# ELLIPSIS IDENTITY AND THE ALTERNATIVE TIER* 

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## 1 Introduction

- Given an ellipsis site $\mathrm{XP}_{\mathrm{E}}$, and its putative antecedent(s) $\mathrm{XP}_{\mathrm{A}}$, to what extent may $\mathrm{XP}_{\mathrm{E}}$ and $\mathrm{XP}_{\mathrm{E}}$ differ?
- i.e. what is the correct formulation of the Identity Condition on ellipsis?
- Traditional assumption: $\mathrm{XP}_{\mathrm{E}}$ and $\mathrm{XP}_{\mathrm{A}}$ must be syntactically isomorphic.
- Merchant 2001: influential work arguing that the Identity Condition should instead be stated in terms of the semantics of $\mathrm{XP}_{\mathrm{E}}$ and $\mathrm{XP}_{\mathrm{A}}$, allowing for constrained syntactic deviations between $\mathrm{XP}_{\mathrm{E}}$ and $\mathrm{XP}_{\mathrm{A}}$.
- More recently, the trend has swung back towards syntactic isomorphism. ${ }^{1}$
- Goal here: a rehabilitation of an old approach to ellipsis identity in terms of focus alternatives (see, e.g., Rooth 1993, Merchant 2001).
- Nothing special about ellipsis identity. Subject to broadly the same licensing requirements as deaccented material (Rooth's project).
- Isomorphism effects are epiphenomal, and arise to due a confluence of the following factors:
- The structural nature of focus alternatives (Fox \& Katzir 2011).
- Recoverability.
- An economy condition on the ellipsis site.

[^0]
## 2 A study in non-isomorphism: sluicing and the Left Branch Condition

## The Left Branch Condition

- First formulated by Ross as below:
(1) The Left Branch Condition (Ross 1967, 1986)

No NP which is the leftmost constituent of a larger NP can be reordered out of this NP by a transformation rule.

- Refined in subsequent work (see, e.g., Corver (1990)). In the subsequent work taken to rule out the extractions in (2).
(2) a. ${ }^{*}$ Whose $_{i}$ did he make out with $\left[t_{i}\right.$ girlfriend]? prenominal genitive
b. ${ }^{*}$ [How many $]_{i}$ did you buy $\left[t_{i}\right.$ apples $]$ ? amount phrase
c. ${ }^{*}$ How $_{i}$ is Henk [ $t_{i}$ handsome]? degree word
d. ${ }^{*}[\text { How handsome }]_{i}$ did Britta meet $\left[a t_{i}\right.$ man $]$ ? attributive mod.
e. ${ }^{*} H^{\prime} w_{i}$ did Britta meet [ $\mathrm{a}_{\mathrm{i}}$ handsome man]?
degree word (subextraction from an attributive mod.)


## LBC repair under sluicing

- Merchant considers examples of Left Branch Extraction under sluicing.
(3) a. He wants a detailed list, but I don't know how detailed.
b. She bought an $\{$ an expensive/fast/big\} car, but I don't know how $\{$ expensive/fast/big $\}$.
c. She writes thorough reports, and wait till you see how thorough!
d. He bought expensive $\{$ toys/jewelery $\}$, but he wouldn't say how expensive.
e. Your brother is a smart doctor, but it's not clear how smart.
f. She is a good carpenter, but it's not clear how good.
- Merchant's (2001) account (see also Kennedy \& Merchant 2000) - genuine island repair.
(4) Your brother is a smart doctor but it's not clear how smart ${ }_{1}$ 〈your brother is a $t_{1}$ doctor〉
- Alternative explored here (also entertained briefly and rejected by Merchant 2001): a nonisomorphic predicational copular source.
(5) Your brother ${ }^{x}$ is a smart doctor but it's not clear how smart ${ }_{1}\left\langle\right.$ he $_{x}$ is $\left.t_{1}\right\rangle$
- Merchant's (2001) argument against a non-isomorphic source: stress-placement:
(6) a. *She bought a big car, but I don't know how big.
b. She bought a big car, but I don't know how big.
(7) a. She bought a car, but I don't know how big it is.
b. She bought a car, but I don't know How big it is.
- Obvious confound here: examples in (7) lack a modifier in the first clause. Once we control for this, stress placement with a copular continuation is consistent with the sluicing data:
(8) a. *She bought a big car, but I don't know how big it is.
b. She bought a big car, but I don't know how big it is.


## Non-predicative modifiers diagnose the structure of the elided material

- Certain modifiers are only acceptable in an attributive context; others have a reading which is only acceptable in an attributive context (see Coppock 2008: ch5).
- Many such non-predicative adjectives are also non-gradable, which makes them unfit for our purposes. Consider, for example, mere.
(9) a. She's a mere imitation.
(Coppock 2008)
b. *Don't worry she's only mere.
c. *She's an extremely mere imitation.
- Here, we are interested in the small class of gradable, non-predicative adjectives (also discussed by Coppock 2008).
(10) a. \#The worker is hard. \#intersective; *non-intersective
b. The problem is hard.
c. The library hired a hard worker.
\#intersective; non-intersective
d. How hard a worker did the library hire?
e. The library hired a very hard worker. \#intersective; non-intersective \#intersective; non-intersective
- The relevant non-predicative interpretation is referred to as non-intersective, since it cannot be derived via intersective modification. ${ }^{2}$
(12) a. $\llbracket \operatorname{hard} \rrbracket^{w}=\left\{x \in \mathrm{D}_{e} \mid \operatorname{hard}_{w}(\mathrm{x})\right\}$
b. $\llbracket$ worker $\rrbracket^{w}=\left\{x \in \mathrm{D}_{e} \mid\right.$ worker $\left._{w}(\mathrm{x})\right\}$
c. $\llbracket$ hard worker $\rrbracket^{w} \neq \llbracket(12 \mathrm{a}) \rrbracket^{w} \bigcap \llbracket(12 \mathrm{~b}) \rrbracket^{w}$
- We can use this as a diagnostic for the structure of the ellipsis site.
(13) a. \# The library hired a hard worker, but $I$ don't know exactly how hard ${ }_{1}$ the worker was $t_{1}$.
b. \# The library hired a hard worker, but I don't know exactly how hard.
c. The library hired a hard worker, but I don't know exactly how hard a worker.
(14) a. \# Mary married a heavy drinker, but I don't know exactly how heavy $y_{1}$ the drinker was $t_{1}$.
b. \# Mary married a heavy drinker, but I don't know exactly how heavy.
c. Mary married a heavy drinker, but I don't know exactly how heavy a drinker.


## Addressing an objection from Slavic

- Elliott \& Murphy (2016a) show that in certain varities of Slavic, LBE bleeds non-intersective readings.
(15)
a. Meri je zaposlila [NP teškog neradnika]

Meri is hired heavy non_worker
"Meri hired a lazy person" $\checkmark$ non-intersective
"Meri hired someone who is heavy and does not work." $\checkmark$ intersective
b. $\quad{ }_{N P}$ Koliko teškog neradnika $]_{1}$ je Meri $\mathrm{t}_{1}$ zaposlila? How heavy non_worker is Mary hired
"How lazy a person did Mary hire?" $\sqrt{ }$ non-intersective
"How heavy was the person that Mary hired who doesn't work?"

[^1](11) $\llbracket \operatorname{hard}$ worker $\rrbracket^{w}=\left\{x \in \mathrm{D}_{e} \mid \exists e\left[\operatorname{AGENT}_{w}(e)=x \wedge \operatorname{working}_{w}(e) \wedge \operatorname{hard}_{w}(e)\right]\right\}$

Elliott \& Murphy (2016a) suggest a way of deriving the meaning in (11) compositionally via null operator movement out of the nominalized verbal structure. The precise account of the non-intersective reading will however be largely irrelevant for our purposes.
c. Koliko teškog ${ }_{1}$ je Meri zaposlila ${ }_{N P} \mathrm{t}_{1}$ neradnika]?

How heavy is Mary hired non_worker
"How lazy a person did Mary hire?" Xnon-intersective
"How heavy was the person that Mary hired who doesn't work?"
$\checkmark$ intersective

- Elliott \& Murphy suggest that the argument for non-isomorphic sources in English on the basis of non-intersective adjectives is flawed, since the following premise does not go through: island-repair (LBE) predicts the non-intersective reading to survive.
- The data from Slavic suggests that LBE may bleed the non-intersective reading for independent reasons.
- As was implied, non all varities of Slavic seem to behave like Serbo-Croatian in this respect. In Czech, for example, speakers report that non-intersective readings survive under LBE.
(16) Marie včera potkala [ ${ }_{N P}$ starého přítele]

Czech Marie yesterday met old friend
"Marie met a friend yesterday who is old" $\boldsymbol{\checkmark}$ intersective
"Mary met a friend yesterday who she has known for a long time"
(17) Jak starého ${ }_{1}$ Marie včera potkala $\left[{ }_{N P} \mathrm{t}_{1}\right.$ přítele ]? How old Marie yesterday met friend
"How old is the friend that Mary met yesterday?"
$\checkmark$ intersective
"How long has Mary known the friend she met yesterday?" $\checkmark$ non-intersective

- A more precise way of stating the objection, therefore, is that the data may be interpreted as indicating that English is a Serbo-Croatian-type language with respect to LBE.
- Data from the English sub-comparative construction however indicates that where English does allow LBE, in this instance of a covert operator, the non-intersective reading survives.
(18) a. Mary married a heavier drinker than she did a smoker.
b. Mary married a heavier drinker than she married a smoker.
$\checkmark$ non-intersective reading
- The operator movement implicated in clausal comparatives violates the Left Branch Condition (see Kennedy \& Merchant 2000).
(19) Mary married a heavier drinker than [ ${ }_{C P} O p_{i}$ she married [ ${ }_{\mathrm{DP}}$ a $t_{\mathrm{i}}$ heary smoker]].
- The data from clausal comparatives shows that in English, a violation of the Left Branch Condition fails to bleed the availability of the non-intersective reading.


## Further evidence from Italian

- Further evidence from Italian; In Romance the intersective vs. non-intersective readings can be disambiguated via word order.
(20) a. un amico vecchio
a friend old

A friend who is old (intersective)
b. un vecchio amico
an old friend
A friend from a long time ago (non-intersective)
c. L’amico è vecchi
the_friend is old
The friend is old (intersective)

- We can show that vecchio ("old") is gradable under the non-intersective reading.
(21) Gianni è il più vecchio amico che abbia

John is the more old friend that have
"John is the friend I've known for the most time"

- Word order in Italian will remove the ambiguity we have to control for in the English data. A final important point is that Italian disallows LBE.
(22) ${ }^{*}[\text { Quanto costosa }]_{1}$ ha comprato ${ }_{\text {NP }}$ una macchina $\left.\mathrm{t}_{1}\right]_{\text {, Gianni? }}$ How expensive has bought a car John
"How expensive a car did John buy?"
- The sluicing data is given below:
(22) a. Ho incontrato un amico vecchissimo di Gianni ma non so quanto Have met a friend old.very of John but not know how "I met a very old friend of John's, but I don't know how old." $\checkmark$ int.; Xnon-int.
b. *Ho incontrato un vecchissimo amico di Gianni, ma non so quanto Have met a old.very friend of John, but not know how
"I met a very old friend of John's, but I don't know how old" $\quad X_{\text {int.; }} x_{\text {non-int. }}$
c. Ho incontrato un amico vecchissimo di Gianni ma non so quanto è Have met a friend old.very of John but not know how is vecchio lamico
old the.friend
"I met a very old friend of John's, but I don't know how old the friend is."
$\checkmark$ int.; $X$ non-int.
d. ${ }^{*}$ Ho incontrato un vecchissimo amico di Gianni, ma non so quanto $\dot{e}$ Have met a old.very friend of John, but not know how is vecchio l’amico
old the.friend
"I met a very old friend of John's, but I don't know how old." Xint.; Xnon-int.


## An open problem

- Gapping seems to exhibit genuine LBE repair. A copular source is unavailable as a repair strategy (Coppock 2011).
(23) Josie makes too strong a coffee, and Patrick too weak ${ }_{1}\left\langle\right.$ makes $^{[\mathrm{NP}}$ a $\mathrm{t}_{1}$ coffee] $]$.
- A possible non-isomorphic source, involving a small clause:
(24) Josie makes too strong a coffee, and Patrick too weak ${ }_{1}\left\langle{\left.\text { makes coffee } t_{1}\right\rangle}\right\rangle$
- Can we diagnose for this structure specifically?


## 3 More non-isomorphic sources

## Short sources

- Short sources involve taking a sub-part of the preceding clause as the antecedent:
（25）They hired someone who［t speaks a Balkan language］－guess which！
a．which 〈he speaks）！
short source
b．which 〈they hired someone who speaks）！
long source
－Antecedent has the trace of a relative operator in subject position，short source has an e－type pronoun in subject position．Merchant（2001）motivates the possibility of such a mismatch using examples like ：
（26）We need to know［what he is doing $t$ ］，and why 〈he is doing it $\rangle$
（cf．\＃．．．and why 〈we need to know what he is doing〉．）
－More examples of sluicing with a short source：
（27）a．John seems to me to be lying about something，but I don＇t know what he is lying about． （ $\neq$ what he seems to me to be lying about．）
b．I remember meeting him，but I don＇t remember when Imet him．
（cf．$\neq \#$ when I remember meeting him．）
（Merchant 2001）
－Lasnik objects to Merchant＇s invocation of short sources，and presumably as a result，Mer－ chant drops the evasion approach in later work．See Matt Barros，Elliott \＆Thoms 2013 for refutations of Lasnik＇s arguments．


## Unconditional sluices

－See Elliott \＆Murphy 2016b for substantial discussion of these cases．
（28）John will fight any $\operatorname{man}^{x}$ ，no matter how tall $\langle\ldots\rangle$
a．${ }^{*}\left\langle\mathrm{he}_{\mathrm{J}}\right.$ will fight any man $\rangle$
b．$\left\langle h e_{x}\right.$ is $\rangle$

## Truncated cleft sources

－Cases of sluicing involving the disjunction of propositions in the antecedent，which I dub p－or－q sluices，following Matthew Barros（2014），motivate the availability of a truncated cleft source，which I take to involve a pronominal subject of type $\langle e, t\rangle$ ，anaphoric on some property in the discourse，and a pivot of type $e$ ．
（29）a．Either something＇s on fire，or Sally＇s baking a cake，but I don＇t know which．
b．Either something＇s on fire，or Sally＇s baking a cake，but I don＇t know which it is．

- Matthew Barros (2014) shows that the grammaticality of $p$-or- $q$ sluices in a given language tracks the grammaticality of a cleft continuation as in 29b. In Russian for example, both the p-or-q sluice and the cleft continuation are ungrammatical. 30 shows this for a variety of different possible wh-remnants.
(30) *ili Sally opjat' pechet tort ili chto-to gorit, no ya ne znayu \{chto/ kakoy/ or Sally again bake cake or something burns, but I not know what which kakoe iz dvuh/ kakoe kotoraja immeno (eto). which of.the two which situation exactly it


## 4 Towards a flexible identity condition

- It looks like we want an identity condition that will let in a limited amount of non-isomorphism without over-generating.
- I will sketch an approach here based on existing, independently-motivated work on the semantics of scalar implicature, and association with focus (Katzir 2008, Fox \& Katzir 2011).

Why might association with focus and ellipsis involve the same mechanism?

- This is an old idea going back to Rooth 1993. One advantage is that it allows one to give a unified account of ellipsis and deaccenting, where ellipsis is conceived of as a more radical form of the former process.
- There are other intriguing commonalities between the two domains.
- Observation: certain presuppositions are ignored for the purposes of computing focus alternatives, but not others (Sauerland 2013).
- Novel empirical generalization (originally due to Elliott 2013a): the same presuppositions that are ignored for the purposes of computing focus alternatives are ignored for the purposes of ellipsis identity.
- It is helpful to contrast the behaviour of presuppositions in ellipsis and association with focus environment, with quantificational environments.
(31) No student in the class except for one submitted her work on time.
- (31) is true in a scenario where, e.g., two students criticized themselves, but only one is female. This means that presupposition introduced by the gender feature on her must factor into the quantification. ${ }^{3}$
- Now compare to an example involving association with focus:

[^2](32) Only Mary submitted her work on time.

- (32) is false in a scenario where Mary was the only female student who submitted her work on time, but John submitted his work on time too. In order to get the right meaning for (32), the presupposition introduced by her must be ignored for the purposes of computing focus alternatives.
- Similarly, ellipsis identity ignore $\phi$-featural mismatches.
(33) Mary submitted her work on time, and John did 〈submit his work on time〉, too.
- The thought is that if we state our licensing condition in terms of focus alternatives, such facts come for free.
- One response to this data would be to claim that $\phi$-features on bound pronouns in such cases are not interpreted (see, e.g., Kratzer 2009), but see Sudo 2012 for extensive arguments that $\phi$-features on bound pronouns are indeed presuppositional.
- Other presuppositions however count for both association with focus, and ellipsis; broadly, the presuppositions associated with particular roots.
(34) $\llbracket$ Mary stopped smoking $\rrbracket^{t}=\lambda w: \exists \mathrm{t}^{\prime}\left[\mathrm{t}<\mathrm{t}^{\prime} \wedge\right.$ Mary smokes $_{w}$ at $\left.\mathrm{t}^{\prime}\right]$. $\neg\left[\right.$ Mary smokes ${ }_{w}$ at t$]$
- (35) is true in a scenario where, e.g., Mary smoked at some past time, but doesn't smoke at the current time, however there are other individuals who don't smoke at the current time either (the assertive component of the meaning). This means that the presupposed component of the meaning has to factor into the computation of focus alternatives.
(35) Only Mary stopped smoking.
- Similarly (36) presupposes that John smoked at some past time, and gives rise to a presupposition failure otherwise.
(36) Mary stopped smoking, and John did too.


## Background: structural alternatives

- See Katzir 2008, Fox \& Katzir 2011, Trinh \& Haida 2015.
- Applications to ellipsis identity: Elliott 2013b, Thoms 2015, Abels 2016 and Fleisher 2016.
- Motivation: the symmetry problem in the computation of scalar implicatures/association with focus.
(37) a. Josie ate some of the ice cream.

SI: $\neg$ [Josie ate all of the ice cream $]$
b. Josie watched Blade Runner or Aliens.

SI: $\neg[$ Josie watched Blade Runner and Aliens]
c. Josie has three cats.

SI: $\neg$ [Josie has four cats.]

- The traditional Gricean view is that the scalar implicature of a sentence is computed by negating the truth-conditionally stronger alternatives to the sentence.
- The symmetry problem arises when we fail to constrain the set of truth-conditionally stronger alternatives.
(38) Josie has four cats.
(39) Potential alternatives:
a. Josie has four cats.
b. Josie has exactly three cats.
- Both (39a) and (39b) are truth-conditionally stronger than (38) ${ }^{4}$
- However, the negation of (39b) contradicts the assertion of (38).
- The solution, naturally, is to develop a theory of alternatives according to which (39a) counts as an alternative to (38), but (39b) does not.
- The standard way of doing this, following is to invoke lexically specified scales (Horn 1972), i.e. $\{. . .$, three, four, ...\} are scalemates, but $\{$...,three, exactly three,...\} are not.
- Fox \& Katzir (2011) note that the symmetry problem also arises for association with focus.
(40) Q: What did Josie do?

John only $[\text { read three books }]_{\mathrm{F}}$.
Inference: $\neg$ [John read four books]
(41) Potential alternatives:
a. $S_{1}$ : Josie read four books.
b. $S_{2}$ : Josie read exactly three books.

[^3]- According to the standard theory of association with focus, the inference in (40) is derived via negating a contextually specified subset of the alternatives derived via replacing the $F$ marked constituent with constituents of the same semantic type.
- It is not plausible to carry the mechanism for symmetry-breaking posited in the literature on scalar implicatures (Horn scales), over the association with focus. This is because association with focus is a fully general, and therefore we need an algorithm for computing alternatives in a systematic way.
- A salient distinction between the potential alternatives in (41) is that John read exactly three books is structurally more complex than the sentence John read three books, but John read four books is not.
- Katzir's (2008) idea is that the set of alternatives to a sentence $S$ are derived via recursive application of the following tree-manipulation operations.
- Deletion (removing edges and nodes)
- Contraction (removing an edge and identifying its end nodes)
- Substitution (replacing one terminal element with another of the same category)
- On this basis, Katzir provides the following definition of structural complexity:
(42) Structural complexity (Katzir 2008: p. 679)

Let $\phi, \psi$ be parse trees. If we can transform $\phi$ into $\psi$ by a finite series of deletions, contractions, and replacements of constituents $\phi$ with constituents of the same category taken from $\mathrm{L}(\phi)$, we will write $\psi \lesssim \phi$. If $\psi \lesssim \phi$ and $\phi \lesssim \psi$ we will write $\phi \sim \psi$. If $\psi \lesssim \phi$ but not $\phi \lesssim \psi$ we will write $\psi<\phi$.
(43) Fox \& Katzir's (2011) structurally-charaterized focus alternatives
$F(S, C)=$
$\left\{S^{\prime}: S^{\prime}\right.$ is derived by replacing constituents $x_{1}, \ldots, x_{n}$ with $y_{1}, \ldots, y_{n}$, where $\left.y_{1} \lesssim c x_{1}, \ldots, y_{n} \lesssim c x_{n}\right\}$

- Important take-home point: the alternatives implicated in our account of scalar implicature and focus alternatives are elements of the interpreted object language - syntactic structures.


## Existing focus-based licensing conditions

- Identity condition on ellipsis: Merchant's (2001) e-GIVEnness. ${ }^{5}$

[^4](45) e-GIVENness

An expression counts as e-given iff $E$ has a salient antecedent $A$, and modulo $\exists$-type shifting,
a. A entails F-clo(E), and
b. E entails F-clo(A)

- The details here are not so important, but note that the licensing condition is stated in terms of entailment, and therefore is defined in terms of truth. Licensing conditions of this kind face some well-known over-generation problems. One prominent example is the relational opposites puzzle (Hartman 2009).
(46) John will beat someone at chess, and then Mary will $\langle\ldots\rangle$
a. 〈beat someone at chess〉
b. * $\langle$ lose to someone at chess $\rangle$
(47) $\exists x[x$ will beat someone at chess] entails $\exists x[x$ will lose to someone at chess]
- The standard solution is to supplement e-GIVENness with something like Chung's (2005) no new words condition on ellipsis licensing, but this is naturally just a stipulation.
- I suggest here that (based on the evidence for non-isomorphic sources) that a more accurate generalization is as follows:
(48) No new roots!

Given an ellipsis site E, and its antecedent A, E may not contain any roots not already present in A.

- This condition will 'come for free' based on the proposed licensing condition.


## Licensing Via structural alternatives

- I suggest the following licensing condition on ellipsis, based on Fox \& Katzir's notion of structural alternatives.


## (49) Licensing via alternatives (first version) ${ }^{6}$

a. $E \in F(A, C)$
b. $\quad A \in F(E, C)$

[^5]－Recall：
（50）Fox \＆Katzir＇s（2011）structurally－charaterized focus alternatives
$F(S, C)=$
$\left\{S^{\prime}: S^{\prime}\right.$ is derived by replacing constituents $x_{1}, \ldots, x_{n}$ with $y_{1}, \ldots, y_{n}$ ， where $\left.y_{1} \lesssim c x_{1}, \ldots, y_{n} \lesssim c x_{n}\right\}$
（51）$\quad S^{\prime} \lesssim c S$ if $S^{\prime}$ can be derived from $S$ by successive replacements of sub－constituents of $S$ with elements of the substitution source for $S$ in $C, S S(S, C)$ ．
（52） $\operatorname{SS}(X, C)$ ，the subtitution source for $X$ in a context $C$ ，is the union of the following sets：
a．The lexicon
b．The subconstituents of $X$
c．The set of salient constituents in C
－I suggest here that the difference between ellipsis and de－accenting boils down to the salience assumption：
（53）Salience assumption：elided material does not count as salient in C．
－As stated，the licensing condition is FAR too permissive，and fails to rule out the relational opposites case，voice mismatches，etc．

An economy condition on ellipsis licensing
－Katzir（2008）and Fox \＆Katzir（2011）assume that $F(S, C)$ is a flat set of alternatives．I＇d like to revise that slightly here－I will take $F(S, C)$ to be an ordered set of alternatives， ordered according to how much each alternative $S^{\prime}$ deviates structurally from $S$ ．This can be calculated by counting how many successive applications of Katzir＇s tree－manipulation operations are required to derive $S^{\prime}$ from $S$ ．This will successfully rule out examples such as the following：
（54）Abby called Chuck an idiot after Ben did．．．
a．．．．〈call him an idiot〉
b．＊．．．〈insult him〉
－Despite the fact that（54b）can be derived from the antecedent via tree－manipulation op－ erations（and crucially，inserted from the lexicon），there is always a competing ellipsis site that deviates less from the antecedent－namely，the structure in（54a）．Since the licensing condition states that $E$ must be a maximal member of $F(A, C),(54 b)$ is always blocked by the possibility of（54a）．

- We can now revise our ellipsis licensing condition.


## (55) Licensing via alternatives (second version)

a. $E$ is a maximal element in $F(A, C)$
b. $A \in(E, C)$

- Despite the fact that the proposed licensing condition is symmetric, (53) guarantees that A may be structurally more complex than E .
- Concretely, a case of 'vehicle change'.
(56) They arrested the guy who lives over the garage, though he thought they wouldn't 〈arrest him $\rangle$
- The licensing condition states that $\mathcal{A} \in F(A, C)$, but $A$ is apparently structurally more complex than E. However, since the material the guy who lives over the garage is overt, it counts as salient in C , and due to the definition of the substitution source in (52), this means that the guy who lives over the garage is part of the substitution source for E in C . The condition on the antecedent is also simply stated in terms of membership; there is no maximality condition.
- What about licensing in the other direction? The condition on the ellipsis site states that it must be the maximal member of $F(A, C)$. This is plainly not the case however - without saying anything further, the maximal element of $F(A, C)$ will always be the structure identical to A, namely, arrest the guy who lives over the garage. In order to derive the actual elided material, we must first delete the definite DP, and replace it with a masculine pronoun, an occurence of which is overt and therefore salient in C.
- We need to revise the identity condition again - alternatives which give rise to ungrammaticality do not count for the purposes of maximality. This is starting to sound very much like an economy condition.


## (57) Licensing via alternatives (third version)

a. $E$ is a maximal element in $F(A, C)$ that does not otherwise violate any grammatical constraints
b. $A \in(E, C)$

## More evidence for a flexible licensing condition: split antecedents

- what is the antecedent here?
(58) I did everything Mary did. Mary swam the English Channel and Mary climbed Kilimanjaro, and I did too.
(59) a. $A=[$ $v p$ swim the English channel $]$
b. $\quad A^{\prime}=\left[{ }_{\mathrm{VP}}\right.$ climb Kilimanjaro]
c. $E=[v p$ swim the English channel and climb Kilimanjaro $]\left(\neq A \neq A^{\prime}\right)$
- The proposed licensing condition is flexible enough to license this, since the ellipsis site can be constructed by (re)combining material from the substitution source.


## 5 The structural residue: case-matching

- Gary Thoms came up with the following argument that case-matching must be about surface features.
(60) I saw someone arrive, but I didn't see who.
a. \# ...I saw arrive.
b. ...arrived.
- Case-matching looks very much like a surfacey morphological condition, and is virtually exceptionless - unlike the sluicing $/ \mathrm{P}$-stranding generalization!
- According to the kind of account developed here, case-matching will not follow from the licensing condition on ellipsis.
- It must follow from something else. Abels (2016) posits a distinct licensing condition for the correlate-remnant pair (the fit condition), which could supplement the licensing condition for elided material proposed here.


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    ${ }^{1}$ See, e.g., work recently presented here by Murphy (2016) arguing that ellipsis involves removal of syntactic material structurally identical to its antecedent.

[^1]:    ${ }^{2}$ The meaning that we want for the non-intersective reading of hard worker is something like the following:

[^2]:    ${ }^{3}$ Footnote about how it is standardly assumed that the semantics of $\phi$-features is presuppositional.

[^3]:    ${ }^{4}$ That is to say, (39a) entails (38), but not vice versa, and likewise for (39b).

[^4]:    ${ }^{5}$ See also Elliott \& Sudo 2016 for a dynamicized version of Merchant's e-GIVENness, which they argue is necessary in order to account for mismatches between quantifiers and anaphoric definites.
    (44) John applied to five graduate schools ${ }^{x}$, but I don't know why...
    a. ... $\left\langle\right.$ he applied to five graduate schools $\left.{ }^{y}\right\rangle$
    b. ... $\left\langle\right.$ he applied to the graduate schools $\left._{x}\right\rangle$

[^5]:    ${ }^{6}$ The idea of stating the ellipsis licensing condition in terms of structural alternatives was to my knowledge first proposed by Elliott (2013b), and has since been proposed by Thoms (2015), Abels (2016) and Fleisher (2016), for different reasons.

