

# Although *revisited*\*

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## Abstract

This paper offers an analysis of the meaning of *although* set within the framework of Relevance Theory. In line with Iten (1998b), *although* is seen as encoding procedural information that constrains the inferential processes involved in the derivation of implicatures. However, the current account differs from Iten (1998b) in several points. First, it suggests that utterances of the form *Q although P* or *Although P, Q* encode a single logical form that can be developed into a single proposition expressed. Second, it proposes that the procedural meaning of *although* indicates that the hearer is to suspend an inference.

## 1 Differences between *but* and *although*

It seems uncontentious that (1a) and (b) can receive the same ('concessive') interpretation as (2).

- (1) a. Peter went out although it was raining.  
b. Although it was raining, Peter went out.
- (2) It was raining but Peter went out.

This is reflected in much of the literature, where *Q although P/Although P, Q* is treated as having a subset of the interpretations possible for *P but Q*. For instance, König (1985) describes *P but Q* as the prototypical means of expressing an 'adversative' relation, while he sees *Q although P/Although P, Q* as the prototypical 'concessive' expression. According to him (1985: 4), concessives have the properties in (3).

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\* This paper differs minimally from chapter 6 of Iten (2000). As always, I'm grateful to Robyn Carston for many helpful and inspiring discussions on the topic of this paper.



interpretation for *Q although P/Although P, Q* and *P but Q, but* must introduce *Q*, while *although* introduces *P*. If they both introduce the same clause, the *although* utterance receives a radically different interpretation from the *but* utterance – as (6) demonstrates when it is compared with (2).

- (6) a. It was raining although Peter went out.<sup>2</sup>  
 b. Although Peter went out, it was raining.

This may seem a painfully obvious point but it is, nevertheless, worth making, particularly in the ‘light’ of Fraser’s (1998: 314) insistence that (7a), (b) and (c) are all equivalent.

- (7) a. She fried the onions, but she steamed the cabbage.  
 b. She fried the onions. However, she steamed the cabbage.  
 c. She fried the onions, although she steamed the cabbage.

The second obvious difference between *but* and *although* is that the former is a coordinating conjunction, while the latter is a subordinating conjunction. This distinction is brought out by a number of syntactic tests. First, only subordinate clauses can be preposed. For instance, while (1b) is perfectly acceptable, (8) is clearly ungrammatical.

- (1) b. Although it was raining, Peter went out.  
 (8) \*But Peter went out, it was raining.

Second, according to Green (1976: 385), negative NP preposing, as in (9), is only possible within a main clause.

- (9) Not for a moment did she hesitate.

This test, too, brings out a clear difference between *but* and *although*: (10) is perfectly acceptable, while (11) is ungrammatical.

- (10) The cliff was high but not for a moment did she hesitate.

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<sup>2</sup> This sentence might not strike the reader as acceptable – at least at first, it seems to suggest that Peter has the power to influence the weather (i.e. that the non-logical implication is ‘Normally, if Peter goes out, it isn’t raining’). I will discuss this type of example at some length later on in this paper. For the moment, I’d like to point the reader to (6b) for an acceptable interpretation of this combination of *P* and *Q*.

(11) \*Although not for a moment did she hesitate, she was quite frightened.

These tests clearly show that *but* is a co-ordinating conjunction, while *although* is a subordinating conjunction.<sup>3</sup> This observation combined with the first one (i.e. that for the same interpretation to be maintained, *although* must introduce *P* where *but* introduces *Q*) provides sufficient reason not to analyse *although* along the same lines as *but*. However, even without those observations, no one would want to claim that *but* and *although* are completely synonymous, for it is only in a relatively restricted subset of examples that *although* can replace *but* (obviously, once the necessary syntactic changes have been made). This is illustrated in the next section.

## 2 Interpretations of *Q although P/Although P, Q*

### 2.1 When can *Q although P/Although P, Q* and *P but Q* receive the same interpretation?

There is widespread agreement in the linguistics and philosophy of language literature that *but* has a wide variety of uses. In order to bring out the differences between *but* and *although* even more clearly I will look at the range of interpretations that *but* can receive and see whether *although* can replace *but* in all cases, once the necessary syntactic changes have been made. (1) and (2) have already shown that *although* can do duty for what might be called direct denial of expectation *but*. That is, cases where the *but* clause is the negation of an implication derived from the first clause. For instance, in (2), *It was raining* may be taken to imply that Peter didn't go out in a certain context and the *but* clause (*Peter went out*) directly denies this.

(12) and (13) show that *although* can also replace indirect denial *but*, where it is an implication of the *but* clause that denies an implication of the first clause. For instance, here the first clause (*it's raining*) may imply that the speaker won't go for a walk, while the *but* clause (*I need some fresh air*) implies that the speaker will go for a walk. Note that there is an interesting difference between (13a), where the subordinate clause is postposed, and (13b), where it is preposed. The latter is slightly, but noticeably, more acceptable than the former and the same goes for (14b), as compared to (14a). I will suggest an explanation for this in section 5.

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<sup>3</sup> For a discussion of further tests that distinguish between subordinate and co-ordinate clauses see Rouchota (1998: 45-47).

- (12) It's raining but I need some fresh air.  
 (13) a. I need some fresh air although it's raining.  
       b. Although it's raining, I need some fresh air.<sup>4</sup>  
 (14) a. He has long legs although he is a bit short of breath.  
       b. Although he is a bit short of breath, he has long legs.

As (15) and (16) illustrate, what R. Lakoff's (1971) calls "semantic opposition" can also be expressed using *although*, but this shouldn't be surprising since it can be argued that this use can be reduced to denial of expectation.<sup>5</sup> Again, there is a slight difference in interpretation or acceptability between (16a) and (b) – the former is more likely to be interpreted as involving direct denial, and the latter as involving indirect denial.

- (15) John is tall but Bill is short.  
 (16) a. Bill is short although John is tall.  
       b. Although John is tall, Bill is short.

As (17) and (18) show, *although* doesn't have a correction use: (18a) is completely unacceptable and (18b) is only acceptable on a denial of expectation reading (e.g. one on which *that isn't my sister* is taken to imply something like *that isn't one of my relatives*, which is then denied by *that is my mother*).

- (17) She isn't my sister but my mother.  
 (18) a. \*She is my mother although not my sister.  
       b. Although not my sister, she is my mother.

It seems unlikely that *although* could replace *but* on its discourse use. Discourse *but* is analysed as introducing a new paragraph and signalling a return to the main topic of the discourse. Since *although* would actually have to introduce the preceding paragraph to parallel the examples discussed so far, and, more importantly, since *although* is a

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<sup>4</sup> Note that *even though* can generally replace *although* without a change in meaning. However, some people feel that the use of *even though* always makes a 'direct denial' interpretation more accessible. For them, utterances like *He has long legs, even though he is a bit short of breath* border on the unacceptable.. I'll leave the question of whether *although* and *even though* are synonymous for another time.

<sup>5</sup> Theorists who have argued for such a reduction of "semantic opposition" to denial of expectation include Blakemore (1987, but not 1989) and Foolen (1991). For a fuller discussion, see chapter 5 of Iten (2000).

subordinating conjunction and subordinate clauses can't stand on their own, *although* couldn't do the job of *but* in contexts in which it receives a discourse interpretation.<sup>6</sup>

Finally, utterance- and discourse-initial uses of *but* can't be replaced by *although* for obvious reasons. As mentioned above, *although* actually has to introduce the first clause, rather than the *but*-clause for the same interpretation to be preserved when replacing *but* with *although*. However, in utterance- and discourse-initial uses of *but* there is by definition no first clause. So, it is clear that there couldn't possibly be a case of *although* replacing *but* in utterance- and discourse-initial positions. Still, this doesn't rule out the possibility that an isolated *although*-clause could occur utterance- or discourse-initially in its own right. However, this doesn't seem to be possible. Mary's utterances in (19) and (20) are not exactly acceptable.

(19) Mary [catching Peter munching his way through a box of chocolates]:  
\*Although you're on a diet./?Although you're on a diet?

(20) Peter: I think John is wonderful.  
Mary: \*Although he cheated on you./Although he cheated on you?

Notice, however, that (at least for some speakers) Mary's utterances can become acceptable, particularly in (20), when uttered with the appropriate interrogative intonation contour.

To sum up the discussion so far, it seems that *although* can do duty for *but* just as long as the intended interpretation is one of denial of expectation and that direct denial lends itself more to being expressed by *Q although P* than indirect denial. So, *although* must be given its own analysis, which must take into account its status as a subordinating conjunction and which can explain why *although* can be used to express some of the same things as *but* but not others.

## 2.2 *Although* in three domains

Sweetser (1990: 78-79) sees what she calls 'adversative' connectives, such as *although* and *despite*, and causal connectives, such as *because* and *since*, as being able to function in three domains: **real-world** (or **content**), **epistemic** and **speech-act**. (1a) and (21) are

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<sup>6</sup> However, there might be something amounting to discourse *although*. Exchanges like that in (i) can sometimes be observed.

(i) A: This is a really nice house.

B: Although, I'm not sure that it's structurally sound.

Of course, this could be a performance error or a shift in use.

examples of *although* and *because* operating in the **real-world** or **content** domain. That is, the relations they express hold between states of affairs in the real world.

- (1) a. Peter went out although it was raining.  
 (21) Peter got wet because it was raining.

In the case of (21) this is relatively easy to see; the relation expressed is one of real-world causality, i.e. the rain caused Peter to get wet. It's a bit harder to see in what sense the 'adversative' relation expressed by *although* in (1) holds in the real world. In order to make clearer the real-world nature of the connection in such examples Sweetser (1990: 79) provides a paraphrase. Analogous to her own examples, the paraphrase for (1), which is not one of the examples she considers, would be something like (22).

- (22) Peter's going out occurred in spite of the rain, which might naturally have led to his not going out.

This shows that *although* doesn't actually express a real-world relationship between two states of affairs in the way *because* does. Instead, the relationship *although* expresses is one that exists in the speaker's mind and is based on her knowledge of a real-world causal relation between the state of affairs described in the subordinate clause and the negation of the main clause. In other words, the real-world relationship in (1) doesn't hold between Peter's going out and the rain, but rather between the rain and Peter's not going out. In fact, while real-world causality clearly exists, it is doubtful whether there is such a thing as real-world 'adversativeness'.

Sweetser (1990: 103-104) herself speculates that there probably is no real-world use of *but*, because there is no real-world relation of contrast. Given that she is happy to accept that *although* has a real-world use, this seems quite curious. Particularly, since (2) shows that *but* can perfectly well be used to express the relation expressed by *although* in (1).

- (2) It was raining but Peter went out.

It seems to me that it is quite likely that there is no real-world use of *although*, at least not in the same way in which there is a real-world use of *because*.

In (23), *because* operates in what Sweetser calls the **epistemic** domain.

- (23) It's been raining, because Peter is wet.

That is, rather than expressing a causal relation between two events or states of affairs in the world, it expresses a causal relationship between the speaker's knowledge that Peter is wet and the conclusion that it's raining. *Although* in (6a) could be seen as operating in the epistemic domain, too.

(6) a. It was raining although Peter went out.

Sweetser's (1990: 79) paraphrase of this example would be something like (24).

(24) The fact that it was raining is true in spite of the fact that Peter went out, which might reasonably have led me to conclude that it wasn't raining.

Again, the epistemic relationship doesn't so much seem to hold between the two conjuncts as it does between the subordinate clause and the negation of the main clause.

Finally, (25) gives an example of *because* applying to Sweetser's speech-act domain.

(25) Is it raining, because Peter looks wet.

Here, *because* expresses a causal relation between the state of affairs described in the subordinate clause and the speech-act performed in the main clause. In other words, the fact that Peter looks wet is the speaker's reason for asking whether it's raining. In (26), *although* applies to the speech-act domain. Sweetser's gloss for this kind of example is given in (27).

(26) Is it raining, although I'll have to go out anyway.

(27) I ask you if it's raining in spite of the fact that I have to go out anyway.

It seems, then, that the question is what exactly do *P* and *Q* in *Q although P* and *Although P, Q* stand for. From Sweetser's discussion one could conclude that she would advocate that *Q although P* can have (at least) three different non-logical implications, i.e. one of (28)-(30), where *X* is the proposition expressed by *P* and *Y* that expressed by *Q*, depending on whether *although* is understood as operating in the real-world/content, the epistemic or the speech-act (SA) domain.

(28) Normally (*X* causes not-*Y*)

(29) Normally (*X* leads to the conclusion that not-*Y*)

(30) Normally (*X* causes the speaker not to SA that *Y*)



While I wouldn't want to go along with either Sweetser's postulation of these three domains or her 'analysis' (if it can be called that) of *although*, she points out some interesting examples of *although* utterances. Any adequate analysis of the meaning of *although* should explain not just the interpretation of standard examples involving *although*, such as (1), but also that of its 'epistemic' and 'speech act' uses. In what follows, I'll briefly look at some analyses of *although* before I propose my own, relevance-theoretic, account.

### 3 Traditional ways of accounting for the meaning of *although*

#### 3.1 Winter & Rimon, Sidiropoulou

Like König (1985), Winter & Rimon (1994) don't actually propose a detailed analysis of the meaning of *although*. Instead, they are concerned with giving a semantics for what they call "contrastive conjunctions", of which *although* is one. Nevertheless, their approach seems worth discussing, at least briefly, simply because they are among the few theorists who mention *although* at all and they have a view on the difference between (denial) *but* and *although*.

According to Winter & Rimon (1994: 369), *although* can only express what they call restricted contrast (which is the same as König's 'concessivity'), i.e. *although* can only link *P* and *Q* if *P* implies *not-Q*. *But*, on the other hand expresses general contrast, which amounts to the same as indirect denial of expectation. This means that they would regard (13) as unacceptable (unless it was interpreted as implying that the rain should stop the speaker from wanting fresh air). However, they admit that some native speakers find (31) acceptable when, for example, uttered by the doctor who operated on the son to the father who is concerned that the operation wasn't successful.

- (13) a. I need some fresh air although it's raining.  
 b. Although it's raining, I need some fresh air.

(31) Your son walks although he walks slowly.

In such a case *P* (*your son walks slowly*) would imply *not-R* (*the operation wasn't a success*) and *Q* (*your son walks*) would imply *R* (*the operation was a success*). I believe that Winter & Rimon may find *although* unacceptable in cases where *Q* doesn't directly deny an implication of *P* because they only consider cases of the form *Q although P*. As with the example above, I find (31) much more acceptable in the guise of (32).

(32) Although your son walks slowly, he walks.

It will be seen in section 5 that this difference can be explained in terms of the order in which the clauses are processed.

Sidiropoulou's (1992) account is set in a different framework from Winter & Rimon's (1994) and she believes that *although* has basically two interpretations. According to her (1992: 204-206), *Although P, Q* can be given either a "Shared Implicature Concession (SIC)" reading or a "Speaker's Attitude Concession (SAC)" reading. SIC simply amounts to the same as König's 'concessive' reading, Winter & Rimon's 'restricted contrast' and what I've called 'direct denial of expectation'. SAC, on the other hand, is a variety of König's 'adversative' reading, Winter & Rimon's non-restricted contrast and my own indirect denial. According to Sidiropoulou (1992: 206), SAC involves the

*signaling of a change in the speaker's attitude* with respect to what follows, or precedes, the *although* conjunct. (Sidiropoulou's italics)

She, therefore, analyses *although* as indicating in these cases that the speaker either has a positive attitude to *P* and a negative attitude to *Q* or the other way round. For instance, she might analyse Winter & Rimon's example in (32) as conveying that the speaker has a negative attitude to *P* (*your son walks slowly*) and a positive attitude to *Q* (*your son walks*). Now, while this might be plausible for this particular example, I find it difficult to see how (13) could be analysed along similar lines. It seems likely that in this case the speaker will have a negative attitude towards *P* (*it's raining*), but it's not clear that saying that the speaker has a positive attitude towards *Q* (*I need some fresh air*) either does justice to the situation or is particularly enlightening. Furthermore, this example clearly shouldn't get a SIC reading either (there is no implication that the speaker doesn't normally need fresh air when it's raining).

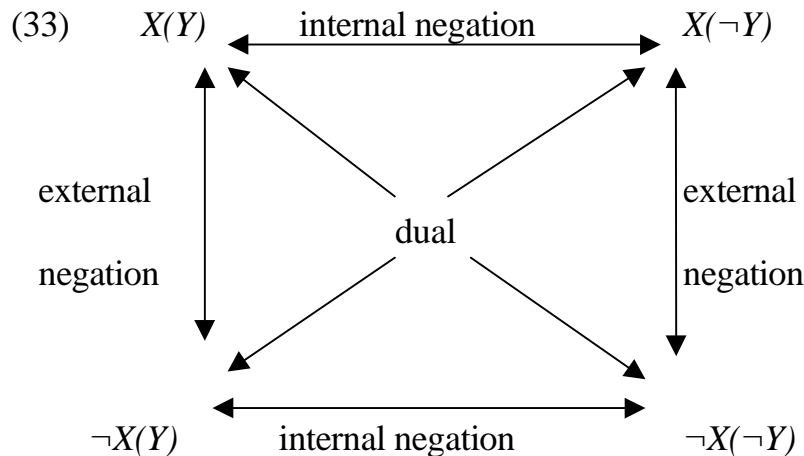
The upshot of this very brief discussion of Winter & Rimon (1994) and Sidiropoulou (1992) is that, apart from a proliferation of terminology, there is a stunning lack of variety when it comes to analyses of the meaning of *although*. The only point on which there seems to be some disagreement is whether or not *although* can link *P* and *Q* in cases in which the contrast or incompatibility between them is not direct. Whether a theorist believes that it can or can't seems to be entirely dependent on whether the examples they consider are of the form *Q although P* or *although P, Q*. Winter & Rimon predominantly consider the former and conclude that *although* must express direct (or restricted) contrast, Sidiropoulou exclusively considers the latter and concludes that *although* can express either direct or indirect contrast. However, essentially, they all

agree with König’s (1985) analysis of *Q although P/Although P, Q*, although, of course, their accounts differ in some of the detail. None of them give a particularly satisfying account of what exactly it is that *although* encodes.

### 3.2 A duality account

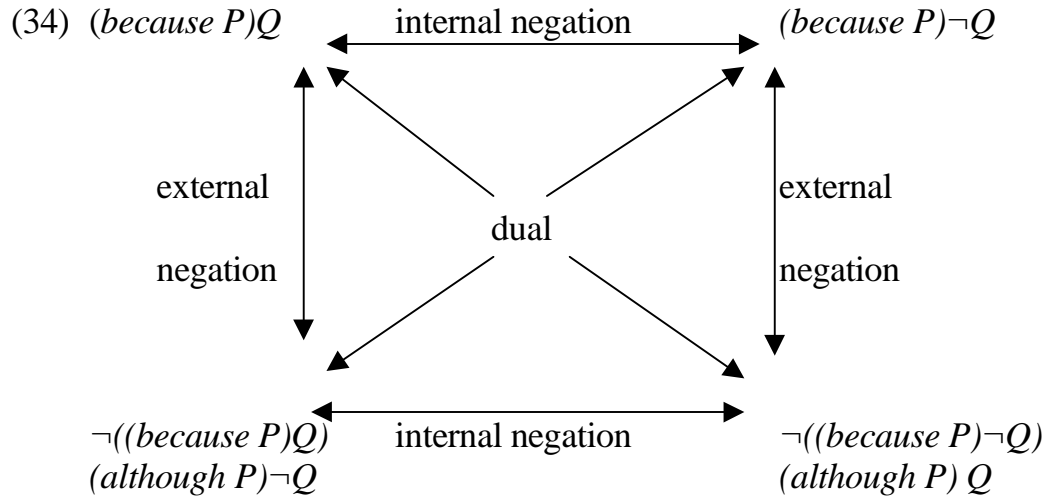
While the ‘account’ of *although* given by König (1986) doesn’t go beyond stating that *Although P, Q* is the prototypical concessive construction, König (1989) takes a slightly more interesting approach. In this paper, he proposes that concessive relations are the **dual** of causal relations. Clearly, this needs some (in fact, quite a lot of) explanation. König (1989: 197) follows Löbner (1987, 1990) in defining the semantic (i.e. truth-conditional) relation of duality as follows.

Duality is a relation that can hold between two propositions whenever there are two possibilities for negating the proposition, internal and external. For instance, negation can apply to *all Fs are G* either externally, as in *not(all Fs are G)*, or internally, as in *all Fs are not-G*. More generally, there are three ways of combining negation with any proposition of the form *X(Y)*: *X(¬Y)*, *¬X(Y)*, and *¬X(¬Y)*. König (1989: 197) represents these possibilities in the “duality square” in (33).



As this square indicates, the relation of duality holds between the positive proposition and the external negation of its internal negation. For instance, *all Fs are G* and *not(all Fs are not-G)* (= *some Fs are G*) are duals. The idea is now that the relationship between *all Fs are G* and *some Fs are G* is paralleled by that between *because P, Q* and *although P, Q*, i.e. that causal relations and ‘concessive’ relations are duals of each other. If this is right, then *not(because P, not-Q)* should be (at least truth-conditionally)

synonymous with *although P, Q*. To illustrate this, I give the duality square for *because P, Q* in (34).



König (1989: 195-197) argues that such a close connection between causality and concessiveness is well supported by intuitions. For instance, he refers to Hermodsson (1978), who proposes to reanalyse (and rename) ‘concessives’ as ‘incausals’. This is based on an intuition close to that of Sweetser (1990) who seems to see the relation expressed by *although* as one between obstacle or impediment (the content of the *although*-clause) and a consequence one would have expected to be impeded or prevented from coming about in the light of the truth of the *although*-clause. This means that causal utterances, such as (35), and concessive utterances, such as (36), can be formed on the basis of one and the same underlying causal connection.

(35) Peter got wet because it was raining.

$Q$  because  $P$

(36) Peter didn't get wet although it was raining.

$\textit{not-}Q$  although  $P$

König (1989: 196) captures these similarities in (37) and (38).

- (37) a. Since/because  $P, Q$   
 b.  $P \ \& \ Q$  (entailment)  
 c. if  $P$ , normally  $Q$  (presupposition)

- (38) a. Although/even though  $P, \textit{not-}Q$   
 b.  $P \ \& \ Q$  (entailment)  
 c. if  $P$ , normally  $Q$  (presupposition)

There certainly is something plausible about this intuition. Furthermore, if there really is a relation of duality between causal and concessive connections, this would have one particular advantage. While, as König (1989: 201) points out, merely stating that there is this relation between concessivity and causality doesn't amount to giving an account of either, it does mean that, once one has an account of causality, an account of (the truth-conditional properties of<sup>7</sup>) concessivity follows automatically (assuming one has an account of negation). Of course, it should also work the other way around, i.e. an account of concessivity should also yield an account of causality. However, this is not very likely – the chances of getting a grip on causality seem much better than those of getting a grip on concessivity. Moreover, starting with an analysis of *Although P, Q* and simply analysing *Because P, Q* as *not(Although P, not-Q)* isn't an option because *although* can't fall under the scope of (external descriptive) negation. (39) does most decidedly not capture (40).

(39) It is not the case that although it was raining, Peter didn't get wet.     *Not(although P, not-Q)*

(40) Because it was raining, Peter got wet.

In this, the *although/because* pair differs markedly from other duals. For instance, *all Fs are G* can be captured by *not (some Fs are not-G)*.

Unsurprisingly, there are a number of problems with König's attempt at accounting for the meaning of *Although P, Q* in terms of causality and duality. Possibly the most fundamental one is that, at best, this account only captures the meaning of *Although P, Q* in those cases where it receives a 'concessive' interpretation, i.e. where there is a direct incompatibility between *P* and *Q* and it (non-logically) implies *normally(if P, then not-Q)*. In other words, it doesn't apply to 'adversative' uses of *although*. In fact, it seems doubtful that such an account would even be an analysis of the meaning of *although*. At most, it seems, König's duality account offers an analysis of the concessive relation. However, giving an analysis of a concessive relation is only interesting if it helps account for the meaning of certain linguistic expressions, such as *but* and *although*. The fact that neither *but* nor *although* always express a concessive relation indicates that defining this relation doesn't lead to a full account of the meaning of these expressions. Moreover, Iten (1997, 1998a) gives a range of arguments to show that *Because P, Q* and *Although P, Q* don't stand in a relation of duality to each other, even assuming that *although* is being used 'concessively'. Here, I will just reiterate the strongest argument.

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<sup>7</sup> Even if concessivity and causality were duals, it's doubtful whether this account, couched in purely logical terms, would shed any light on the relation's cognitive import.

This argument against König's duality account of concessives is connected with the truth conditions of *because P, Q* and *although P, Q*. It is generally accepted that, while the truth of *P* and the truth of *Q* are necessary conditions for the truth of *Because P, Q*, they are not sufficient. For an utterance such as (21) to be true it is not enough that it was raining and that Peter got wet, but the rain must have been the cause of Peter's getting wet.

(21) Peter got wet because it was raining.

This is shown nicely by (41), where the (descriptive) negation applies just to the causal connection between the rain and Peter's getting wet.

(41) Peter didn't get wet because it was raining – it was raining, but he got wet because he fell in the pond.

The 'concessive' relation between the rain and Peter's not getting wet expressed by *although* in (36), on the other hand, is not a matter of truth conditions. As mentioned in section 1, all it takes for an utterance like this to be true is the truth of each conjunct.

(36) Peter didn't get wet although it was raining. *not-Q although P*

The unacceptable (42) shows that it is impossible to negate (descriptively) just the concessive relation.

(42) \*Peter didn't not get wet although it was raining – it was raining, but Peter didn't get wet although he fell in the pond.

This difference raises some interesting points for König's duality account. For instance, *not(because P, Q)* and *although P, ¬Q* should be equivalent according to the duality square in (34). However, it is not immediately clear that they are. *Although P, ¬Q* is true just in case *P* is true and  $\neg Q$  is true. In other words, the truth of *P* and the truth of  $\neg Q$  are necessary and jointly sufficient conditions for the truth of *although P, ¬Q*. It is not obvious that the same conditions are necessary and jointly sufficient for the truth of *not(because P, Q)*. Of course, they are jointly sufficient for the truth of *not(because P, Q)*. However, they are not necessary. The truth of *P* and  $\neg Q$  is only one of four sets of propositions that are sufficient for the truth of *not(because P, Q)*. All four possibilities are given formally in (43).

- (43) a.  $P, \neg Q$  [and, therefore,  $\neg(P \text{ causes } Q)$ ]  
 b.  $\neg P, Q$  [and, therefore,  $\neg(P \text{ causes } Q)$ ]  
 c.  $\neg P, \neg Q$  [and, therefore,  $\neg(P \text{ causes } Q)$ ]  
 d.  $P, Q, \neg(P \text{ causes } Q)$

To give a concrete example, assuming that the negation is understood as taking wide scope, (44) could be true due to any of (45a)-(d).

- (44) Peter didn't get wet because it was raining.  
 (45) a. It was raining, but Peter didn't get wet (and, therefore, the rain didn't cause Peter to get wet).  
 b. It wasn't raining, but Peter got wet (the rain didn't cause Peter to get wet).  
 c. It wasn't raining and Peter didn't get wet (and, therefore, the rain didn't cause Peter to get wet)  
 d. It was raining and Peter got wet, but it wasn't the rain that caused Peter to get wet.

In other words, for *not(because P, Q)* to mean the same as *although P, not-Q*, it has to receive a very specific interpretation. Since this interpretation is one out of four possible ones, i.e. one out of four interpretations compatible with the semantics of *not(because P, Q)*, it follows that *not(because P, Q)* and *although P, not-Q* are only going to receive the same interpretation in certain circumstances. This means that their equivalence (if equivalent is what they are) is not a matter of their semantics but it arises pragmatically. Therefore, König's conclusion that *because* and *although* are semantically duals of each other is misguided. Nevertheless, there is something interesting to be explained here, i.e. the fact that, at least sometimes, *not(because P, Q)* and *although P, not-Q* really do seem to receive the same or a very similar interpretation. For instance, König's (1989: 196) examples (46) and (47) are likely to be interpreted along similar lines.

- (46) This house is no less comfortable because it dispenses with air-conditioning.  
 (47) This house is no less comfortable although it dispenses with air-conditioning.

I believe (and will show) that this can be explained straightforwardly once one has an adequate analysis of the encoded meaning of *although*.

Summing up, it has been shown that König's claim that *because P, Q* and *although P, Q* are duals of each other, i.e. that *not(because P, not-Q)* and *although P, Q* are truth-conditionally equivalent, is not tenable. Furthermore, even if it could be shown that a relation of duality holds between causality and concessivity, this truth-conditional

account would be missing crucial cognitive differences. For, cognitively, *because P, Q* and *not(although P, not-Q)* are certainly not equivalent.

## 4 Towards an RT account

### 4.1 Concept or procedure?<sup>8</sup>

Given that *although* essentially only seems to have a single function (i.e. something to do with direct or indirect denial) there might be an initial temptation to try and treat it as encoding conceptual information. However, since it never contributes to the truth conditions of utterances in which it occurs, it seems unlikely that this is the case. In this section, I will use the three tests identified by Rouchota (1998a) and discussed in Iten (1998b, 2000: ch. 4) to argue that all available evidence points in the direction of *although* encoding procedural, rather than conceptual, information.

Let me start with cognition. It seems quite clear that most native speakers of English would find it more than averagely difficult to say what *although* ‘means’. Even linguists who spent a lot of time thinking about *although* generally end up saying how it is **used** rather than what it **means**. Furthermore, *although* is probably not one of the easiest words for foreign learners of English to acquire.

The second argument involves truth-evaluability. Recall that expressions which encode concepts are truth-evaluable whether or not they contribute to the truth conditions of a particular utterance. For instance, although *sadly* doesn’t contribute to the truth conditions of A’s utterance in (48), B’s reply to it is perfectly acceptable.

- (48) A: Sadly, my mother-in-law died.  
 B: That’s not true, you’re not sad about her death.

By contrast, the unacceptability of B’s reply in (49) shows that the contribution *although* makes to the meaning of an utterance is not truth-evaluable and its meaning, therefore, not likely to be conceptual.

- (49) A: Peter went out although it was raining.  
 B: \*That’s not true, he always goes out in the rain.

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<sup>8</sup> For a detailed discussion of the conceptual/procedural distinction see e.g. Wilson & Sperber (1993), Rouchota (1998a) and chapter 4 of Iten (2000).



The final test concerns compositionality: While conceptual expressions freely combine with each other to form larger conceptual representations, procedural expressions don't combine with each other to form larger procedures and they can't be modified by other procedures or by concepts. For *although* this is brought out by examples, such as (50) and (51). These show that, while other subordinating conjunctions, such as *because*, can be modified by an adverbial like *mainly*, a combination of *mainly* with *although* has ungrammatical results.

(50) Peter went to the party mainly because he wanted to see Susan.

(51) \*Susan went to the party mainly although she didn't want to see Peter.

Similarly, in (52) *partly* modifies *because* with a perfectly acceptable result, while in (53) the same can't be said of an attempt to use *partly* to modify *although*.

(52) Peter went to the party partly because he wanted to see Susan and partly because he had nothing better to do.

(53) \*Susan went to the party partly although she didn't want to see Peter and partly although she had a lot of work to do.

Furthermore, (54) shows that one can use descriptive negation to negate just the meaning of *because*, while (55) demonstrates that descriptive negation can't be applied just to the meaning *although*. Obviously, where the negation is clearly metalinguistic (or echoic), *although* can be negated, as in (56)<sup>9</sup>.

(54) Peter didn't go to the party because he wanted to see Susan but because he had nothing better to do.

(55) \*Susan didn't go to the party although she didn't want to see Peter but although she had a lot of work to do.

(56) Susan didn't go to the party *although* she had a lot of work to do, but *because* of it.

Clearly, there is no syntactic reason for these differences in acceptability between (50) and (51), (52) and (53), and (54) and (55): *because* and *although* are both subordinating conjunctions. It seems, therefore, likely that this difference is due to the fact that the two conjunctions encode different types of meaning.

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<sup>9</sup> For a discussion of metalinguistic negation see Horn (1985). For a Relevance Theoretic reanalysis see Carston (1996).

To sum up this section, all the available evidence points in the direction of *although* encoding a procedure rather than a concept. In section 4.3, I shall suggest a procedure which is likely to be what *although* encodes and this procedure will be tested on the data discussed earlier. Before that, however, something ought to be said about the explicit content of utterances of the form *Q although P* and *although P, Q*.

## 4.2 The proposition(s) expressed

As mentioned in section 1, the general consensus is that utterances of sentences of the forms in (57) and (58) are true just in case *P* is true and *Q* is true. The question is whether this amounts to the claim that these utterances express the conjunctive proposition in (59).

- (57) *Q although P*
- (58) *Although P, Q*
- (59) *P & Q*

Obviously, if the proposition expressed were intended to capture nothing more than pure truth-conditional content, then this question would be pointless. However, recall that the proposition expressed, within the framework of Relevance Theory, is a development of a logical form encoded by the utterance and that syntactic structure is a crucial part of what is encoded. In other words, the question is whether the logical form encoded by (57) and (58) is an *and*-conjunction. As demonstrated in section 1, these sentences involve subordination while *and*-conjunctions, such as (59), have co-ordinate structure. It, therefore, seems highly doubtful that anything of the form in (59) could correspond to a logical form encoded by any utterance involving subordination. So, if the logical form encoded by (57) and (58) doesn't involve a co-ordinate conjunction, what is its structure? I can imagine two possibilities. First, one might want to find some way of representing subordination, say by using the symbol "sub". In this case, the logical form encoded by (57) and (58) would be (60), where *Q'* stands for the conceptually encoded content of the main clause and *P'* for that of the subordinate clause.

- (60) *Q' sub P'*

For instance, for (1) the logical form might roughly look something like (61).

- (1) a. Peter went out although it was raining.

(61) X WENT OUT sub IT WAS RAINING<sup>10</sup>

Alternatively, one might want to say that (57) and (58) don't encode a single logical form at all, but, instead, that they encode the set of logical forms in (62).

- (62) a.  $Q'$   
b.  $P'$

On the face of it, (62) has the advantage over (60). First, it allows one to account relatively straightforwardly for examples that involve Sweetser's speech-act use of *although*, such as (26).

(26) Is it raining, although I'll have to go out anyway.

It seems clear that someone uttering (26) will, probably among others, be likely to communicate the higher-level explicatures in (63).

- (63) a. The speaker is asking whether it's raining.  
b. The speaker is saying that she'll have to go out anyway.

Now, recall that higher-level explicatures are nothing other than embeddings of the proposition expressed under speech-act or propositional attitude descriptions. Clearly, (63a) and (b) are embeddings of something under speech-act descriptions, and, according to the RT definition, the something they embed must be the proposition(s) expressed by the utterance. The proposition(s) expressed, in turn must be a development of a logical form encoded by the utterance. If one assumes that *although* utterances encode two logical forms, it is easy to see how each of them can be developed into a proposition expressed and how each proposition expressed can be embedded to form its own set of higher-level explicatures, e.g. those in (63a) and (b). If, on the other hand, the assumption is that such utterances encode one single logical form comprising the conceptually encoded content of both its clauses, it is not at all clear how this could be 'developed' into two separate propositions, each of which is a development of only one of the clauses. Now, because there is something maybe a bit marked and unusual about speech-act uses of *although* one might be tempted to look for an alternative explanation

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<sup>10</sup> I'm working on the assumption that proper names, such as *Peter*, don't **encode** individual concepts, but rather procedurally guide the hearer to supply such a concept on particular occasions of utterance.

and not take this very seriously as evidence for *although* utterances encoding two logical forms. However, this would be a mistake.

Even perfectly ‘ordinary’ *although* utterances, such as (1), present a problem for the assumption that they encode one single logical form. It seems uncontroversial that a speaker uttering (1) may communicate each of (64a) and (b) in its own right and that she would, surely, be doing so explicitly.

- (64) a. Peter went out.  
b. It was raining.

In other words, it is not just in speech-act uses of *although* that each clause must come with its own set of explicatures. It seems, then, that (62) should be preferred to (60), i.e. that *although* utterances should be seen as encoding two separate logical forms and as having two separate sets of explicatures.

However, (62) also has a disadvantage, i.e. it makes it look as though the two propositions, *P* and *Q* are completely unrelated syntactically. Quite obviously, that is not the case. This is brought out particularly clearly by examples of the form *although P, Q*, where the first clause may contain indexicals that are bound by constituents of the second clause. For instance, *he* and *it* in the first clause of (65) are bound by *Peter* and *the spinach* in the second.

- (65) Although he<sub>i</sub> didn’t like it<sub>j</sub>, Peter<sub>i</sub> ate [the spinach]<sub>j</sub>

(66b) shows that it’s not easily possible for pronouns in the first of two juxtaposed sentences to be bound by constituents of the second sentence<sup>11</sup>.

- (66) a. Peter<sub>i</sub> ate [the spinach]<sub>j</sub>. He<sub>i</sub> didn’t like it<sub>j</sub>.  
b. He<sub>i</sub> ate it<sub>j</sub>. Peter<sub>\*i/k</sub> didn’t like [the spinach]<sub>\*j/l</sub>.

These syntactic properties of utterances like (65) can be captured by (60) but not by (62). It seems, then, that neither of the two alternatives to (59) is quite ideal. So, what is one to do?

It is not clear to me how the claim that *Q although P* and *although P, Q* encode two logical forms could be adapted to capture the syntactic properties of these sentences.

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<sup>11</sup> I’ve changed the order of the two sentences for the juxtaposed examples so as to rule out pragmatic unacceptability – *Peter didn’t like the spinach. He ate it.* doesn’t make for a particularly acceptable piece of discourse.

However, Carston (forthcoming) offers a way of reconciling the idea that these sentences encode a single logical form, maybe along the lines of (60), with the fact that the main clause and the subordinate clause can each have their own set of explicatures. In section 3.3.1, she considers examples such as (1) and proposes a modification of the relevance-theoretic definition of explicature to account for the undoubted intuition that, for instance, an utterance of (1) has the explicatures in (64). Her new definition of explicature is given in (67).

(67) An assumption (proposition) communicated by an utterance is an ‘explicature’ of the utterance if and only if it is a development of (a) a linguistically encoded logical form of the utterance, or of (b) a sentential subpart of a logical form.

This definition makes it possible not only to explain how (64a) and (b) can both be explicatures of (1), but also how (26) can have the higher-level explicatures in (63a) and (b).

- (26) Is it raining, although I’ll have to go out anyway.  
 (63) a. The speaker is asking whether it’s raining.  
 b. The speaker is saying that she’ll have to go out anyway.

In both of these cases, the explicatures in question aren’t developments of a logical form encoded by the utterance but developments of a sentential subpart of a logical form encoded by the utterance. This raises the question of whether, in the case of *although*-conjunction, the whole logical form ever is developed to form an explicature. That is, do utterances of the form in (57) and (58) ever express a proposition that is a development of the entire logical form. This is an interesting question because it seems that in the case of other subordinating conjunctions, such as *because* and *when*, this does happen. For instance, according to Carston (forthcoming, section 3.3.1), *because* utterances, e.g. (21), standardly express three propositions, e.g. (68a)-(c)<sup>12</sup>.

- (21) Peter got wet because it was raining.  
 (68) a. PETER GOT WET  
 b. IT WAS RAINING  
 c. PETER GOT WET BECAUSE IT WAS RAINING

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<sup>12</sup> In the Gricean spirit, I’m hideously oversimplifying these propositions.

Similarly, an utterance containing *when*, such as (69), could, and should, be seen as communicating the three propositions in (70)<sup>13</sup>.

- (69) It was raining when Peter went out.  
 (70) a. IT WAS RAINING  
       b. PETER WENT OUT  
       c. IT WAS RAINING WHEN PETER WENT OUT

It seems clear that, in both these cases, the (c) proposition must be communicated because both *because* and *when* actually contribute to the truth conditions of the utterances in which they occur. However, if truth-conditionality is the criterion, then one would expect there not to be a (c) proposition for *although* utterances. Indeed, it is hard to see, as I have shown in the previous sub-section, what conceptual constituent *although* could contribute to such a proposition. Although there isn't anything inherently wrong with the idea that *although* utterances encode a single logical form, but never communicate a proposition that is a development of the whole of this logical form, there is something slightly strange about it. I believe that there may be a way of avoiding this 'strangeness'.

It might be that utterances of the forms in (57) and (58) don't only express propositions that are developments of sentential subparts of the logical forms they encode but that they also express a propositions developed from the entire logical forms. For instance, it doesn't seem entirely wrong to suggest that (1) also expresses the proposition in (71).

- (71) PETER WENT OUT WHILE IT WAS RAINING

Indeed, the embedding test suggests that it is a proposition along these lines that determines the truth conditions of an utterance of (1a). Surely, a speaker uttering (5) isn't conveying that the reason Peter got wet is that he went out **and** that it was raining, but, crucially, that Peter went out **while** it was raining

- (5) Because Peter went out although it was raining, he got wet.

Now, one might want to take this to mean that *although* actually encodes *while* plus something else. However, this is clearly not tenable. For instance, rather than

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<sup>13</sup> See fn. 12.

expressing a proposition that contains *while*, it seems likely that an utterance of (72) would express one like (73), which contains *before*.

- (72) Peter got drunk although he had to give a lecture.  
 (73) PETER GOT DRUNK BEFORE PETER HAD TO GIVE A LECTURE

Similarly, (74) seems likely to express a proposition containing *after*, along the lines in (75).

- (74) Peter went out although Mary told him not to.  
 (75) PETER WENT OUT AFTER MARY TOLD PETER NOT TO GO OUT

In other words, it's unlikely that *although* encodes anything like 'conceptual subordinating conjunction plus something else' – the evidence presented in the last section speaks against that quite strongly already. Instead, it is possible that its syntactic function as a subordinating conjunction makes available a slot in the logical form, which is then pragmatically filled by a subordinating concept. Which concept this will be is determined by the context, but also, indirectly, by the procedure encoded by *although*, which, at the very least, must rule out *because*.

### 4.3 What procedure?

Since *although* seems to be able to replace *but* in all examples in which the second clause denies an 'expectation' created by the first, one might want to try and formulate a procedure for *although* along the lines of denial. However, this doesn't seem to be an option. First, assuming that (1) and (2) both do involve denial of expectation, *but* in (2) introduces the clause that does the denying, while *although* in (1a) and (b) introduces the clause whose implication is being denied.

- |     |   |                      |
|-----|---|----------------------|
| (2) | It was raining but Peter went out.          | <i>P but Q</i>       |
| (1) | a. Peter went out although it was raining.  | <i>Q although P</i>  |
|     | b. Although it was raining, Peter went out. | <i>Although P, Q</i> |

This means that *although* couldn't possibly encode a procedure that instructs the hearer that the clause it introduces contradicts and eliminates an assumption. Nevertheless, the *although* clause does seem to be doing some contradicting. For instance, in (1) it could be seen as indirectly contradicting the assumption that Peter went out. However, it

clearly doesn't eliminate this assumption. It was observations like these that led me to propose the procedure in (76) in Iten (1998b: 100)

(76) What follows (i.e. *P*) contradicts, but does not eliminate, *X*. *X* is an aspect of the interpretation of *Q*.

According to this, *although* indicates that the clause it introduces contradicts an aspect of the interpretation of *Q* without eliminating it. In the case of (1), this aspect of the interpretation of *Q* is the proposition expressed. However, in other examples it could be a higher-level explicature or an implicature. The former takes care of Sweetser's speech-act examples, while the latter explains König's 'adversative' examples, where in the corresponding *but* utterance the denial of expectation would be indirect. For instance, the idea is that in (26) what is contradicted without being eliminated is the higher-level explicature in (77).

(26) Is it raining, although I'll have to go out anyway.

(77) The speaker is asking whether it is raining.

Similarly, in (13) the *although* clause contradicts the implicature in (75) without eliminating it.

(13) a. I need some fresh air although it's raining.  
b. Although it's raining, I need some fresh air.

(78) The speaker wants to go for a walk.

Iten (1998b: 100-105) shows in detail how the procedure in (76) combined with the communicative principle of relevance can explain the whole range of examples discussed by König and Sweetser.

However, while it may be doing a reasonable job of accounting for the examples, this procedure has some weak points. For instance, it overlooks the fact that the contradiction between *P* and *X* is never of a direct nature, i.e. it is never the case that  $X = \textit{not-P}$ . Instead, it is always the case that *P* one way or another **implies** *not-X*. Indeed, Iten (1998b: 100) captures this by saying that the hearer is likely to recover a contextual assumption (which is an implicated premise) along the lines of (79).

(79) In general,  $\neg X$  follows from *P*.



Another undesirable aspect of (76) is that it is quite cumbersome. Now, while this certainly isn't a knockdown argument against it, it would be nice to find a more elegant procedure. Finally, it is no longer clear to me that what goes on in an *although* utterance is really a matter of the *although* clause contradicting an aspect of the interpretation of the main clause. After all, the implication of the *although* clause that contradicts an aspect of the interpretation of *Q* does not eliminate the contradicted assumption, and it is this assumption, rather than the implication of *P*, that ends up being communicated. It seems, therefore, that the procedure in (76) invites the hearer to derive an assumption, i.e. *not-X* only to eliminate it subsequently. In fact, in cases where the *although* clause follows the main clause, the hearer would have to derive an assumption the negation of which he has already processed. What really seems to go on in these utterances is that *although* prevents an inference from going through that would end up contradicting an aspect of the interpretation of the main clause. I would therefore like to suggest that *although*, in utterances of the form *Q although P/although P, Q*, encodes a procedure along the lines in (80).

(80) Suspend an inference from what follows (i.e. *P*) which would result in an unresolvable contradiction.

Understood like this, *although* functions rather like a road sign warning of a cul-de-sac, i.e. it warns the hearer of a possible inferential dead end. Its doing so has the side effect of making accessible that assumption which, in combination with *P*, will give rise to the contradiction. That is, the fact that the speaker indicates that the hearer is to suspend an inference means that she believes that he is in some danger of actually performing the inference because he may have a background assumption accessible that would license it. It is a side effect of the hearer's being warned of a danger that the thing he is being warned of, in this case the inference that leads to a contradiction, becomes manifest or more manifest to him. This means that, sometimes, the assumption that leads to the contradiction only becomes manifest to the hearer once he has processed the *although* clause (or maybe it becomes manifest to him that the speaker thinks that the assumption is, or may be, manifest to him).

(1) a. Peter went out although it was raining.

For instance, in (1a) the hearer first processes *Q*, i.e. *Peter went out*, then *although* indicates that there is an inference from *P* (i.e. *it was raining*) that has to be suspended because it would yield a contradiction. In this particular example, it is quite conceivable that *P* (i.e. *it was raining*) gives immediate access to the assumption that people don't go

out if it's raining. This assumption licenses an inference from *it was raining* to *Peter didn't go out*, which would obviously contradict the proposition expressed by *Q* (i.e. *Peter went out*). Quite generally, the most accessible assumption that could be contradicted in such examples is, of course, one that has just been communicated, i.e. explicatures or implicatures of *Q*. In the rest of this section I will show that the new procedure in (80) does at least as good a job as (76) at accounting for all manner of examples, and, indeed, it will be seen in section 6 that it can explain when and why *although* utterances can be used to express something similar to the corresponding *but* utterances.

I have already demonstrated above that the procedure in (80) can account for what König calls 'concessive' uses of *although* and for cases where *although* operates in Sweetser's real-world or content domain. As mentioned earlier, in (6), repeated here, *although* applies to Sweetser's epistemic domain. However, it is still 'concessive', i.e., intuitively, *although* seems to indicate that *P* gives one reason to conclude *not-Q*.

- |     |   |                      |
|-----|---|----------------------|
| (6) | a. It was raining although Peter went out.  | <i>Q although P</i>  |
|     | b. Although Peter went out, it was raining. | <i>Although P, Q</i> |

My new procedure accounts for this type of example without any problems. *Although* indicates that the hearer is to suspend an inference from *P* (*Peter went out*) to an assumption that would contradict a communicated assumption. As always, the most accessible assumption that could be contradicted is the proposition expressed by *Q* (i.e. *it was raining*). Now, the inference from *Peter went out* to *it wasn't raining* must be licensed by an accessible assumption and the only kind of assumption that can license this inference is one that involves the possibility of concluding that it isn't raining from the fact that Peter is going out – maybe because he is the kind of guy who hates the rain so much that he avoids it at all cost. The problem with this assumption is that it is less generally accessible than the assumption that people don't go out if it's raining, because it involves more idiosyncratic information about Peter. Furthermore, the fact that it is raining can be the cause of somebody's not going out, while somebody's going out is most decidedly not a possible cause of there being no rain. In other words, out of context, (1) is easier to process than (6) because the assumption that licenses the suspended inference is more readily accessible in the case of (1). Of course, for people who know Peter very well and maybe often joke about his dislike of rain (6) may well be as easy to process as (1).

In the case of an utterance of (26), where *although* applies to the speech-act domain in Sweetser's view, the suspended inference is from *P* (*I'll have to go out anyway*) to the negation of a higher-level explicature of *Q* (i.e. *I'm not asking you if it's raining*).

(26) Is it raining, although I'll have to go out anyway.

This inference is licensed by assumptions such as *people who have to go outside no matter what the weather is like don't ask what the weather is like*. This shows how the procedure in (80) can explain 'concessive' uses of *although* quite easily.

'Adversative' uses of *although*, such as (13), can be explained along the following lines.

- (13) a. I need some fresh air although it's raining. *Q although P*  
 b. Although it's raining, I need some fresh air. *Although P, Q*

Again, *although* indicates that the hearer is to suspend an inference from *P* (*it's raining*) to an assumption that contradicts a communicated assumption. Here, the most likely candidate for the communicated assumption that is potentially contradicted isn't the proposition expressed by *Q* (i.e. *the speaker needs some fresh air*) or a higher-level explicature (e.g. *the speaker is saying that she needs some fresh air*), but an implicature of *Q* (i.e. *the speaker wants to go for a walk*). The inference from *it's raining* to *the speaker doesn't want to go for a walk* is licensed by a relatively easily accessible and generally accepted assumption, such as *people don't normally want to go for a walk in the rain*.

I believe that this has shown that the procedure in (80), not only makes it possible to account for the whole range of examples involving *although*, but that it can also explain why, at least taken out of context, some *although* utterances are easier to process, and therefore more likely to be judged acceptable, than others.

In section 3.2 I promised to show later that an adequate analysis of *although* is able to explain the fact that König's examples (46) and (47) seem to receive the same interpretation. This is the point at which I should make good my promise.

(46) This house is no less comfortable because it dispenses with air-conditioning.

*Not(Q because P)*

(47) This house is no less comfortable although it dispenses with air-conditioning.

*Not-Q although P*

Let me start with (47). As above, *although* indicates that the hearer is to suspend an inference from *P*, here *this house dispenses with air-conditioning*, that leads to a contradiction. In this case, it is plausible that *not-Q*, i.e. *this house is no less comfortable*, is the assumption that would be contradicted and that an assumption along the lines of (81) licenses the suspended inference.

(81) If a house dispenses with air-conditioning, it's less comfortable.

Surely, it's conceivable that what lies behind the assumption in (81) is a belief that a house's lack of air-conditioning **causes** it to be less comfortable. Now, (46) can be paraphrased as (82).

(82) It is not the case that the fact that this house dispenses with air-conditioning causes it to be less comfortable.

In other words, someone uttering (46) is saying that, in this particular case, the house's lack of air-conditioning doesn't cause it to be less comfortable. It seems, then, that both, (46) and (47), involve the suspension of a potential move from cause to consequence, i.e. from the house's lack of air-conditioning to its being less comfortable. A speaker of (46) asserts that this move doesn't take place in the real world, while a speaker of (47) uses *although* to indicate that it is to be suspended in the hearer's mind.

### **5 *Q although P* vs. *Although P, Q***

At the beginning of this paper I noted that, particularly when it comes to 'adversative' uses of *although*, there seems to be a difference in acceptability or ease of processing between utterances of the form in (57) and those of the form in (58).

(57) *Q although P*

(58) *Although P, Q*

In particular, I observed that there was a tendency to prefer (13b), (16b) and (14b) to their corresponding (a) utterances.

(13) a. I need some fresh air although it's raining.

b. Although it's raining, I need some fresh air.

(16) a. Bill is short although John is tall.

b. Although John is tall, Bill is short.

(14) a. He has long legs although he is a bit short of breath.

b. Although he is a bit short of breath, he has long legs.

I believe that this difference can be explained in processing terms. The procedure in (80) means that a hearer needs access to two assumptions in order to find an *although*

utterance acceptable, i.e. to be able to process it smoothly along the lines indicated by *although*:

- (i) the assumption that licenses the suspended inference; and
- (ii) the assumption which the inference, if performed, would contradict.

This is necessary because the hearer needs to know which inference from *P* the speaker intends him to suspend. Obviously, accessing (i) involves accessing (ii) and accessing (ii) makes it easier to access (i). It is precisely in the order in which (i) and (ii) are likely to be accessed that utterances of the form in (57) are different from those of the form in (58).

In the standard ‘concessive’ examples, such as (1), even though (a) and (b) are processed differently, given the different order of the clauses, there is no noticeable difference in the processing effort that is required. Therefore, there is no difference in acceptability between (1a) and (1b).

- (1) a. Peter went out although it was raining. *Q although P*
- b. Although it was raining, Peter went out. *Although P, Q*

However, when it comes to ‘adversative’ examples, where the suspended inference is from *P* to the negation of an implicature of *Q*, the difference in processing paths leads to a difference in processing effort. For instance, consider (14).

- (14) a. He has long legs although he is a bit short of breath. *Q although P*
- b. Although he is a bit short of breath, he has long legs. *Although Q, P*

Personally, I find (14b) considerably more acceptable than (14a). I would argue that, here, the suspended inference goes from *P* (*he is a bit short of breath*) to the negation of the implicature of *Q* given in (83). The assumption that combines with *P* to license this inference might be something like (84).

- (83) He is a good runner.
- (84) If X is short of breath, X is not a good runner.

An utterance of (14a) or (b) is most likely to be given this kind of interpretation in a scenario in which speaker and hearer are discussing who is a good runner or some such thing. In such a scenario, a hearer of (14b) is very likely to form the correct hypothesis as to which inference he is to suspend straightaway and he will have no problems at all

in processing the utterance along the lines intended by the speaker. Hence, its undoubted acceptability.

Things are not quite as simple for a hearer of (14a), who processes *Q* first. Such a hearer is quite likely to derive the implicature in (83) in the scenario described and, therefore, should have no problems in realising which inference he is to suspend. Nevertheless, because he will just have processed the encoded meaning of *Q* (i.e. *he has long legs*), the proposition expressed by this clause will be highly accessible and he is likely to consider first the hypothesis that this is the potentially contradicted assumption. In other words, the hearer may well first access an assumption which would license the inference from *P* (*he is a bit short of breath*) to the negation of the proposition expressed by *Q*, e.g. *if X is a bit short of breath, then X doesn't have long legs*. No doubt, he will discard this assumption as soon as he's accessed it. However, his accessing it at all means that (14a) involves more processing effort than (14b).

## 6 *But vs. although* – revisited

In the first two sections of this paper I discussed some of the similarities and differences between *but* and *although*. Now that I've proposed procedural analyses of both, it should be possible to explain these similarities and differences in terms of the procedures encoded by *but* and *although*. The procedure encoded by *but*, as proposed by Iten (2000, ch. 5) is given in (85), that encoded by *although* in (80), repeated below.

(85) What follows (*Q*) denies an accessible assumption.

(80) Suspend an inference from what follows (i.e. *P*) which would result in an unresolvable contradiction.

Both of these procedures can apply in cases where *P* implies *not-Q*: the *but* procedure applies because in such a case *Q* denies *not-Q*; the *although* procedure because the inference from *P* to *not-Q* has to be suspended in order to avoid a contradiction. Similarly, in cases where *P* implies *not-R* and *Q* implies *R* both procedures can apply: the *but* procedure because *Q* indirectly denies *not-R*, which is accessible from *P*; the *although* procedure because the inference from *P* to *not-R* must be suspended to avoid a contradiction between *not-R* and *R*.

These two procedures can also explain why *but* can give rise to many more 'interpretations' than *although*. The procedure *but* encodes is much simpler and more general than that encoded by *although*. In particular, it is now possible to explain why *although* can't occur discourse-initially. One possible reason for this is explored by

Rouchota (1998: 47), who stresses that subordinate clauses quite generally have to be embedded in main clauses and, therefore, can't occur in isolation. No doubt, this observation is correct. However, the *although* procedure suggested in this paper also rules this out, at least for discourse-initial isolated *although* clauses. Recall that *although* indicates that an inference from the clause it introduces has to be suspended because it results in an unresolvable contradiction. Such a contradiction can only arise where at least one other assumption is being communicated by the same speaker. This also explains why utterance-initial occurrences of isolated *although* clauses, such as Mary's utterance in (20), are only acceptable when uttered with an interrogative intonation.

(20) Peter: I think John is wonderful.

Mary: \*Although he cheated on you./Although he cheated on you?

As before, *although* indicates that the hearer is to suspend an inference from *he cheated on you* because it leads to an unresolvable contradiction. The contradiction is clearly between the proposition expressed by Peter's utterance and an implication one would derive from *John cheated on Peter* and *the cheated party doesn't usually think the cheating party is wonderful*. However, Mary isn't the one who communicated the assumption that Peter thinks John is wonderful. So, there strictly speaking isn't an unresolvable contradiction and it isn't actually up to Mary to indicate that the inference should be suspended. All she can do, and what I believe she does do by uttering the *although* clause as a question, is tentatively attribute the suspension of this inference to Peter and hope that her pointing out that there is an inference that has to be suspended in this way if one is to believe both that Peter thinks John is wonderful and that John cheated on Peter. If Mary wanted to object to Peter's thinking that John is wonderful more forcefully, she should have uttered (86), where what she is denying might well be the assumption that it's okay for Peter to think John is wonderful or, indeed, the clearly accessible assumption that John is wonderful.

(86) But he cheated on you!

The final set of examples I want to consider come from R. Lakoff (1971: 137). She correctly observes that an utterance of (87) is perfectly acceptable, while neither (88a) nor (b) can be uttered felicitously.

(87) John would be a doctor today, but he failed chemistry.

- (88) a. \*Although John would be a doctor today, he failed chemistry.  
 b. \*John failed chemistry although he would be a doctor today.

I would argue that what's going on here is that the *but* clause in (87) denies the accessible, but clearly not manifest, assumption *John is a doctor today*. The *although* examples are unacceptable because, to parallel the *but* utterance, the suspended inference would have to go from *P* (i.e. *John would be a doctor today*) to the negation of a communicated assumption – most probably (and accessibly) the proposition expressed by *Q* (i.e. *John failed chemistry*). However, the only kind of assumption that could license this inference is the completely implausible (89).

(89) If someone would be a doctor today they didn't fail chemistry.

## 7 Conclusion

In this paper I hope to have shown that a procedural account of the meaning of *although*, on which it is seen as indicating that an inference has to be suspended because it would result in a contradiction, is not only descriptively adequate but also goes a long way towards explaining which *although* utterances are judged acceptable and, in particular, when an *although* utterance can be used to achieve an interpretation similar to a corresponding *but* utterance, and when it cannot.

## References

- Anscombe, J.-C. & O. Ducrot (1977) Deux *mais* en français? *Lingua* 43: 23-40.  
 Bach, K. (1999) The myth of conventional implicature. *Linguistics and Philosophy* 22: 327-366.  
 Carston, R. (1996) Metalinguistic negation and echoic use. *Journal of Pragmatics* 25: 309-330.  
 Carston, R. (forthcoming) *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Oxford: Blackwell.  
 Fraser, B. (1998) Contrastive discourse markers in English. In Jucker & Ziv (1998). 301-326.  
 Green, G. (1976) Main clause phenomena in subordinate clauses. *Language* 52: 382-397.  
 Hermodsson, L. (1978) *Semantische Strukturen im kausalen und konditionalen Bereich*. Uppsala: Amquist & Wiksell.  
 Horn, L. (1985) Metalinguistic negation and pragmatic ambiguity. *Language* 61: 121-174.  
 Iten, C. (1997) *Because* and *although*: a case of duality? *UCL Working Papers in Linguistics* 9: 55-76.  
 Iten, C. (1998a) *Because* and *although*: a case of duality? In Rouchota, V. & A. H. Jucker (eds.). *Current Issues in Relevance Theory*. 59-80. Amsterdam: John Benjamins.



- Iten, C. (1998b) The meaning of *although*: a relevance theoretic account. *UCL Working Papers in Linguistics* 10: 81-108.
- Iten, C. (2000) '*Non-Truth-Conditional*' Meaning, Relevance and Concessives. University of London PhD thesis.
- König, E. (1985) On the history of concessive connectives in English. Diachronic and synchronic evidence. *Lingua* 66: 1-19.
- König, E. (1986) Conditionals, concessive conditionals and concessives: Areas of contrast, overlap and neutralization. In Traugott, C. E. et al. (eds.). *On Conditionals*. 229-246. Cambridge: CUP.
- König, E. (1989) Concessive relations as the dual of causal relations. In: D. Zaefferer (ed.). *Semantic Universals and Universal Semantics*. 190-209. Dordrecht: Foris.
- Lakoff, R. (1971) If's, and's and but's about conjunction. In: Fillmore & Langendoen (1971). 114-149.
- Löbner, S. (1987) Quantification as a major module of natural language semantics. In: Groenendijk, J. et al. (eds.) *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*. 53-85. Dordrecht: Foris.
- Löbner, S. (1990) *Wahr neben Falsch. Duale Operatoren als die Quantoren natürlicher Sprache*. Tübingen: Niemeyer.
- Rouchota, V. (1998) Connectives, coherence and relevance. In Rouchota, V. & A. H. Jucker (eds.). *Current Issues in Relevance Theory*. 11-57. Amsterdam: John Benjamins.
- Sidiropoulou, M. (1992) On the connective *although*. *Journal of Pragmatics* 17: 201-221.
- Sweetser, E. E. (1990) *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: CUP.
- Winter, Y. & M. Rimon (1994) Contrast and implication in natural language. *Journal of Semantics* 11: 365-406.