Lecture 8: Conventional Implicatures

Readings:
(1) Potts, Christopher (Potts 2005) *The Logic of Conventional Implicatures*. (On your CD)
(2) Potts, Christopher. (Potts 2007) Conventional implicatures, a distinguished class of
   meanings. http://people.umass.edu/potts/papers/potts-interfaces.pdf .
Suggestions for additional reading:
(Potts 2002) The syntax and semantics of *as*-parentheticals.
(Horn 2004) Implicature.
(Karttunen and Peters 1979) Conventional implicature. (a classic)

See also the **APPENDIX** to last week's lecture.

1. Introduction: Characterization and examples of conventional implicatures.

Classic notion of conventional implicature. Let's begin with a brief excerpt from the beginning of Larry Horn's handbook article (Horn 2004) on Implicatures. It's mostly about conversational implicatures, but he begins with a brief bit about conventional implicatures.

Subtypes of implicature are illustrated by (1a–c) (after Grice 1961: §3); the primed member of each pair is (in certain contexts) deducible from its unprimed counterpart:

(1)   a. Even KEN knows it's unethical.
      a′. Ken is the least likely [of a contextually invoked set] to know it's unethical.
      [I omit b and c; they are conversational implicature examples of familiar sorts.]

Unlike an entailment or logical presupposition, the inference induced by *even* in (1a, a′) is irrelevant to the truth conditions of the proposition: (1a) is true if and only if Ken knows it's unethical. The inference is not cancelable without contradiction *(#Even Ken knows it's unethical, but that's not surprising)*, but it is detachable, in the sense that the same truth-conditional content is expressible in a way that removes (detaches) the inference: *KEN knows it's unethical (too)*. Such detachable but non-cancelable aspects of meaning that are neither part of, nor calculable from, what is said are conventional implicatures, akin to pragmatic presuppositions (Stalnaker 1974). Indeed, along with connectives like *but,* the now classic instances of conventional implicature involve precisely those particles traditionally analyzed as instances of pragmatic presupposition: the additive component of adverbial particles like *even* and *too,* the "effortful" component of truth-conditionally transparent "implicatives" like *manage* and *bother,* and the existential component of focus constructions like clefts.

Potts on Conventional Implicature. Potts in his book gives a more restrictive account of conventional implicatures, and in Chapter 7 he explicitly disagrees with the characterization of many of the classic examples of conventional implicatures (*but, therefore, even, still, again,* and possibly *too*), suggesting that what they contribute belong in a new category of "additional entailments". The main characteristic on which they fail is "Speaker

orientation"; in embedded contexts, under *believes that, said that*, etc., they are easily interpreted as part of what the subject believes or said, not as the responsibility of the speaker of the whole sentence. So we will need to distinguish between "classic CI" and "Potts CI".

1.1. Examples of conventional implicatures

Let's first make a list of "classic" conventional implicatures, followed by "Potts CI's".

(1)   *Even*: Even KEN knows it's unethical.
      Entails: Ken knows it's unethical.
      Conventionally implicates: Ken is the least likely to know that it's unethical.

(2)   *But:* John is hungry but he won't stay for supper.
      Entails: John is hungry. John won't stay for supper.
      Conventionally implicates: We might expect that if John is hungry, he will stay for supper.

(3)   *Too:* Manfred Krifka was in Moscow last spring too.
      Entails: Manfred Krifka was in Moscow last spring.
      Conventionally implicates: Some other given person was in Moscow last spring.

Note: In early work on *too*, it was thought that the conventional implicature (or presupposition; in early work these weren't usually distinguished; or 'secondary entailment' if Potts is right) was "Someone other than Manfred Krifka was in Moscow last spring." But as Saul Kripke first noticed, in examples like this one such a conventional implicature would be trivial, because there are always lots of people in Moscow. So the contribution of *too,* however we classify it, must be **anaphoric**.

(4)   *Manage*: Masha managed to start the car.
      Entailment: Masha started the car.
      Conventional implicature: It required some effort to start the car. Masha made some effort to start the car.

(5)   *Fail*: Bush failed to read the report. (Karttunen and Zaenen 2005)
      Entailment: Bush did not read the report.
      Conventional implicature: Bush had an opportunity and tried, or should have tried, to read it.

(6)   *Still*: Alfred has still not come. (from (Frege 1918/1994), cited by (Karttunen and Zaenen 2005))
      Entailment: Alfred has not come.
      Conventional implicature: Alfred was expected to have come by now.

Classic conventional implicatures usually survive the S-family tests, if those tests can be applied, but they can't be applied in any natural way with *but* or *even* or *too* or *still*; those all tend to out-scope negation, plus *too* is a "positive-polarity" word and would have to be replaced by *either* in a negative sentence.

(7)   Bush didn't fail to read the report.
      Entailment: Bush did read the report. (The negation of the earlier entailment.)
      Conventional implicature: Bush had an opportunity and tried, or should have, to read it.

(8)   Masha didn't manage to start the car.
      Entailment: Masha didn't start the car.
      Conventional implicature: It required some effort to start the car. Masha made some effort to start the car.

Note on metalinguistic negation. Apparent counterexamples to survival of the S-family tests:

(9)   Bush didn't "fail" to read the report. He never received it.

This should not be regarded as failure of the S-family test, because this is "metalinguistic" negation (Horn (1985, 1989); see Kadmon (2001, p.8)). The fact that metalinguistic negation does not principally target truth-values and at-issue content is illustrated in (10).

(10)   I didn't receive "an information" – I received "information".   (Grammar correction)

A list from Bach (1999) (who disagrees that they actually are; see Section 1.4.)

- *adverbs*: already, also, barely, either, only, scarcely, still, too, yet

- *connectives*: but, nevertheless, so, therefore, yet

- *implicative verbs*: bother, condescend, continue, deign, fail, manage

- *subordinating conjunctions*: although, despite (the fact that), even though

Manage vs. *stop*: **Implicatives** vs. **factives.** Bach includes *stop* in his list of implicative verbs, but I think that's just a mistake, and that *stop* brings with it a presupposition rather than a conventional implicature. The *implicative verbs* (Karttunen's term) have the property in (11) below, whereas *stop*, like the factive verbs (see list in Lecture 4 handout), though it isn't usually classed in that group, has the property in (12). The conventional implicature with implicative verbs concerns something added by the *matrix* verb (*managed, bothered, succeeded, …*), whereas the presupposition associated with factive verbs concerns the truth of the embedded clause. (*Stop* is not like a typical factive verb, because what's presupposed is the *previous* truth of the embedded clause, whereas normal factives like *realize* presuppose *simultaneous* truth of the embedded clause.)

(11) *Implicative verbs:*   John Verbed VP *entails* John VP'ed
John didn't Verb VP *entails* John didn't VP

(12) *Factive verbs:*   John Verbed [S] *entails* or *presupposes* S
John didn't Verb [S] *entails* or *presupposes* S

More examples from Potts and others. The next four examples are all "supplementals".

(13) *Parenthetical as-clauses:*
Ames was, as the press reported, a successful spy.
Entailment: Ames was a successful spy.
Conventional implicature: The press reported that Ames was a successful spy.

(14) *Non-restrictive relative clauses:*
Ames, who stole from the FBI, is now behind bars.
Entailment: Ames is now behind bars.
Conventional implicature: Ames stole from the FBI.

(15) *Nominal appositives:* Lance Armstrong, an Arkansan, has won the 2002 Tour de France.
Entailment: Lance Armstrong has won the 2002 Tour de France.
Conventional implicature: Lance Armstrong is an Arkansan. (actually not true)

(16) *Parenthetical adverbs:* Luckily, Beck survived the descent.
Entailment: Beck survived the descent.
Conventional implicature: It was lucky that Beck survived the descent. Beck might well

not have survived the descent.

(17) *Factive verbs?:* Bush acknowledged that Iraq had aided Al Qaeda.
Entailment: Bush said that Iraq had aided Al Qaeda.
Conventional implicature (?): Iraq aided Al Qaeda.

1.2. Potts's analysis of conventional implicatures of appositives.

Repetition from Lecture 4 and Lecture 7! Just a bit of it, here for reference. From (Potts 2007) .

(5)   Syntactic tree and semantic parse tree:

…

For basic NAs, we need the meaning of COMMA to take $<e_a, t_a>$ expressions to $<e_a, t_c>$ results:

(38) COMMA translates as: $\lambda f \lambda x. f(x) : <<e_a, t_a>, <e_a, t_c>>$

I henceforth write this meaning as **comma**. It works in conjunction with **feature semantics**, (27), to license subtrees of the form in (39), a part of (5).

(27) **feature semantics** (informal paraphrase by BHP)

If β is a designated *feature term* of type $<\sigma, \tau>$, and the node it marks is has a basic interpretation (without the feature) as α of type σ, then the feature-marked node is interpreted as β(α), of type τ. (So the feature is interpreted as a function that applies to the basic interpretation. It would also have been possible to introduce COMMA as an ordinary morpheme, sister-adjoined to the NP, and use the ordinary rule of functional application.)

(39)   **comma(cyclist)** : $<e_a, t_c>$
|
cyclist : $<e_a, t_a>$

(28)   **parsetree interpretation**

Let *T* be a semantic parsetree with the at-issue term α on its root node, and distinct type t^c CI terms $\iota_1, \ldots, \iota_n$ on nodes in it. Then the interpretation of *T* is the tuple:

$$< \|\alpha\|^M, \|\iota_1\|^M, \ldots \|\iota_n\|^M >$$

where $\|\cdot\|^M$ is the interpretation function, taking formulae of the meaning language to the interpreted structure *M*.

The extract above gives an analysis of simple NP appositives, omitting some details such as statement of the rules of at-issue functional application and CI functional application, but similar methods apply to non-restrictive relatives and many other non-restrictive modifiers and other expressions introducing conventional implicatures. Potts has a direct account of the requirement of referentiality of the antecedent of a nominal appositive, since it must be of type e.

1.3. Disagreement by Karttunen with some aspects of Potts.

According to Potts, one difference between conventional implicatures and presuppositions is that the commitments made via conventional implicatures are made by the *speaker* of the utterance, and except in special circumstances remain 'speaker-oriented' even when embedded. Presuppositions, on the other hand, may be associated with a subject of a higher verb, etc.

But Karttunen and Zaenen (2005) point out that in conditional sentences, presuppositions and conventional implicatures appear to behave in the same way.

(18) The jury is very likely to convict Gonzales. In that case, *as a third time offender,* he will never get out of jail.

The *as*-clause in the second sentence is supposed to contribute the conventional implicature that Gonzales is a third-time offender, and this should be a commitment of the speaker of the sentences (this is the *speaker-orientation* property listed in the Appendix to Lecture 7.) But what we see is that this implicature holds only in the context of the event predicted in the first sentence, namely the jury's conviction. What the speaker *is* committed to is that Gonzales has been convicted twice before.

To compare the behavior of presuppositions, consider definite descriptions as in (19a,b). Karttunen and Zaenen note that both (19a) and (19b) are possible: the first has its presupposition satisfied in the actual world (assuming Gonzales has already been convicted twice before), and the second has its presupposition satisfied after the context is updated with the content of the first sentence.

(19) a. The jury is very likely to convict Gonzales. In that case, *the second-time offender* will never get out of jail.
b. The jury is very likely to convict Gonzales. In that case, *the third-time offender* will never get out of jail.

Karttunen and Zaenen thus see the difference between conventional implicatures and presuppositions as relatively small compared to their similarities. If speaker-orientation doesn't always distinguish them (sometimes it does, K&Z acknowledge), then the main difference may be just that presuppositions should already be familiar to the hearer, and conventional implicatures need not be; and given the phenomenon of accommodation, that difference is not always a sharp one.

1.4. Kent Bach's challenge.

Kent Bach (1999) denies the existence of conventional implicatures altogether. He argues that some putative conventional implicatures, like those of *but*, are really entailments, and others like those of *luckily*, are higher-order comments on the content of a speech act. We won't study his work here, but note that Potts (Chapter 7 of his book) agrees with Bach for many of the classic examples of conventional implicatures, but believes that this makes it even clearer how the "supplementals" that he concentrates on ARE conventional implicatures.

2. Tests for conventional implicatures, and your examples.

2.1. From the Appendix to Lecture 7

Conventional implicature: [arises from] part of the meaning of a word or construction but not part of its (at-issue) truth-conditions. An implicature which arises from the particular choice of words or syntax, rather than from conversational maxims. See (Potts 2002, 2005, to appear). Potts argues that these are fully semantic, not pragmatic, and are a species of entailments, but on

a separate dimension, independent of "at-issue" meaning. [Note: If we accept the idea "entailments on a separate dimension" for "conventional implicatures in a broad sense", then that could include all the classic ones, including those rejected by Bach and by Potts.]

Some authors – especially earlier -- have equated conventional implicature with presupposition, but conventional implicatures can add new information; see Potts (2005, to appear).

Some properties of and tests for conventional implicatures (Potts):
- Non-cancellability. Conventional implicatures are commitments, and give rise to entailments, though separate from the "at-issue" entailments of a sentence.
- Conventionality: Conventional implicatures are by definition part of the conventional meaning of a word or construction.
- Detachability: most conventional implicatures *are* detachable, since they come from specific words or constructions and not just from the truth-conditional content of what is said. So substituting a semantically equivalent word or expression can result in changes in conventional implicatures.
- Speaker-orientation: The commitments made via conventional implicatures are made by the *speaker* of the utterance, and except in special circumstances remain 'speaker-oriented' even when embedded. **Note: this is now the main difference between Potts and "classic" CIs. Potts maintains this condition, but many classic CIs fail it. See Potts Chapter 7. For our purposes, let's include Classic CIs and Potts CIs together as CIs, since we don't have a separate category for "secondary entailments".**
- Independence from at-issue meaning: conventional implicatures are logically and compositionally independent of at-issue meaning.
- Behavior under negation, etc: Since conventional implicatures are independent from at-issue meaning, and are (almost) always 'speaker-oriented', they normally survive under negation, in *if*-clauses, etc.
- Non-backgrounding: Conventional implicatures are not generally assumed to be part of the conversational background; they often give new, "supplementary", information.

2.2 Your examples from Homework 2.

2.2.1. Some Conventional Implicature Examples from Katya Garmash
Conventional Implicatures
There are certain modifiers in Russian which convey implicatures concerning speaker's evaluation of quantity:
(1)   Она заработала целых сто рублей.
(2)   Она заработала аж сто рублей.
(3)   Она заработала всего (лишь) сто рублей.
(4)   Она заработала только сто рублей.
(Actually, all of these expressions, except maybe целых, ccan be used to talk not only about quantity, in very different contexts in fact).
Examples (1), (2) imply that a speaker thinks that 100 rubles is very much, but it's not an at-issue meaning. In (3), (4) a speaker thinks that 100 r. is really not much. The fact that these are not at-issue meanings can be shown with the following examples:
       Катя заработала целых 100 рублей, и она этим недовольна.
But it seems to me that these are not actually conventional implicatures, but expressives. There's an example, which doesn't really prove this assumption, but still, I think, is worth noting:
       If A says: Я заработала целых 100 рублей.
       Then a very natural answer of B, who doesn't think 100 rubles is a lot, would be:
                Ну и что здесь такого? or
                Ну и чему ты радуешься?
       but not: Но по-моему это немного.

This example shows, that when B denies this non-at-issue meaning – he is "denying" primarily A's excitement.
Also, several different expressives can be used to intensify the emotion:

Я заработала аж целых 100 рублей!

BHP notes: Interesting problem! In his 2005 book, Chris Potts treated expressives as a subclass of conventional implicatures, in which case these could be both; in his later papers, he didn't, in which case we would have to try to settle which way these examples should be classified.

And what do you take the status of « Она заработала сто рублей.» to be for all of (1) – (4)? Is it an entailment, a conventional implicature, or some sort of presupposition? For English, I think it's considered an entailment in (1)-(3) and a presupposition (Horn 1969) or conventional implicature in (4).

2.2.2. Aspect and implicatures: Masha Khachaturyan, Katya Garmash, Daria Popova

From Masha Khachaturyan:
As for conventional implicatures and entailments, as they depend on the semantics, they depend on the specific features of every language. All the things that may cause ambiguity in semantics can be a possible problem for conventional implicatures, which can turn out to be wrong.
From this point of view Russian aspect again poses problems.
For example:
(3)   *Петя не сдавал экзамен.*
        Entailment: *Петя не сдал экзамен.*
        It is impossible to have passed the exam without taking it.
(4)   *Петя не сдал экзамен.*
        Conventional implicature: *Петя сдавал экзамен.*
        It may be true and may not.
        A: Петя сдал экзамен?
        B: Нет.
        (A makes an implicature that Petya tried to pass it, otherwise B would have said that he hadn't even tried – Maxim of Quantity. But A can as well ask to clear it up)
        A: А он вообще его сдавал?
        B: Да/Нет.

(5)   *Петя сдал экзамен.*
        Entailment: *Петя сдавал экзамен.*
        It is impossible to have passed the exam without taking it.
(6)   *Петя сдавал экзамен.*
        We cannot implicate or entail anything: Petya could pass and could as well not pass the exam, the sentence itself doesn't tell anything about it.

From Katya Garmash: Conventional Implicatures

(1) Я полчаса пытался понять эту теорему.

(2) Я три часа учил это стихотворение.

In these two examples an imperfective form of a verb is used, but it is implied that the speaker has in fact already completed the action denoted by the verb: for example, in (1) it is literally said that during a period of time that lasted for half an hour the speaker was trying to understand some theorem – but the speaker also "indirectly" (via conversational impl) informs that he has eventually understood it.

I think that here the maxim of quantity is at work (so that the speaker doesn't add that he HAS understood the theorem, but the implicature can be cancelled: я полчаса пытался понять эту

теорему, но так и не понял). What I don't understand is why exactly this is implied – why not the opposite, that the speaker still didn't manage to understand the theorem. Probably it has to do with the fact that these verbs (I will take now учить for simplicity) denote telic processes and are "paired" with perfective verbs (выучить) which denote the accomplishments (I'm not sure abut terminology), the result of these processes.

It is interesting to compare a sentence like (2) with (3):

(3) Я за 3 часа выучил это стихотворение.

The literal meaning of (3) is that the speaker has already learned the poem (it is asserted, not implied) and the process of learning lasted for 3 hours. It seems that there is one more difference between (2) and (3) (apart from that the thing that is asserted in (3) is implied in (2)): the construction "за + [time] +perfective verb", it seems, conventionally implies that the process was not difficult, or it was even easy (that's why in fact (3) sounds not very well). So, sentences (4) and (5) mean (almost) the same:

(- Это стихотворение лёгкое?)

(4) Да, я его за пять минут выучил.

(5) Да, я его пять минут учил.

But (6) and (7) are different:

(- Как домашнее задание, сложное?)

(6) - Я его полночи делала.

(7) - ?Я его за полночи сделала.

A possible very informal explanation for this asymmetry could be: if we want to underline the difficulty, the efforts which this process demanded from us, we will want to use a verb that denotes this process (to describe this process), and not a verb that denotes only the result.

From Daria Popova:

(- *Какие задачи Вы сделали?*) - *Я делал 1 и 3.*

Assertion: *Я делал 1 и 3 задачи.*
Possible implicature: *Я не сделал толком ни одной задачи, но по 1 и 3 я пытался что-то сделать.*
Comment: *I'd rather regard it as a conversational implicature, because it can be canceled by adding some explicit material (Я делал 1 и 3, и у меня получилось, что в первой ответ 5, а в третьей -7), it is non-detachable, non-conventional, calculable (cooperative principle + the following maxims: be relevant, be brief, be polite, but actually the violation of the maxim: avoid ambiguity (see next implicature), which can be extremely useful if you try to give your teacher the impression, that you have done tasks number 1 and 3), reinforceable (Я делал 1 и 3, пытался их сделать по крайней мере), not backgrounded.*
Another possible implicature: *Я сделал 1 и 3 задачи, но не уверен, что сделал их правильно.*
Comment: *I would classify it as a conversational implicature, because it can be canceled by adding some explicit material (Я делал 1 и 3, но у меня ничего не вышло), it is non-detachable, non-conventional, calculable (cooperative principle + the following maxims: be relevant, be brief, be polite, do not say what you believe to be false, but actually the violation of the maxim: avoid ambiguity (see previous implicature), reinforceable (Я делал 1 и 3, даже сделал, можно сказать), not backgrounded.*

2.2.3. Another example from Daria Popova

Он стесняется рассказать о своём прошлом.

Assertion: *Он стесняется рассказать о своём прошлом.*

Entailment: *Он не рассказывает о своём прошлом.*

Comment: *I'm not sure how to classify it. On the one hand, I personally would consider it as an entailment, because it possesses certain properties of entailments, such as non-cancellability, conventionality (if we replace рассказать (сов.вид) with рассказывать (несов.вид) the entailment will disappear), behavior under negation (if we* say: *Он не стесняется рассказать о своём прошлом it would lose the entailment), anti-backgrounding, non-detachability(?). But, on the other hand, such verbs are commonly called implicative verbs (sometimes more precisely - verbs of negative implicature) and this confuses me.* BHP: See note on characterization of implicative verbs above: they have <u>entailments</u> concerning the embedded proposition.

Conventional implicature: *Говорящий полагает, что его (о ком говорящий говорит) прошлое не безупречно.*

Comment: *In my view, it is a conventional implicature. It is non-cancellable, conventional, detachable, speaker-oriented, independent from at-issue meaning, gives some new information.*

BHP note: Interesting examples; I don't have clear intuitions myself, and I don't know if English is the same as Russian here.

English: He was too ashamed/embarrassed to tell about his past. (entails that he didn't tell)

He was ashamed/embarrassed to tell about his past. (Maybe he did tell, maybe he didn't)

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