

The relevance of focus: The case of *let alone* reopened*

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1. Introduction

Within the Gricean approach to pragmatics, it is commonly held that the principles of cooperative conversation only apply to the meaning of an utterance. With the exception of the maxim of Manner, which I set aside, the conversational maxims only make reference to ‘*what* is said’ in an utterance, not ‘*how* it is said’. The first maxim of Quantity, for instance, states: ‘Make your contribution as informative as is required (for the current purposes of the exchange)’ (Grice 1975, 45). Whether an utterance is informative or not will have to do with its meaning, not its form. Thus, when speakers flout a maxim, the conversational implicature that is thereby generated has the property Grice (1975, 57f.) calls NONDETACHABILITY: the same conversational implicature should arise from any of the alternative ways of saying the same thing. In other words, the calculation of a conversational implicature does not take into account the form of an utterance.

There are some cases, though, where it seems as if the pragmatics might be sensitive to form. The additional meaning component of indirect speech acts (as in the famous *Can you pass the salt?*, a question that has the force of a request) and neg-raising predicates (which allow an embedded clause understanding for matrix clause negation) can, in principle, be generated as a conversational implicature from the strictly literal meaning of these utterances, but this implicature would have to somehow recognize the form of these utterances since it disappears if a synonymous expression is used. But, as Morgan (1978) argues for indirect speech acts and Horn & Bayer (1984) argue for neg-raising predicates, the conversational implicatures in these cases can be analyzed as having been short-circuited, so that they are triggered automatically without need for calculation.¹ A short-circuited implicature differs from an idiom like *kick the bucket* since it exists, as Morgan (p. 270f.) puts

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¹In a kindred, though not identical, proposal, Bach & Harnish (1979, 171–202) invoke the ‘standardization’ of conversational implicatures.

it, not ‘*in spite of* its original meaning. But...precisely *because of* its literal meaning;...it is a matter of convention that one says it (and means it, or at least purports to mean it) under certain circumstances, for certain purposes.’ The relevant conventions are not the usual CONVENTIONS OF LANGUAGE that give rise to the literal meaning of a sentence, but rather what Searle (1975, 76) calls the CONVENTIONS OF USAGE—those conventions that govern how a sentence, along with its literal meaning, can be used for a certain purpose.

It is hypothesized, then, that a lexical item—a piece of form—cannot impose specific pragmatic requirements on the sentence in which it occurs *independently of the interpretation of that sentence*.² This follows, again, from the very nature of the maxims, which only refer to the meaning of an utterance (its relevance, its informativeness, its truth or falsity). This aspect of the Gricean program has not, however, gone unchallenged. Most notably, scholars working within Construction Grammar (Fillmore 1988, Kay & Fillmore 1999) have posited the existence of ‘constructions’ that directly link linguistic form with knowledge of how that form must be used. One of the constructions most celebrated within this tradition is *let alone*, illustrated in (1).

(1) A: Has Oswald climbed Mt. Everest?

B: Oswald hasn’t climbed the Berkeley hills, **let alone** Mt. Everest.

In their classic 1988 paper, Fillmore, Kay & O’Connor argue that *let alone* conventionally encodes information about how the sentence in which it occurs can interact with the principles of cooperative conversation. A sentence containing *let alone*, they propose, is used to avoid a clash between the maxims of Quantity and Relevance (or Relation). Specifically, it allows the speaker to be relevant to the issue under discussion, which in (1) involves whether Oswald climbed Mt. Everest, while simultaneously obeying the first maxim of Quantity (which enjoins conversational participants to make their contribution as informative as required) by expressing the proposition corresponding to the full clause preceding *let alone*—here, that Oswald hasn’t climbed the Berkeley hills. In making this proposal, Fillmore et al. explicitly abandon (p. 501f.) the hypothesis that the Gricean maxims are blind, so to speak, to the form of an utterance.

In this paper, I reexamine whether *let alone* really requires us to renounce the traditional Gricean conception of the maxims. I take a close look at the pragmatics of *let alone*, using the question-under-discussion framework of Roberts (1996, 2004) to model its effect on the discourse context. In the end, I conclude that we do not, at least not on the basis of evidence from *let alone*, need to posit the existence of direct mappings between lexical items, or ‘constructions’, and pragmatic instructions about how the sentences in which they occur can be used. My argument has two parts. First, using naturally-occurring data drawn from the internet and the British National Corpus, I challenge Fillmore et al.’s generalization that a *let alone* sentence is always relevant to a conversational issue corresponding

²Chierchia (2004) argues that some conversational implicatures, specifically those based on scales (arising from the maxim of Quantity) are computed by the grammar and triggered by specific lexical items. This position still conforms to this hypothesis, as Chierchia removes scalar implicatures from the domain of pragmatics altogether.

to the constituent following *let alone*, i.e. *Mt. Everest* in (1).³ Both *the Berkeley hills* and *Mt. Everest* must be relevant, at the least, to the question under discussion. And, second, I argue that the constraint *let alone* imposes on the context is in fact quite a bit stronger than relevance. A *let alone* sentence must be congruent to the question under discussion—a requirement that is imposed by the obligatory foci on *the Berkeley hills* and *Mt. Everest*. The direct interaction envisioned by Fillmore et al. between linguistic form and Gricean pragmatics thus reduces, I contend, to *let alone*'s association with focus.

2. The semantics of *let alone*

To start, let us first consider the semantics of *let alone*. In this paper, I follow Fillmore et al. in analyzing the main contribution of a *let alone* sentence, the at-issue entailment, as the conjunction of two propositions.⁴ Thus, the *let alone* sentence in (1), repeated as (2) below, can be translated as (3).

(2) Oswald hasn't climb the Berkeley hills, let alone Mt. Everest.

(3) At-issue entailment:

$$\lambda w[\neg\text{climb}_w(\text{the-berkeley-hills})(\text{oswald}) \wedge \neg\text{climb}_w(\text{mt-everest})(\text{oswald})]$$

Going into the syntax of this sentence in detail would take us too far off track, but I should mention that the fragment following *let alone* is plausibly derived from an underlying full clause by gapping.⁵ It can thus straightforwardly express a proposition that differs from the first conjunct solely in the identity of the internal argument.

In addition to the at-issue entailment in (3), a *let alone* sentence also comes along with a presupposition.⁶ The first conjunct is presupposed to be lower on a contextually-salient scale than the second conjunct, as shown in (4).⁷

(4) Presupposition:

$$\lambda w[\neg\text{climb}_w(\text{the-berkeley-hills})(\text{oswald})] < \lambda w[\neg\text{climb}_w(\text{mt-everest})(\text{oswald})]$$

³The British National Corpus (version 2) is distributed by Oxford University Computing Services on behalf of the BNC Consortium; all rights in the texts cited are reserved. Examples are annotated with a three character code identifying the text of origin followed by the line number within that text. Internet data is accompanied by the source URL.

⁴In work elsewhere (Toosarvandani, to appear), I give a different semantics for *let alone*, one in which it does not express the conjunction of two propositions. I follow Fillmore et al.'s account here, not only for simplicity, but also to give our competing pragmatic accounts a level semantic playing field.

⁵Evidence for this syntactic analysis comes from a number of properties *let alone* shares with more canonical cases of gapping, including the possibility of multiple fragments and sensitivity to island constraints.

⁶I also argue in Toosarvandani, to appear that this part of *let alone*'s meaning has the status of a 'background entailment'. The difference to a presupposition is not germane here.

⁷Fillmore et al. state this presupposition slightly differently: the first conjunct must be *more informative in a scalar model* than the second conjunct. A SCALAR MODEL is a set of propositions ordered by the context on which a primitive 'more informative' relation can be defined (see also Kay 1990). It is possible, however, to state the relationship between *let alone*'s two conjuncts in terms of a contextually-dependent scale, with the informational asymmetry between them deriving from pragmatic enrichment.

In an out-of-the-blue context, this scale might be likelihood: it is less likely that Oswald hasn't climbed the Berkeley hills, since they are so low and hence easy to climb, than it is that Oswald hasn't climbed Mt. Everest. The scalar relationship between *let alone*'s two conjuncts also leads to inferences from the first conjunct to the second. Given the difference in likelihood between them, if Oswald has not climbed the Berkeley hills, we can infer that he has not climbed Mt. Everest. Of course, this is not, strictly speaking, an entailment since it is easy to come up with countermodels. If Oswald is an expert mountaineer from Nepal who has never been to North America, then Oswald will not have climbed the Berkeley hills, though he may very well have ascended Mt. Everest.⁸

3. *Let alone* as a 'construction'

With a basic semantics for *let alone* in hand, we can now move on to Fillmore et al.'s claim that *let alone* states, as a conventional part of its lexical entry, how it interacts with the Gricean maxims. Before actually looking at a *let alone* sentence, though, consider the exchange in (5).

- (5) A: Has Oswald climbed Mt. Everest?
B: Oswald hasn't climbed the Berkeley hills.

The intuition here is that B does not quite answer A's question, since B's utterance is somehow not quite relevant. Assuming that B is not opting out of the Cooperative Principle, this means that B violates the maxim of Relevance, i.e. 'Be relevant.' But as Grice notes himself (p. 46), this statement of the maxim of Relevance, because of its terseness, is quite vague. A more precise way of capturing the intuitive violation of Relevance in (5) is offered by the question-under-discussion framework of Roberts (1996, 2004).

The fundamental goal of discourse, under this view, is to answer the big question *What is the way things are?*, a goal participants work towards by having a discourse strategy comprised of a set of questions that are more manageable to answer. These questions, which have been accepted by discourse participants as answerable, though not yet answered, are contained in the QUESTION-UNDER-DISCUSSION STACK, a set of questions ordered by when they were accepted onto the stack. When a new question is accepted, it is added to the top of the stack. When a question is answered, or determined to be unanswerable, it is popped off the stack. The topmost question is the (IMMEDIATE) QUESTION UNDER DISCUSSION.

⁸That is not to say that *let alone*'s two conjuncts can never be related by logical entailment (a proposition p ENTAILS a proposition q iff $p \subseteq q$):

- (i) I challenge Mr. Hutton to produce hard copy of how 'each leaflet made clear in one form or another, that it was not a substitute for individuals taking proper advice about their own position.' I maintain that such advice was not given in **any leaflet, let alone all.**

(<http://www.telegraph.co.uk/money/main.jhtml?xml=/money/2006/07/08/cmpen08.xml>)

Assuming that *any* expresses existential quantification, in every situation where such advice was not given in at least one leaflet, such advice was not given in all leaflets.

A short example (from Roberts 1996, 12): Assume a model with two individuals, Hilary and Robin, and two foods, bagels and tofu. We can imagine the discourse in (6), in which all of the questions have been accepted into the question-under-discussion stack.

(6) Q1: Who ate what?

Q1a: What did Hilary eat?

Q1a_i: Did Hilary eat bagels?

Yes.

Q1a_{ii}: Did Hilary eat tofu?

Yes.

Q1b: What did Robin eat?

Q1b_i: Did Robin eat bagels?

No.

Q1b_{ii}: Did Robin eat tofu?

Yes.

While the questions in the stack are ordered by precedence, this ordering is related, in Roberts's model, to the questions' informativeness relative to one another. The complete answer to a question located after another question in the stack will entail a partial answer to the preceding question.⁹ The entire discourse in (6) thus ends up being a strategy to answer Q1, since a complete answer to each of the subquestions provides a partial answer to Q1. Answering both Q1b_i and Q1b_{ii} provides a complete answer to Q1b. And answering both Q1a and Q1b yields a complete answer to Q1, the superquestion *Who ate what?*

We can now define what it means to be relevant in terms of the question-under-discussion framework:

(7) The utterance of an assertion α is RELEVANT to the question under discussion Q iff α introduces a partial answer to Q . (after Roberts 1996, 16)

The utterance of an assertion is relevant just in case it introduces a partial answer to the question under discussion.¹⁰ In order to understand what it means to be a partial answer, we first need a semantics for questions. I adopt the semantics of Groenendijk & Stokhof (1984), for whom the intension of a question is a relation between worlds. When a question is added to the Common Ground, it establishes a partition on the context set, each cell of which corresponds to a complete and exhaustive answer to the question. The concept of a partial answer can be defined in terms of this partition on the context set, as in (8).¹¹

⁹Technically, Roberts states that the complete answer to a question will *contextually* entail a partial answer to a preceding question. This slight modification, which is necessary to account for indirect answers, is not relevant here.

¹⁰Roberts also defines a notion of relevance for questions (p. 16), but we will be dealing here only with assertions.

¹¹A proposition p is a COMPLETE ANSWER to a question Q iff p is equal to (exactly) one of the cells in the partition on the context set created by Q . All complete answers are also partial answers.

- (8) A proposition p is a PARTIAL ANSWER to a question Q iff p is equal to the union of at least one of cells in the partition on the context set created by Q .

Since each cell in a partition constitutes a complete and exhaustive answer to the question, the union of any number of them will be a partial answer.

Returning now to the discourse in (5), the meanings of A's question and B's answer are given in (9).

- (9) A: Has Oswald climbed Mt. Everest? \rightsquigarrow
 $\lambda w \lambda w' [\mathbf{climb}_w(\mathbf{mt-everest})(\mathbf{oswald}) = \mathbf{climb}_{w'}(\mathbf{mt-everest})(\mathbf{oswald})]$
 B: Oswald hasn't climbed the Berkeley hills. \rightsquigarrow
 $\lambda w [\neg \mathbf{climb}_w(\mathbf{the-berkeley-hills})(\mathbf{oswald})]$

B's answer is not relevant, since it does not constitute a partial answer to the question under discussion, i.e. A's question. This point can be made visually by looking at the effect of the discourse in (9) on a concrete model, such as the one in (10).

- (10) a. $D_e = \{\text{Oswald, Max, Mt. Everest, the Berkeley hills}\}$
 b. $D_s = \{w_1, \dots, w_{10}\}$
 c. $\llbracket \mathbf{climb}(\mathbf{mt-everest})(\mathbf{oswald}) \rrbracket = \{w_6, w_7, w_9, w_{10}\}$
 d. $\llbracket \mathbf{climb}(\mathbf{the-berkeley-hills})(\mathbf{oswald}) \rrbracket = \{w_3, w_4, w_9, w_{10}\}$
 e. $\llbracket \mathbf{climb}(\mathbf{mt-everest})(\mathbf{max}) \rrbracket = \{w_5, w_7, w_8, w_{10}\}$
 f. $\llbracket \mathbf{climb}(\mathbf{the-berkeley-hills})(\mathbf{max}) \rrbracket = \{w_2, w_4, w_8, w_{10}\}$

(11)

$$\left\{ \begin{array}{c} \text{c} \\ w_1, w_2, w_3, w_4, w_5, \\ w_6, w_7, w_8, w_9, w_{10} \end{array} \right\} + (9A)$$

$$\left\{ \begin{array}{c} \left\{ w_6, w_7, w_9, w_{10} \right\}, \\ \left\{ w_1, w_2, w_3, \\ w_4, w_5, w_8 \right\} \end{array} \right\}$$

As shown in (11), prior to the addition of the question, the context set (written c) contains the entire domain of worlds, D_s . Adding the question in (9) creates a partition of two cells on the context set: one containing w_6, w_7, w_9 , and w_{10} , where Oswald climbs Mt. Everest, the other containing the remaining six worlds, in which he does not (though he may climb other mountains). Now, if we try to add B's assertion from (9), it is not a partial answer to the question since it does not eliminate at least one entire cell. The proposition that Oswald has not climbed the Berkeley hills is the complement of the set in (10d), i.e. $\{w_1, w_2, w_5, w_6, w_7, w_8\}$, which is not equal to the union of any of the cells in (11). B's utterance thus fails to be relevant.

Just because B violates the maxim of Relevance in the dialogue in (9), however, does not mean that B will have misled A by not first opting out of cooperative conversation. As in Grice's south of France example (p. 51f.), the hearer may be faced with a violation of

Relevance and try to explain it by supposing that it follows from a clash between Relevance and some other maxim and that the speaker was forced to choose one over the other. It is easy to imagine a context for the dialogue in (9) where this would happen. Say A and B both participate in a mountain climbing club whose members attempt mountains in increasing order of difficulty. Starting with the Berkeley hills, they then climb a few other mountains before finally ascending Mt. Everest. In such a context, the clash would arise between Relevance and the first maxim of Quantity, since by saying that Oswald has not climbed the Berkeley hills, B also answers A's question (the only way for Oswald to have climbed Mt. Everest is for him to have first climbed the Berkeley hills). That is, while B's utterance may not be *directly* relevant to A's question, it is *indirectly* relevant since it is more informative than answering (straightforwardly) *Oswald hasn't climbed Mt. Everest*. The reasoning that would produce such a clash would go as follows: 1) B is not opting out in (9). 2) B has violated the maxim of Relevance (in the sense developed above). 3) This observation can only be explained by supposing that B is aware that to be more directly relevant would be to violate the first maxim of Quantity by being less informative. The demands of Relevance are subordinated, in this context, to those of Quantity.

Fillmore et al. argue that what *let alone* does is to mediate precisely this clash between Relevance and Quantity. Consider the dialogue in (12).

- (12) A: Has Oswald climbed Mt. Everest? \rightsquigarrow
 $\lambda_w \lambda_{w'} [\mathbf{climb}_w(\mathbf{mt-everest})(\mathbf{oswald}) = \mathbf{climb}_{w'}(\mathbf{mt-everest})(\mathbf{oswald})]$
 B: Oswald hasn't climbed the Berkeley hills, let alone Mt. Everest. \rightsquigarrow
 $\lambda_w [\neg \mathbf{climb}_w(\mathbf{the-berkeley-hills})(\mathbf{oswald}) \wedge \neg \mathbf{climb}_w(\mathbf{mt-everest})(\mathbf{oswald})]$

B's assertion using *let alone* in (12) subsumes the informational contribution of the plain assertion in (9): they both say that Oswald hasn't climbed the Berkeley hills. According to Fillmore et al., there is no possibility of it inducing a violation of Relevance, however, since a *let alone* sentence includes the second conjunct, which it marks as being directly relevant to the question under discussion. Their statement of *let alone*'s pragmatic contribution (p. 532) is worth quoting in its entirety:

- (a) By way of the raising of what we may call the CONTEXT PROPOSITION, the immediately preceding context has created conditions under which a speech act represented by the weaker [second conjunct] is an appropriate or relevant response.
- (b) The weaker [second conjunct] of the *let alone* sentence specifically accepts or rejects the context proposition.
- (c) In either case, the speaker, while committing himself emphatically to the [second conjunct], indicates that limiting himself to it would not be cooperative, since there is something even more informative to be said: the stronger [first conjunct]. Thus the *let alone* construction, with its two parts, can be seen as having the function of meeting simultaneous and conflicting demands of Relevance and Quantity.

Their notion of a ‘context proposition’ translates rather straightforwardly into the question-under-discussion framework as a polar question under discussion, here *Has Oswald climbed Mt. Everest?*. What *let alone* does, then, is to require an immediate question under discussion that is answered by the second conjunct. This enables the speaker to satisfy Relevance. At the same time, a *let alone* sentence also conveys a more informative statement, the first conjunct, thereby satisfying the first maxim of Quantity. By using *let alone*, a speaker is able to simultaneously satisfy both maxims. Without *let alone*, if the speaker uttered just the first conjunct, they might potentially violate Relevance.

The only thing that has to be conventionally encoded as part of *let alone*’s lexical entry is its relation to the immediate question under discussion. This pragmatic requirement can be stated as in (13).

- (13) Pragmatic requirement of an assertion α *let alone* β :
 β must be relevant to the question under discussion; α need not be relevant to the question under discussion.

The informational asymmetry between the two conjuncts, mentioned in subclause (c) above, does not have to be included here. If, by *let alone*’s presupposition discussed in §2, the first conjunct is lower on a contextually-salient scale such as likelihood, then it should be possible, in the right context, to infer the second conjunct from the first.

Given the discussion in the introduction, (13) is unexpected, since, if it is a conventional property of *let alone*, it would force the second conjunct β and not the first conjunct α to be relevant to the question under discussion *regardless of what α and β meant*. In other words, the pragmatic requirement in (13) is arbitrary and it does not follow from the meaning of the *let alone* sentence: we could easily imagine a lexical item *let alone*¹ that requires its first conjunct, but not its second conjunct, to be relevant to the immediate question under discussion. Thus, under the Fillmore et al. 1988 account, *let alone* would differ in this respect from both indirect speech acts and neg-raising predicates, which are used in a certain way in virtue of their literal meaning.

The requirement in (13)—that a *let alone* sentence should only ever occur in a context where the question under discussion is answered by the second conjunct—should be closely examined, though, using naturally-occurring data. I do this in the next section.

4. Examining Fillmore et al.’s generalization

As Fillmore et al. predict, *let alone* does often occur in contexts where the immediate question under discussion is answered by the second conjunct, as in the following:

- (14) You’d have thought your Brian could have found you somewhere a bit more comfortable, interposed Mrs. Harper, seeing her opportunity of introducing Brian to his disadvantage, ‘he must know a few folk, it’s not only money that counts...’ and her voice trailed away, as she simultaneously managed to imply that Brian had the Town Hall in the palm of his hand, and that he had enough money to buy his father a comfortable bungalow in a nice suburb whenever he felt like it. Shirley watched Fred return Mrs. Harper’s grease-smearred, red-nosed gaze: affable, broad, patient,

he stared at her, and wiped his mouth on his table napkin. She could see his decision not to bother to try to explain that Brian hardly knew anybody in Northam Town Hall, and that **Brian's salary as Head of Humanities at an Adult Education College hardly rose to paying his own mortgage, let alone to buying a house for his aging father.** (FB0 1086)

The *let alone* sentence here occurs in a discussion about whether Brian has the money to buy a house for his aging father, an issue that was raised by Mrs. Harper's comment. The question-under-discussion stack for the discourse in (14), just before the *let alone* sentence is proffered, looks like (15).

(15) Q1: What does Brian's salary rise to?

Q1a: Does Brian's salary rise to buying a house for his aging father?

The immediate question under discussion is the polar question Q1a, which asks whether Brian's salary is enough to buy a house for his father. There is a higher superquestion, the wh-question Q1, that is partially answered by an answer to Q1a.

Looking now at the first conjunct of the *let alone* sentence in (14)—that Brian can hardly pay his own mortgage—it does not, as we saw in the previous section, directly address the immediate question under discussion. Instead, it is the answer to another polar question, *Does Brian's salary rise to paying his own mortgage?* Assuming that the two conjuncts of a *let alone* sentence are added to the context incrementally, when the *let alone* sentence is asserted, this question will have to be added to the top of the question-under-discussion stack:

(15') Q1: What does Brian's salary rise to?

Q1a: Does Brian's salary rise to buying a house for his aging father?

Q1b: Does Brian's salary rise to paying his own mortgage?

But the new immediate question under discussion in (15'), Q1b, is not completely unrelated to Q1a. The complete answer to both these questions entail partial answers to the wh-superquestion Q1.

While Fillmore et al. require Q1a to be the question under discussion when the *let alone* sentence is used, there is nothing in the question-under-discussion framework itself that forces this. Given the order of the two *let alone* conjuncts, it should be entirely possible for the question-under-discussion stack to already look like (15') by the time the *let alone* sentence is uttered, with the immediate question under discussion corresponding to the first conjunct. This is exactly what we find:

(16) Several commentators have claimed that on this expedition Gould's party was the first ever to reach the great western bend of the Murray overland from Adelaide. But we cannot be certain that Gould even got as far as the river at all. He himself says he 'spent five weeks entirely in the bush in the interior, partly on the ranges and partly on the belts of the Murray.' Although he had a magnificent view from the top of the Mount Lofty range of the Murray River, winding its course across the flats through

a belt of dense dwarf eucalypti, **there is no mention of his ever having reached its banks, let alone the remote western bend 100 miles away.** (HRB 1133)

At the beginning of the paragraph, the author introduces the issue of how far Gould and his party got towards the western bend of the Murray River, and then goes on to discuss whether they even reached the banks of the river (presumably, they would have followed the river to their destination). Thus, by the time the *let alone* sentence is used, the first conjunct—that there is no mention of Gould’s having reached the banks of the Murray river—corresponds to the immediate question under discussion:

(17) Q1: What did Gould reach?

Q1a: Did Gould reach the western bend of the Murray River?

Q1b: Did Gould reach the banks of the Murray River?

This type of example is crucial for evaluating Fillmore et al.’s account, since it is exactly what they predict should not occur, according to the pragmatic requirement in (13): the question under discussion at the moment the *let alone* sentence is uttered corresponds to the first conjunct, not the second conjunct. So let us look at another case of the same type:

(18) Thus although the laws of 1861 succeeded in turning serfs into smallholders, the methods they employed were heavily biased in the gentry’s favor. Because peasants had to pay back the sums of money which the government advanced on their behalf at 6 per cent interest over forty-nine years, it was to be a long time before their freedom was complete. . . It looks, then, as if the reformers had laboured in vain. A severe critic of the statutes of 1861 might respond to the question ‘Why did Alexander II free the serfs?’ by saying that he failed to do so. Without going quite so far, historians have indeed been critical. Academician Druzhinin held that the object of the framers of the statutes was ‘to retain in the hands of the gentry estate the maximum quantity of land and to facilitate the gentry’s transition to more profitable farming based on free labour by providing them with the essential capital and reserves of the necessary manpower.’ In two closely argued and provocative essays Alfred Rieber claimed that the object of the emancipation was not even to benefit **the gentry (let alone the peasantry)**, but rather to put the principal institutions of the autocracy, the treasury and the army, in a position to recover from the ravages of the Crimean War. (HY7 1179)

The overarching question this paragraph addresses is *Who was the object of the emancipation to benefit?* The first part of the paragraph asks whether it was to benefit the peasants, while the second half considers the idea that it was for the gentry that Alexander II freed the serfs. By the time the author comes to the *let alone* sentence, the question-under-discussion stack thus looks like (19).

(19) Q1: Who was the object of the emancipation to benefit?

Q1a: Was the object of the emancipation to benefit the peasantry?

Q1b: Was the object of the emancipation to benefit the gentry?

The immediate question under discussion, raised by the author's consideration of Druzhinin's views, corresponds to the first conjunct—that the object of the emancipation was to benefit the gentry. In both this case and the immediately preceding one, the second conjunct addresses a higher domain goal, an issue that was raised prior to the immediate question under discussion.

Even though in all of the scenarios the question-under-discussion stack looks different before the *let alone* sentence is proffered, its use triggers the addition of additional questions that render them all essentially identical in structure. In (15'), (17), and (19), the first conjunct answers a polar question that is preceded on the stack by the polar question answered by the second conjunct. This follows directly from the order of the two conjuncts in the *let alone* sentence: since the first conjunct will be added to the Common Ground before the second conjunct (Heim 1983, 177), the polar question corresponding to the first conjunct is preceded by the one corresponding to the second conjunct.¹²

This account of the pragmatics of *let alone*—which does not impose a requirement on what the question under discussion can be, but rather treats it as derivative of the order of the conjuncts in a *let alone* sentence—predicts that it should be possible for neither of the polar questions be raised explicitly. This is exactly what we find:

(20) A difficult man to know; perhaps shy, possibly arrogant. A meticulous man, with a compelling need for orderliness, distancing himself from anything which might threaten the harmonious life he was striving to create. When and how did he unwind? And with whom? It was hard to imagine him having **a casual chat with anyone, let alone a more intimate relationship.** (HWP 2459)

At the moment the *let alone* sentence is proffered, the immediate question under discussion is the *wh*-question *How did he unwind?* (ignoring, for convenience, the intervening question *And with whom?*). It thus is located at the top of the question-under-discussion stack:

(21) Q1: How did he unwind?

The *let alone* sentence again triggers the addition of two polar question corresponding to the two conjuncts:

¹²While the two polar questions are ordered by precedence with respect to each other, Roberts places an additional condition on the question-under-discussion stack relating precedence and informativity (p. 11). For all Q and Q' in the the question-under-discussion stack, if $Q < Q'$ (if Q precedes Q'), then the complete answer to Q' contextually entails a partial answer to Q . The problem here is that, while Q1a precedes Q1b, a complete answer to Q1b does not *necessarily* contextually entail a partial answer to Q1a. Only a negative answer to Q1b (that the object of the emancipation was not to benefit the gentry) entails a partial answer to Q1a. A positive answer to Q1b (that the object of the emancipation was to benefit the gentry) does not comprise any sort of answer to Q1a.

(21') Q1: How did he unwind?

Q1a: Did he unwind by having a more intimate relationship?

Q1b: Did he unwind by having a casual chat with anyone?

What has stayed constant in the structure of all the discourses we have examined so far is the presence of a *wh*-superquestion, which dominates some number of polar subquestions.

This generalization about the types of discourse contexts *let alone* occurs in reflects an important aspect of the first maxim of Quantity, which, again, Grice states (p. 45) as: ‘Make your contribution as informative *as is required (for the current purposes of the exchange)* [emphasis added].’ As Horn (2001, 195) observes, the last part essentially builds Relevance into Quantity. An utterance is only overinformative or underinformative relative to the conversational issue at hand. Thus, when Fillmore et al. say that *let alone* allows the speaker to make a more informative utterance, this does not mean it is more informative in the abstract. There are after all innumerable propositions that are more informative than the second conjunct. Just slotting one in, as in (22), is not possible.

(22) A: What has Oswald climbed? \rightsquigarrow

$\lambda w \lambda w' [\lambda x [\mathbf{climb}_w(x)(\mathbf{oswald})] = \lambda x [\mathbf{climb}_{w'}(x)(\mathbf{oswald})]]$

B: #Nobody has climbed Mt. Everest, let alone Oswald. \rightsquigarrow

$\lambda w [\neg \exists x (\mathbf{climb}_w(\mathbf{mt-everest})(x)) \wedge \neg \mathbf{climb}_w(\mathbf{mt-everest})(\mathbf{oswald})]$

The proposition that nobody climbed Mt. Everest unilaterally entails that Oswald did not climb Mt. Everest, which satisfies *let alone* scalar presupposition. The sentence is still infelicitous in this context, however, since the first conjunct is not relevant to the question under discussion. Using the same model as in (10), the question *What has Oswald climbed?* creates a partition of four cells on the context set:

(23)

$$\begin{array}{c} \text{c} \\ \left\{ \begin{array}{l} w_1, w_2, w_3, w_4, w_5, \\ w_6, w_7, w_8, w_9, w_{10} \end{array} \right\} \\ + (22A) \\ \left\{ \begin{array}{l} \{w_3, w_4\}, \{w_6, w_7\}, \\ \{w_9, w_{10}\}, \\ \{w_1, w_2, w_5, w_8\} \end{array} \right\} \end{array}$$

Either Oswald has only climbed the Berkeley hills (w_3 and w_4), he has only climbed Mt. Everest (w_6 and w_7), he has climbed both (w_9 and w_{10}), or he has climbed neither (the remainder of the context set). The first conjunct of the answer in (23), that nobody has climbed Mt. Everest, is true only in the worlds in $\{w_1, w_2, w_3, w_4\}$, a set that is not equal to the union of any of the cells in (23).

While Fillmore et al.’s analysis predicts that only *let alone*’s second conjunct must be relevant to the question under discussion, the correct generalization seems to be that both conjuncts must address the same *wh*-question, which may or may not dominate polar questions when the *let alone* sentence is proffered. There is no need to include this as a pragmatic component of *let alone*’s lexical entry, I propose, since once we take into account

the focus structure of a *let alone* sentence, both conjuncts will automatically be relevant to the same wh-question.

5. The role of focus

A prominent feature of every sentence with *let alone* is the presence of a pair of foci. Consider, for instance, the sentence we have been looking at:

(24) Oswald hasn't climbed [the Berkeley HILLS]_F, let alone [Mt. EVERest]_F.

Let alone is flanked by two falling pitch accents (Jackendoff's (1972, 258–265) Accent A or Pierrehumbert's (1980) H* pitch accent), one on the fragment following *let alone*, which I will call the REMNANT, the other on the corresponding constituent of the preceding clause, the CORRELATE. These intonational contours mark the correlate and remnant as being in focus, the extent of which is marked by square brackets and a subscripted 'F'.

Both of the foci accompanying *let alone* must be present. In the felicitous sentence in (25), pitch accents occur on both the correlate *flowers* and the remnant *chocolates*.

(25) Q: What did Oswald get for Susan? Did Oswald get [FLOWers]_F or [CHOcolates]_F for Susan?

A: Oswald didn't get [FLOWers]_F, let alone [CHOcolates]_F, for Susan.

(26) Q: Who got flowers or chocolates for Susan? Did [OSwald]_F get flowers or chocolates for Susan?

A: #[OSwald]_F didn't get flowers, let alone chocolates, for Susan.

Moving the nuclear pitch accent onto the subject, as in (26), results in infelicity. This infelicity is a product of the focus structure, since the logically equivalent statement [*Oswald*]_F *didn't get flowers or chocolates for Susan* (by De Morgan's law) is a perfectly felicitously answer to the question in (26).

The obligatoriness of the foci accompanying *let alone* is plausibly related to the phenomenon of ASSOCIATION WITH FOCUS. Expressions like *only* and *even* also restrict the focus structures of the sentences in which they occur: they require the presence of a focus somewhere in their scope. When *even* is, for instance, adjoined in (27) to the DP direct object, the nuclear pitch accent falls on the head noun *consulate*.¹³

(27) A: What type of representation does France have in Iraq?

B: France doesn't have even [a CONSulate]_F in Iraq.

(28) A: What countries have consulates in Iraq?

B: #[FRANCE]_F doesn't have even a consulate in Iraq.

¹³I use DP-adjoined *even* here since the VP-adjoined version behaves, as Jackendoff (1972, 248) observes, peculiarly, allowing the pitch accent to fall on the subject, e.g. [*Oswald*]_F *hasn't even climbed the Berkeley hills*. This sets it apart from other focus-sensitive expressions, such as *only* and *just* (p. 250).

The segmentally-identical string in (28) is infelicitous, however, because the nuclear pitch accent is located on the subject, which does not fall within the scope of *even*. Because of this dependency, the focus in (27) is said to be ‘associated’ with *even*.¹⁴

What do the two foci associated with *let alone* do? Just as with other foci, they serve to structure the discourse by enforcing question-answer congruence (Halliday 1967, 207f.). Consider the question in (29), which contains a wh-phrase in subject position.

- (29) Q: Who took the chair?
 A1: [SAlly]_F took the chair.
 A2: #Sally took [the CHAIR]_F.

The two answers in (29) are truth-conditionally identical, serving as partial, if not complete, answers to the question. We can thus say that both are COHERENT answers. But only the first answer is felicitous since it is CONGRUENT to the question: it has a focus in the same position as the wh-phrase of the question, in subject position. The second answer, in contrast, has a focus on the direct object, and it is accordingly incongruent.

Roberts (1996) argues that question-answer congruence should be enforced by a presupposition of focus:

- (30) Presupposition of an assertion α containing a focus:
 α is congruent to the question under discussion at the time α is uttered.
 (after Roberts 1996, 24)

An assertion containing a focus presupposes that it is congruent to the question under discussion. It is intuitively clear what it means to be congruent—the focus must correspond to the wh-phrase of the question—but a formal definition of congruence is also possible using Rooth’s (1985, 1992) ALTERNATIVE SEMANTICS for focus, which parallels Hamblin’s (1973) semantics for questions. Rooth proposes that, alongside a sentence’s ordinary semantic value, there exists a focus semantic value, consisting of the set containing the ordinary value and all the alternatives to it that are derived by making a substitution in the position of the focus. The focus value of the sentence in (24) would accordingly be the set of propositions of the form ‘Oswald hasn’t climbed x ’, as in (31). (I write the function that gives such focus meanings as *ALT*.)

- (31) $ALT(\text{Oswald hasn't climbed [the Berkeley HILLS]}_F, \text{let alone [Mt. EVerest]}_F) =$
 $\lambda p \exists x (p = \lambda w [\neg \text{climb}_w(x)(\text{oswald})])$

¹⁴Partee (1991, 21) notes a class of counterexamples to this generalization that have since come to be discussed under the rubric of SECOND OCCURRENCE FOCUS. Under certain discourse contexts, a focus associated with an expression like *even* does not bear the nuclear pitch accent, a fact that early on was taken to mean that the presence of the associated focus is optional. But Beaver, Clark, Flemming, Jaeger & Wolters (2007) show, replicating earlier work, that these foci do indeed receive a more prominent realization than the surrounding nonfocal material. While there is no significant pitch excursion, they exhibit both increased energy (they are louder) and increased duration. Beaver & Clark (2008, 142–181) in addition argue that it is possible to test for the presence of a focus using a trio of tests: ellipsis, extraction, and the distribution of reduced pronouns.

It might not be immediately obvious why this should be the focus value of the sentence in (24). Taking first just the full clause preceding *let alone*, *ALT* would return the set of propositions in (31), each of which differs just in the identity of the internal argument. Since the focussed fragment following *let alone* always stands in the same relation to the surrounding sentence as the first focussed constituents—since, in other words, the remnant and correlate always bear the same syntactic function—its focus value will be identical to what is given in (31).

The Roothian focus value in (31), before being used to calculate question-answer congruence, must be converted into an expression that can be compared to the meaning of a question, which in the Groenendijk & Stokhof's semantics I adopt here is a relation between possible worlds. Heim (1994) provides a way of strengthening Hamblin-style question meanings into Groenendijk & Stokhof-style meanings (her *answer*₂). Applying this to the focus value in (31), we get the expression in (32), a relation between possible worlds.¹⁵

$$(32) \text{ answer}_2(\text{ALT}(\text{Oswald hasn't climbed [the Berkeley HILLS]}_F, \text{let alone [Mt. EVerest]}_F)) = \lambda w \lambda w' [\lambda x [\neg \text{climb}_w(x)(\text{oswald})] = \lambda x [\neg \text{climb}_{w'}(x)(\text{oswald})]]$$

With a focus value in hand for the sentence in (32) that is of the same type as a question, we can define congruence between an assertion and a question in the following way:

$$(33) \text{ An assertion } \alpha \text{ is CONGRUENT to a question } Q \text{ iff } \text{answer}_2(\text{ALT}(\alpha)) = Q.$$

The assertion in (32) will thus be congruent to a question just in case its focus value, suitably strengthened with Heim's *answer*₂, is equal to the meaning of the question.

With the notion of congruence just defined, the presupposition of focus in (30) requires that, at the time the *let alone* sentence in (32) is uttered, it will have to be congruent to one of two possible questions under discussion. The first is given in (34).

$$(34) \text{ What has Oswald climbed? } \rightsquigarrow \lambda w \lambda w' [\lambda x [\text{climb}_w(x)(\text{oswald})] = \lambda x [\text{climb}_{w'}(x)(\text{oswald})]]$$

Even though the question meaning in (34) and the focus value in (32) differ in their polarity (positive for the former and negative for the latter), they are equivalent, satisfying the definition of congruence in (33). Since each of the cells created by a wh-question corresponds

¹⁵More specifically, *answer*₂ is the function in (i), where \mathcal{P} is a variable over sets of propositions ($\langle\langle s, t \rangle, t \rangle$). When applied to the Roothian alternatives of the sentence in (31), it gives the expression in (ii).

- (i) $\text{answer}_2 = \lambda \mathcal{P} \lambda w \lambda w' [\cap \{p \mid \mathcal{P}(p) \wedge p(w)\} = \cap \{p \mid \mathcal{P}(p) \wedge p(w')\}]$
- (ii) $\text{answer}_2(\text{ALT}(\text{Oswald hasn't climbed [the Berkeley HILLS]}_F, \text{let alone [Mt. EVerest]}_F)) = \lambda w \lambda w' [\cap \{p \mid \exists x (p = \lambda w'' [\neg \text{climb}_{w''}(x)(\text{oswald})] \wedge p(w))\} = \cap \{p \mid \exists x (p = \lambda w'' [\neg \text{climb}_{w''}(x)(\text{oswald})] \wedge p(w'))\}]$

This is not yet a Groenendijk & Stokhof-style denotation. Beck & Rullman (1999, 269f.) prove that (ii) is equivalent to the expression in (iii), which is what is given in (32).

$$(iii) \lambda w \lambda w' [\lambda x [\neg \text{climb}_w(x)(\text{oswald})] = \lambda x [\neg \text{climb}_{w'}(x)(\text{oswald})]]$$

This expression can now be compared to the meaning of a question.

to an exhaustive answer, negative and positive questions have exactly the same meaning (Groenendijk & Stokhof 1984, 279f.).¹⁶ Because of this equivalence, we also expect that the focus presupposition of the sentence in (24) should be satisfied by a negative question under discussion, as indeed it is:

- (35) A: What hasn't Oswald climbed? Hasn't he climbed Mt. Everest?
 B: Oswald hasn't climbed [the Berkeley HILLS]_F, let alone [Mt. EVerest]_F.

By establishing congruence to the wh-question under discussion in (34), the pair of foci associated with *let alone* also ensure that both of *let alone*'s conjuncts are relevant to it. As illustrated in (29), an assertion can be relevant to the question under discussion while still being incongruent. But the reverse situation, where a sentence is congruent but irrelevant, is impossible. By definition, an assertion is always a focus alternative to itself. If then, by the presupposition of focus, an assertion's focus value is equal to the meaning of the question under discussion, then the assertion will also constitute a partial answer to the question under discussion, and will therefore, by the definition of relevance in (7), be relevant to it. To illustrate, take the exchange we have been looking at:

- (36) A: What has Oswald climbed? \rightsquigarrow
 $\lambda_w \lambda_{w'} [\lambda_x [\mathbf{climb}_w(x)(\mathbf{oswald})] = \lambda_x [\mathbf{climb}_{w'}(x)(\mathbf{oswald})]]$
 B: Oswald hasn't climbed [the Berkeley HILLS]_F, let alone [Mt. EVerest]_F. \rightsquigarrow
 $\lambda_w [-\mathbf{climb}_w(\mathbf{the-berkeley-hills})(\mathbf{oswald}) \wedge -\mathbf{climb}_w(\mathbf{mt-everest})(\mathbf{oswald})]$

By the discussion above, B's *let alone* sentence in (36) is congruent to A's question with the wh-phrase in object position. To assess whether it is also relevant to the question, consider the effect of the question on the context set. As in (23), the question establishes a partition of four cells:

$$(37) \quad \begin{array}{c} \text{c} \\ \left\{ \begin{array}{l} w_1, w_2, w_3, w_4, w_5, \\ w_6, w_7, w_8, w_9, w_{10} \end{array} \right\} \\ + (36A) \\ \left\{ \begin{array}{l} \{w_3, w_4\}, \{w_6, w_7\}, \\ \{w_9, w_{10}\}, \\ \{w_1, w_2, w_5, w_8\} \end{array} \right\} \end{array}$$

It can be seen that both the first conjunct, equal to the set $\{w_1, w_2, w_5, w_6, w_7, w_8\}$, and the second conjunct, equal to the set $\{w_1, w_2, w_3, w_4, w_5, w_8\}$, comprise partial answers to the question since they are each equal to the union of exactly two partitions. They are thus both relevant to the question.

In the end, *let alone*'s apparent sensitivity to Relevance comes down to nothing more than obligatory association with two foci on the correlate and remnant. These foci

¹⁶This is an advantage of using the Groenendijk & Stokhof system for deriving question-answer congruence, as Beaver & Clark (2008, 45 fn. 2) note. Under a Hamblin semantics for questions, a positive answer is not congruent to a negative question.

presuppose that the *let alone* sentence is congruent to the corresponding wh-question under discussion. An assertion that is congruent to a question also introduces a partial answer to it, ensuring that both conjuncts of a *let alone* sentence will always be relevant to the same wh-question under discussion. Under this view of *let alone*, it is not particularly special in any way, except that it requires the presence of a pair of foci, a property of numerous other natural language expressions.

6. Conclusion

Through a detailed study of the pragmatics of *let alone*, I hope to have shown that it is not necessary, as Fillmore et al. claim, to recognize conventional mappings between linguistic form and use. The pragmatic effect of a *let alone* sentence—in particular, how in certain contexts it appears to mediate the conflicting demands of the maxims of Relevance and Quantity—can be derived from its semantics and conventional association with a pair of foci. It remains to be seen to what degree this type of analysis can be extended to other purported ‘constructions’ that include a conventionalized pragmatic component, such as the *What’s X doing Y?* construction (Kay & Fillmore 1999) and the *Just because...doesn’t mean...* construction (Bender & Kathol 2001).

More broadly, we can view focus as a grammatical mechanism for ensuring Relevance: when an assertion satisfies the presupposition of focus, it is perforce also relevant to the question under discussion. But, as Roberts (1996, 27) observes, the presupposition of focus does not just duplicate the effect of Relevance, it does more. Just as with other presuppositions, it can be exploited, so that, even if the goals of a conversation have not been stated explicitly, hearers can use the presupposition of focus to accommodate the goals assumed by the speaker. Thus, while *let alone* may not directly encode pragmatic knowledge in the way envisioned by Fillmore et al., through its association with a pair of foci, it nonetheless interacts with, and is able to shape, the discourse context in which it appears.

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