

Expanding the taxonomy of parenthetical *as*-clauses

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1 Introduction

Potts' correlation Potts (2002) divides *as*-parentheticals into those with a CP gap (1a) and those with a VP gap (1b). He argues that the semantic type of the gap must match that of the *as*-clause host: in (1a), the *as*-clause adjoins to a constituent of type $\langle st \rangle$, whereas in (1b) it does to one of type $\langle s \langle et \rangle \rangle$. I call these *regular as-clauses*.

- (1) a. Ames was a spy, [as the FBI suspected [CP gap]] [CP gap]
b. Ames stole important documents, [as the FBI suspected he had [VP gap]]. [VP gap]

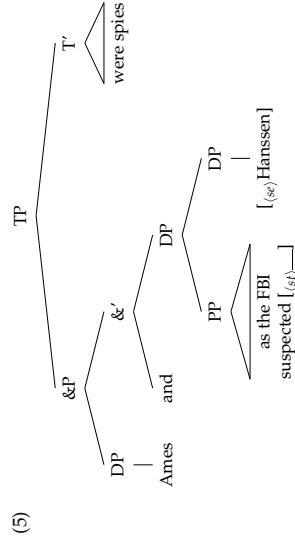
To derive this correlation, Potts proposes that *as*-clauses are partial identity functions (see below). An integral part of this account are the lexical entries for *as* in (2); note that these can be unified by defining a metatype σ (3).

- (2) a. $as_{CP} = \lambda P \in D_{\langle (st)t \rangle} [\lambda p \in D_{\langle st \rangle} : P(p) \text{ is true } [p]]$
b. $as_{VP} = \lambda F \in D_{\langle (s \langle et \rangle)t \rangle} [\lambda f \in D_{\langle s \langle et \rangle \rangle} : F(f) \text{ is true } [f]]$
(3) For any $\sigma \in \{ \langle st \rangle, \langle s \langle et \rangle \rangle \}$, $as = \lambda X \in D_{\langle \sigma \rangle} [\lambda x \in D_{\langle \sigma \rangle} : X(x) \text{ is true } [x]]$

Today's talk This correlation is incorrect: *as*-clauses, whether containing a CP or a VP gap, can also adjoin to other constituents. The only requirement is that the *as*-clause contain a variable over semantic objects of the same type as the host.

Test case: conjunction internal *as*-clauses These clauses premodify the second conjunct of a DP coordination (note that these examples require pitch accent on the *as*-clause host; in the rest of the handout, pitch accent marking will be implicit).

- (4) a. Ames and, [as the FBI suspected [CP gap]], BOONE were spies.
b. Ames and, [as the FBI suspected he had [VP gap]], BOONE stole important documents.



The argumentation is based on the conjunction of two properties of these clauses, both implicit in the tree above.

- Conjunction-internal *as*-clauses share many properties with their regular counterparts, which suggest that both types should be subsumed under the same analysis; for the purposes of this talk, the most important one is that the gap is demonstrably either propositional (with CP gaps) or predicative (with DP gaps), never individual (sec. 2).
- Conjunction-internal *as*-clauses involve coordination at the DP level, rather than clausal coordination supplemented with some process of conjunction reduction (ellipsis; Right Node Raising, etc); as such, it must be the case that the *as*-clause adjoins directly to an $\langle se \rangle$ constituent (sec. 3).

The analysis (sec. 4) requires modelling gaps as having an articulate internal semantics, so that proper subparts of this semantics can be abstracted over.

2 Parallelisms between regular and conjunction-internal *as*-clauses

2.1 Island sensitivity

In neither type of *as*-clause may the gap be contained inside an island. The (b) examples are controls with a bridge verb, to show that it is, in principle, possible to embed the gap inside a finite clause.

- (6) *regular as-clause, CP gap*
a. * Durians are delicious, [as Nina spoke with a grocer who claimed [CP gap]].
b. Durians are delicious, [as Nina said that the grocer claimed [CP gap]].
- (7) *Conjunction-internal as-clause, CP gap*
a. * Durians and, [as Nina spoke with a grocer who claimed [CP gap]], papayas are delicious.
b. Durians and, [as Nina said that the grocer claimed [CP gap]], papayas are delicious.
- (8) *regular as-clause, VP gap*
a. * Durians grow best in tropical climates [as Nina spoke with a grocer who claimed they do [VP gap]].
b. Durians grow best in tropical climates, [as Nina said that the grocer claimed they do [VP gap]].
- (9) *Conjunction-internal as-clause, VP gap*
a. * Durians and, [as Nina spoke with a grocer who claimed they do [VP gap]], papayas grow best in tropical climates.
b. Durians and, [as Nina said that the grocer claimed they do [VP gap]], papayas grow best in tropical climates.

2.2 Sisterhood restriction

In regular *as*-clauses, the meaning of the gap is necessarily retrieved from the constituent that the *as*-clause attaches to.

- (10) *regular as-clause, CP gap*
That space has four dimensions is widely known, [as they announced [CP gap]].
— *As*-clause = they announced that it's widely known that space has four dimensions.
— *As*-clause \neq they announced that space has four dimensions.

(11) *regular as-clause, VP gap*

The fact that Sue read the map carefully means that she stayed on the trails, [as did Chuck [VP___]].

- *As*-clause = Chuck stayed on the trails.
- *As*-clause ≠ Chuck read the map carefully.

Conjunction-internal *as*-clauses also exhibit a sisterhood restriction, whereby only the host DP is relevant to the meaning of the gap.

(12) *Conjunction-internal as-clause, CP gap*

Ames and, [as the FBI suspected [CP___]], Boone were spies.

- *As* clause = the FBI suspected that Boone was a spy.
- *As* clause ≠ the FBI suspected that Ames and Boone were spies.
- *As* clause ≠ the FBI suspected that Ames was a spy.

(13) *Conjunction-internal as-clause, VP gap*

Ames and, [as the FBI suspected he had [VP___]], Boone stole important documents.

- *As* clause = the FBI suspected that Boone had stolen important documents.
- *As* clause ≠ the FBI suspected that Ames and Boone had stolen important docs.
- *As* clause ≠ the FBI suspected that Ames had stolen important documents.

2.3 Opacity of the *as*-clause

Variables contained in *as*-clauses resist binding from operators outside the *as*-clause.

(14) *regular as-clauses*

a. * No_i hiker was, [as she_i admitted [CP___]], prepared for the freezing temperatures.
 b. * Every_i grad student has, [as he_i promised he would [VP___]], written a paper on serial verbs.

(15) *Conjunction-internal as-clauses*

a. * No_i hiker and, [as she_i revealed [CP___]], very few rescue workers were prepared for the freezing temperatures.
 b. * Every_i grad student and, [as he_i hoped they would [VP___]] most postdocs has protested Greg's tenure denial.

2.4 Truth-conditional independence

It is possible to deny the truth of the *as*-clause to the exclusion of the main clause, and vice versa.

(16) *regular as-clause, CP gap*

A: Ames was a spy, [as the FBI suspected [CP___]].
 B: It's true he was a spy, but the FBI never suspected he was one.
 B': It's true that the FBI suspected he was a spy, but in reality he wasn't one.

(17) *regular as-clause, VP gap*

A: Ames stole important documents, [as the FBI suspected he had [VP___]].
 B: It's true he stole important documents, but the FBI never suspected he done so.
 B': It's true that the FBI suspected he had stolen important documents, but in reality he hadn't done so.

(18) *Conjunction-internal as-clause, CP gap*

A: Ames and, [as the FBI suspected [CP___]], Boone were spies.
 B: It's true that Ames and Boone were spies, but the FBI never actually suspected that Boone was one.
 B': It's true that the FBI suspected that Boone was a spy, but in reality neither he nor Ames was one

(19) *Conjunction-internal as-clause, VP gap*

A: Ames and, [as the FBI suspected he had [VP___]], Boone stole important documents.
 B: It's true that Ames and Boone stole important documents, but the FBI never actually suspected that Boone had done so.
 B': It's true that the FBI suspected that Boone had stolen important documents, but in reality neither he nor Ames had done so.

2.5 Category of the gap

Potts argues that CP gaps in regular *as*-clauses are necessarily propositional because the are illicit in exclusively nominal environments (complement of *be aware of*) and licit in exclusively clausal environments (complement of *boast*). Gaps in conjunction-internal *as*-clauses exhibit the same distribution.

- (20) a. * We are aware of [that the Earth is round].
 b. We are aware of [the roundness of the Earth].
 c. * The Earth is round, [as we are aware of [CP___]].
- (21) a. Alfred boasted [that the results were excellent].
 b. * Alfred boasted [the excellence of the results].
 c. The results were excellent, [as Alfred boasted [CP___]].
- (22) a. * The Earth and, [as we are aware of [CP___]], the Moon are round.
 b. The results and, [as Alfred boasted [CP___]], the prospects were excellent.

The category/type of VP gaps is easier to determine, as they always appear in positions that are exclusively predicative, i.e., as complements of modals, auxiliaries, and supportive *do*.

2.6 Internal syntax of the gap

Potts argues that CP gaps ought to be modelled as deep anaphors, on the grounds that they can take a non-linguistic antecedent. Comparable examples can be constructed for conjunction-internal *as*-clauses (Craig Thiersch, p.c.).

- (23) *Scenario: wife goes home and finds her husband naked in bed with another woman.*
 Aha! Just as I suspected [CP___]!
- (24) *Scenario: the WHO has recently released a report on the benefits of Mediterranean cuisines. As we walk into a Lebanese restaurant, you point at all the platters of hummus and say:*
 This simple and, [as the WHO claims [CP___]], healthy dip is their speciality.
- On the other hand, LaCara (2013) points out that VP gaps do not support non-linguistic antecedents, which suggests they are surface anaphors.
- (25) *Scenario: wife goes home and finds her husband naked in bed with another woman.*
 # Aha! Just as I suspected you would [VP___]!

- (26) *Scenario: the WHO has recently released a report on the benefits of Mediterranean cuisines. As we walk into a Lebanese restaurant, you point at all the platters of hummus and say:*
 # This simple and, [as the WHO claims it is [VP ___]], healthy dip is their speciality.

Additionally, VP gaps also allow extraction from within them, which is another property of surface anaphors.

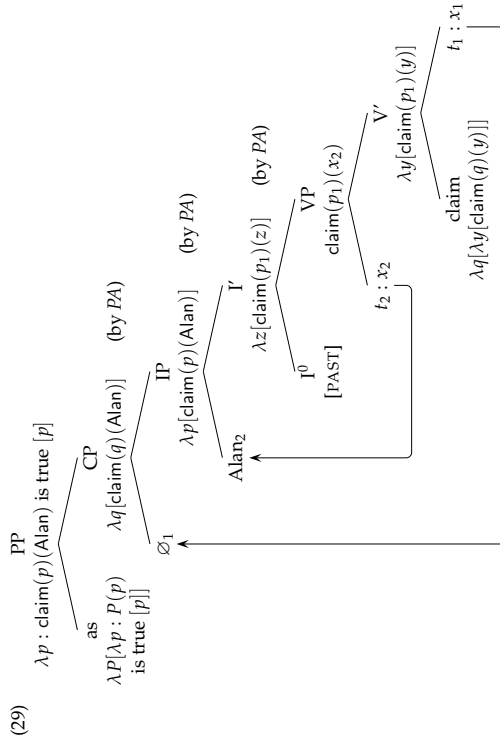
- (27) a. The boat sank, [as I thought it would [VP ___]].
 b. The boat was sunk, [as I think the barge also was [VP ___]].
 c. Mary seems happy, [as she should [VP ___]].
- (28) a. The boat and, [as I thought it would [VP ___]], the barge sank.
 b. The boat and, [as I think it also was [VP ___]], the barge were sunk.
 c. Mary and, [as she should [VP ___]], Nancy seem happy.

2.7 Interim conclusion

Regular	Conj-int
locality effects	yes
sisterhood effects	yes
opacity to external operators	yes
truth-conditional independence	yes
gap is propositional/predicative	yes
propositional gaps are deep anaphors	yes
predicative gaps are surface anaphors	yes

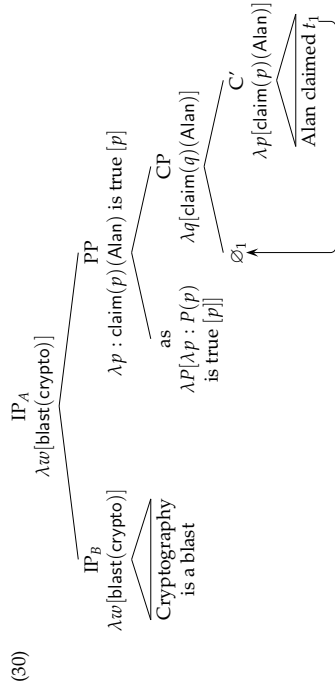
Table 1: Parallelisms between regular and conjunction-internal *as*-clauses

Given that regular and conjunction-internal *as*-clauses pattern together in many important aspects, they should be subsumed under the same analysis.



“As it stands, CP-*as* clauses denote in $\langle(st), \langle st \rangle\rangle$. Correspondingly, Predicate-*as* clauses denote in $\langle\langle s(et) \rangle, \langle s(et) \rangle\rangle$. They are, then, partial identity functions on propositions (for CP-*as*) or properties (for Predicate-*as*). This captures formally the dependence of *as*-clauses identified earlier as the syntactic sisterhood restriction: these clauses have an open argument slot; alone, they cannot express a proposition. In the usual situation, then, they must adjoin to an appropriately typed phrase.” [Potts 2002:655]

The following tree illustrates the final stage in the derivation, where the *as*-clause adjoins to the host constituent *Cryptography is a blast*. As above, I supplement the tree with Potts’s commentary on this part of the derivation.



“Using this version of *as*, IP_A asserts only the proposition $[\lambda w [\text{blast}_w(\text{cryptography})]]$. But the conventional implicature associated with *as* means that the calculation cannot proceed to the IP_A unless the *as*-PP applies to a proposition *p* such that Alan in fact claimed that *p*. Thus, an *as*-clause-containing CP entails both the content of the declarative and the content of the *as*-clause, but only the former is a proper (strictly truth-functional) entailment. In effect, the *as*-clause is a filter: it applies to a proposition, checks that the result expresses a truth, and then passes the proposition on unmodified.” [Potts 2002:657]

3 Against a conjunction-reduction analysis

[more precisely: some conjunction-internal *as*-clauses can be analyzed as clause-level coordinations plus ellipsis and/or Right Node Raising, but this is not a general possibility]

3.1 Distribution

Coordinate structures containing an *as*-clause exhibit the same distribution as regular DP coordinations, which in turn is the same distribution as regular uncoordinated DPs.

- (31) *Distribution of conjunction-internal as-clauses with a CP gap*
 a. There is a pigeon and, [as Edna just pointed out [CP ___]], a sparrow in the tree. [there-expletive associate]
 b. Ames learned to speak Russian and, [as the New York Times reported [CP ___]], Chinesese. [direct object]

- c. Ames sold the KGB and, [as some have speculated [_{CP}___]], the Mossad many important documents.
[indirect object]
- d. Ames and, [as Edna just told me [_{CP}___]], Hanssen are both likely to be KGB double agents.
[raised subject]
- e. Ames and, [as the New York Times reported [_{CP}___]], Hanssen, have both been accused of being KGB double agents.
[passivized subject]
- f. Edna believes both Ames and, [as Harvey suspected [_{CP}___]], Hanssen to be KGB double agents.
[ECM subject]
- g. The FBI gathered detailed information about both Ames and, [as Edna just confirmed [_{CP}___]], Hanssen.
[complement of preposition]
- h. The FBI tapped Ames and, [as the New York Times reported [_{CP}___]], Hanssen's phone line.
[possessor]
- (32) *Distribution of conjunction-internal as-clauses with a VP gap*
- a. There is a pigeon and, [as Edna predicts there would be [_{VP}___]], sparrow in the tree.
[*there*-expletive associate]
- b. Ames learned to speak Russian and, [as Edna claimed she also had [_{VP}___]], Chinese.
[direct object]
- c. Ames sold the KGB and, [as some predicted he would [_{VP}___]], [F the Mossad] many important documents.
[indirect object]
- d. Ames and, [as Edna thought he could be [_{VP}___]], Hanssen are both likely to be KGB double agents.
[raised object]
- e. Ames and, [as the New York Times anticipated he would be [_{VP}___]], Hanssen, have both been accused of being KGB double agents.
[passivized subject]
- f. Edna believes both Ames and, [as Harvey suspected he could be [_{VP}___]], Hanssen to be KGB double agents.
[ECM subject]
- g. The FBI gathered detailed information about both Ames and, [as Edna just confirmed they have [_{VP}___]], Hanssen.
[complement of preposition]
- h. The FBI tapped Ames and, [as the New York Times reported they have [_{VP}___]], Hanssen's phone line.
[possessor]

3.2 Multiple as clauses

- (33) Ames and, [as the New York Times reported [_{CP}___]], Hanssen learned to speak Russian and, [as Edna said she also had [_{VP}___]], Chinese.
- a. Main clause = Ames and Hanssen learned to speak Russian and Chinese.
- b. i. Subject *as*-clause = the New York Times reported that Hanssen learned to speak Russian and Chinese.
ii. Subject *as*-clause ≠ the New York Times reported that Ames and Hanssen learned to speak Russian and Chinese.
- c. i. Object *as*-clause = Edna said that she also had learned to speak Chinese.
ii. Object *as*-clause ≠ Edna said that she had also learned to speak Russian and Chinese.

In order to maintain an analysis in terms of clausal conjunction, (33) would have to be derived from a base along the lines of (34). Note that the three separate clausal conjunctions in (34) are necessary to ensure that each *as*-clause is scopally independent from the other and from the main clause (cf. the paraphrases of (33)).

- (34) [_{CP}₁ Ames learned to speak Russian and Chinese], and [_{CP}₂ [as the New York Times reported [_{CP}___]], Hanssen learned to speak Russian and Chinese], and [_{CP}₃ [as Edna said she also had [_{VP}___]], Edna learned to speak Chinese].

3.3 Collective readings

A coordination of two singular DPs is ambiguous between a distributive and a collective reading (35), but the collective reading disappears under clausal coordination (36a), including cases where clausal coordination is combined with VP ellipsis (36b) or Right Node Raising (36c). A conjunction-internal *as*-clause doesn't eliminate the collective reading.

- (35) Alan and Harvey have lifted a piano. [_✓ *distr./✓ coll.*]
- (36) a. Alan has lifted a piano, and Harvey has lifted a piano too. [_✓ *distr./* coll.*]
b. Alan has lifted a piano, and Harvey has too. [_✓ *distr./* coll.*]
c. Alan has, and Harvey also has lifted a piano. [_✓ *distr./* coll.*]
- (37) a. Alan and, [as Edna predicted [_{CP}___]], Harvey have lifted a piano. [_✓ *distr./✓ coll.*]
b. Alan and, [as Edna predicted he would [_{VP}___]], Harvey have lifted a piano. [_✓ *distr./✓ coll.*]

3.4 Agreement

If both conjuncts are singular, the verb exhibits cumulative plural agreement. This follows directly from a DP-coordination analysis, but not from a clausal coordination analysis.

- (38) a. Ames and, [as the FBI suspected [_{CP}___]], Hanssen were spies.
b. * Ames and, [as the FBI suspected [_{CP}___]], Hanssen was a spy.
- (39) a. Ames and, [as the FBI believed he had [_{CP}___]], Hanssen have stolen important documents.
b. * Ames and, [as the FBI believed he had [_{CP}___]], Hanssen has stolen important documents.

Furthermore, the distribution of plural agreement in conjunction-internal *as*-clauses tracks the distribution of plural agreement in regular DP conjunctions.

- (40) a. There { *✓* is / * are } a pigeon and a sparrow in the tree.
b. There { *✓* is / * are } a pigeon and, [(just) as Edna predicted [_{CP}___]], a sparrow in the tree.
c. There { *✓* is / * are } a pigeon and, [(just) as Edna predicted there would be [_{VP}___]] a sparrow in the tree.

Similarly in the German long passive: nominative subjects trigger cumulative agreement, but accusative subjects trigger default singular agreement.

- (41) a. Der Traktor und der Wagen { *✓* wurden / * wurde } zu verkaufen
the.NOM tractor and the.NOM car were was to sell
versucht.
tried
"Someone tried to sell the tractor and the car"

- b. Den Traktor und den Wagen { * wurden / ✓ wurde } zu verkaufen
 the.ACC tractor and the.ACC car was to sell
 versucht.
 tried
 "Someone tried to sell the tractor and the car"

- (42) a. Der Traktor und, [wie Oskar gerade herausgefunden hat [CP___]], der
 the.NOM tractor and as Oskar just found.out has the.NOM
 Wagen { ✓ wurden / * wurde } zu verkaufen versucht.
 car were was to sell tried
 "Someone tried to sell the tractor and, as Oskar just found out, the car"
 b. Den Traktor und, [wie Oskar gerade herausgefunden hat [CP___]], den
 the.ACC tractor and as Oskar just found.out has the.ACC
 Wagen { ✓ wurden / * wurde } zu verkaufen versucht.
 car were was to sell tried
 "Someone tried to sell the tractor and, as Oskar just found out, the car"

3.5 Scope wrt modals and negation

The Old Testament forbids garments that contain wool and linen woven together, even though garments made of wool alone or linen alone are allowed. The reading of (43) that is consistent with this restriction is one in which the coordinate structure takes scope below *can't*.

- (43) Jews can't wear garments woven of wool and linen.
 [✓ *can't* > *and* / # *and* > *can't*]

Insertion of a conjunction-internal *as*-clause doesn't disrupt this reading.

- (44) Context: *Rudy and Alan are playing Trivial Pursuit. Edna, who is just walking by, overhears this part of the game.*

R: According to Deuteronomy, Jews aren't allowed to wear garments that combine which two fabrics?

A: I know that one of them is wool, but I can't remember the other.

E: (*Leans closer to Alan and whispers.*) Pssst! The other fabric is linen!

A: That's the answer! Jews can't wear garments woven of wool and, [as Edna just reminded me [CP___], linen!
 [✓ *can't* > *and* / # *and* > *can't*]

3.6 Variable binding

A quantifier in the first conjunct of a DP coordination can bind a pronoun in the second, but not the other way around. Similarly, a quantifier in the second conjunct cannot bind a pronoun in the main predicate of the clause. All of these binding relations fall under clausal coordination, due to lack of c-command.

- (45) a. Every_i runner and his_i coach have to attend the race information meeting at 8pm tonight.
 b. * His_i coach and every_i runner have to attend the race information meeting at 8pm tonight.
 c. * The race director and every_i runner have informed his_i coach about the new race rules.

Insertion of a conjunction-internal *as*-clause doesn't the binding patterns we find with DP-level conjunctions.

- (46) a. Every_i runner and, [as Edna just announced [CP___]], his_i coach have to attend the race information meeting at 8pm tonight.
 b. * His_i coach and, [as Edna just announced [CP___]], every_i runner have to attend the race information meeting at 8pm tonight.
 c. * The race director and, [as Edna predicted [CP___]], every_i runner have informed his_i coach about the new race rules.
 (47) a. Every_i runner and, [as Edna announced he would have to [VP___]], his_i coach have to attend the race information meeting at 8pm tonight.
 b. * His_i coach and, [as Edna announced he would have to [VP___]], every_i runner have to attend the race information meeting at 8pm tonight.
 c. * The race director and, [as Edna predicted he would have to [VP___]], every_i runner have informed his_i coach about the new race rules.

3.7 Generalized quantifiers

Two generalized quantifiers can be conjoined with *and* if they have matching monotonicity (Barwise and Cooper 1981:194ff). Note that this is a restriction on DP coordinations, not CP coordinations with generalized quantifiers in them.

- (48) a. [Several men and a few women] arrived on time. [*both increasing*]
 b. [No man and few women] arrived on time. [*both decreasing*]
 c. * [Few men and a few women] arrived on time. [*mixed*]
 (49) a. John was invited and no woman was, so he went home alone.
 b. * John and no woman was invited, so he went home alone.
 (50) a. Few mathematicians have worked on natural language conjunction and few linguists have, so I don't think you have the right to make these unfounded statements.
 b. * Few mathematicians and a few linguists have worked on natural language conjunction, so I don't think you have the right to make these unfounded statements.

Insertion of a conjunction-internal *as*-clause doesn't disrupt this pattern.

- (51) a. Several men and, [as Edna pointed out [CP___]] a few women arrived on time. [*both increasing*]
 b. No man and, [as Edna pointed out [CP___]] few women arrived on time. [*both decreasing*]
 c. * Few men and, [as Edna pointed out [CP___]] a few women arrived on time. [*mixed*]
 (52) a. Several men and, [as Edna predicted they would [CP___]] a few women arrived on time. [*both increasing*]
 b. No man and, [as Edna predicted they would [CP___]] few women arrived on time. [*both decreasing*]
 c. * Few men and, [as Edna predicted they would [CP___]] a few women arrived on time. [*mixed*]

3.8 Interim conclusion

In the general case, conjunction-internal *as*-clauses exhibit DP-level conjunction, without any signs of conjunction reduction. From this, it follows that the *as*-clause host must be a bare DP (type $\langle se \rangle$).

DP-like distribution	Reduced clausal coordination	DP-level coordination w/ o reduction	Conjunct <i>as</i> -clauses
multiple instances per clause	??	yes	yes
collective readings	??	yes	yes
cumulative agreement	no	yes	yes
low scope wrt modals and negation	no	yes	yes
cross-conjunct variable binding	no	yes	yes
monotonicity restrictions with CQs	no	yes	yes

Table 2: Clausal vs. DP-level coordination

4 Analysis

4.1 Overview of the difficulties

Trying to extend Potts's analysis, without modification, to the conjunction-internal cases results in a compositionality failure. The problem lies on the implicit assumption that the second application of PA targets a semantic object of the same type as the first one.

- (4) a. Ames and, [as the FBI suspected [CP_]], Boone were spies.

$$(53) \quad \lambda p_{\langle st \rangle} : \text{suspect}(p)(\text{FBI}) \text{ is true } [p] \quad \text{as} \quad \lambda q[\text{suspect}(q)(\text{FBI})] \quad \text{(by PA)}$$

$$\lambda p_{\langle st \rangle} \langle \lambda p_{\langle st \rangle} [\lambda p_{\langle st \rangle} [\text{suspect}(p)(\text{FBI})]] \quad \text{(by PA)}$$

$$: P(p) \text{ is true } [p] \quad \emptyset_{CP} \quad \lambda p_{\langle st \rangle} [\text{suspect}(p)(\text{FBI})] \quad \text{(by PA)}$$

↑
the FBI suspected $t_{\emptyset_{CP}}$

$$(54) \quad \lambda p_{\langle st \rangle} : \text{suspect}(p)(\text{FBI}) \text{ is true } [p] \quad \text{as the FBI suspected} \quad \text{Hanssen}$$

↑
??

The solution requires dropping this assumption, so that the final application of PA can target an individual. In turn, this requires modelling the gap as having an articulate internal semantics.

4.2 Gaps have a complex semantics

Consider example (44) again.

- (44) Context: *Rudy and Alan are playing Trivial Pursuit. Edna, who is just walking by, overhears this part of the game.*

R: According to Deuteronomy, jews aren't allowed to wear garments that combine which two fabrics?

A: I know that one of them is wool, but I can't remember the other.

E: (*Leans closer to Alan and whispers.*) Psst! The other fabric is linen!

A: That's the answer! Jews can't wear garments woven of wool and, [as Edna just reminded me [CP_]], linen!
[✓ *can't* > *and* / # *and* > *can't*]

But what is the meaning of the *as*-clause in Alan's final answer?

- (55) [as Edna just reminded me]

≠ Edna reminded me that jews can't wear garments woven of wool and linen.

[that's not what Edna did, she only mentioned linen]

≠ Edna reminded me that jews can't wear garments woven of linen.

[that's not what Edna did; plus, it would be factually incorrect]

= Edna reminded me that the other fabric is linen.

[gap takes its meaning from a previous salient utterance]

Furthermore, this meaning has to be modelled as having an articulate semantics, so that we can abstract over proper subparts of it (else, composition with *as* would fail).

- (4) a. Ames and, [as the FBI suspected [CP_]], Boone were spies.

(56) Step 1: composition of the '*as*'-clause (where $\emptyset_{CP} = \text{spy}(\text{Ames})$)

$$\lambda q_{\langle se \rangle} : \text{suspect}(\text{spy}(q))(\text{FBI}) \text{ is true } [q]$$

$$\text{as} \quad \lambda z[\text{suspect}(\text{spy}(z))(\text{FBI})]$$

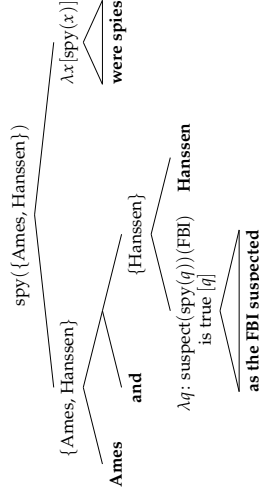
$$\lambda Q_{\langle se \rangle} [\lambda q_{\langle se \rangle} : Q(q) \text{ is true } [q]] \quad \emptyset_{CP} \quad \lambda p_{\langle st \rangle} [\text{suspect}(p)(\text{FBI})]$$

↑
the FBI suspected \emptyset_{CP}

Note that this derivation requires augmenting the lexical entry in (3) so that the metatype σ can also range over $\langle se \rangle$ -type objects.

- (57) For any $\sigma \in \{ \langle st \rangle, \langle s \langle st \rangle \rangle, \langle se \rangle \}$, $as = \lambda X \in D_{\langle st \rangle} [\lambda x \in D_{\langle st \rangle} : X(x) \text{ is true } [x]]$

- (58) Step 2: composition of the '*as*' clause with the host clause (apply your favorite semantics for DP conjunction)



4.3 Granularity of the semantics of the gap

It might seem that the right way of modelling the semantics of the gap is by defining a focus/background partition, and then abstracting over the focus. This would account for the following asymmetry.

(59) Q: Who has stolen the documents?
A: [Ames and, [as the FBI suspected [CP___]], Hanssen]_F have stolen the documents.

(60) Q: What have Ames and Hanssen stolen?
A: # Ames and, [as the FBI suspected [CP___]], Hanssen have stolen [the documents]_F.

However, this would make the wrong predictions for the following example, where the focus is a proper subconstituent of the host.

(61) Q: The prime ministers of two Asian countries have endorsed the IPCC 4 report today, but I can't remember which countries.

A: I can tell you: the prime minister of [Japan]_F, and [as CNN already anticipated last week [CP___]], the prime minister of [Korea]_F have endorsed it.

More generally, *as*-clauses seem to require the material that follows to contain some pitch accent. If so, focus prosody might be a confounding factor here.

(62) Q: What has Ames been doing?
A: He has, [as the FBI suspected all along [CP___]] been [selling secrets to the Soviets]_F.

(63) Q: Who has been selling secrets to the Soviets?
A: # [Ames]_F has, [as the FBI suspected all along [CP___]], been doing that.

(64) Q: Who has been selling secrets to the Soviets?
[As the FBI suspected all along [CP___]], [Ames]_F has been doing that.

Unfortunately, at this point I don't know enough about how parentheticals interact with prosody to say anything relevant (though see Dehé 2007, 2009). The best I can say is that *as*-clause gaps have a fully articulate semantics.

5 Extensions

This analysis extends straightforwardly to subclausal coordinations of constituents other than DPs —e.g., attributive adjectives, VPs, and PPs. All that is necessary is to augment the entry in (64) with the appropriate types.

(65) This exhaustive and, [as Edna pointed out [CP___]], incriminating report ruined Ames' career.

(66) Sleeping eight hours a day and, [as many doctors now agree [CP___]], eating a plant-based diet are crucial factors in staying healthy.

(67) Right before the lunch break and, [as Edna just pointed out [CP___]], right after the board meeting are both good times for the IT guy to come fix Harvey's computer.

Additionally, it can also account for *as*-clauses adjoined to subclausal constituents outside coordinate structures.

(68) *School trip to the ancient history museum*

Curator: Hey, don't touch that vase! It's extremely valuable!

Guide: Now, look here, kids! This, [as the curator just warned us [CP___]], extremely valuable vase was found in 1967 in the outskirts of Crete.

(69) A: Hey, look at that guy with a Yankees shirt!

B: That's not a Yankees shirt, that's a Nationals shirt!

A: Whatever, the guy with the, [as you aptly observe [CP___]] Nationals shirt is hitting on Edna.

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