2.1.3. Limits on analysis

Although the presence of *and* or another word used to mark conjunction is a good sign that conjunction will be involved in a full analysis of a sentence, it does not mean that the sentence as a whole can be analyzed as a conjunction.

One thing that can interfere is the occurrence of indefinite pronouns and similar expressions. Consider the sentence A friend of Ann lives in Singapore and works in London. The claim it makes may well be true, but its truth would be at least mildly surprising. However, there would be no surprise at all in the truth of a sentence analyzed as A friend of Ann lives in Singapore \wedge a friend of Ann works in London since there is no longer any implication that the same person does both. Of course, we could paraphrase the original sentence (a bit awkwardly) as A friend of Ann lives in Singapore and that person works in London, but that is of no help in analyzing it since the second clause relies on the first clause for the reference of the phrase *that person* and thus does not function as an independent sentence. Indeed, in spite of the occurrence of the word *and*, there is no way to analyze this sentence as a conjunction in which the references to Singapore and London appear in different components; its analysis must await our treatment of expressions involving the indefinite article in chapters 7 and 8. The indefinite article is one of a group of expressions also including some, every, and no that we will later study as *quantifier words*. Their presence will often preclude analysis of a sentence as a compound formed by a connective even though a word that ordinarily indicates that compound is present. Analysis as a compound formed by the connective is sometimes possible in such cases, but you should be wary if you find yourself being led to repeat a quantifier word when dividing the sentence into two components (as we would do by repeating a friend of Ann in the example above).

Similar problems can arise in other cases where we might expect to find a conjunction, as with attributive adjectives and relative clauses. For example, *Tom forecast a hot and windy day next week* is not equivalent to *Tom forecast a hot day next week* \land *Tom forecast a windy day next week* since the latter does not imply that the two forecasts are for the same day. This is the reason that 2.1.2 recommended such analyses only for predicate nominatives. In such cases, the implication that two adjectives are being applied to the same thing is insured by other aspects of the sentence, but you still need to be wary of duplicating other quantifier phrases—in, for example, the subject of the sentence—when you make the analysis. And this is true even for compound predicate

adjectives: Sam's car was cheap and reliable is equivalent to Sam's car was cheap \land Sam's car was reliable but One model is cheap and reliable is not equivalent to One model is cheap \land one model is reliable.

Even when quantifier words are not involved, analyses by conjunction cannot always be used to separate modifiers from the words they modify. For example, it would be wrong to analyze *Tristram* is a large flea as Tristram is a flea \(\Lambda \) Tristram is large because a sentence with this analysis entails that at least one flea is to be found among the large things of the world. The problem in this case is that an adjective modifying a noun has its meaning determined in part by the noun it is applied to; *large* indicates a different range of sizes when it is applied to fleas than when it is applied to elephants. This is an example of a phenomenon discussed in 1.3.2: vague terms have their meaning determined in part by their context of use. A noun can contribute to the context in which an adjective is used when the adjective is applied to the noun directly and also when the adjective follows the noun in a stream of discourse. This means that it also would be wrong to analyze *Tristram* is a flea and Tristram is large as Tristram is a flea \wedge Tristram is large, for the adjective *large* acquires part of its meaning from the noun *flea* in the English sentence. (But the way a noun affects the meaning of a vague adjective is not simple. Although the sentence *No fleas are large* speaks about fleas, the range of sizes indicated by *large* in this sentence is different from the range indicated by its use in Tristram is a flea and *Tristram is large.*)

But why does the same thing not happen with the conjunction *Tristram* is a flea \(\) Tristram is large? Although the symbol \(\) is closely related to the English conjunction and, it is not a simple abbreviation; and we do not assume that their contribution to the meaning of a sentence is exactly the same. The symbol \wedge (and the construction both ... and ... that we use as an alternative notation for it) are signs for the operation of conjunction. The conjunction of two sentences is a sentence that, in any context, has truth conditions that are related to those of its two components in the way shown by the table we considered earlier. And the stipulation that this is so in any context is a crucial one here; in particular, it need not be part of that context that either component has been asserted. So in the conjunction, we cannot assume that the meaning of the second component *Tristram is large* will be influenced by the meaning of the first component. In certain sorts of context, it will have the same meaning as *Tristram is large for a flea*. But it is only in such contexts that *Tristram is a flea* \land *Tristram is large* has the same truth conditions as Tristram is a flea and Tristram is large, and our analyses should not depend on equivalences that hold only for certain contexts.

This indicates a further difference between our model of the operation of language and the way things work in English. Everything that is said in English has the potential of affecting the context of what follows it and, to a more limited extent, what precedes it. But when we analyze sentences, we treat their components as independent and as each understood in the same context. Our excuse for this limitation of our model is the same as that for many others: a model that was more accurate in this respect would require significant complications—and complications that no one yet understands very well.

Of course, we can analyze *Tristram is a large flea* as a conjunction after all if we modify the second component to remove its dependence on the context established by the assertion of the first. One way of doing that was suggested in passing above: we may use the conjunction *Tristram is a flea* \land *Tristram is large for a flea*. Here we have modified the second component to replace the implicit effect of the context with a more explicit indication of the range of sizes in question. Though generalizations about such matters are risky, something like this device can be applied in many cases where adjectives acquire part of their meaning from the surrounding context.

There are still other factors that can prevent the separation of attributive adjectives from the nouns they modify. We could be guilty of slander if we were to analyze *Alfred is an alleged murderer* as *Alfred is a murderer*. The difference between this and the example above is that the attributive adjective *alleged* modifies the meaning of a noun in a different way from an adjective like *large*. Adjectives like *large* narrow down the class of things marked out by the noun by adding a further property; in contrast, *alleged* shifts the membership of this class by adding as well as dropping members. The class of alleged murderers is not included in the class of murderers in the way the class of large fleas is included in the class of fleas. As a result, no analysis as a conjunction is possible.

While the issues of contextual dependence can also affect our ability to separate relative clauses from the nouns they modify, this latter problem does not occur for them. If we say *Alfred is a murderer who is alleged to be one* we already imply that Alfred is a murderer so analysis as a conjunction is possible. This means that one initial test for cases where we may separate an attributive adjective from the noun it modifies is to see if restatement using a relative clause changes the meaning. While *That's an unknown Rembrandt* is equivalent to *That's a Rembrandt that is unknown* and can be analyzed as a conjunction, *That's a fake Rembrandt* is not equivalent to *That's a Rembrandt that is fake* and cannot be analyzed in this way.

But, in the end, the test that an analysis must pass is that the conjunction we use to represent a sentence really has the same truth conditions. Since the truth table for conjunction is directly tied to the laws of entailment discussed in 2.1.1, one way to apply this test is to check whether the original sentence really entails both components of the analysis (when these are considered as independent sentences) and whether they, taken together, entail it. And we have used this test in the discussion of examples above; for example, because *Alfred is an alleged murderer* does not entail *Alfred is a murderer*, we cannot analyze the premise as conjunction with the conclusion as one of its conjuncts. Due to the problems associated with the contextual dependence of meaning, when applying this test, we must be careful not to fill out the meanings of terms in one of the sentences we compare by a surreptitious reference to another sentence.

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