

While gap relatives can straightforwardly be analyzed as involving movement, the analysis of resumptive relatives is less straightforward. While the literature up to the 1990's took a base-generation analysis for granted, more recent contributions such as e.g. Pesetsky (1998), Aoun et al. (2001), Boeckx (2003), and Bianchi (2004) have argued in favor of a movement analysis of resumption.

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[5]   Matching effects (Salzmann 2006: 348ff.; Salzmann to appear a: section 5.4; Salzmann & Seiler in prep.) provide additional evidence that resumption is related to the realization of oblique case. Problems with Bayer et al's generalization and other strategies to realize oblique case in German varieties are discussed in Salzmann (to appear a, fn. 8/9).

[6]   There have been alternative – syntactic – proposals to explain resumptive pronouns for oblique cases most of which attempt to unify them with resumptive pronouns after prepositions. Some (e.g. Boeckx 2003, Bianchi 2004) have linked them to inherent case. As discussed in Salzmann (2006: 373; Salzmann to appear a: section 4.1.3), this does not work for Swiss German because datives require resumptive pronouns irrespective of whether they are structural or inherent. Furthermore, inherent accusatives do not require resumptive pronouns. What is important in Swiss German is thus the morphological notion „oblique case". Van Riemsdijk (1989) argues that datives are in fact PPs so that dropping the resumptive pronoun would violate recoverability. See Salzmann (2006: 369ff.) and Salzmann (to appear a: section 4.1.3) for evidence that dative resumptive pronouns cannot be reanalyzed as PPs. The variation facts to be introduced in section 6 clearly show that datives require a separate explanation and cannot be subsumed under the explanation for PPs.

Any analysis of resumption is normally confronted with the following paradox: Resumptive constructions do not obey locality constraints,[7] but at the same time pass certain movement diagnostics such as Strong Crossover (SCO) and reconstruction.[8] If one adopts a movement analysis, one will need a special explanation for the absence of locality effects; on the other hand, a base-generation analysis will need a new mechanism to account for movement effects like reconstruction and SCO. Aoun et al. (2001) have argued that this paradox does not obtain in Lebanese Arabic, where reconstruction patterns with locality: Reconstruction is only observed if the resumptive pronoun is located in a position from where movement would in principle be possible. When resumptive pronouns occupy positions from where extraction is impossible, there is no reconstruction. Such a state of affairs argues for a movement analysis in the first case and a base-generation analysis in the second (see Bianchi 2004 for a similar argument). However, reconstruction effects do not always pattern with locality. Guilliot & Malkawi (2006) and Guilliot (2007) have shown that reconstruction into islands is possible in Jordanian Arabic and French, respectively. At least for such languages, the paradox remains.

The same holds for Swiss German: Reconstruction and SCO effects systematically obtain in resumptive relatives, and reconstruction into islands is possible as well. Here are a few examples with resumptive pronouns inside strong islands, i.e. PPs some of which are embedded in another island (for more data cf. Salzmann 2006, to appear b). (8a/b) illustrate reconstruction, (8c) is an example of SCO. Of course, examples like (8b/c) are very complex and difficult

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[7]   This is not correct for all languages. In some, resumptive constructions are sensitive to locality, cf. e.g. Boeckx (2003: 108ff.) for Swedish and Vata, Goodluck and Stojanovic (1996) for Serbo-Croatian, and Rouveret (2008) for Welsh. For those, a movement analysis, or at least an analysis in terms of Agree, seems preferable.

[8]   For Strong Crossover cf. McCloskey (1990) and Shlonsky (1992); for reconstruction see e.g. Aoun et al. (2001), Bianchi (2004), Guilliot & Malkawi (2006), Guilliot (2007), and Rouveret (2008).

to process. However, their (potential) degradedness cannot be related to locality since (8a), where reconstruction is readily available, also constitutes a strong island (the external head is enclosed in square brackets; the reconstruction site is indicated by means of underline).

(8) a) D [Ziit vo **sim$_i$** Läbe], wo **niemert$_i$** gern **dr**über redt,
the time of his life C nobody likes.to there.about talks
isch d Pubertät.
is the puberty
'The time of his$_i$ life that nobody$_i$ likes to talk about is puberty.'

b) de [Abschnitt vo **sim$_i$** Läbe], won i < d Behauptig,
the period of his life C I the claim
dass **jede Politiker$_i$** stolz **dr**uf isch > nöd cha glaube
that every politician proud there.on is not can.1SG believe
lit.: 'the period of his$_i$ life that I cannot believe the claim that every
politician$_i$ is proud of'

c)* de [**Bueb**]$_i$, won **er$_i$** für en Fründ vo **im$_i$** es Auto gschtole hät
the boy C he for for friend of him a car stolen has
lit.: 'the boy$_i$ who$_i$ he$_i$ stole a car for a friend of' (SCO)

I will adopt a base-generation approach here, not because it easily solves the paradox, but rather because it is eventually confronted with fewer difficulties: On a descriptive level, locality is quite well understood: Movement operations are subject to certain constraints no matter how they are captured theoretically. With reconstruction, things are much less clear. Reconstruction is also found in constructions without a direct movement relationship between the reconstructee and the reconstruction site. This holds e.g. generally for relative clauses (unless a Raising analysis is adopted) and pseudoclefts (den Dikken et al. 2000: 42):

(9) What **nobody$_i$** bought was a picture of **his$_i$** house.

Nobody and the bound pronoun *his* are not part of the same clause and there is no obvious movement relationship that could reconstruct *nobody* into the same

clause as *his* (see den Dikken 2006, section 6 for an overview over possible analyses).

Furthermore, certain instances of scope reconstruction in relative clauses cannot be explained by reconstruction, cf. e.g. Sharvit (1999), Cecchetto (2005), Hulsey & Sauerland (2006):

(10)   The woman every man$_i$ loves is his$_i$ mother.

The multiple-individual reading (a different woman for every man) cannot result from reconstructing the external head of the relative since the QP binds a pronoun in the matrix clause. Rather, some other mechanism is necessary. This could be QR of the QP (Hulsey & Sauerland 2006) or an analysis in terms of indirect binding (Sharvit 1999, Cecchetto 2005). But once such mechanisms are necessary anyway and thus in principle available, reconstruction is no longer needed to account for reconstruction for variable binding and scope.[9]

The parallel between movement and reconstruction is thus obviously not perfect so that alternative mechanisms are necessary anyway. Before I turn to these and lay out how they account for the movement effects, I briefly need to sketch my assumptions about base-generation. [10]

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[9] See also Cecchetto (2005) for convincing arguments that reconstruction in relative clauses should generally not be accounted for in terms of the copy theory of movement.

[10] The test case to tell apart movement and base-generation would involve reconstruction into intermediate positions. Such interpretations would be unexpected under base-generation since the reconstructee (i.e. the external head) would not be related to such a position. The reconstruction mechanisms for base-generation discussed below lead to reconstruction to the tail of the A'-dependency since the external head is only related to the resumptive (mediated by the operator). With successive-cyclic movement, on the other hand, reconstruction into intermediate positions is expected to obtain. I discussed a number of cases in Salzmann (2006: 341–345), but the results are not clear enough to derive any conclusions from them. The problem is more general in that reconstruction into intermediate positions is generally degraded in German and its varieties, cf. Salzmann (2006: 92ff.). For resumption in other languages, it has sometimes been claimed that cyclicity effects disappear, i.e. reconstruction is always to the tail of the A'-dependency, cf. Rouveret (2008: 186) for Welsh.

4.2 The syntax of base-generation

I will make very few assumptions about base-generation: As in traditional analyses, an operator base-generated in an operator position binds a pronoun in an argument position. As a consequence, this operator must not have a case-feature that needs to be checked. I therefore propose that such an operator is not case-marked and only has an [Op] feature that is checked against the corresponding uninterpretable feature on C. When a case-marked operator is chosen, a movement derivation will result because it can check both the case feature of v/T and the [Op] feature of C. The two possibilities schematically look as follows:

(11) a) $[_{CP}$ Op$_i$ C $[_{vP}$ $[_{vP}$ pron$_i$ V] v]]   base-generation
          [~~Op~~]   [~~case~~]

b) $[_{CP}$ Op   C $[_{vP}$ $[_{vP}$ ~~Op~~ V] v]]   movement
          [~~Op/case~~]   [Op/~~case~~]

4.3 Accounting for movement effects under base-generation

To my knowledge, there are basically two types of mechanisms that have been explored to handle movement effects for base-generated dependencies: semantic reconstruction (cf. Sternefeld 2000 for an overview) and the NP-ellipsis analysis of resumptive pronouns (Guilliot & Malkawi 2006, and Rouveret 2008). In the latter, the resumptive is reanalyzed as a transitive determiner whose NP-complement has been elided under identity with an antecedent (PF-deletion is henceforth indicated by means of outline): $[_{DP}$ D $\mathbb{NP}]$. This would give the following schematic representation for an example like (8a) (strikethrough indicates LF-deletion; since only NP-parts are LF-deleted, no problems arise for thematic interpretation; English words are used for ease of presentation):

(12)   the [~~time of his$_i$ life~~] [[Op ~~time of his$_i$ life~~] C nobody$_i$ likes to about
        $[_{DP}$ it $[_{NP}$ 𝕥𝕚𝕞𝕖 𝕠𝕗 𝕙𝕚𝕤$_i$ 𝕝𝕚𝕗𝕖]] talk]

Importantly, this only works in the present context if the Matching Analysis of relative clauses is adopted as e.g. in Salzmann (2006, to appear b), where the relative operator is just a D-element taking an NP complement which is elided under identity with the external head. Reconstruction effects are thus not per se a problem for a base-generation analysis.

The same holds for SCO effects; they could also be handled by means of the NP-ellipsis theory of resumptives: In examples like (8c), the resumptive *im* would have *Bueb* 'boy' as its NP complement. As it would end up in the c-command domain of the co-indexed *er* 'he', the sentence is out due to a violation of Principle C, as under a movement derivation. More traditional approaches like McCloskey (1990) and Shlonsky (1992) define SCO on the basis of the A'-chain linking the operator with the resumptive pronoun. An SCO effect in an example like (8c) would then be due to the fact that the chain between the base-generated operator and the resumptive crosses a pronoun with the same index (again, I use English words for ease of presentation):

(13)   * the boy$_i$, **Op$_i$** C **he$_i$** for a friend of **him$_i$** a car has stolen

I will therefore adopt a base-generation approach.[11] For detailed discussion of the problems that arise with a movement account, cf. Salzmann (to appear b).

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[11] Cf. van Riemsdijk (1989) for an earlier proposal in terms of base-generation. Apart from many technical differences largely due to the development of syntactic theory over the last twenty years, there is one point where I crucially differ from van Riemsdijk: Van Riemsdijk proposes that SU- and DO-relatives also involve resumptive pronouns, which, however, are fronted and then undergo deletion. In Salzmann (to appear a: section 4.2.1) I have rejected such an analysis among others because gap relatives allow scope reconstruction much more readily than resumptive relatives. This is unexpected if the difference between gap and resumptive relatives is only a matter of PF.
Furthermore: Relatives where non-individual-denoting types like predicates or amounts are relativized, e.g. cases like (4a), cannot be analyzed as involving fronting and deletion of a weak pronoun: The only potential proform that could be used in such a case, *das* 'that', is arguably not weak enough to front and undergo deletion. In amount relativization there is no proper proform at all so that a movement analysis is the only option for those. But if

5   Implementation – comparing OT and MP

In this section, I will sketch the basic derivations for the three contexts *islands, datives, and subjects/direct objects* both in an OT and in an MP framework.

5.1   Scenario 1: islands

I have argued above that in island contexts, the resumptive derivation is a last resort since the gap derivation fails. This translates differently into OT/MP: In MP, the movement derivation crashes since it violates a derivational locality constraint. Only the base-generation derivation converges and thus emerges as the only grammatical variant. In OT, both derivations compete with each other, i.e. belong to the same Candidate set (see 5.5 on the definition of the Candidate Set). Grammaticality is thus not the result of convergence of just one candidate, but rather of its optimality. In the case at hand, the resumptive candidate wins because it satisfies a higher-ranking constraint than the gap candidate. The following two constraints are relevant for the case at hand:[12]

(14) a)   LOCALITY: Movement must not cross islands

   b)   *RES: Resumptive Pronouns are prohibited (cf. Müller & Sternefeld
                                                              2001: 41)

(14a) is a gross simplification, of course. The concept of island used here is best understood in the sense of the generalized adjunct condition (cf. e.g. Boeckx 2003). The distinction between weak and strong islands will be ignored for ease of presentation.

(14b) penalizes resumption. *RES is a constraint that simply penalizes resumption, which in the case at hand amounts to penalizing base-generation. It

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movement is necessary anyway, there is good reason to assume movement for SU- and DO-relatives as well.

[12] OT-constraints will henceforth appear in small capitals, MP-constraints only with capitalized initials.

is thus different from SILENTTRACE by Pesetsky (1998) where resumptives are viewed as the phonetic realization of traces. For obvious reasons SILENTTRACE cannot easily be extended to base-generation. Furthermore, the possessor relativization facts discussed in Salzmann (to appear b) show that what is crucial is not just a ban against variables with phonetic content, but against resumption/base-generation per se as there are also silent resumptive pronouns (cf. also, e.g., Georgopoulos 1985 and McCloskey 1990 for evidence for silent resumptives). This automatically implies that reference to the Avoid Pronoun Principle (as in Chomsky 1982: 63f., van Riemsdijk 1989, Heck & Müller 2000: 44) is also undesirable since that constraint just prefers silent over overt pronouns rather than penalizing resumption/base-generation per se.[13] *RES is thus not a classical representational economy constraint. In fact, there is clear evidence that it should be set apart from structural economy: Resumptive pronouns are unmarked in many languages of the world (treating them as marked with respect to movement is the result of a eurocentric, standard language-based perspective) and often constitute the first relativization strategy acquired by children (cf. Goodluck & Stojanovic 1996). For pronouns, on the other hand, one can formulate universal hierarchies (e.g. from stressed to zero) that are relevant in some way in every language. Additionally, resumptive pronouns are themselves subject to structural economy constraints. Depending on the context they can appear as full, weak, clitic or zero pronouns (cf. Salzmann, to appear b). Whether movement or resumption is the default or whether both strategies are equally economical is determined by the relative ranking of *RES with respect to STAY/*MOVE (the first type of language

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[13] In fact, footnote 31 in Müller & Sternefeld (2001: 60) suggests that this is also how they interpret their constraint RES. I would like to stress, therefore, that my interpretation is crucially different: The constraint *RES simply penalizes resumptives/base-generation. It is for this reason that I write *RES instead of RES.

mentioned in 3 suggests we are dealing with a tie). For the Alemannic varieties we can assume the ranking *RES >> STAY (they thus belong to the second group mentioned in 3). For ease of exposition I will omit STAY in the tableaux.[14]

Given that in an island context only the base-generation derivation is possible, satisfying LOCALITY is obviously more important than avoiding resumptive pronouns. This follows if LOCALITY outranks *RES:

(15) Island context

			LOCALITY	*RES
☞	a.	Base-generation		*
	b.	Movement	*!	

Given the two constraints one expects there to be languages with the reverse ranking *RES >> LOCALITY; this would basically mean that these languages could freely violate locality constraints (only, of course, if the constraint requiring checking outranks LOCALITY). Such languages are, however, not attested. See section 6.3 for a solution to this problem.

Another question that arises in this context concerns languages like Standard German or Dutch which do not seem to have any options in an island context. A violation of locality is not tolerated, and neither is a violation of *RES, as these languages cannot make use of resumptive pronouns. In other words, this is a case of absolute ungrammaticality/ineffability. There are various ways of handling absolute ungrammaticality within Optimality Theory, cf. e.g. Müller (2000: 82ff.) and Müller & Sternefeld (2001: 48ff.). Given the conclusions to be

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[14] Légendre et al. (1998) use the faithfulness constraint FILL that disfavors epenthesis to penalize resumptives. As I will argue for an input-free definition of the Reference Set in 5.5 below and will generally dispense with faithfulness constraints, this is not an option. The issues touched upon in this paragraph are discussed in detail in Salzmann (to appear c) where it is attempted to subsume the ban against resumption/base-generation under more primitive notions such as the ban against external Merge.

reached in 6.3 about the architecture of grammar, I favor a solution where the Generator simply cannot generate any candidates in that context.[15]

5.2 Scenario 2: datives

Datives work similarly: In MP, only the resumptive derivation converges. The gap derivation violates a PF-constraint/filter requiring the realization of oblique case, which I will term RealizeObl. As shown in (6)–(7), such a constraint is independently necessary. Importantly, in MP violation of RealizeObl will lead to ungrammaticality. The corresponding OT-constraint only differs from it in that it is violable:

(16)   REALIZEOBL: Oblique case must be phonetically realized

REALIZEOBL outranks *RES so that we get resumption for datives:

(17) Dative relatives

		REALIZEOBL	*RES
☞ a.	Base-generation		*
b.	Movement	*!	

OT-accounts dealing with the left-periphery of relative clauses such as Pesetsky (1998) and Broekhuis & Dekkers (2000) assume that the syntactic basis of restrictive relative clauses universally involves an overt relative pronoun + an overt complementizer both of which can be subject to deletion. Under such

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[15] In Salzmann (to appear b) I relate the possibility of resumption to the presence of case-unmarked operators in a given language (cf. Merchant 2004 for a similar view). In Salzmann (to appear c) I additionally explore the possibility that there *are* options in island contexts for languages like Dutch/Standard German, namely what I called resumptive prolepsis in Salzmann (2006): Simplifying somewhat, instead of direct movement from an embedded clause, the dependency between operator and theta-position is established indirectly via short A'-movement in the matrix clause and binding:

i)   [Von wem_i]$_j$ glaubst du __$_j$, dass Maria jedes Buch mag, das er_i hat?
      of   who   believe you   that   Mary every book likes that he   has
      lit.: Who do you think that Mary likes every book that has?'

premises, the question arises why oblique case cannot be realized by a relative pronoun in Spec, CP in Alemannic relatives. One cannot say that there simply is a silent relative operator. Rather, the absence of overt relative pronouns should follow from constraint interaction; or to put it differently: The inventory of relative elements is the result of evaluation and not just simply given by the lexicon. As suggested to me by Hans Broekhuis (p.c.), one possibility involves the constraint LE(CP), which favors CPs whose first element is an overt complementizer. If this constraint dominates REALIZEOBL, the possibility of realizing oblique case in Spec, CP is ruled out. Other things being equal, this basically implies that there are never overt relative pronouns in Alemannic dialects. RECOVERABILITY, which outranks LE (CP), is arguably only an issue for datives and PPs. Due to the high ranking of LE(CP) and the low ranking of *RES, recoverability is satisfied by means of resumption in these varieties.[16]

5.3 Scenario 3: subjects/direct objects

Intuitively, gap derivations are preferred over resumptive derivations in this context because they are more economical. It is, however, not trivial to capture

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[16] I remain somewhat skeptical as to the necessity of such a step. First, positing relative pronoun + complementizer as the universal basis for relative CPs is blatantly eurocentric; given that relative pronouns are a phenomenon of standard languages, but are typologically less common than other relativization strategies, this seems an undesirable move. Second, from the point of view of language acquisition, positing overt relative pronouns which are always deleted on the way to the surface would arguably be problematic. According to Broekhuis & Dekkers (2000: 399f.) the possibility of deleting a relative pronoun depends on whether it is meaningful, i.e. whether it has marked features. For Alemannic dialects, this would imply that relative pronouns never contain any meaningful (marked) features so that they can always be deleted. But this is probably just a very indirect way of saying that the dialects in question simply have silent relative operators without any features that require phonetic realization. Positing empty operators thus arguably derives at least as good a result as abstract but never surfacing relative pronouns like the *that* used in Broekhuis & Dekkers (2000: 403). The data discussed in Broekhuis & Dekkers (2000: 415ff.) may in fact provide evidence in favor of silent operators after all.

Eventually, the issue depends on how empty elements are handled in syntax. If they are invariably the result of a deletion operation, as is assumed in much work on OT-syntax, an approach as sketched in the main text is inevitable.

this theoretically, at least not in MP terms. This is why I start with the OT evaluation: As discussed in 5.1, the ban against resumption should be set apart from pure structural economy. In a context where no constraint requires overt realization, a resumptive derivation will violate *RES while the gap derivation does not and thus emerges as optimal (recall from 5.1 that *RES also dominates STAY; the intuition about movement being more economical is thus only expressed by the ranking *RES >> STAY, as there is no connection with structural economy):

(18) Relativization of subjects/direct objects [17]

		REALIZEOBL	*RES
	a. Base-generation		*!
☞	b. Movement		

It is very difficult to find a good MP-constraint for this scenario. Since both the movement and the base-generation derivation converge, one would need an Economy constraint to select one of the two as the grammatical one. While the notion of Economy has played an important role in the development of the Minimalist Program, there does not seem to be a well-established constraint one could use for the case at hand. The only related constraint that has been proposed within the P&P tradition is the Avoid Pronoun Principle. As discussed in 5.1, it cannot be easily extended to relativization because the choice is strictly speaking not between overt and null pronoun but simply between movement and base-generation, i.e. it is not a case for structural economy.[18] For present

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[17] Relativization of predicates in transparent positions as in (4a) works the same.

[18] Aoun et al. (2001) argue that base-generation is less economical than movement because it involves more operations, i.e. because it involves greater derivational complexity. Apart from the fact that there has been a strong tendency in recent years to do without transderivational economy constraints (cf. Müller & Sternefeld 2001), it is far from obvious that such a constraint would work for the implementation of base-generation proposed here. Aoun et al. (2001) propose a very different implementation of base-

purposes, I will simply use an MP equivalent of *R$_{ES}$, i.e. *Res. This constraint compares two PF-representations of converging derivations (i.e. it is a translocal constraint). In the case at hand it selects the one without resumptive pronoun.[19]

5.4 Location of the constraints and last resort

The previous sections have shown that MP and OT locate the relevant constraints in different parts of the grammar. In OT, all constraints are part of the Evaluator and are equally violable. In MP, however, we have a derivational constraint (Locality),[20] a representational constraint (RealizeObl) and a translocal constraint (*Res). The first two are inviolable, the third one only comes into play when there is competition, i.e. when there are several converging derivations in the same Reference Set.

Similarly, the notion of last resort is captured in very different ways. In OT, last resort simply means that a certain candidate is selected because it has a better constraint profile than the other ones. In other words, last resort is a relative concept. In MP, it depends on the configuration. For islands and datives, last resort means that the resumptive derivation is the only one that converges, i.e. last resort is an absolute notion. For subject/direct object relativization,

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generation a full discussion of which is beyond the scope of this paper. See Salzmann (to appear b,c) for arguments against Aoun et al.'s (2001) approach.

[19] Under the assumption that this economy constraint – like other MP-constraints – is essentially universal, one arrives at the prediction that resumption is universally more marked than movement. Given the arguments in 5.1 that resumption is just as unmarked as movement, this is highly undesirable and points out a serious weakness of the MP-constraint system. The same applies to the approach by Aoun et al. (2001) in terms of derivational economy. Economy constraints in the MP fail to adequately address the fact that languages simply differ as to whether movement or base-generation is the default or whether there is a free choice between the two (in certain environments) as in Irish or Hebrew. This kind of language variation is completely unexpected under such an approach. In Salzmann (to appear c) these issues are discussed in detail.

[20] On a more representational MP-approach, Locality could, of course, also be a representational constraint.

however, it is a relative one because there are competing derivations of which the one that satisfies *Res is chosen as the more economical option.

An OT approach thus handles all cases consistently while in the MP the three cases are essentially given a somewhat different explanation. The implications of this will be discussed in 6.3.

5.5   Definition of the Reference Set/Candidate Set

For the present analysis to work, base-generation has to compete with movement. In OT, this holds for all three contexts, in MP, this only holds for the SU/DO case. This has far-reaching consequences for the definition of the Candidate Set (CS)/Reference Set (RS), i.e. the set of derivations/representations that compete with each other: The definition of the RS/CS is by no means trivial and there is to date no generally accepted definition. While it is still often assumed that the RS/CS is determined by the numeration, the set of lexical items used for a derivation, I believe that there are good reasons not to do so, as pointed out in Sternefeld (1997), Broekhuis and Dekkers (2000), Heck et al. (2002), and Broekhuis and Klooster (2007). In the case at hand, basing the CS/RS on the numeration would not work since movement and base-generation structures arguably involve different numerations (pace Aoun et al. 2001, cf. Salzmann to appear b,c). Rather, the Swiss German facts suggest that the CS/RS should be based on the same LF.

At LF, a movement and a base-generation derivation will look very similar: Intermediate copies will have been deleted, and the lower copy of the movement chain will be converted into a variable. Similarly, the resumptive pronoun will also function as a variable through binding by the operator:

(19) a) $[_{CP} Op_i \ldots \quad x_i]$ movement

     b) $[_{CP} Op_i \ldots \quad pron_i]$ base-generation

I take these two LFs to be sufficiently similar for both to be part of the same Candidate/Reference Set (cf. Salzmann to appear b,c for detailed discussion).[21]

6   The problem of variation

So far OT and MP seem to make the same predictions and analyze the data equally well. However, once dialectal, inter- and intra-speaker variation are taken into account, the picture changes. I will first discuss variation between different linguistic systems before I turn to variation within the same system.

6.1   Crosslinguistic/dialectal and inter-individual variation

6.1.1   The descriptive facts

Most traditional descriptions of Alemannic claim that dative relatives require a resumptive pronoun, cf. Bossard (1962: 141) for Zugovian, Fischer (1989: 429) for Lucerne, Hodler (1969: 246) and Marti (1985) for Bernese, Sonderegger & Gadmer (1999) for Appenzell, Suter (1992: 183) for Basel, and Weber (1964: 299) for Zurich German.

However, there are exceptions: The Low Alemannic dialect of Oberrotweil (Germany), which is typologically very similar to the Swiss German varieties, has basically the same resumptive system as the Swiss German dialects, with gaps for subjects and direct objects and resumptive pronouns for PPs; but crucially, there are no resumptive pronouns for datives, as shown in the grammatical description by Noth (1993: 418ff.):

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[21] One caveat is in order here: It has been pointed out that resumptive pronouns impose semantic restrictions on the external head, i.e. that they block scope reconstruction, cf. Sharvit (1999), Boeckx (2003), Bianchi (2004). This has, of course, implications for the definition of the Reference Set if it is based on the notion of "same LF". The scope facts in Zurich German resumptive relatives are too complex to discuss here, cf. Salzmann (2006). The theoretical consequences are discussed in detail in Salzmann (to appear c).

(20) a) Alli, wun em   __ACC hab wellá   machá, sí mr   vrgroodá.
         All C   he.DAT   have wanted make   are me.DAT failed
         'All (e.g. cakes) that I tried to make for him, turned out bad.'   DO

   b) Sáli Fírma, wu dr   Sebb noch __DAT ebis   schulded,
       that firm   C the S.   still   something owes
       hed scho   wíder aagruáfa.
       has already again called   IO
       'That company to which Sebb still owes something has called again.

   c) Dr áinzig,   wu si   vrhandlá **míd em**, ísch dr Aafíárer.
       the only.one C they negotiate with him is   the leader
       'The only one with whom they negotiate is the leader.'   PP

The same seems to be the case in Glarus German. Bäbler (1949: 60), a textbook to learn the local dialect, gives five examples with dative relativization all of which contain gaps. Otherwise, the resumption system is the same as in Zurich German. Here is one of the examples of dative relativization:

(21)   Känntscht du   der Bueb, …wo me __DAT de es Bremi gih   het?
          know.2sg you the boy   C one   then a prize given has
          'Do you know the boy to whom they then gave a prize?'

Importantly, the variation cannot be related to a different status of dative case in these varieties. As in Zurich German, dative has to be overtly realized in the contexts (6)–(7). Neither can the deviating behavior of dative relatives be attributed to the types of datives: Noth (1993) and Bäbler (1949) list examples with datives of various types: datives of ditransitive verbs, of intransitive verbs, subcategorized datives and non-subcategorized ones (bene-/malefactives). In other words, the dialectal variation is real.

More evidence for variation comes from the Idiotikon (1999, XV, 13f.), a dictionary of Swiss German dialects. The entry of the relative particle *wo* contains several examples with dative relatives, some of which are constructed with a resumptive pronoun and some without. All the examples are taken from careful written sources such as textbooks, grammatical descriptions, dialect

literature etc. The examples without resumptive pronoun come from the following dialects: Bernese, Appenzell, Glarus, and Wallis German while those with resumptive pronoun are from Basel, Bernese, Zugovian, and Lucerne German. The fact that we find both variants in Bernese suggests that the variation is not just between larger dialect areas but also occurs among individuals of the same variety; i.e. we are dealing with inter-speaker variation. More evidence for inter-speaker variation is found in Hodler (1969: 246), who notes that the resumptive pronoun is normally obligatory in Bernese, but (for reasons he does not specify) sometimes does not occur. Similarly, while Sonderegger & Gadmer (1999) explicitly state that dative resumptive pronouns are necessary in Appenzell German, one of the examples in the Idiotikon, which is undoubtedly from the same dialect (by the author Jakob Hartmann), does not contain a resumptive pronoun. Since the conflicting examples without resumptive pronouns occur in contexts where the grammatical descriptions normally take dative resumptive pronouns to be obligatory, the variation cannot be due to different types of dative. Rather, we seem to be dealing with true inter-speaker variation (in Salzmann to appear a, section 5, the empirical situation is discussed in more detail).

6.1.2 Why an MP approach must remain unsatisfactory

In current Minimalist work, crosslinguistic variation (including idiolectal variation) is usually reduced to differences in the specification of lexical items or differences in the inventory of lexical items. Quite often variation is linked to differences in feature strength/interpretability of some functional head which will trigger overt movement in one language but not in another. Since in the case at hand we are not dealing with differences in displacement, feature strength/interpretability cannot be at stake. Rather, the crosslinguistic variation must root in the presence vs. absence of a given lexical item.

At first sight, one might want to argue that the varieties without dative resumptive pronouns simply do not have the required operator so that a movement derivation is the only option for dative relatives. However, this does not work: First, dative resumptive pronouns do occur in all varieties when the dative is inside an island:

(22)   de Maa, won i käs < Buech, won ***(em)**   gib>, zrugg überchum
          the man C I no   book C   he.DAT give back   get
          lit.: 'the man who I don't get any book back that I give to'

Second, since these varieties use base-generation whenever the variable is inside an island, including PPs, they must have the case-less operator posited in 4.2. This implies that in these varieties both the movement and the gap derivation are an option for datives. The variation in dative resumption thus cannot be due to a difference in the inventory of operators. But how can the absence of dative resumption in transparent contexts be derived?

One possibility would be to assume that there is no RealizeObl in those varieties so that gap derivations converge and are preferred over resumptive derivations because of *Res. But this leads to serious problems, since then one can no longer account for the pattern in (6)–(7). We are thus forced to assume that the general requirement to realize dative case, i.e. RealizeObl, still holds in the respective variety. But then this PF-constraint will filter out all derivations where dative remains unexpressed, including dative gap relatives. In other words, dative relatives with gaps cannot be derived given that RealizeObl is inviolable. The only possible way out is to make RealizeObl more specific so that it no longer applies to relative clauses. In that case, both gap and resumptive derivations will converge. The gap variant then emerges as more economical since it does not violate the Economy constraint *Res, cf. 5.3. In a non-transparent context such as (22), on the other hand, only the base-generation derivation will converge, not because of RealizeObl, but because of Locality.

This strategy of positing rather specific constraints is exactly what Broekhuis (2008) criticizes about Chomsky's (2001) treatment of object shift, where the cross-linguistic differences are handled by quite specific PF-filters. As pointed out in Broekhuis (2008), such a strategy is feasible, but amounts to a reformulation of the descriptive generalizations. The difference between varieties with dative resumptive pronouns and those without is then due to a slight difference in the PF-filter RealizeObl: It holds across the board in the first group, while in the second, it does not hold for relatives. An MP approach can thus handle the variation, but only at a very high cost.

6.1.3 Why an account based on violable constraints is superior

Under an OT account, the variation can be handled straightforwardly: The fact that REALIZEOBL does not hold in all contexts is not a problem because it is a violable constraint. In the case at hand, we can argue that the absence of dative resumptive pronouns is due to a different ranking between REALIZEOBL and *RES. While REALIZEOBL dominates *RES in the varieties with dative resumptive pronouns, the reverse ranking obtains in the dialects/idiolects without dative resumptive pronouns:

(23) Dative relatives without resumptive pronouns

		*RES	REALIZEOBL
a.	Base-generation	*!	
☞ b.	movement		*

The obligatoriness of dative resumptive pronouns in islands like (22) follows if LOCALITY dominates the two constraints *RES and REALIZEOBL.

One might object that this solution is just as descriptive as the MP-analysis in the previous subsection. But this is certainly not correct: The OT approach fares better in a number of important aspects: First: In the OT-account, the variation is derived from primitive notions of grammar: All constraints are

very general and independently needed while in the MP-account, the variation is handled by means of a general and a more specific filter. Second, the OT description is more economical in that only three constraints are needed: LOCALITY, *RES and REALIZEOBL. The MP-account of the previous subsection, however, requires the derivational constraint Locality, an Economy constraint *Res and two versions of RealizeObl: One that applies across the board and one that does not apply to relative clauses. Third, the OT approach makes interesting predictions about possible types of language: Given the constraint set, one does not expect to find a language that consistently uses dative resumptive pronouns, but leaves dative unexpressed in contexts like (6)–(7). To my knowledge, this prediction is correct. Under an MP-account with very specific filters, it would be easy to formulate a constraint that leads to such an unattested patterns. I conclude, therefore, that an approach based on violable constraints is superior.

6.2 Intra-speaker variation

6.2.1 The descriptive facts

The data presented so far show that the use of dative resumptive pronouns is much less systematic than suggested by earlier descriptions. Two recent studies (Salzmann, to appear a, on Zurich German, and Salzmann & Seiler in prep. on Swiss German) have not only confirmed this fact, but rather show that variation in dative resumption is pervasive: Not only do speakers of the same variety differ from each other in their use of dative resumptive pronouns, there is also a lot of variation within the grammar of an individual: Most speakers judged both the gap and the resumptive version grammatical. In other words: The use of dative resumptive pronouns is essentially optional. Importantly, the variation is restricted to dative relativization in transparent contexts. In island contexts, dative resumptive pronouns are obligatory. In other grammatical relations, the

result is also categorical and confirms the earlier descriptions: Resumptive pronouns are prohibited for subjects and direct objects, but necessary for PPs and islands.

There is no evidence that the variation is related to sociolinguistic factors like age, sex, education etc. One cannot simply say that younger people are less likely to use dative resumptive pronouns. In fact, some of the sources in the Idiotikon mentioned above without dative resumptive pronouns are 50-100 years old. Conversely, a quick Google search reveals that dative resumptive pronouns are used frequently in news forums, chat-rooms etc., i.e. in communicative contexts which are most likely to be frequented by younger people. It is neither the case that the variation can simply be attributed to processing factors, e.g. that the resumptive pronoun is dropped in sloppy speech or conversely that the resumptive pronoun is inserted as some repair strategy. As shown in 6.1.1, gaps and resumptive pronouns for datives are found in very carefully written sources such as textbooks, traditional dialect literature etc. It is highly unlikely that those instances represent performance errors. But once gap as well as resumptive relatives are a possibility in the grammar of many speakers of an Alemannic variety, it is unlikely that speakers who use gaps next to resumptive pronouns for dative relatives make performance errors when they use one of the variants. Furthermore, in our questionnaires, the majority of our informants explicitly marked both the gap and the resumptive variant as grammatical. Finally, a processing account would have to assume that one of the variants, the gap or the resumptive pronoun, is the basic variant while the other one is the result of a performance error. Given that both variants are attested in careful sources, cf. 6.1.1, both variants are equally good candidates for the basic variant. Choosing between the two seems not only arbitrary but even wrong. I conclude from this that intra-speaker variation in the use of dative resumptive pronouns is simply a

fact one cannot deny. Both gap and resumptive pronoun are grammatical variants for one and the same speaker.[22]

6.2.2 Why an MP-approach fails and an OT-approach succeeds

Given that both the gap and the resumptive variants are grammatical for many speakers, we need a model of grammar that generates both variants. Within the lexical variation theory there is one recent approach by Adger (2006) that explicitly tackles intra-speaker variation. Simplifying somewhat, he proposes that variation within a grammar arises if a grammar contains two featurally different, but semantically identical elements that – due to their feature difference – are realized differently in the morphological component. Depending on which element is chosen for a given derivation, we get either variant a or b.

The discussion on dialectal variation in 6.1.2 has shown, however, that the variation cannot be located in the inventory because all varieties have both gap and resumptive relatives and therefore require both a case-marked (for movement: SU/DO) and a case-unmarked operator (for base-generation: PPs, islands). The question is whether intra-speaker variation can be explained by the presence of both relative operators. In the case at hand it cannot, for principled reasons: In Adger's approach the differences in the numeration are taken to be significant enough to constitute two different Reference Sets so that two given (converging) derivations will not compete and can both emerge as grammatical, thereby leading to optionality. However, as discussed in section 5, since the

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[22] This is not to say that the distribution of gap vs. resumptive pronoun is completely random and free of processing effects. As discussed in Salzmann (to appear a, section 5.4) and Salzmann & Seiler (in prep.) there are a number of configurations where the gap variant is preferred: in matching contexts and with inanimate/non-referential head nouns. To what extent those factors are hard grammatical constraints or just soft/processing-related constraints and how they should be integrated into a model of grammar is something I wish to investigate in future research. See Salzmann (to appear a: section 6.3) and Salzmann & Seiler (in prep.) for first results.

Candidate/Reference Set must be determined on the basis of LF to explain the resumption facts, there will always be competition between gap and resumptive derivations. The optionality thus cannot result from different inputs. Rather, it must somehow be the result of PF-constraints. As discussed in section 5, the general version of the MP-constraint RealizeObl will be too strong when dative relatives contain gaps: Derivations with gaps violate RealizeObl and therefore crash so that only the resumptive variant should be grammatical. The same problem obtains in intra-speaker variation: With the general RealizeObl, derivations with gaps violate RealizeObl and therefore crash. Again, only the resumptive derivations should be grammatical, contrary to fact. The only alternative is to use the specific version of RealizeObl, which in principle allows both gaps and resumptive pronouns for datives. But even that will not do: Even though both gap and resumptive relatives converge in that case, the MP-constraint *Res, which is independently necessary to rule out resumptive pronouns for subjects and direct objects (cf. 5.3), will favor the gap variant for reasons of economy. In other words, it is simply not possible for this type of grammar to generate both variants.[23]

In an OT approach, optionality in transparent contexts follows straightforwardly from a tie between REALIZEOBL and *RES. Both gap and resumptive pronoun can thus be optimal:

(24) Optionality in dative resumption: REALIZEOBL <> *RES

Within islands (22), the resumptive variant is the only possibility because LOCALITY, which outranks the two tied constraints, can only be satisfied by resumption/base-generation.

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[23] Nothing changes under a movement approach to resumption. Gap and resumptive derivations would be part of the same Reference Set and would thus compete in dative relatives. But because of *Res only the gap variant would be grammatical, contrary to fact.

6.3   Why only datives? Arguments for a restrictive generator

There are two aspects that raise doubts about the validity of the OT-approach presented here: Given the three constraints LOCALITY, REALIZEOBL and *RES it is easily possible to come up with a ranking that will lead to a language that arguably does not exist: Suppose the following ranking: REALIZEOBL >> *RES >> LOCALITY. This would lead to a typologically unattested language, which has dative resumptive pronouns but no resumptive pronouns when the extraction site is inside an island (which implies that there would be movement out of islands). This is clearly undesirable. An MP approach is not confronted with this problem because locality is hardwired into the derivational system so that derivations that violate locality will invariably crash.

Furthermore, it is completely arbitrary under the OT approach that variation is restricted to datives. With the OT formalism it is just as easy to model a language where resumptive pronouns inside islands are optional, e.g. with a tie between *RES and LOCALITY. Again, this problem does not arise under an MP-approach since the constraints that lead to variation do not apply to the computational system but to PF-representations. This captures the fact that the variation we find in Alemannic relatives is restricted to interface phenomena (the realization of oblique case) rather than fundamental syntactic properties, thereby echoing the dichotomy between core and periphery. This insight is completely lost in the present OT account. Basically any kind of variation may be possible, contrary to fact.

Since I have shown that the violability of certain constraints is necessary for a correct description of the facts, I do not want to give up an account based on violable constraints altogether. Rather, I would like to propose an alternative that preserves the insight of the analysis while at the same time helps restrict the possible grammars (and thus the range of variation): Locality constraints on

movement, at least those banning movement from strong islands, are reanalyzed as part of the Generator (e.g. some version of the CED or phase theory). As a result, the grammar will never generate sentences that violate such islands. In the case at hand, this will correctly limit the variation to the realization of oblique case, an interface constraint. The Derivations & Evaluations model proposed by Broekhuis (2008) provides exactly the necessary architecture to implement such an approach: It combines an MP-generator with an OT-like evaluator that includes economy constraints (such as STAY) and interface constraints (like REALIZEOBL). Constraints that are never violated, e.g. the prohibition to move out of strong islands, are built into the MP-generator. This accounts for the universal properties of human language while the Evaluator is responsible for cross-linguistic, and as we have seen, inter- and intra-speaker variation. The architecture thus echoes the old core-periphery dichotomy and is directly compatible with the recurring observation that variation, especially micro-variation, is (apart from differences in the lexical inventory) often limited to interface constraints and the presence or absence of overt displacement.

7 Conclusion

Dialectal, inter- and intra-speaker variation in dative resumption in Alemannic varieties of German clearly shows that ranked violable interface constraints are descriptively and explanatorily superior to the PF-filters used in recent Minimalist work. At the same time, the range of variation can be better restrained if certain properties of language are not taken to be the result of constraint interaction, but rather of a restrictive Generator. In this respect the facts discussed here argue for a combination of some elements of both the Minimalist Program and Optimality Theory, as, e.g., proposed in the Derivations & Evaluations framework by Broekhuis (2008).

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