Optimizing the Ellipsis Site[*]

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Claim: in the case of *unconditional sluicing*, there is a tension between the syntax of the e(llipsis)-site, and the surface-form of the remnant. Interpretive evidence suggests that the e-site has the syntax of a copular clause. The remnant however displays strict case-matching. This leads to an incompatibility between the e-site and remnant when the correlate is assigned an oblique case in the antecedent. We argue that the only way to reconcile these facts is via a system of ranked, violable constraints.

1   Introduction

- Some terminology:

  (1)   Timo bought a record, but I don't know which record$_1$ ⟨Timo bought t_1⟩.

  (correlate — remnant; antecedent — e-site)

- In this talk, we will discuss a construction that we call *unconditional sluicing*, as it involves sluicing in an interrogative clause embedded in a *headed unconditional adjunct* (Rawlins 2008a, 2013), as exemplified in (2).[1]

  (2)   Mary will kiss any man, no matter whose brother-in-law ⟨...⟩.

- We assume that (2) is a *headed unconditional clause* in Rawlins' (2008a) terms, subject to sluicing.[2]

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[1]These are discussed briefly by Merchant (2001, p. 175) in a footnote under the rubrik of 'concessive sluices'. As Rawlins (2008a) argues at length however, these constructions do not in fact contribute a concessive meaning, but rather unconditionality.

[2] Rawlins (2008a) also discusses another kind of unconditional clause, a *constituent unconditional*, as exemplified in (i).

(i)   Whoever Joanna talked to, Alfonso will be jealous. (Rawlins 2008a, p. 61)

Rawlins shows that constituent unconditionals, like headed unconditionals, pattern with interrogatives rather than free relatives. Curiously, unlike headed unconditionals, constituent unconditionals do not seem to license sluicing.

(ii)   John will flirt with any woman, no matter whose sister-in-law.

(iii)   a.   *John will flirt with any woman, whoever's sister in law.

- We therefore identify *any man* as the correlate, and *whose brother-in-law* as the remnant. In these constructions, the correlate is typically a Free Choice Item (FCI). Some more examples follow.

    (3)   a.   Mary will be skeptical of any argument, regardless of whose.
          b.   John is happy with any flavour of ice cream, no matter what.
          c.   Sally can never drink coffee at conferences, no matter how good.

- [Rawlins](#)'s (2008a) syntax for a headed unconditional. The unconditional clause is a clausal adjunct. 'no matter' is identified as a complex complementizer which semantically selects for a question meaning.

    (4)   No matter who comes, I will be happy.
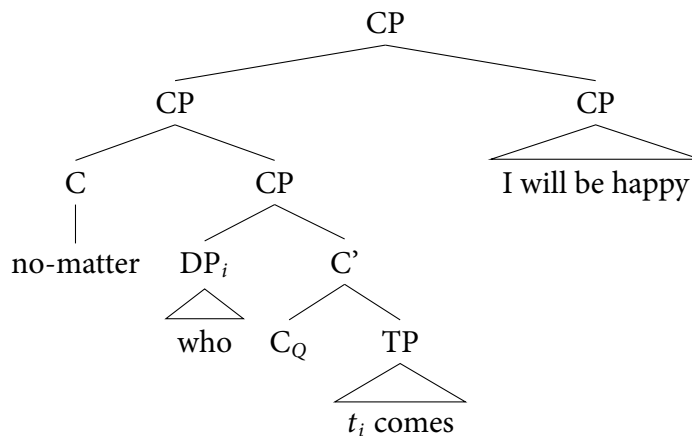
- Alternatively, 'regardless of' may appear as the head of the unconditional clause. Here, 'regardless' is a complementizer that syntactically selects for a PP and semantically selects for a question meaning.
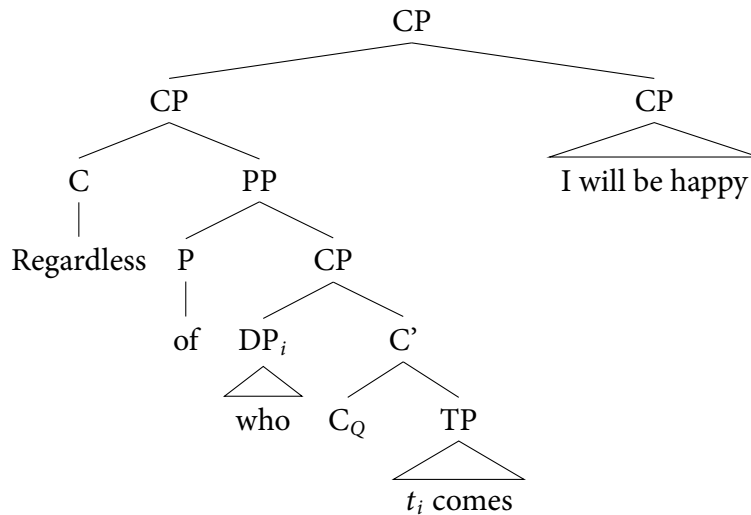
    (5)   Regardless of who comes, I will be happy.

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          b.   ...whoever's sister-in-law she is.

Why this might be is an open question, although ideally this would be related to other differences between alternative and headed unconditionals, such as the acceptability of *why*-questions with the latter but not the former.

(iv)   a.   *Whyever Alfonso went to France, he ended up staying there.
       b.   Regardless of why Alfonso went to France, he ended up staying there.

                                                                          ([Rawlins 2008a](#), p. 69)

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                              CP
                   ┌──────────┴──────────┐
                  CP                     CP
             ┌─────┴─────┐          ┌─────┴─────┐
             C          PP          I will be happy
             │      ┌────┴────┐
        Regardless  P        CP
                    │     ┌───┴────┐
                    of  DP_i      C'
                        ┌┴┐    ┌───┴───┐
                       who   C_Q      TP
                                   ┌───┴───┐
                                  t_i comes
```

- Crucially for our purposes, Rawlins (2008a) (see also Rawlins 2008b, 2013) argues that unconditional heads, such as *no matter* and *regardless* select for a clause with interrogative syntax and semantics (rather than, e.g., a free relative). This is precisely the environement in which sluicing is independently known to be possible.

- One of Rawlins' arguments that unconditionals involve interrogative syntax/semantics is as follows: citing Jespersen, Rawlins notes that when a constituent question is formed off an interrogative clause, the wh-word *what* must be used. When a constituent question is formed off a free relative, the wh-word must match the head of the free relative (examples from Rawlins 2008a, p. 61).

  (6)   a.   Alfonso knows **who Joanna talked to**.
        b.   Alfonso knows WHAT?, *Alfonso knows WHO?

  (7)   a.   Alfonso talked to **whoever Joanna did**.
        b.   Alfonso talked to WHO?, *Alfonso talked to WHAT?

- We can now apply this test to the clause embedded in a headed unconditional. As shown in (8), unconditional clauses pattern with interrogative clauses, not with free relatives.

  (8)   a.   Regardless of **who Mary talks to**, Sally promised not to get jealous.
        b.   Sally promised not to get jealous, regardless of WHAT?
             *Sally promised not to get jealous, regardless of WHO?

- Furthermore, we can apply this same test to what we tentatively identified as unconditional sluices. Again, these pattern with interrogative clauses, not free relatives. Just like other instances of sluicing, unconditional sluices have the same distribution of interrogatives.

  (9)   a.   Mary will kiss any man, no matter **whose brother-in-law** ⟨...⟩.
        b.   Mary will kiss any man no matter WHAT?
             *Mary will kiss any many no matter WHO(SE)?

- Furthermore, unconditional heads can embed multiple wh-questions, whereas multiple wh-words are not possible in free relatives.

  (10) a.   No matter who speaks to whom, Mary promised not to get upset.

  b. *Alfonso talked to who(ever) said what. ([Rawlins 2008a](), p. 63)

- Unconditional sluices pattern with sluices generally in allowing for multiple remants in certain environments.

  (11) Everyone should dance with someone, it doesn't matter who with whom.
        (cf. everyone danced with someone, but I can't remember who with whom.)

- Our initial observation is therefore that an isomorphic source often fails to provide the correct interpretation for the sluice.[3]

  (12) #Mary will kiss any man, no matter who she will kiss t.

- Manipulating modality does not seem to help matters either.

  (13) #Mary will kiss any man, no matter who she kisses t.

- In order to capture the interpretation of the unconditional sluice, it seems necessary to posit a copular clause as the e-site.[4]

  (14) Mary will kiss any man, no matter who he is t.

- Unconditional sluicing is also possible with a sprouted, adjectival remnant:

  (15) Mary will kiss any man$_1$, no matter how ugly $\langle$he$_1$ is $t\rangle$

- In this instance, it is especially clear that only a non-isomorphic, copular e-site will provide the right interpretation, as illustrated by the contrast in (16).[5] For concreteness, we assume that the e-site in question is a predicational copular, which has as its subject an e-type pronoun co-varying with *any man*.

  (16) a. #Mary will kiss any man, no matter how ugly a man she kisses.

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[3] Unconditional sluices have some other interesting properties which we shan't discuss in much detail here. There are restrictions on possible remnant/correlate pairs which differ from standard cases of sluicing.

(i) a. Mary will kiss {any/#a/#some/#each} man, no matter who.
     b. Mary will kiss {#any/a/some/#each} man, but I don't know who.

We speculate that these restrictions are semantic/pragmatic in nature, and relate to scopal parallelism. We leave further investigation of these facts to future work.

[4] Note that this constitutes an argument against the hypothesis that sluicing obeys strict syntactic isomorphism. A similar argument can be made on the basis of sentences like the following (from [Barros and Vicente 2015]()):

(i) Mary has a new boyfriend, but i don't know who $\langle$he is $t\rangle$.
                            #$\langle$she has $t\rangle$.

[5] Additionally, adopting a non-isomorphic copular e-site side-steps the question of how ellipsis can repair a Left Branch Condition violation, since such an assumption is necessary if an isomorphic e-site is assumed.

(i) a. Mary will kiss any man, no matter how ugly <she will kiss a t man$\rangle$.
     b. *How ugly will Mary kiss a t man?

See also [Barros et al. (2014)]() for additional arguments in favour of a copular e-site in these cases.

      b.   Mary will kiss any man$_i$, no matter how ugly he$_i$ is.

- The puzzle now comes from languages with richer case morphology. In the examples in (17) and (18), we observe that there is strict case-matching effects despite the fact that an isomorphic source is independently ruled out.

  (17)   Sie suchen jemand-en,   der im Tor spielt, egal   wen   ⟨#sie suchen⟩.
            they search somebody-ACC who in goal plays no.matter who.ACC   they search
            'They are looking for somebody to play in goal, it doesn't matter who ⟨#they are looking for/✓it is⟩.'

  (18)   Der Idiot würde wirklich jed-em   vertrauen, egal   wem   ⟨#er vertrauen
            the idiot would really   anyone-DAT trust   no.matter who.DAT   he trust
            würde⟩.
            would
            'That idiot would really trust anyone, no matter who ⟨#he would trust/✓it is⟩!'

                                                                                 (*German*)

- Instead, we would expect to find a copular clause here, however, the rigid case-matching on the sluice (or remnant) would go against the well-known surface constraint against non-nominative pivots in German.

- Thus, there seems to be no good proposal for the ellipsis site here. If we have an isomorphic source, the case of the sluice makes sense, but the interpretation is wrong.

- Furthermore, we have similar data in Serbo-Croatian:

  (19)   Maja će pomoći nekome,   nije   bitno   kome   ⟨#će pomoći⟩.
            Maja will help.INF someone.DAT NEG.be important who.DAT   will help.INF
            'Maja will help anyone, no matter who.'

  (20)   Maja će pomoći nekome,   nije   bitno   ko   je to
            Maja will help.INF someone.DAT NEG.be important who.NOM be that
            'Maja will help anyone, no matter who it is.'

                                                                               (*Serbo-Croatian*)

- If we opt for a copular e-site, we get the interpretation right, but the pivot would not be in nominative.

- Assuming that principles are grammar are rigid, there should be no way to construct a copular clause in syntax and have the pivot assigned dative, for example.

- Our approach is to say that constraints such as the one demanding nominative pivots are *violable* and that structures are subject to *optimization* to maximally satisfy these constraints.

- As such, the output structure we have for *unconditional sluices* must violate one of these constraints on grammar to give us a structure such as the following:

  (21)   jemand-en   … egal   wen   ⟨es ist⟩.
            somebody-ACC   no.matter who.ACC it is

- This is a structure that violates the condition on nominative pivots but satisfies case-matching. As such, it is an imperfect solution and one that could never surface without ellipsis, assuming that ellipsis sites are optimized.

2 Towards an Optimality Theoretic account

- The solution we propose involves *optimization* of the e-site following a number of ranked constraints.

- One framework in which to implement this intuition is *Optimality Theory* (Prince and Smolensky 1993/2004, McCarthy and Prince 1995, Barbosa et al. 1998, Legendre et al. 2001).

☞ Bear in mind that Optimality Theory can be put on top of any existing syntactic theory and does not entail that the entire grammar is based on ranked constraints.[6]

(22) *Basic tenets of OT*:
   a. *Constraints are violable:* Constraints are not absolute but violations of a constraint do not result in absolute ungrammaticality.
   b. *Constraints compete:* The fact that constraints may conflict results in competition. The winner of a particular competition is the candidate that does not violate the higher-ranked constraint.
   c. *Constraints are ranked:* If constraints have conflicting requirements, the ranking decides.

(23)

/dap/	NoCoda	Max
a. dap	*!	
☞ b. da		*

(24)

/dap/	Max	NoCoda
☞ a. dap		*
b. da	*!	

- Thus, the need to satisfy a high-ranked markedness constraint (such as NoCoda) can trigger a faithfulness-violating repair such as deletion.

- Since repairs are a hallmark of ellipsis (see Section **??** for further discussion), OT offers an intuitive explanation for them. If the ellipsis site violates a high-ranked enough constraint, a repair will follow as the natural result.

- In our examples, it would then also possible that to assume that the output can violate an important constraint of grammar in order to appease a more important constraint (i.e. a case-matching constraint).

- In order to formalize this, we will first motivate each constraint in turn.

2.1 Case-Matching

In this section, we will attempt to motivate the condition on case-matching as an independent constraint in the grammar, which does not simply follow as a consequence of isomorphism.

- Descriptively, it looks like languages with m(orphological)-case are subject to strict case-matching. This is argued for convincingly by Merchant (2001), and cross-linguistically the case-matching generalization seems to be virtually exceptionless.

(25) Timo hat jemandem   geholfen, aber ich weiß nicht {wem/*wer/*wen}.
     T. has someone.DAT helped,   but I   know not {who.DAT/.NOM/.ACC}.
     "Timo helped someone, but I don't know who."

---

[6] Müller and Sternefeld (2001) show that competition between different potential candidates is implicit in much contemporary syntactic theorizing.

- What kind of constraint is case-matching?

(26) *Hypothesis*:
Case-matching falls out as a by-product of the requirement that the antecedent and e-site be *syntactically isomorphic* (see, e.g., Ross 1969).

- This doesn't look like it's going to work. Whereas Merchant's case-matching generalization is virtually exceptionless, Merchant's second big generalization – the P-stranding generalization – has been shown to allow for many exceptions cross-linguistically. See, e.g., Stjepanović (2008), Rodrigues et al. (2009), Sag and Nykiel (2011), and many more.

- Many of the aforementioned authors provide compelling arguments that the ban on P-stranding can be circumvented just in case a non-isomorphic, copular source is available.

- The isomorphism hypothesis leaves the distinction between the case-matching generalization and the P-stranding generalization mysterious.[7]

- In fact, the evidence from languages with m-case is consistent with two hypotheses:[8]

  (i) case-matching requires that the remnant and correlate bear the same *abstract* case,

  (ii) case-matching requires that the remnant and correlate bear the same *morphological* case; they may differ in abstract case.

- Following Barros (2014), we observe here that perception verbs with ECM in English allow us to tease apart these two possibilities. In (27), the correlate is assigned accusative case by the ECM verb *saw*. Only a non-isomorphic source is available. It follows that the remnant in (26) is assigned (abstract) nominative case.

(27)   I saw someone$_{ACC}$ coming, but I didn't see who$_{NOM}$ $\langle t$ came$\rangle$.
$\qquad\qquad$ #$\langle$I saw t coming$\rangle$
$\qquad\qquad$ *$\langle t$ coming$\rangle$

- (27) instantiates an abstract case mis-match, but it is compatible with case-matching caring only about m-case (since English lacks any productive m-case).

- More evidence that case-matching cares more about surface morphology than is often assumed: van Craenenbroeck's (2012) observation that when the remnant and correlate differ in abstract case, but are nonetheless *syncretic*, the case-matching violation is ameliorated (The crucial assumption here is that a P-less sluice in a non-P-stranding language forces a copular e-site).

(28)   Timo hat an   einen Linguisten   gedacht, aber ich weiß nicht {*welchen/*welcher}
$\qquad$ T.   has about [a   linguist].ACC thought, but I   know not   {which.ACC/.NOM}.
$\qquad$ "Timo thought about a linguist, but I don't know which."

(29)   %Timo hat an   eine Frau   gedacht, aber ich weiß nicht welche.
$\qquad$ T.   has about a   woman thought, but I   know not   which.
$\qquad$ "Timo thought about a woman, but I don't know which."

---

[7]See also Merchant (2001), Thoms (2013), Barros et al. (2014), Barros (2014) and Weir (2014) for arguments against strict isomorphism as a condition on ellipsis identity.

[8] See McFadden (2004) for arguments that abstract case and morphological case should be teased apart.

	Nom.		Acc.
Masc.	*welcher Linguist*	≠	*welchen Linguisten*
Fem.	*welche Frau*	=	*welche Frau*

(30)

- The standard view in the literature is that the syntax of the e-site constrains the form of the remnant, i.e., case-matching falls out as a by-product of case-matching. The evidence discussed above suggests rather that the syntax of the remnant constrains the syntax of the e-site; case-matching is imposed and an independent constraint, and the e-site must be consistent with the form of the remnant. We therefore postulate the constraint in (31), and we leave how to derive it to future work.[9]

(31)   Match(m-case)
        The remnant and correlate must bear the same m-case.

- We assume here that case syncretism involves two elements bearing identical m-case features, but potentially distinct abstract case features. It follows that Match(m-case) will not be violated if the remnant and correlate have distinct abstract case, just so long as there is case syncretism. This correctly derives van Craenenbroek's (2012) observations regarding case mis-match amelioration via syncretism.

- Novel evidence that Match(m-case) is in fact a *violable* constraint comes from an informal questionnaire study (carried out by the first author, 6 informants) on case-matching and perception verbs with ECM in modern Greek. The verb for *to see* in Greek exceptionally case-marks the subject of an embedded clause accusative. It may also embed an interrogative clause. This allows us to construct examples parallel to the English ECM example (27).

- Here, the verb *to see* both exceptionally case-marks the subject of the embedded clause in the antecedent, and introduces the sluice. For half of the informants, (32) was judged to be acceptable, and for half it was judged to be unacceptable. Note the mis-matching remnant.

(32)   a. %Ida   kapion   na erxete ala den borusa na do   pios.
            saw.I someone.ACC NA come but not could   NA see.I who.NOM.
        b.   ...etan
                ...it.was

- For all informants, (33) was judged unacceptable (with a matching remnant). This is presumably due to the infelicitousness of an isomorphic continuation.

(33)   a. *Ida   kapion   na erxete ala den borusa na do   pion.
            saw.I someone.ACC NA come but not could   NA see.I who.ACC.
            'I saw someone coming, but I couldn't see who.'
        b. #...ida   na erxete.
            ...saw.I NA come.
            '...I saw coming.'

- For all informants, (34) was judged unacceptable – note again the mis-matching remnant. The only difference between (34) and (32a) is that here, the verb that introduces the sluice is distinct from the embedding verb in the antecedent, rendering an isomorphic source possible.

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[9]See also recent work by Barros and Vicente (2015), who argue for a constraint which they dub *the remnant condition* which imposes matching (in this case, of semantic type) between the correlate and remnant directly.

(34) *O Janis ide   kapion   na erxete ala den ksero pios
 the John saw.3P someone.ACC ACC come but not know.I who.NOM.
 'John saw someone coming, but I don't know who.'

- For all informants, (35) was judged acceptable. (35) is identical to (34), except for here, the case on the remnant matches the case on the antecedent.

(35) O Janis ide   kapion   na erxete ala den ksero   pion.
 The John saw.3P someone.ACC NA come but not know.I who.ACC.
 'John saw someone coming, but I don't know who.'

- The only way to make sense of this data is to treat MATCH(M-CASE) as a violable constraint. For a subset of the speakers (those who found (32a) acceptable), MATCH(M-CASE) can be violated just in case an isomorphic source is independently ruled out for interpretive reasons.

2.2 PIVOT(NOM)

- In German, we observe that the pivot in a copular clause has to be nominative:

(36) Hans hat einen Promi   zum Abendessen eingeladen, aber er verrät nicht
  Hans has a.ACC celebrity to   dinner   invited   but he reveals not
  wer/*wen   es ist.
  who.NOM/*who.ACC it is
  'Hans has invited a celebrity to dinner, but he won't say who it is.'

- We can capture this fact by proposing the relatively simple constraint in (37):

(37) PIVOT(NOM):
  The pivot of a copular clause must be nominative.

- Note at this point that we have our first conflict. In (36), the constraint on case-matching (assuming it applies here) will require matching between correlate and remnant (i.e., accusative case). However, the constraint in (37) requires that the pivot of the copular clause – here, the remnant – is nominative.

- Thus, these constraints are *antagonistic* and ranking must decide the winner:

(38)

somebody.ACC … who it is	PIVOT(NOM)	MATCH(CASE)
☞ a. somebody.ACC … who.NOM it is		*
b. somebody.ACC … who.ACC it is	*!	

- We will return to this issue in the analysis in Section 3.

2.3 DEP **and** MAX

- In OT, there are typically two main types of constraints:
  - *Markedness constraints*, which penalize a particular structure or structures that do not conform to a particular structure. MATCH(M-CASE) and PIVOT(NOM) are markedness constraints.[10]
  - *Faithfulness constraints*, which penalize changes to the input; either by adding of removing structure.

- There are two faithfulness constraints that militate against deletion (Dep) and insertion (Max) (McCarthy and Prince 1995).

  (39)   Dep-IO ('Dependence'):
         Every element of the output has a correspondent in the input.
         'Do not insert'

  (40)   Max-IO ('Maximality'):
         Every element of the input has a correspondence in the output.
         'Do not delete'

- Dep and Max work in tandem to ensure that all else being equal, an isomorphic e-site will always be preferred to a non-isomorphic e-site.

- Dep and Max can only be violated if there is a higher-ranked constraint that can be satisfied by making changes to the structure.

- One simply example of this are cases of *vehicle change* (Fiengo and May 1994):

  (41)   Alex$_i$ was arrested but he$_i$ doesn't know why ⟨Alex$_i$ was arrested⟩.

- If we assume an isomorphic ellipsis site, then copying *Alex*$_1$ faithfully into the ellipsis site would incur a Principle C violation:

  (42)   *Vehicle change*:

he$_1$ doesn't know why ⟨Alex$_1$ was arrested⟩	PrincipleC	Max	Dep
a. why ⟨Alex$_1$ was arrested⟩	*!		
☞ b. why ⟨he$_1$ was arrested⟩		*	*

- Since PrincipleC is ranked higher than both Dep and Max, the optimal candidate removes *Alex* from e-site (1 violation of Max) and inserts a coreferent pronoun (1 violation of Max).

3   Analysis

- The first point to address is the nature of the input to optimization and the model of grammar we assume.

- We assume a standard minimalist derivational model of syntax (Chomsky 1995), where e-sites are always isomorphic and subject to specific licensing conditions

- Furthermore, this optimization process is triggered by the presence of an [E]-feature in syntax.

- The input to the optimization is assumed to sluice-containing CP.

  (43)   Someone is coming, but I don't know [$_{CP}$ who ⟨is coming⟩].
         $\overbrace{\phantom{[_{CP} \text{ who ⟨is coming⟩}]}}^{\text{input}}$

[$_{CP}$ who ⟨is coming⟩]	Max	Dep
☞ a. [$_{CP}$who ⟨is coming⟩]		
b. [$_{CP}$who ⟨is going to come⟩]	*!*	**
c. [$_{CP}$who ⟨will come⟩]	*!	*

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[10] A more precise formulation would be to say that a violation mark is assigned for every structure in which case does not match or a copular clause does not have a pivot in the nominative. But we will keep to the informal definitions here.

- Assuming that the input includes an isomorphic e-site, we can reinterpret the MATCH(M-CASE) constraint above as a faithfulness constraint that prevents changes to the m-case of the sluice:

  (44)   IDENT(M-CASE):
          Do not change (m-)case features.

- If we take the constraints we established, we can derive an example such as (45) as follows:

  (45)   Der Idiot würde wirklich jed-em   vertrauen, egal   wem   ⟨#er vertrauen
          the idiot would really   anyone-DAT trust   no.matter who.DAT   he trust
          würde⟩.
          would
          'That idiot would really trust anyone, no matter who ⟨#he would trust/✓it is⟩!'

[CP who.DAT ⟨he would trust⟩]	SEL	ID(CASE)	PVT(NOM)	MAX	DEP
a. [CP who.DAT ⟨he would trust⟩]	*!				
☞ b. [CP who.DAT ⟨it is⟩]			*	***	**
c. [CP who.NOM ⟨it is⟩]		*!		***	**

- The trigger constraint SEL is designed to capture the incompatibility of the isomorphic source. This can be traced either back to some semantic redundancy of interpretation, or a selectional requirement of the unconditional predicate.

- Since the isomorphic e-site is ruled out, the repair that we opt for is a cleft or predicative source (see van Craenenbroeck 2010).

- This now poses the problem that we have a copular clause with a non-nominative pivot. This is militated against by the constraint PIVOT(NOM) as we have seen.

- However, since this constraint is ranked lower than the faithfulness constraint protecting case (ID(CASE)) in German, the candidate modifying the case on the sluice is blocked.

- The candidate in (45b) therefore emerges as the optimal candidate despite never being a possible surface form. This comes from the fact that the optimization process is ellipsis-specific (i.e. triggered by ellipsis).

- The final ellipsis site has to violate some relatively important grammatical constraint and here the solution is 'suboptimal' (in a non-technical sense), but the best of a number of unideal solutions.

3.1   Constraint re-ranking

- One prediction made by an OT analysis is that re-ranking constraints should (in principle) derive other languages or possible languages.

- For the analysis of German, we had the ranking IDENT(CASE) ≫ PIVOT(NOM).

- We would expect to find cases where a language has the reverse ranking: PIVOT(NOM) ≫ IDENT(CASE).

- (İnce 2012:261) provides instances of case-mismatches in Turkish. As illustrated in (46), the subject of a nominalized embedded clause in Turkish has genitive case. However, when an embedded subject is the correlate, the remnant is obligatorily nominative. A nominative (matching) remnant is ungrammatical, as illustrated in (47).

(46) Ahmet [**kim-in** Ankara-ya git-ti‿-i-]ni söyle-di? ; ama **kim**
A-.NOM **one**-GEN Ankara-DAT go-COMP-POSS3S-ACC say-PAST-3S but **who**-NOM
bil-mi-yor-um
know-NEG-PRES-1S
"Ahmet said someone went to Ankara, but I don't know who."

(47) *... ama **kim-in** bil-mi-yor-um
but **who**-GEN know-NEG-PRES-1S

one.GEN go … who.GEN ⟨…⟩	Pᴠᴛ(Nᴏᴍ)	ID(Case)
a. one.GEN go … who.GEN ⟨it is⟩	*!	
b. one.GEN go … who.NOM ⟨it is⟩		*!

- We can account for this by assuming that there is re-ranking of the constraints here.

- Assuming (*contra* İnce 2012) that we are dealing with a 'pseudosluicing' construction here , then the fact that the underlying copular source triggers a change to nominative suggests a higher ranking of Iᴅ(Cᴀsᴇ)

- Furthermore, the Greek data discussed earlier suggest that the ranking Pɪᴠᴏᴛ(Nᴏᴍ) ≫ Iᴅ(Cᴀsᴇ) must hold.

- If an isomorphic ellipsis leads to redundant meaning (indicated by the constraint Rᴇᴅ), then this high-ranked constraint triggers a repair as in (48).

(48) *Isomorphic e-site impossible*:
   a. %Ida kapion na erxete ala den borusa na do pios.
     saw.I someone.ACC NA come but not could NA see.I who.NOM.
   b. #Ida kapion na erxete ala den borusa na do pion.
     saw.I someone.ACC NA come but not could NA see.I who.ACC.
     'I saw someone coming, but I couldn't see who.'

who.ACC ⟨I saw⟩	*Rᴇᴅ	Pɪᴠᴏᴛ(Nᴏᴍ)	ID(Case)
a. who.ACC ⟨I saw⟩	*!		
b. who.ACC ⟨it was⟩		*!	
c. who.NOM ⟨it was⟩			*

- Let us assume that the repair is again a cleft/predicative source in this case (Barros et al. 2014). If Iᴅᴇɴᴛ(Cᴀsᴇ) were ranked higher than Pɪᴠᴏᴛ(Nᴏᴍ), then we would expect the same result as in German and Serbo-Croatian (non-nominative on the remnant).

- However, we observe that (some speakers) allow for a mismatch in case rather than tolerate a non-nominative pivot of an underlying copular clause.

- This suggests the ranking Pɪᴠᴏᴛ(Nᴏᴍ) ≫ Iᴅ(Cᴀsᴇ).

- If the e-site is no longer redundant, however (i.e. by having a 3rd person subject), then no repair is triggered:

(49) *Isomorphic e-site possible*:
   a. *O Janis ide kapion na erxete ala den ksero pios
     the John saw.3P someone.ACC ACC come but not know.I who.NOM.
     'John saw someone coming, but I don't know who.'

b. O   Janis ide   kapion   na erxete ala den ksero   pion.
   The John saw.3P someone.ACC NA come but not know.I who.ACC.
   'John saw someone coming, but I don't know who.'

who.ACC ⟨John saw⟩	*RED	PIVOT(NOM)	ID(CASE)	MAX
a. who.ACC ⟨John saw⟩				
b. who.ACC ⟨it was⟩		*!		**
c. who.NOM ⟨it was⟩			*!	**

4   Conclusion

- The approach we have outlined here, involving competition between competing candidate sluices, can be marshalled to account for so-called 'repair' effects discussed by Merchant (2001) and others.

(50)   *Complementizer trace effect*:
        John said that someone will fix the door, but I don't know who ⟨John said that *t* will fix the door⟩

I don't know who ⟨John said said that *t* will fix the door⟩	THAT-T	MAX
a. I don't know who ⟨John said said [CP that *t* will fix the door]⟩	*!	
b. I don't know who ⟨John said said [CP *t* will fix the door]⟩		*

- We leave further exploration of this line of research to future work.

- A summary of the talk:

  - We introduced novel empirical data: unconditional sluicing, and discussed a puzzle involving an apparent incompatibility between the surface form of the remnant, and the content of the e-site.

  - We motivated an approach to case-matching as an independent, violable constraint, that applies to the remnant and correlate directly.

  - We outlined an approach to ellipsis identity involving *competition* between multiple competing candidate e-sites. We formalized this in terms of OT.

  - We showed how our OT analysis can be applied concretely to the unconditional sluicing puzzle.

  - In future work, we intend to explore some further applications of optimization to other identity puzzles.

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