

The relative proform *as*

1 Introducing parenthetical *as*

Parenthetical *as*: what is its syntax, and what does it mean? Consider these sentences:¹

- (1) a. Specifically, the court acknowledged that, even if more than 90 percent of downloads over those networks were illegal, **as** [the plaintiffs claimed __ in their suit], the number of legal uses was still significant enough to merit protection.
b. Secondly **as** [most reviewers say __], at the end of the book we still don't fully understand where Bush is coming from.
c. As you may already know __ ,
a diet low in important nutrients can compromise the body's immune system and make it harder for the body to fight off infection
d. **As** [I say __], this problem has yet to receive a comprehensive treatment.
- (2) a. The next day, although I sprayed the pests, **as** [I knew I must __], I stood at arm's length from the compost heap and wore jeans and high-rise trainers.
b. To suggest, **as** [I do __], that Georges Braque is the greatest living painter is to remind a contemporary audience [...] that, after all, permanence, grandeur, deliberation, lucidity and calm are paramount virtues of the art of painting [...]
c. They are paid, **as** [ambulance drivers should be __], for 'being there' ...
d. Mrs Thatcher expressed confidence that she would win and declared again, **as** [she had __ at the outset], that even if she did not win outright ...
- (3) a. The fashionable dress varies, **as** [do __ the fashionable drugs], but there are always at least two problems for society to deal with.
b. Those with assets exceeding £500,000 can also apply, **as** [can __ businessmen willing to invest over £150,000 and create new employment].
- (4) a. In other words, unless Ralph Nader builds that mass movement pretty quick, thereby breaking the two-party duopoly **as** he calls it ____, look out America – more beer riots are on the way!
b. This misapprehension is called Avidya, which causes desire, or Trishna **as** it is called ____ in Sanskrit.
c. A former Disneyland employee, Rosenthal's outfit would make Mickey Mouse blush and run afoul of the "dictatorship's," **as** she calls it ____, dress code.

¹Unless otherwise noted, all sentences are attested in the British National Corpus, the AP/Newswire Corpus, or from online search engine results.

1.1 Formal features

These uses have the following formal features:

- “Comma” intonation
- The possibility for syntactic niching (2b, 2c, 2d)
- A subordinated clause with *as* in front, and a post-auxiliary gap where a proposition, predicate, or name-like phrase should appear
- A syntactic island caused by a long-distance dependence (see below)

Potts (2002a, 2002b) demonstrated that the gap in the *as*-clause cannot appear within syntactic islands (relative clauses, complex noun phrases, adjuncts, etc).² These are shown in (5), from (Potts, 2002b:631–2).

- (5) a. *Nina quickly bought two durians, exactly **as** [we met a chef [*rel-cl* who did ___]].
 b. *Eddie fills his truck with leaded gas, just **as** [they believed [*DP* the report that he must ___]].
 c. *Jim Durrow counts cards, just **as** [the owners arrested Sammie [*adjunct* when he did ___]].
- (6) a. ... as [[*DP* a chef we met] did ___].
 b. ... as [they told him [*CP* he should ___]].
 c. ... as [Sammie did ___].

1.2 Semantic features

The general semantics of *as*-clauses is as follows:

- Contribution of information that is “parenthetical” to the central, at-issue semantics (Potts, 2005)
- The semantics filling that gap is taken from the predicate of the matrix clause.

The task is to determine exactly how the gap is filled syntactically and semantically. Part of this will include determining how many sub-senses of parenthetical *as* actually exist.

The procedure:

1. Collapse CP- and Predicate-*as* into Verbal *as*
2. Analyze Verbal *as* as a relativizer with anaphoric properties

What will be glossed over:

²He primarily treats so-called Strong Islands. See Potts, 2002b:630–1 and Potts, 2002a for further discussion and citations.

- Exactly how to account for syntactic niching, and its relation to (or identity with) sentential adverbial modification.

2 Semantics

A constructional (Kay & Fillmore, 1999; Kay, 2002) specification of CP/Predicate-*as*.

$$\left[\begin{array}{l} \text{NAME "VERBAL } as\text{"} \\ \text{INHERIT LEFT ISOLATION} \\ \text{SYN | MOD} \left[\begin{array}{l} \text{CAT } V \\ \text{MAX } + \\ \text{SEM } \boxed{1} \end{array} \right] \\ \left[\begin{array}{l} \text{LFORM } as \\ \text{CAT } V \\ \text{SEM } \text{contig-subset-of}(\boxed{1}) \end{array} \right] \bullet \left[\begin{array}{l} \text{CAT } V \\ \text{MAX } + \\ \text{SRS } + \\ \text{FIN } + \end{array} \right] \end{array} \right]$$

As a whole, the construction is a subtype of the Left Isolation construction (Kay & Fillmore, 1999), which essentially licenses a long-distance dependency. It modifies a maximal verbal structure, i.e., either a VP or a CP. The construction has two daughters. The left daughter is the lexical item *as*, which takes as its semantics a subset of the semantics of the modified head. It itself is verbal, and fills a verbal gap (again, either VP- or CP-shaped) in the construction's right daughter. The right daughter is a finite clause (subject restriction satisfied) with a gap.

Below, the terms Pred(icate)-*as* and CP-*as* will continue to be used as a useful way of distinguishing the two types of gaps that can appear in the *as*-clause.

2.1 Partial anaphora

With Predicate-*as* (cf. VPE, *do so* anaphora). Here boldfaced material indicates information in the antecedent clause that contradicts information in the antecedent clause.

- (7) a. The secret police will doubtless try to make sure **there are no demonstrators chanting in the streets on Saturday**, as thousands did in Leipzig on Monday night.
- b. **Our lodging was not free for us**, as it was for our service colleagues.
- c. If **a member crossed him on a policy issue**, as Callaghan did on trade-union reform in the spring of 1969 [...].

- d. Or perhaps **she got the name of the Chinese American Citizens Alliance close but not quite right**, as she had with the Arizona Historical Society’s library?

With CP-*as* (cf. *same thing*). Here boldfaced material indicates material in the antecedent clause that potentially fills the downstairs gap. Underlined material indicates antecedent material that is contradicted within the *as*-clause.

- (8) a. Yet, just as Bruno claimed for an infinite universe, **this finite model has “no center nor edge”**.
- b. I suppose we’ll never know whether **Bush** [...] **associates this construction [noo-kyoo-lar] with folksy, hypermasculine speech** (as Arnold Zwicky suggests for some other features [of his speech, i.e., *is-is*]).
- c. One could imagine that **the United States might wish it could devalue the US “dollar” relative to the Mexican “dollar,”** as was the case with respect to Japan and Europe in the early 1970s when the United States was trying to extricate itself from the Bretton Woods exchange-rate system.
- d. As is the case with other studies, **Watts’ book is not cited by Hicks**.
- e. Neither can it be reasonably said that **North Korea is a threat to US security** as was claimed for Saddam Hussein’s Iraq before 2003.
- f. Now, just as is claimed for the case of colour, it may seem that **the experience of musical harmonies must reveal something about their “intrinsic nature”**.

2.2 A non-difficulty

Unexpected prepositions:

- (9) a. Cats have built a flying machine to catch birds. **As** you are aware, catching birds is a cat’s highest priority.
- b. But, of course, **as** you must be aware of by this time, perhaps all the economic statistics like G.D.P. etc., are not
- c. **As** most are aware of by now, on Thursday, June 23, 2005, the U.S. Supreme Court ruled 5-4 in favor of the Connecticut city of New London
- d. **As** you probably have heard in the news, the Iraqi army is moving missiles and artillery to the Kuwaiti border.
- e. **As** you may have heard about in news stories, GAO recently released its new high-risk report, which deals primarily with the here and now.
- f. **As** you may have heard us talking about all evening, we’ve had a major computer worm affect systems here at CNN, as well as other industries throughout the country.

2.3 Modality and Negation

CP- and Predicate-*as* seem to interact slightly differently with respect to negation and modal meaning.

If a CP-*as* clause precedes some operator, that operator must be incorporated into the semantics of *as*. But such meaning is difficult or impossible to push into a Pred-*as* clause. Following the operator, inclusion of negation and modality is *possible* for CP uses, but again impossible for Predicate uses.

- (10) a. He doesn't make unilateral decisions. (as his father did \neq 'his father did not make unilateral decisions')
- b. He **might** be able to help us out. (as you claimed = 'you claimed he is/might be able to help us out')

In contrast to sentential negation, constituent negation, if contained in an affirmative clause, is perfectly acceptable in both Predicate and CP uses.

- (11) a. For example, Mary Jane lives with her parents, **not** with her Aunt as she did in the original continuity, and she has romantic feelings for Spider-Man.
- b. The tradition in this region was, as in pre-Romanesque times in Western Europe, to build in solid wood, **not** half-timber work as was the western European method during the Middle Ages.

In general, *sentential* negation is disallowed at the top level in the *as*-clause. This prohibits matrix (sentential) negation from getting pushed into a Pred-*as* clause. It also rules out cases like **...as he didn't say* and **...as you deny*. These are generally degraded, and only rarely attested (see Potts, 2002b for examples and speculation as to the reason for this constraint).

This difference can be compared to **He did, but I didn't so* and **He said he wouldn't, and not so he did* on the one hand, and **He denied so* on the other.

3 Syntax

In contrast to more traditional relative-clause analyses (Fowler, 1926, *Oxford English Dictionary*), recent accounts have analyzed *as* as a subordinating preposition (Potts, 2002a, 2002b, 2005; Pullum & Huddleston, 2002).

What could lead us to select one over the other?

Sentence-initial Predicate-*as*:

- (12) a. **As** Trent had known it would __, the callus on Gomez's index finger [exactly fitted the trigger and upper edge of the trigger-guard].

- b. **As** she did __ in her first match, Martinez [had ice applied to her neck during every changeover]
- c. **As** Wesley had done __ , and **as** Rational Dissenters very frequently did __ , they [alluded to the natural rights of all men].
- d. **As** they have done __ before, rebel Serbs [accused the Muslim-led government army of firing on its own people to scuttle peace talks].

This is not only trouble for an account that distinguishes sharply between Predicate and CP uses, but also for an account that requires strict adjacency between the *as*-clause and the antecedent material.

The relativizer account also allows for direct comparison with an uncontroversial proform, historically-related *so*.

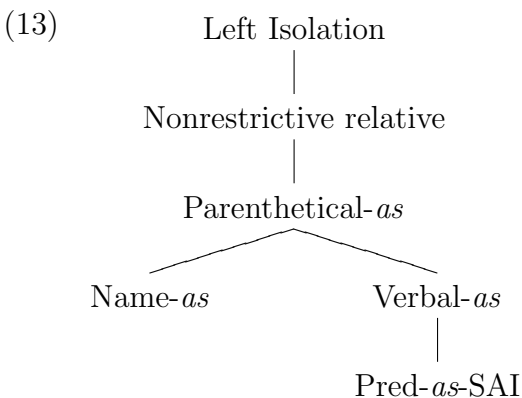
Finally, we can distinguish *as* from the semantically-similar but non-relativizing *like* (*like I was saying* __ , *like most people do* __). Note in particular the impossibility of subject-aux inversion with *like* (see (3): the possibility of inversion (auxiliary or otherwise) is associated at least partly with *wh*-movement, indicating a very different syntactic analysis for *like* as opposed to *as*.

4 Conclusion

Lessons:

1. *As* is anaphoric. It allows partial/type-identity with a sentential antecedent. There are two main types of parenthetical-*as*: verbal-*as* and name-*as*.
2. *As* is a relativizer. It is key in correlative (and perhaps some conventional) relatives in English.

The following indicates the relationships between the types of parenthetical *as* constructions.

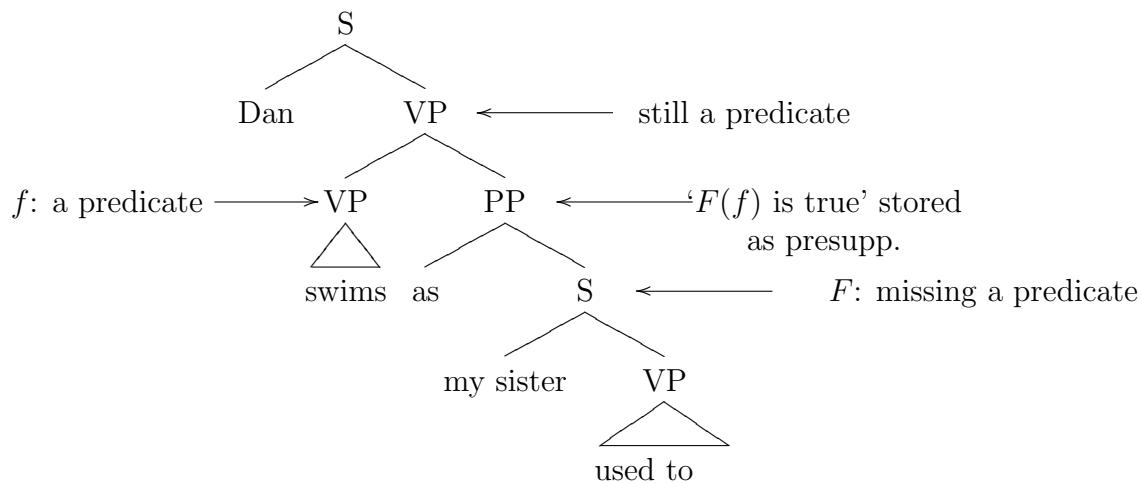


A The alternative account

The analyses given by Potts (2002a, 2002b).

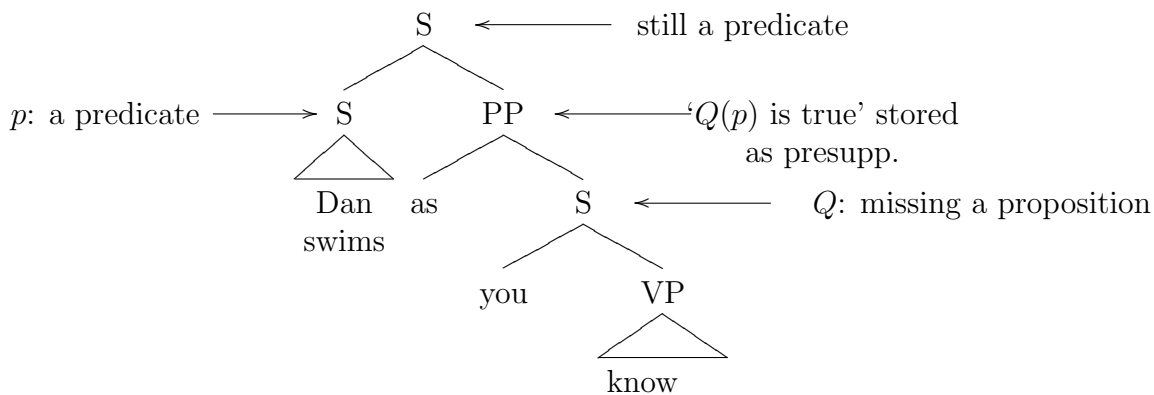
(14) a. $[[as_{Pred}]] = \lambda F_{\langle\langle s, et \rangle, t \rangle} [\lambda f_{\langle s, et \rangle} : F(f) \text{ is true } [f]]$

b.



(15) a. $[[as_{CP}]] = \lambda Q_{\langle\langle st, t \rangle, t \rangle} [\lambda p_{\langle st \rangle} : Q(p) \text{ is true } [p]]$

b.



B Constructions

The long-distance dependency construction assumed to be inherited by the non-restrictive relative construction:

$$(16) \left[\begin{array}{l} \text{NAME "LEFT ISOLATION" (Kay \& Fillmore, 1999)} \\ \left[\text{SEALED} \quad + \right] \\ \left[\begin{array}{ll} \text{ROLE} & \text{FILLER} \\ \text{SYNSEM} & \boxed{1} \left[\text{LOC} \quad - \right] \end{array} \right] \bullet \left[\begin{array}{ll} \text{ROLE} & \text{HEAD} \\ \text{SEALED} & - \\ \text{SYN | CAT} & \text{V} \\ \text{VAL} & \left\{ \text{VAL}^*_{[\textit{sealed-}]} \left[\text{SYNSEM} \boxed{1} \right] \right\} \cup \left\{ \right\} \end{array} \right] \end{array} \right]$$

C VP/Predicate Ellipsis?

There is another possibility, namely that the gap is licenced by a VP/Predicate Ellipsis construction. However, the meanings that can be associated with elided predicates are not the same as with *as*-clauses. In the following, from (Potts, 2002b:627), ellipsis allows for a more distant antecedent. Pred-*as* requires an immediately-adjacent antecedent.

- (17) a. The fact that Sue read the map carefully probably means that she stayed on the trails. But we aren't sure whether Chuck did (stay on the trails / read the map carefully).
- b. The fact that Sue read the map carefully probably means that she stayed on the trails, as did Chuck (stay on the trails / *read the map carefully).

References

- Fowler, H. W. (1926). *Modern English Usage*. Oxford: Oxford University Press.
- Kay, P. (2002). English Subjectless Tag Questions. *Language*, 78, 453–481.
- Kay, P., & Fillmore, C. J. (1999). Grammatical Constructions and Linguistic Generalizations: The What's X Doing Y? Construction. *Language*, 75, 1–33.
- Lee-Goldman, R., & Ellsworth, M. (2007). *As-two constructions, not single preposition*. Presented at the 81st Annual LSA Meeting, Anaheim, CA.
- Potts, C. (2002a). The Lexical Semantics of Parenthetical-*as* and Appositive-*which*. *Syntax*, 5, 55–88.
- Potts, C. (2002b). The Syntax and Semantics of *As*-Parentheticals. *Natural Language and Linguistic Theory*, 20, 623–689.
- Potts, C. (2005). *The Logic of Conventional Implicature*. Oxford: Oxford University Press.
- Pullum, G. K., & Huddleston, R. (Eds.). (2002). *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.