Spanish seems to allow P-stranding in contexts of sluicing (Rodrigues et al., 2009) (1a), even though it doesn’t allow P-stranding in non-elliptical wh-questions (1b):

(1) a. Juan habló con una chica, pero no sé (con) cuál.
   John talked with a girl but not I know with which
   ‘John talked with a girl but I don’t know which’.

b. *¿Cuál chica habló Juan con?
   which girl talked John with
   Intended ‘Which girl has John talked with?’

This constitutes an apparent counterexample for the Preposition Stranding Generalization:

(2) **Form-identity generalization II: Preposition-stranding**
   A language \(L\) will allow preposition stranding under sluicing iff \(L\) allows preposition stranding under regular wh-movement. (Merchant, 2001 p. 92)

Some authors (Rodrigues et al., 2009; Barros, 2014) proposed non-isomorphic, copular sources as the one in (3b) to account for P-less remnants:

(3) a. Juan habló con una chica, pero no sé cuál.
   John talked with a girl but not I know which

b. ...no sé cuál es la chica con la que habló Juan.
   not I know which is the girl with the that talked John
   ‘...I don’t know which girl is the girl that John talked with.’
1 Exhaustive readings

In clefts the pivot entails exhaustivity [Merchant 2001]:

a. it only allows a ‘mention-all’ interpretation, and
b. it’s incompatible with modifiers which require a ‘mention-some’ interpretation
   (e.g. for example and else).

Prediction: if P-less remnants arise from a cleft/copular source, they can’t combine with non-exhaustive modifiers. This prediction is not borne out.

1.1 Mention-some Modification

P-less remnants in Spanish are compatible with por ejemplo ‘for example’ (4B):

(4) A. Deberías hablar con alguien sobre tus problemas financieros.
   ‘You should talk with someone about your financial problems.’
B. (Con) quién, por ejemplo?
   ‘Who, for example?’

Wh-questions can combine with this modifier (5a); clefted/copular questions do not (5b):

(5) a. Con quién debería hablar, por ejemplo?
   ‘Who I should talk with, for example?’
   
   b. Quién es la persona con la que debería hablar, (*por ejemplo)?
   ‘Who is the person that I should talk with, for example?’

Nonexhaustive readings are also found with P-less remnants in stripping [Vicente 2008]:

(6) Ana recomienda servir la carne con un buen tinto, por ejemplo, (con) un Rioja.
   ‘Ana advises to serve the meat with a good red wine, for instance, a Rioja.’
Again, a cleft/copular source is incompatible with a non-exhaustive interpretation, as (7) shows:

(7) *El tinto con el que Ana recomienda servir la carne es un Rioja, por ejemplo.
the wine with which Ana advises to serve the meat is a Rioja for example
Int: ‘The red wine with which Ana advises to serve the meat is a Rioja, for example.’

P-less variants in (13) and (6) cannot arise from a cleft/copular source.

1.2 Else Modification

P-less remnants are also compatible with else modification (Martín González, 2010) (8a), and a cleft/copular source is ungrammatical in this context (8b):

(8) a. Juan habló con tres de sus estudiantes. Habló con Paula y con María
John talked with three of his students he talked with Paula and with Mary
pero no recuerdo quién/cuál más.
but not I remember who/which else
‘John talked with three of his students. He talked with Paula and with Mary, but I don’t remember who else.’

b. ...no recuerdo quién/cuál más es el estudiante con el que habló.
not I remember who/which else is the student with whom he talked
Intended: ‘I don’t remember which other student he talked with.’

The same pattern is found in stripping:

(9) a. A. Escuché que Mauricio habló sobre varios temas interesantes.
I heard that Mauricio talked about several topics interesting
‘I heard Mauricio talked about several interesting topics.’

B. Sí, (sobre) astronomía seguro, pero no sé (sobre) cuál más.
yes about astronomy for sure but not I know about which else
‘Yes, (he talked) about astronomy for sure, but I don’t know which else.’

b. ...no sé cuál (tema) más es el tema sobre el que habló.
not I know which topic else is the topic about which he talked
Intended: ‘I don’t know which other topic he talked about.’

P-less variants in (8a) and (9a-B) cannot arise from a cleft/copular source.

In this section...
✓ I provided evidence that P-less remnants of clausal ellipsis allow non-exhaustive readings (given by mention-some and else modification), and
✓ I showed that accounts that propose non-isomorphic sources (i.e. copular/cleft sources) make wrong predictions regarding exhaustive readings.
2 Analysis

(10) Components of the analysis:
   I. Remnants of ellipsis (can) stay in-situ
      i. Fragments are in interpreted in-situ [Weir, 2014].
      ii. Fragments don’t move (i.e. there is no “exceptional PF movement”).
   II. Identity Condition: The ellipsis site must be syntactically identical to its antecedent, modulo the [F]-marked material. This condition is computed before Spell Out.

2.1 Fragments are interpreted in-situ [Weir, 2014]

NPIs (11), reciprocals (12), quantifiers (13), and prepositions (14) cannot move (examples in b), but they can appear as remnants of ellipsis (examples in c):

(11) a. Max doesn’t read any mystery novels.  
    b. *Any mystery novels, Max doesn’t read \( t \).  

(12) a. Each of them hates the other.  
    b. *The other, each of them hates \( t \).
    c. A: Who does each of them hate? – B: The other.

(13) a. They interviewed \{everyone/someone\}.  
    b. ??\{Everyon/Someon\}, they interviewed \( t \).

(14) a. He looked up.  
    b. *Up, he looked \( t \).
    c. A: Did he look UP? – B: No, down.

Quantifiers inside a VP (15) and quantifier phrases (16) can be fronted, but when they occur as remnants of ellipsis they are interpreted as if they were in their base position:

(15) a. John refused to teach every student. (refuse > \( \forall, \forall > \text{refuse} \))
    b. ...and teach every student, John refused to. (refuse > \( \forall, *\forall > \text{refuse} \)).
    c. A: What did John refuse to do? – B: Teach every student. (refuse > \( \forall, \forall > \text{refuse} \))

(16) a. John refused to read all the syntax books. (refuse > \( \forall, \forall > \text{refuse} \))
    b. All the syntax books, John refused to read. (refuse > \( \forall, *\forall > \text{refuse} \))
    c. A: Which books did John refuse to read? – B: All the syntax ones. (ref > \( \forall, \forall > \text{ref} \))
In all these cases, ellipsis appears to target a string which is not a constituent:

(17)  
   a. *Cake, John ate t.  

Weir proposes that fragments are interpreted in situ and they move at PF.

I propose that fragments—at least in Spanish—can stay in-situ. I claim that there is no need to assume exception* exception* exception* PF movement of the remnant.

2.2 Proposal

An in-situ approach to clausal ellipsis

• There is an [E]-feature on C (Merchant 2001) which gives the instruction to delete/fail to realize C and its complement.

• [F]-marked material is interpreted (phonologically) with stress.

• The instruction to stress [F]-marked material is at odds with the instruction to delete/fail to realize the material in C[E] and its complement.

• To resolve this, deletion only targets non-[F]-marked material.

• Clausal ellipsis requires syntactic identity:

   (18) Identity Condition: The ellipsis site must be syntactically identical to its antecedent, modulo the [F]-marked material. This condition is computed before Spell Out.

1 Previous in-situ approaches to ellipsis have been proposed; see, for instance, Abe (2015).
2 Deletion of C eliminates the [+wh] feature that triggers movement of the wh-phrase (Merchant 2001, fn. 17).
(19)  a. Juan vio algo pero no sé qué.
John saw something but not know.I what
b. [A Juan vio [F algo]] ... [⊂ vio [F qué]]

Antecedent
\begin{center}
\begin{tikzpicture}
  \node (CP) {CP};
  \node (TP) [below] {TP};
  \node (C) [above] {C};
  \node (vP) [below] {vP};
  \node (T) [left] {T};
  \node (vio) [above] {vio};
  \node (Subj) [below] {Subj.}
  \node (Juan) [above] {Juan};
  \node (v) [right] {v};
  \node (VP) [below] {VP};
  \node (V) [below] {V};
  \node (algo) [below] {algo};
  \draw (CP) -- (TP);
  \draw (TP) -- (C);
  \draw (C) -- (vP);
  \draw (vP) -- (T);
  \draw (T) -- (vio);
  \draw (vio) -- (Subj);
  \draw (Subj) -- (Juan);
  \draw (Juan) -- (v);
  \draw (v) -- (VP);
  \draw (VP) -- (V);
  \draw (V) -- (algo);
\end{tikzpicture}
\end{center}

Ellipsis site
\begin{center}
\begin{tikzpicture}
  \node (CP) {CP};
  \node (TP) [below] {TP};
  \node (C) [above] {C};
  \node (vP) [below] {vP};
  \node (T) [left] {T};
  \node (vio) [above] {vio};
  \node (Subj) [below] {Subj.}
  \node (Juan) [above] {Juan};
  \node (v) [right] {v};
  \node (VP) [below] {VP};
  \node (V) [below] {V};
  \node (algo) [below] {algo};
  \node (DP) [right] {DP};
  \node (un libro) [right] {un libro};
  \draw (CP) -- (TP);
  \draw (TP) -- (C);
  \draw (C) -- (vP);
  \draw (vP) -- (T);
  \draw (T) -- (vio);
  \draw (vio) -- (Subj);
  \draw (Subj) -- (Juan);
  \draw (Juan) -- (v);
  \draw (v) -- (VP);
  \draw (VP) -- (V);
  \draw (V) -- (algo);
  \draw (algo) -- (DP);
  \draw (DP) -- (un libro);
\end{tikzpicture}
\end{center}

what bought John a book
b. [A [F Qué] i compró Juan t i] ... [⊂ compró [F un libro]]

Antecedent
\begin{center}
\begin{tikzpicture}
  \node (CP) {CP};
  \node (TP) [below] {TP};
  \node (C) [above] {C};
  \node (vP) [below] {vP};
  \node (T) [left] {T};
  \node (compró) [above] {compró};
  \node (Subj) [below] {Subj.}
  \node (Juan) [above] {Juan};
  \node (v) [right] {v};
  \node (VP) [below] {VP};
  \node (V) [below] {V};
  \node (ti) [below] {ti};
  \node (DP) [right] {DP};
  \node (un libro) [right] {un libro};
  \draw (CP) -- (TP);
  \draw (TP) -- (C);
  \draw (C) -- (vP);
  \draw (vP) -- (T);
  \draw (T) -- (compró);
  \draw (compró) -- (Subj);
  \draw (Subj) -- (Juan);
  \draw (Juan) -- (v);
  \draw (v) -- (VP);
  \draw (VP) -- (V);
  \draw (V) -- (ti);
  \draw (ti) -- (DP);
  \draw (DP) -- (un libro);
\end{tikzpicture}
\end{center}

Ellipsis site
\begin{center}
\begin{tikzpicture}
  \node (CP) {CP};
  \node (TP) [below] {TP};
  \node (C) [above] {C};
  \node (vP) [below] {vP};
  \node (T) [left] {T};
  \node (compró) [above] {compró};
  \node (Subj) [below] {Subj.}
  \node (Juan) [above] {Juan};
  \node (v) [right] {v};
  \node (VP) [below] {VP};
  \node (V) [below] {V};
  \node (ti) [below] {ti};
  \node (DP) [right] {DP};
  \node (un libro) [right] {un libro};
  \draw (CP) -- (TP);
  \draw (TP) -- (C);
  \draw (C) -- (vP);
  \draw (vP) -- (T);
  \draw (T) -- (compró);
  \draw (compró) -- (Subj);
  \draw (Subj) -- (Juan);
  \draw (Juan) -- (v);
  \draw (v) -- (VP);
  \draw (VP) -- (V);
  \draw (V) -- (ti);
  \draw (ti) -- (DP);
  \draw (DP) -- (un libro);
\end{tikzpicture}
\end{center}
2.3 Evidence & Predictions

In this section...

✓ I will report a novel generalization with respect to what types of clausal ellipsis (and in which contexts) allow P-less remnants.
✓ I will show that there is no correlation between the availability of P-less remnants and the availability of copular sources (see footnotes).

2.3.1 Sluicing vs. Fragment answers

P-less remnants are possible in sluicing (21) but not in fragment answers (22).

I assume that F-marking can mark either the entire PP or the DP.

Sluicing: when the correlate PP is [F]-marked, the preposition is not deleted (21a). When the correlate DP is [F]-marked, the preposition is deleted, and a P-less remnant obtains (21b). The Syntactic Identity Condition is satisfied (non-[F]-marked material is underlined).

(21) Juan habló con alguien pero no sé (con) quién.
John talked with someone but I don’t know who.
‘John talked with someone but I don’t know who.’

a. [A Juan habló [F con alguien]] ... [C E Juan habló [F con quién]]
b. [A Juan habló con [F alguien]] ... [C E Juan habló con [F quién]]

Fragment answers: the correlate wh-phrase moves in the antecedent. If the PP is [F]-marked, the preposition in the remnant is not deleted (22a).

If only the wh-phrase is [F]-marked, the preposition cannot be deleted because of the Identity Condition (i.e. non-[F]-marked material in the antecedent won’t be syntactically identical to material in the ellipsis site) (22b).

(22) A: Con quién habló Juan? – B: *(Con) María.
With who talked John? With Mary.
‘A: Who did John talk with? – B: Mary.’

a. [A [F Con quién]; habló Juan ti] ... [C E habló Juan [F con María]]
b. *[A [Con [F quién]]; habló Juan ti] ... [C E habló Juan con [F María]]

Generalization: P-less remnants are only allowed when the correlate in the antecedent remains in-situ; P-less remnants are not allowed when the correlate moves.

A non-isomorphic, copular continuation is possible:

(1) María es la persona con la que habló Juan.
Mary is the person with that talked John
‘Mary is the person that John talked with.’
2.3.2 Two types of contrast sluicing

Some cases of contrast sluicing allow P-omission (23) but others don’t (24).

Correlate in-situ: we expect to find optional P-omission. The prediction is borne out.

(23) Juan habló con cinco chicas pero no sé (con) cuántos chicos
John talked with five girls but not know.I (with) how many boys
‘John talked with five girls but I don’t know with how many boys.’

a. [A Juan habló [F con cinco chicas]] ... [c Rae Juan habló [F con cuántos chicos]]
b. [A Juan habló con [F cinco chicas]] ... [c Rae Juan habló con [F cuántos chicos]]

Correlate moves: we expect P-omission to be banned. The prediction is borne out.

(24) Sé con cuántas chicas habló Juan, pero no sé *(con) cuántos chicos.
I know with how many girls talked John but not know with how many boys
‘I know with how many girls John talked, but I don’t know with how many boys.’

a. [A [F con cuántas chicas] habló Juan t] ... [c Rae habló Juan [F con cuántos chicos]]
b. *[A [con [F cuántas chicas] habló Juan t] ... [c Rae habló Juan con [F cuántos chicos]]

2.3.3 Split questions

Split questions are structures that contain a wh-question part followed by a tag (Arregi, 2010). The correlate moves, so we expect to find P-omission to be impossible:

(25) ¿Con quién habló Juan, *(con) Marí a?
with who talked John with Mary
‘Who did John talk with? Mary?’

a. [A [F Con quién]i habló Juan t] ... [c Rae habló Juan [F con Marí a]]
b. *[A [con [F quién]]i habló Juan t] ... [c Rae habló Juan con [F Marí a]]

A non-isomorphic copular source is ungrammatical:

(1) *Cuántos chicos son (los chicos) con los que habló Juan?
how many boys are the boys with that talked John
Int. ‘How many boys are the boys that John talked with?’

4A copular source is ungrammatical. In some other cases of contrast sluicing that don’t allow P-omission (1a), a copular clause is perfectly possible as a source for the ellipsis site (1b):

(1) a. Sé con qué CHICA habló Juan, pero no sé *(con) qué CHICO.
I know with which girl talked Juan but not I know with which boy
‘I know which girl John talked with but I don’t which boy.’
b. ...no sé qué chico es (el chico) con el que habló Juan.
not I know which boy is the boy with which talked Juan
‘I don’t know which boy is the one that Juan talked with.’

5In (24) a copular continuation is ungrammatical. In some other cases of contrast sluicing that don’t allow P-omission (1a), a copular clause is perfectly possible as a source for the ellipsis site (1b):
2.3.4 Stripping

Stripping allows P-less remnants:

(26) Juan habló con SUSANA, no (con) ELENA.
    John talked with Susan  not with Elena
    ‘John talked with Susan, not with Elena.’

a. [ₐ Juan habló [f con Susana]] ... [no [cₑₐ habló Juan [f con Elena]]]
   b. [ₐ Juan habló con [f Susana]] ... [no [cₑₐ habló Juan con [f Elena]]]

Pseudostripping refers to cases of stripping in which the remnant precedes the negation (Depiante, 2000). According to Depiante (2000), pseudostripping is derived via movement of the remnant followed by deletion. This configuration doesn’t allow P-omission:

(27) Juan habló con SUSANA, *(con) ELENA no.
    John talked with Susan  with Elena  no
    ‘John talked with Susan, not with Elena.’

a. [ₐ Juan habló [f con Susana]] ... [F con Elena] no [cₑₐ habló Juan [F con Elena]]]
   b. [ₐ Juan habló con [f Susana]] ... [F con Elena] no [cₑₐ habló Juan con [F Elena]]]

The problem with (27b) is that it would involve P-stranding, and that’s ungrammatical.

Further evidence: when the 1p pronoun mí ‘me’ combines with the preposition con, it takes the form -migo and forms a single word with P: conmigo ‘with.me’.

If the correlate PP is conmigo, P-omission is impossible, as (28b) shows:

(28) Juan habló conmigo, no *(con) Elena.
    John talked with.me not  with Elena

a. [ₐ Juan habló [f conmigo]] ... [no [cₑₐ habló Juan [f con Elena]]]
   b. *[ₐ Juan habló con [f migo]] ... [no [cₑₐ habló Juan con [f Elena]]]

This is because it’s impossible to [F]-mark part of a word in Spanish.

6A non-isomorphic source is ungrammatical:

(1) *No Elena es la persona con la que habló Juan.
    not Elena is the person  with that  talked John
    Intended ‘Elena is not the person that John talked with.’

7A non-isomorphic source is grammatical:

(1) Elena no es la persona con la que habló Juan.
    Elena no is the person  with that  talked John
    ‘Elena is not the person that John talked with.’

Interestingly, if cleft/copular sources were possible, we would expect the exact opposite pattern.
2.3.5 Sprouting

P-less remnants are ungrammatical in sprouting even in P-stranding languages like English.

(29) John got married but I don’t know *(to) who.
   a. [A John got married] ... [C[E] John got married [F to who]]
   b. *[A John got married] ... [C[E] John got married to [F who]]

(30) Juan se casó pero no sé *(con) quién.
   John got.married but not I.know with who
   a. [A Juan se casó] ... [C[E] Juan se casó [F con quién]]
   b. *[A Juan se casó] ... [C[E] Juan se casó con [F quién]]

This follows from the analysis proposed here but requires further stipulations under a cleft-source analysis\(^8\).

3 Conclusions

✓ Cleft-source analysis makes the wrong predictions: i) non-exhaustive readings are allowed; ii) there is no correlation between the availability of cleft/copular sources and P-omission.

✓ P-less remnants are only allowed when the correlate in the antecedent doesn’t move: Fragment answers, Split questions and Sprouting never allow P-omission; Sluicing, Stripping and Contrast sluicing allow P-omission in some contexts.

✓ I proposed an analysis that tries to account for all subtypes of clausal ellipsis in an uniform way, without proposing construction-specific constraints.

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\(^8\)For instance, Barros (2014) argues that cases of sprouting have silent syntactic/implicit correlates. He argues that implicit obliques are syntactically simplex; then, ungrammatical cases are ruled out by the his Remnant Condition (which requires semantic identity between the remnant and the correlate.) because the semantics of these simplex implicit arguments is distinct from that of DPs (i.e. of someone ≠ who).
References


Weir, Andrew. 2014. Fragments and clausal ellipsis. Doctoral Dissertation, University of Massachusetts Amherst, MA.

Laura Stigliano
Ph.D. student - Department of Linguistics - The University of Chicago
laurastigliano@uchicago.edu - voices.uchicago.edu/stigliano/