Defining Pragmatics: Appendices

Appendix 3.1.1

Here are questionnaire results from Reid (1991), confirming the pragmatic behavior of agreement. For instance, over 15 percent of his subjects preferred singular *rabbit* over plural *rabbits* in (1.b) below, even though more than one rabbit was involved. Thus, although 100 percent of his subjects chose *rabbits* for (1.a), only close to 85 percent chose *rabbits* for (1.b) (Reid, 1991: 138: A,B):

(1) a. Just as the sun set, three_____cautiously entered the garden and began to nibble the lettuce.
b. Returning to the woody undergrowth, Jake found his traps had caught a half dozen _____, enough for his hungry companions back at the house.

In other cases (Reid varied the animals and the contexts) the percentages of singular nouns for plural references were even higher. Reid's conclusion is that the choice of entity number for aggregates of various animals depends on the salience of the individuality of the animals. This is very clearly context dependent. Note that Reid's examples come from his questionnaires and also from well-edited written sources (*The New York Times*, *Newsweek*, etc.), so declaring these instances the result of a careless performance is not possible. Moreover, it is not the case that where the grammar allows it, a singular or a plural can be freely selected. Rather, the selection has to comply with the discoursal rationale behind the choice. Context-specific discoursal considerations (whether the entities should be referred to as individuals in the specific utterance) determine the grammatical number agreement (in English, see also Levinson 2000: 262).

Appendix 3.1.2

A pragmatically inferred interpretation creates a (semantic) contradiction

Recall the Gertrude Stein passage, already quoted in Chapter 2:

(1) This first time she married her husband came from Montana. He was the kind that **when he was not alone he would look thoughtful**. He was the kind that knew that in Montana there are mountains and mountains have snow on them. He had not lived in Montana. He would leave Montana. He had to marry Ida and **he was thoughtful** (Gertrude Stein's *Ida*, 1944: 141, cited from Giora, 1985).

While the propositions marked bold in (1) do not actually contradict each other, since one can look thoughtful when not alone and in fact be thoughtful (in general), (1) does feel contradictory (not only because of the propositions marked bold). The reason is that we generate a conversational implicature that if the speaker says that someone ***looks*** *thoughtful*, she intends to convey that they are not really 'thoughtful.' It is this pragmatic meaning which clashes with the later expressed proposition *he was thoughtful*. In this case, then, a pragmatically inferred interpretation is responsible for a judgment of contradiction.

Additional examples for "pragmatic" differences creating truth-conditional distinctions

While sentence topics constitute an extralinguistic concept and their determination is often arrived at by extralinguistic inferences, the choice of a specific topic over another may have implications for the truth-conditional semantic meaning of the proposition. According to Reinhart (1981, ex. 46a–c), *no wonder* directs the application of the comment to specifically the topic. In (2.a), the topic could be the Olympic games, the American athletes, or Carter. (2.b–d) help clarify this point:

(2) a. ~ It's no wonder that Carter is considering withdrawing the American athletes from the Olympic games.
b. ~ As for **the Olympic games**, it's no wonder that Carter is considering withdrawing the American athletes from them (because they are such a farce).
c. ~ As for **the American athletes**, it's no wonder that Carter is considering withdrawing them from the Olympic games (because they are so bad they may lose).
d. ~ As for **Carter**, it's no wonder that he's considering withdrawing the American athletes from the Olympic games (because he is such a hard liner).

In each, the 'no wonder' reason hinges on the topic selected, and the truth conditions are affected accordingly. The truth conditions of (2.a) on any given

use, then, depend on which constituent we take to be the topic, a pragmatic decision.

In fact, many sentences which were thought to differ only pragmatically, because they have different foci, were later seen as truth-conditionally different from each other. This too means that pragmatic meanings may involve truth-conditional aspects. Gazdar (1979) and Stampe (1981), who equate semantics with truth-conditional meaning, point out the following problem: when embedded in larger contexts, sentences supposedly with the same semantic meaning (but different pragmatic meanings, due to different foci), have different truth conditions. Stampe's examples are:

(3) a. ~ Clyde KILLED the donkey.
b. ~ Clyde killed the DONKEY (p. 706).

(3.a) and (b) are supposed to have the same truth conditions but, as Stampe notes, the following are not truth-conditionally equivalent (what was unfortunate?):[1]

(4) a. It was unfortunate that Clyde KILLED the donkey.
b. It was unfortunate that Clyde killed the DONKEY (p. 707).

In fact, the conclusion was (Gazdar, 1979) that (3.a) and (b) are also truth-conditionally distinct (i.e., there are circumstances where one would be true but the other false), so that focus, a supposedly pragmatic phenomenon, must be implicated in establishing truth conditions.

Appendix 3.1.3

Sperber and Wilson (1986/1995) have forcefully argued that there are many inferred meanings which function as if they were explicit (termed explicatures) (see also Carston, 2002). Example I: 2.d, repeated here, is relevant:

(1) … I could read you **some**.

We take Pamela to be suggesting to Darryl in (1) something like 'I could read you some **sections from the book about death and dying**,' even though this completion is not governed by any linguistic deletion rule.

Implicit information plays a crucial discoursal role

(2) Dear Passenger,
The entrance to the Business class compartment, including use of the lavatories, is restricted to Business passengers only. Thank you for your cooperation (A sign in the economy section of an El Al airplane, spotted December 3, 2006).

Why did the airline specify *including use of the lavatories*? Isn't it redundant, given that it is the business class lavatories which are refereed to? It isn't, since economy class passengers had evidently tried to use the business class lavatories.

It all depends on how we interpret *entrance to the business class compartment*, actually. If the explicature here is 'entrance in order to spend time in the business class compartment as a business class passenger' then entrance just for the use of the lavatories does not count as 'entrance to the business class compartment.' Just because interlocutors tend to enrich the grammatical meaning into a more specific explicature the airline needs to add the "redundant" qualifying clause. In other words, the qualifying clause only makes sense with the "loosened-up" explicated meaning for the main clause, according to which, using the lavatories does not count as violating the 'no entrance' regulation. Note incidentally that another (allowed) exception to the regulation is not here specified, namely that crew members are allowed into the business class compartment, although they are not business class passengers, of course. A crew member entering the business class compartment will not therefore count as a violator, despite the fact that 'entrance…is restricted to Business passengers only.'

Appendix 3.2.1

A grammatically defined construction which crosses the sentence unit

Ziv (1994b) argues that in Hebrew left dislocations (as in (1.a)), the full sentence ('its role is to encourage the market') does not constitute one syntactic unit with the left-dislocated constituent ('the stock exchange'). This is why the latter cannot receive any case marking (b), although this is obligatory for right dislocations – see (c) versus (d) (b–d are contrived on the basis of the attested (a):[2]

(1) a. **bursa**, tafkid **shela** le=oded
(The) stock.exchange, its role [is] to=encourage (the)
shuk.
market (Lotan: 16).

b. ~* **shel** **ha=bursa**, ha=tafkid **shela** le=oded
Of the=stock.exchange, its role [is] to=encourage (the)
shuk.
market.

c. ~ha=tafkid **shela** le=oded shuk, **shel** **ha=bursa**.
Its role (is) to=encourage (the) market, of the=stock.
exchange.

d. ~* ha-tafkid **shela** le=oded shuk, **ha=bursa**.
Its role [is] to=encourage (the) market, the=stock.
exchange.

However, despite this nonunitary sentential status of the left dislocation utterance, left-dislocated NPs do obey constraints imposed on them by the construction as a whole. These dictate, for example, that the following (contrived on the basis of an attested example – Lotan: 17) is ungrammatical,

because the left-dislocated constituent is pronominal, whereas the NP in situ is lexical:

(2) * hu_i, gad $zeevi_i$ hu paxot o yoter melex kenya
He, Gad Zeevi is more or less King of Kenya

These, then, are cases where units larger than the syntactic sentence unit exhibit clearly grammatical (distributional) constraints (prohibiting the selection of a pronoun for the left-dislocation slot and a full NP for the sentential-argument slot).[3] Two additional cases, *let alone* Q and *Quite the contrary* are discussed in 7.3 and 8.2 respectively. Both require negation in a clause preceding the one they occur in.

A single sentence spans a whole discourse stretch

To see how the sentence unit can have a whole discourse inside it, note how Roy's perfectly grammatical sentence spans over five conversational turns, and how others take their speaking turns in between: *And then he goes on, for the rest of the book, to absolutely, heartlessly debunk all of the, you know, watery-eyed… new age… uh, various theories… of – how it might .. not .. be that way.*

(3) ROY: ((…)) **And then he goes on**,
for the rest of book,
to [**absolutely**],
MARILYN: [Then <X it X> gets really] depressing @.
ROY: [2**heartless**2][3**ly**3],
PETE: [2@Oh2] [3@good3].
MARILYN: [3@3] [4@@@@4] [5@
PETE: [4@ @oh @gee @4]
ROY: [5**heartlessly debunk**,
MARILYN: You haven't heard nothing,
yet5].
ROY: **all**5] **of the,**
you know,
watery-eyed,
.. new age,
… uh,
various theories,
… [**of –**
MARILYN: [Gaia,
and all that stuff].
ROY: .. **of how it might**] .. **not** .. **be that way** (SBC: 003).

There is certainly a lot of discourse in the midst of this syntactically sentential unit (note how all the verbal arguments are in place, despite the intervening discourses).

Inter- and intra-sentential phenomena needn't receive distinct analyses

An additional case where inter- and intra-sentential phenomena needn't receive distinct analyses concerns anaphoric/disjoint interpretations. As Levinson (2000: 267) puts it, "it would be odd if cross-sentence patterns of interpretation were entirely unrelated to intra-sentential patterns; and of course they aren't" (see also Ariel, 1990; van Dijk and Petöfi, 1977). The following examples show that pronouns induce a coreference reading within and across sentences (4), and definite descriptions induce a disjoint reference reading, again both within and across sentences (5):

(4) a. REBECCA: and he$_i$ just sort of shakes **his**$_i$ head, (SBC: 008).
b. REBECCA: um,
… (H) she$_i$ was riding on BART,
.. and,
… he$_j$ came and sat near **her**$_i$,
.. **she**$_i$ moved,
… **he**$_j$ moved to get closer to **her**$_i$,
.. (H) **she**$_i$ moved again,
.. and **he**$_j$ moved directly opposite **her**$_i$,(SBC: 008).

(5) a. ALINA: and finally it dawns on ~Lisabeth,
that **she**$_i$ doesn't see **Mom**$_j$ that much. (SBC: 006).
b. REBECCA: **he**$_i$'d sit up,
RICKIE: [Yeah].
REBECCA: [(H)] And,
.. you know,
do nothing,
and then once **the man**$_j$ was through the doors, (SBC: 008).

See also Horn (1991) regarding VP preposing.

Appendix 3.2.2

The obligatory/optional dichotomy

A concomitant distinction with the grammatical–extragrammatical dichotomy is an obligatory/optional dichotomy. Supposedly, grammatical rules are obligatory, whereas pragmatic principles are optional. Actually, however, not all grammatical phenomena are obligatory. Free variation exists between grammatical forms too, and not only between alternative pronunciations of words: some grammatical products are optional too. McCloskey and Hale (1984), for example, note that in Irish, one can choose between synthetic (richer) and analytic (poorer) inflections for verbs. And while tense is an obligatory category for English verbs, which tense is chosen is a matter of speaker preference. As for the

opposite cases, where a pragmatic phenomenon is obligatory, those are harder to find, because they hinge on judgments of grammaticality/acceptability (see Appendix 3.2.3 below). Also, many pragmatists (see Ariel, 2008: Part II; Bybee *et al.*, 1994; Hopper and Traugott, 1993/2003) believe that pragmatics actually provides the basis for accounting for the very forms used in clearly grammatically obligatory phenomena, even of verbal agreement (see Ariel, 2000). Most linguists, including pragmatists, however, exclude obligatory phenomena from the pragmatic realm by definition. Hence, proving that an obligatory phenomenon is pragmatically accounted for may not convince them (but see Appendix 3.2.4 below). In fact, Goldberg and Ackerman (2001) (briefly mentioned in 3.2.3), who provide a pragmatic account for a syntactic requirement taken as obligatory (the need to include adjuncts), proceed to also show that it is not quite as obligatory as linguists had assumed, so we may in fact not have pragmatic phenomena which are obligatory.

The grammatical–extragrammatical distinction doesn't matter

Another example where the grammatical–extragrammatical doesn't matter comes from Carston (1999). Carston has argued that metalinguistic negation (as in 1) is not separate from the standard truth-conditional negation, even when operating on nonlinguistic strings. Thus, even though the "wrong" (American) pronunciation of 'tomatoes' is not (British) English, negation operates on it just like it operates on truth-bearing meaning elements (the same is true for *but*, which is oblivious to the grammatical–extragrammatical distinction – see again 3.1.3):

(1) ~ She does**n't** like tom[eiDouz], but she's quite fond of tom[a:touz] (Carston ex. 14).

Appendix 3.2.3

Pragmatic intuitions and consciousness

Here's an argument that conscious pragmatic intuitions are simply not available to speakers, although the data point to their validity. Thompson and Mulac (1991) argue that whereas we lack conscious intuitions regarding the choice between having and not having a complementizer *that* (in sentences such as *I think **that** people would be more refreshed tomorrow* – LSAC), clear pragmatic generalizations can be found which explain the differential occurrence and nonoccurrence of *that* in different cases. Du Bois (1985) similarly argues that whereas speakers would definitely find a sentence with two or three lexical NPs (e.g., *The farmer killed the duckling*) acceptable, examinations of spoken discourse in numerous languages revealed that only a marginal minority of the sentences exhibit such a distribution of lexical NPs. The overwhelming majority have no or one lexical core NP argument. This skewed frequency can and

should be accounted for by extragrammatical factors. In other words, at least in some cases, pragmatics accounts for phenomena that native speakers have no conscious judgments about, although their consistent distribution in natural discourse testifies that they are quite real. Relying on speakers' judgments will not do, then.

The circularity of grammaticality judgments

Another argument against using grammaticality judgments for identifying the grammatical in language is the circularity of the criterion. Note that initially, Chomsky (1957) argued that intuitions should determine grammaticality in clear cases, but in borderline cases, where judgments are not clear, the linguist's theory of grammar would decide between the grammatical and the ungrammatical. Newmeyer (1983) argues that in fact generative grammar has adopted an even more radical position, namely, that "grammatical" simply means generated by the specific theory of grammar. Hence, native speakers' judgments should not even be expected to reflect or be similar to the grammarian's decisions regarding grammaticality. Indeed, Bach and Harnish (1979: 199) have proposed that *Can you please pass the salt?* is ungrammatical (because *please*, which is legitimate only with requests, has been here added to a question form). Of course, it is perfectly acceptable in use.

Such a decision regarding grammaticality automatically affects the acceptable/unacceptable category, because sentences that are generated by the grammar but are rejected by speakers must be unacceptable, whereas sentences that are not generated by the grammar but are usable anyway, must be acceptable. Once grammarians have conceded that their decisions about grammaticality (and as a derivative of that, of acceptability) are based on considerations of what fits their theory of grammar, rather than genuine native-speaker intuitions/behaviors, grammaticality versus acceptability can no longer be a valid criterion for distinguishing between grammar and pragmatics (see Aitchison and Bailey, 1979). The criterion has become completely circular: the grammarian decides what would be accounted for by the grammar, so that any violations of this grammar produce an ungrammaticality, and those violations not accounted for by the grammar are left for a pragmatic account. Such a division of labor has nothing to do with stronger versus weaker native-speaker intuitive judgments.[4]

Appendix 3.2.4

An arbitrary pragmatic phenomenon

Here's another example of a so-called pragmatic phenomenon which is arbitrary to some extent. We mentioned the "natural" order of items on lists reflecting the speaker's point of view as a pragmatic phenomenon in 2.2.4. But note that many such orders actually leave the speaker no choice. They (no longer) express

the speaker's individual point of view (on the specific occasion). Thus, even if the speaker is inside the room, speaking to a person outside, she won't suggest running ?? *out and in* (serving food). While *in and out* and *friend or foe* follow a motivated order (the 'me first' principle), they are now conventional and thus, on some occasions, arbitrary. Such conventionality accounts for the fact that whereas English prefers *more or less*, *more* preceding *less*, Hebrew opted for *paxot o yoter* 'less or more' for expressing approximations.[5] Matisoff (2007) notes that whereas Lahu speakers speak of the counterpart of 'feet and hands' and 'silver and gold.' English speakers use *hands and feet* and *gold and silver.* Hebrew is like English for 'hands and feet,' but like Lahu for 'silver and gold.' At least one of these orders must be arbitrary. Grammar must be involved in the ordering of some conjoined and disjoined items, despite the natural motivation behind many linear orderings (and see again 3.1.3 regarding the originally motivated exclamative *some*).

Hebrew *kcat*

Hebrew *kcat* 'a little' has recently been analyzed by Bardenstein (2005). Seemingly surprisingly, Bardenstein finds that 21 percent of the occurrences of *kcat* are interpreted as 'some,' rather than as 'a little.'[6] In fact, in order to denote 'a little,' *kcat* is nowadays typically stressed and accompanied by some explicit strengthening expression (e.g., *KCAT, aval MAMASH kcat* 'a little, but really a little' – Bardenstein, ex. 3, p. 10). Such findings seem counterintuitive. Why would speakers use *kcat* 'a little' in such a misleading way to denote a non-specific, but not necessarily small, quantity ('some')? The answer lies in pragmatically motivated hedging uses, where speakers use *kcat* not because they really mean 'a little,' but because they want to be polite. Once this use becomes the norm, its euphemistic intention may be unveiled, so that (unstressed) *kcat* no longer specifically denotes a small quantity. I examine many such cases in Ariel (2008: part II). The upshot of these examples is that since today's grammar is quite often yesterday's pragmatics, grammar may very well be natural/motivated, rather than arbitrary.

Appendix 3.3.1

Performance explanations needed within pragmatic inferencing

(1) presents two examples where performance theory should explain the unintended pragmatic interpretations actually adopted.[7] Both cases exhibit pragmatic "over-interpretations," where so many contextual assumptions are deemed relevant by the addressee that the utterance becomes pregnant with meanings never intended by the speaker:[8]

(1) a. ALVY: I distinctly heard it. He muttered under his breath, 'Jew.'
((PART OMITTED))

Well, I pick up on those kind o'things. You know, I was having lunch with some guys from NBC, so I said, uh, 'Did you eat yet or what?,' and Tom Christie said 'No, dichoo?' Not, did you, didchoo eat? Jew? No, not did you eat, but Jew eat? Jew. You got it? Jew eat? (Woody Allen's *Annie Hall*, scene 36).

b. hinne ha=alma hara ve=yoledet ben ve=
Behold, the=virgin conceives, and=bears son and
karat shmo immanu el (*Isiah* 7: 14).
shall.call his-name With:us God (=Hebrew Immanuel).
'Behold, a virgin shall conceive, and bear a son and shall call his name Emmanuel'

Alvy's reading anti-Semitism into Tom Christie's words in (a) is a (comic) example of an over-interpretation. For (b) we can quote three different interpretations by addressees of three different religions. The last two are clearly over-interpretations. Almost all traditional and modern Jewish commentators agree that the pregnant woman referred to in (b) is prophet Isiah's wife. The Septuagint translation of the Hebrew *alma* ('young woman') into Greek (third century BCE) *parthenos* 'virgin,' however, paved the way for the later Christian very rich and prophetic interpretation of the verse, whereby the woman is Mary, and the son Jesus. Wallace Chafe (p.c.) discusses yet another interpretation of this verse, by the Iranian Muslim mother of a man who sent her an American Christmas card with this verse printed on it. The son's intention was to provide the mother with an example of a typical American custom, and this card was not the first memento he had sent her from the USA for this purpose. It turned out, however, that the mother interpreted the verse on the card as implicating that her son had got married, had a son, and named him Emmanuel. It was only the name she objected to… Given the difference between interlocutors regarding what pragmatic interpretations one is to infer, pragmatically derived meanings must depend on performance factors as well (which then naturally differ for different interlocutors). Pragmatics cannot, then, be reduced to a theory of performance.

Appendix 3.3.2

Kasher *et al*. (1999) tested subjects with either right- or left-hemisphere damage, but no subjects with Broca's area (the "language" locale) damage were included. Their conclusion is that both hemispheres participate in implicature comprehension (originally a "right-hemisphere" task), because there was no significant difference between the performance of right- and left-hemisphere brain-damaged subjects. Both groups were impaired in comparison with a control group. Interestingly, there were no correlations between implicature comprehension and general inference drawing either, although both are considered extragrammatical. In the same spirit, Segal (1996) found that Williams syndrome subjects

(with IQ scores around 50, good social capabilities and good linguistic control) were able to draw communicatively relevant inferences, but their general inferential abilities were quite impaired. Wilson (2005) quotes an Asperger's subject who describes how hard it is for her to draw the inferences needed in narrowing down meanings (e.g., what *disappointed* means exactly in a certain context), although these subjects are quite successful in general inferential assignments. Such findings regarding a dissociation between linguistically relevant inferences and other inferences seem to support a "linguistic" status for inferences relevant in communication, although the latter are considered pragmatic. Finally, Zaidel *et al.* (2001) argue that right-brain-damaged subjects do better than left-brain-damaged subjects in basic speech acts (assertions, questions, requests and commands), even though speech acts, as a pragmatic phenomenon, are supposed to involve a right-hemisphere task.

Appendix 3.3.3

Consider again II: 44, here repeated only in translation:

(1) We said from the beginning that **this will take the time that it will take** and it is indeed taking its time. (An Israeli officer about the war in Lebanon, Reshet Bet Radio, July 27, 2006).

What we have here is an inferred (cancelable) interpretation, which should be pragmatic, but, as we already saw in 3.1.3, it nonetheless contributes to the truth conditions of the speaker's utterance (i.e., it behaves "grammatically").

Appendix 5.1

Quality and Manner violations

Nonliteral language is taken as a case of exploiting Quality (since the literal meaning could not possibly be true). Here are two relevant examples (1.a) is a hyperbole, (1.b) an irony:

(1) a. JEFF: .. Who's –
(H) Who's the girl that .. I love?
JILL: [@@@@@]
JEFF: [Who's] the girl that **I'll do anything for**?
JILL: @@@@ .. [2(H)2]
JEFF: [2**I'll**2] **wash her feet with my mouth** (SBC: 028).

b. ROY: I threw a [green pepper down your blouse].
MARILYN: [You threw a green pepper down] my shirt.
ROY: … (SNIFF) .. I thought it was funny.
MARILYN: … **Hilarious** (SBC: 003).

In (1.a), what Jeff is offering to do for Jill is literally incredible. A more plausible interpretation is a weaker statement, that he loves Jill very much, and will do a lot for her. Ironies such as (b) involve a more drastic shift in meaning. Marilyn intends to let Roy know that her attitude to his throwing a pepper down her shirt is quite the opposite of his. She does not find it hilarious at all.
Next, a Manner violation:

(2) mi=cad exad zo birata shel ha=intfada… mi=
On the one hand this (is) the.capitol of the=Intifada… On
cad sheni mitkayem kan shituf peula (lo ba=
the other hand there.exists here cooperation (not in.the
mashmaut ha=shlilit shel ha=musag) marshim lemaday im
negative sense of the=concept) quite impressive with
ha=mosadot ha-yisreeliyim u=ve=rosham iriyat
the=Israeli institutions and=first.among.them the.municipality of
yerushalaim.
Jerusalem.
'On the one hand there is a rather impressive **cooperation (not in the negative sense of the word)** here [East Jerusalem – M.A.] with Israeli institutions, primarily with the Jerusalem municipality.' (Hebrew, *Haaretz* September 1, 1992).

In (2) the writer prefers the very long and cumbersome *cooperation (not in the negative sense of the word)* over the short and simple *cooperation*. This constitutes a Manner (or possibly a Quantity) violation. The reason the writer chose such a long expression is that the word *cooperation* alone in this context would imply 'cooperation with the enemy, a betrayal,' when the writer does not intend that reading at all. Although this is a case where Palestinians are cooperating with Israeli authorities, it is not a case of betrayal in the writer's opinion. This is the implicature generated from the marked form used.

An additional example of misunderstanding

Here are two lines from a recent poem (in Hebrew) by Ilan Sheinfeld. Note that more than one person interpreted the poem as an ironical statement, but it turned out that the poet intends just what he says, when he addresses the Israeli soldiers and asks them to:

(3) … pcacot asu,
… Make bombs
ve=hamtiru otan al kfarim ve=al arim ve=al batim
and=shower them on villages and=on cities and=on houses
ad yikresu.
until (they) will.crumble.down.

hirgu ba=hem hakizu et damam, haxridu xayehem,..
Kill at=them draw ACC their:blood, terrorize their:lives,...
(Sheinfeld, *Texezakna*, 'Let them be strong' July 21, 2006)

In other words, the misinterpreters took the coded message as an inconceivable request, and proceeded to view the poem as ironically conveying that the calls for an all-out cruel war on Hezbollah in Lebanon are intolerable. Inferences are always risky.

An additional cancelability example

(4) DORIS: .. (H) So when he opened up on that,
and **she** followed through,
and **told about her husband**,
... (H) you know?
ENV: ... ((DOOR))
DORIS: **Not necessarily** that **she would approve of it**,
... but at least **she wasn't disapproving** &
ANGELA: .. Yeah.
DORIS: & .. **of it** (SBC: 011).

(4) contains a chain of implicatures which get canceled, so the fine-tuned meaning can finally be reached ('possibly she would, possibly she wouldn't disapprove of it'). Note that *she told about her husband* might be taken to implicate 'possibly she approved of it.' This is then canceled by *not necessarily she would approve of it*. However, since this potentially implicates 'possibly she wouldn't approve of it,' an implicature not intended by the speaker, she cancels this one too with *at least she wasn't disapproving*.

Reinforceability

Sadock (1978) adds a complementary feature to cancelability, reinforceability, which is the ability to explicitly express the implicature without sounding redundant or strange. Here is a relevant example:

(5) REBECCA$_1$: Um,
.. when we have to prove something like specific intent,
((PART OMITTED))
we are allowed to bring in,
... prior similar conduct.
... Um,
.. where he acted in .. a,
.. an identical way,
or where the victims were in a similar situation.
RICKIE: [Okay].

REBECCA$_2$: [Things like] that,
(H) **That's why we're able to have you come in and testify.**
(SBC: 008).

In (5) Rebecca$_1$'s utterances can only be relevant if they somehow connect with the contextually salient fact that she invited Rickie to give testimony. In other words, an interpretation, which is later spelled out by Rebecca$_2$'s last utterance, is generated by Rebecca$_1$. Yet, even though Rebecca$_2$ says what must have already been generated as an implicature, it does not sound redundant, as it would, had she repeated any of her previous utterances (e.g., *we are allowed to bring in prior similar conduct*). Semantic content cannot be denied/canceled without creating a contradiction, but implicatures can, and semantic content cannot generally be explicitly reinforced (by repetition) without creating redundancy, but implicatures can.[9]

Not every context is suitable for implicit communication

(6) a. hodaa al leda
Notice of Birth
shem ha=yoledet… taarix ha=leda shat ha=leda
Name.of the=birth mother… Date.of (the=)birth… Hour of (the=) birth…
min ha=rax ha=nolad: zaxar xai mishkal…
The.sex.of the baby: (a) **live** male Weight…
(Hebrew, Notice of Birth, Ichilov Hospital, May 1990).

b. bi=ydey ha=mishtara kaletet video she=ba metoad
At=the.hands.of the=police cassette video which=in:it documented
tarif be=macav intimi im isha she=eina
Tariff at=state intimate with woman that=is.not
raayato.
his:wife.
'The police has a video cassette in which Tariff is seen in an intimate sitution with a woman **who is not his wife**.' (Hebrew, *Haaretz*, January 25, 2002).

The fact that the baby in (a) was born alive (a rather predictable fact in 1990, easily derivable as a Quantity implicature) is explicitly indicated in the official document issued by the hospital, upon the baby's release from the hospital. It is not left to implicature. The same applies to the implicature in (b), where the expression *a woman* is enough to generate the implicature that the woman is not personally related to Tariff. Indeed, based on such cases a few linguists have gone on to criticize the assumption that the Gricean maxims are always observed, (see Gazdar, 1979; Harnish, 1976; Koktová, 1998; Ochs Keenan, 1976; Wierzbicka, 1991). Courtrooms are another context where communicating by implicatures is supposed to be improper and, in fact, even the

maxims are supposedly not observed there (see Levinson, 1979a regarding interrogation).

Here's a case in point from the courtroom interrogation of a Mr. Bronston, as analyzed by Solan and Tiersma (2005: chapter 11):

(7) Q: Do you have any bank accounts in Swiss banks, Mr. Bronston?
A: No, sir.
Q: Have you ever?
A: The company had an account there for about six months, in Zurich.

The facts are that Mr. Bronston did in the past have a Swiss bank account for five years. Did Mr. Bronston then perjure himself (i.e., did he intentionally lie under oath)? Does a false implicature ('I never had a Swiss bank account' from the second answer) count as perjury? One court convicted Mr. Bronston of perjury, but the Supreme Court later reversed the decision. The reason was that perjury takes into consideration only statements and not implications (implicatures in this case). In agreement with Levinson, Solan and Tiersma justify this decision, given courtroom practice, arguing that lawyers in court are not allowed to assume the automatic application of the Gricean maxims of Quantity, Relation and Manner (Quality, of course, is to be observed).

However, Solan and Tiersma distinguish between discourses which may later be used in the courtroom in language crimes, and courtroom interrogation, where lawyers are involved. In the former case, the Gricean maxims should apply, and the following implicated threat would presumably count as a threat therefore, even though it is not explicitly 'said' (the speaker only committing to **knowing how** to retaliate):

(8) I hope this is not another trick, but if it is, I **sure will know how to** retaliate (private email, November 17, 2001).

In the structured courtroom discourse involving professional lawyers, on the other hand, Grice's maxims should not be presumed to apply (false implicatures do not count as lies). Nonetheless, Solan and Tiersma later qualify this strong repeal of the Gricean maxims, arguing that lawyers should be accountable for probing uncooperative witnesses only when the response is a blatant maxim violation (as in Bronston's second response above). Completely giving up on Relation, argue Solan and Tiersma, would make interrogation useless, for one would not be able to assume that any answer is relevant to the question preceding it. In other words, it is quite clear that even in the courtroom, the Gricean maxims have some standing.

Rationality instead of the CP

Ochs Keenan (1976) quotes numerous examples from Malagasi speakers who seem to ignore the first Quantity maxim, providing too little information. For

example, she reports that a young boy once informed her that 'there is a girl who is coming,' when the girl was actually his sister, so he should have more informatively referred to her as 'my sister.' Kasher (1976, 1994), however, argued that such examples, while definitely diverging from our expectations as westerners from unmarked interactions, do not constitute counterexamples to the Gricean maxims (and see Levinson, 1979a regarding goals and inference rules specific to particular activity types). How so?

First, Kasher (1976, 1982) notes that the maxims do not actually follow from the CP (see also Green, 1990). In fact, he argues that it is hard to justify the assumption that interlocutors have a common goal in conversations (see also Levinson, 1979a). Kasher therefore rejects the CP, and offers instead the Rationality Principle: "Given a desired end, one is to choose that action which most effectively, and at least cost, attains that end, *ceteris paribus*" (Kasher, 1982: 32). It is rationality and not so much cooperativeness that motivates the Gricean maxims, Kasher argues. Once we see the maxims as lower-level generalizations subservient to the higher behavioral pattern of rationality, we can add more maxims, provided they are compatible with the Rationality Principle. In fact, Grice himself saw talk as rational behavior, and did not intend the four maxims to be taken as exhaustive. Rather, for him, the four maxims reflect common and prominent ways in which the CP is observed, and he mentioned politeness as a potential extra maxim, for example. Kasher argues that politeness plays a crucial role in assessing "costs," a crucial factor in the selection of conversational moves according to the Rationality Principle. Thus, in order to be maximally informative and truthful, one might be forced to be rude sometimes. Impolite behavior, however, incurs a social cost to the speaker. No doubt speakers have a rational basis for being polite. The Ochs Keenan "counterexamples" to Quantity can thus be explained away. Since in the society at hand information not available to the addressee is extremely valuable, it may feel too costly for the speaker to impart it. As Robinson (1997) emphasizes, the Gricean maxims are actually applied against a rich cultural foundation.[10] Here's a more familiar case that shows that Quality is actually expected to be overridden by politeness in some social situations:

(9) "Do you remember who I am?" I say to her ear…
"Yes," she says, **and I know it's true**: as I've said **she doesn't lie**
(Margaret Atwood, *Moral Disorder*, 2006: 208).

In (9), the daughter is asking her aging mother whether she recognizes her. If the mother hadn't, this would have been an embarrassment for her, and the narrator is actually assuming that most people would not tell the truth under such circumstances. It is the fact that her mother would have obeyed Quality despite the embarrassment that is remarkable. In other words, when politeness and Quality clash, it's often the case that politeness wins out. This is only a rational course of action, which is what the maxims are all about, argued Kasher.

***Therefore* as a trigger for a conventional implicature**

(10) #FOSTER: (H) Such arguments,
((PART OMITTED))
.. impressed him (H) not in the least.
… (TSK) God alone is salvation.
(H) God alone measures guilt.
((PART OMITTED))
(H) <READ **Therefore**,
.. Luther did not accept rational arguments against predestination doctrine (SBC: 025).

Foster is said to semantically commit himself only to the propositions immediately preceding and following *therefore*. He is in addition committed to the understanding that 'Luther did not accept…' **follows** from 'God alone…', but this is only conventionally implicated by him. Conventional implicatures are like conversational implicatures in that they are implicitly conveyed, and in that they do not affect the truth conditions of the proposition expressed. Foster could not appropriately continue his sermon saying something like "but I don't mean that Luther's rejecting the arguments against predestination…was a consequence of his beliefs that God alone is salvation."

Appendix 5.2

The nature of the conflict between Q_1 and Q_2

Horn views the conflict between Q_1 and Q_2 as a conflict between the speaker's interests and the addressee's interests. The speaker is taken to be interested in economy (least effort), and therefore in maintaining Q_2, as well as the brevity sub-maxim of Manner, whereas the addressee is taken to be interested in maintaining Q_1, as well as in violations of brevity perhaps, explicitness facilitating comprehension. As already mentioned in 4.3, Levinson (2000) proposes an alternative view of this conflict. Levinson does not see it as a conflict between the speaker and the addressee. Rather, it is in the interest of both the speaker and the addressee to have an economical way of communication, because it makes communication more efficient for both. Levinson cites psycholinguistic findings which demonstrate that it is articulation (and not comprehension) which slows down the rate of information transmission between interlocutors. Crucially, the speaker's rate of articulating is very often slower than the addressee's speed of drawing inferences. If so, then both speakers and addressees have an interest in speeding up communication by leaving some meanings to (fast) inferencing rather than to a (slow) encoding. Thus, according to Levinson (2000: 6), "a coincidence of interests" between the speaker and the addressee motivates a system that maximizes both informativity and economy by relying on inference.

Additional examples for the working of the I-Principle

(1) a. yaxol lihiyot she=taiti. im taiti –
Can be that=(I) made.a.mistake. If (I) made.a.mistake –
kulanu bney adam,
we.all (are) human beings (Hebrew, *Haaretz*, October 26, 2001).

b. He said they could do it if they break **a leg** it's their problem. (LSAC)

c. REBECCA: (H) when **a person** (Hx) is charged with multiple crimes,
((PART OMITTED))
in this case we have to prove specific intent.
… to expose himself to **a person**,
.. for sexual arousal (SBC: 008).

What the speaker in (a) is communicating is something like 'If I made a mistake, ((**it is because)**) we're all human beings, **((and we all make mistakes. So you shouldn't judge me harshly**)).' The information marked bold is easily inferable, and can therefore be left out for the addressee to derive based on Q_2, which instructs the speaker not to provide too much information.[11] Information easily inferred is considered superfluous information if explicitly conveyed. Example (1.b) is a case where we rely on Q_2 to interpret the leg as the relevant third party's leg, because the interpretation can be inferred, and the speaker does not need to explicitly indicate it (*their leg*). When Rebecca in (c) uses *a person* the first time, we interpret it (inferentially) as 'a male person,' based on our stereotypes of the sex of criminals (even before Rebecca uses *himself*). When she uses *a person* the second time we interpret her as implicating 'a female person,' again based on our stereotypes of the sex of victims of sex crimes. In both cases we've derived a more informative (specific) interpretation than the one explicitly supplied by the speaker.

Overstreet (1999) explains some of the uses of *and stuff* as reflecting Grice's maxim of Quantity, but they can equally be explained by reference to the I-Principle. She notes that in the following example, the speaker refrains from providing more detailed information because she can rely on the addressee to supply it herself:

(2) ROSIE: So that we can put all the kitchen stuff in there, an' all the heavy stuff, an' just pack out our clothes an' tents **an' stuff** (Example 1, p. 148).

As another application of the I-Principle consider Neg-raising (Horn, 1989: chapter 5). Compare (3.a) with (3.b), its non Neg-raised version:

(3) a. ALINA: He's talking about how we should carry on a conversation later,
((PART OMITTED))
I said I don't –
You know **I really don't think my husband would appreciate that** (SBC: 006).

b. ~I really think my husband would not appreciate that.

The bold-faced portion of (3.a) is not as informative as (3.b), since negation in (a) is external, namely applicable to any element of the sentence it has scope over. In (b), on the other hand, negation specifically applies to the predicate *appreciate* (in the unmarked case). It is therefore a more specific and informative interpretation. The I-Principle explains why we tend to interpret (a) as the more informative (b).

As Horn emphasizes (1984 and onwards), The I-Principle (R-Principle for him) is not only responsible for informativity enrichment. Another type of case where saying a little is interpreted more informatively than the forms warrant is the case of formal reduction with no loss of meaning. If a speaker uses the short form *bus* instead of *omnibus* then we again have a more economical ratio of speech to meaning. The first uses must have been innovative, relying on addressees' inferences that the shorter forms meant the same as the full forms. Other examples provided by Horn are blends (e.g., *televangelist*, *vidiot*) and acronyms (e.g., *NATO*). For an ad hoc example of formal reduction see (1.a) again. And for the crucial dependence between phonetic reductions and contextual predictability, the latter allowing the application of the I-Principle, see Jurafsky *et al.* (2002), Ariel (2008: chapter 5) and references cited therein.

Horn versus Levinson

Note that Horn (1984) does not offer a third, corresponding M-Principle. Instead, for him, unmarked forms lead to the application of the I-Principle (the R-Principle for him), whereas marked forms lead to the application of the Q-Principle. This is his division of pragmatic labor. Traugott (2004) supports Horn's position with historical arguments. She forcefully argues that M-inferences cannot be distinguished from Q-inferences, that there are no clashes between these inferences, and that M-inferences can be achieved by reference to the Q-Principle. However, for clarity of exposition I have adopted Levinson's version. We later see problems for both formulations.

Additional examples for the application of the M-Principle

(4) la=bimai Felini **"nolda"** bat – shnataim
To=director Fellini "was.born" (a) daughter– two.years
le=axar moto.
after his:death.
'A daughter "was born" to director Fellini – two years after his death'
(Hebrew, *Maariv*, November 14, 1995).

Note the quotation marks around "was born" in (4), which create a more marked form. Indeed, it is not the stereotypical birth which is relevant here. Rather, it

is the existence of this daughter (43 years old in 1995), which was revealed two years after Fellini's death. "Was born" here is interpreted as 'first appeared on the public scene.'

Next, consider another marked form for "was born":

(5) PAMELA: and I was constructed,
… inside of some woman's womb,
… (H) and I was…**burped out**, (SBC: 005).

Pamela's choice of *burped out* instead of the unmarked verb *born* implicates that she is trivializing the act of birth, reducing it to a mechanical bodily function. This trivializing is the added, nonstereotypical meaning appropriately expressed by a marked expression. M-inferences are then generated from marked forms, and they constitute marked interpretations, specifically, ones which are different from I-inferences based on the unmarked counterpart forms.[12]

An additional example of a scalar implicature

(6) WALT: ((PART OMITTED)) when you bring your fears up,
… (TSK) (H) what we find out **many** times,
… is that they're more imaginary,
… than they are real (SBC: 021).

Many is compatible with 'all' being the case (so even if it's the case that 'we find out that our fears are imaginary at **all times**' Walt's proposition is true). Hence, according to the accepted semantic analysis, *many*'s encoded meaning is also compatible with the value 'all' (*many* means 'at least many').[13] However, since Walt could have just as easily used *all* instead of *many*, he intends to generate as an implicature that 'not all.' His conveyed meaning is then 'many but not all.' Example (5.d) in the book shows this applies to *some* too: *some people* implicates 'not all people' (it is assumed that only the strongest item on the scale is thus negated in the implicature).

Additional material on Horn scales

First, to verify that the stronger (right-hand) expressions in (22) in the book entail the weaker (left-hand) expressions, consider the following:

(7) a. ALINA: .. Mom had cut **all** the pastries in half? (SBC: 006).
b. ALINA: **the** place was completely empty (SBC: 006).

Note that if it is true that Mom had cut **all** the pastries, then it is also necessarily true that Mom had cut most/many/some of the pastries (the scale in a). Similarly, if it is true that **the** place was completely empty, then it is also true that **a** place (some indefinite place) was completely empty (the scale in b). Note also that all the forms on the scales above are equally unmarked, and hence constitute

salient alternatives for each other. If so, the speaker's choice of a weaker form Q-implicates that she is not in a position to state the stronger form, and therefore that the stronger piece of information is not true as best she knows.

While scales often manifest an entailment relationship such that the stronger items entail the weaker items, there are scales which do not meet this criterion. For example, as Levinson points out, *try* < *succeed* constitute a scale, even though *succeed* does not entail 'try' (note that the following is coherent: *I was not trying to kill myself and almost* ***succeeded without even trying*** – journals.student.com/journal/koR_chick2007). But the items on the scale must maintain a salient opposition (which *try* and *succeed* do): they cannot differ in markedness or register, and they must be "about" the same semantic relations (Levinson, 2000: 82). Hence, *try* in (18) does implicate nonsuccess, as the discourse following it confirms (*no puedo* = 'I can't'):

(8) SHARON: cause I made the whole class learn,
like,
(H) good morning,
good bye,
((LINES OMITTED))
I **tried to get her to say hello**,
and she'd be like,
((LINES OMITTED))
no puedo,
no puedo (SBC: 004).

The reversibility of Horn scales

Levinson (2000: 90) draws our attention to cases where the scale of informativeness is reversed. While normally, higher numbers constitute a stronger claim than lower numbers, when trying to diet, for example, lower number weights are more informative than higher number weights. If so, one can see the numbers as forming a tight contrast set where either larger or smaller numbers are more informative, depending on the specific context. Here's a case in point:

(9) doctor fanafazir yashav muli, mealʔel
Dr. Fanafazir was.sitting across.from:me, leafing
be=shivyon nefesh ba= tik harefui shel avi. "yesh
calmly through-(the) my father's medical record. "There-is
sikuy shel 50 percent she=yarashta et ha=gen ha=ze
(a) **50 percent chance** that =you.have.inherited ACC this=gene
me=avixa. muvan, hu hosif axarei she=raa
from=your:father. Of course," he added after (that)=(he).saw
she=ha=ceva ozel mi= panay, she "yesh
that=the=color was.draining from=my:face, (that) "there.is

sikuy shel 50 percent	she=lo yarashta	oto.
(a) 50 percent chance	that=(you) (did) not inherit	it"

(Hebrew, *Haaretz*, October 27, 1995).

Dr. Fanafazir's addressee must have constructed a reverse scale, whereby smaller numbers constitute a stronger proposition (the lower the chance for the gene for some bad disease the better the prognosis for him). According to this interpretation, since Dr Fanafazir said *50 percent*, he must have refrained from choosing a lower number (say 0 percent or 25 percent). The implicature is then that there's a rather high chance for the addressee to carry the gene. The doctor, in an attempt to reassure the addressee, however, encourages him to construct the opposite scale: since he refrained from choosing a higher number than 50 percent (say *75 percent* or even *100 percent*), the implicature intended (explicitly reinforced here) is that for all the doctor knows 'there is no more than 50 percent chance that he inherited the bad gene.' This is, then, a rather low chance.

And here's another case where changing the context changes the direction of the relevant scale:

(10) Impossible not probable possible probable certain

< –>

When the then Vice President Bush (senior) was campaigning against Democratic nominee Michael Dukakis in 1988, *Washington Times* published an interview with a Dukakis relative, who was asked whether Dukakis had ever sought psychiatric help during a low period in his life. The answer he was quoted as giving was:

(11) It's possible (www.consortiumnews.com/2006/122706a.html)[14]

When a definite denial is expected (*impossible*), *it's possible* is seen as weaker than *it's impossible*, and the implicature is therefore 'it's not impossible,' and in fact, 'probable' (i.e., 'Dukakis may well have sought psychiatric help').[15] Indeed, the paper's headline featured "Dukakis Kin Hints at Sessions." But, now imagine that the question posed to the relative had been "Will Dukakis make a good president?" Under such circumstances, (11) would have implicated just the opposite, namely, 'it's not certain,' and in fact, 'probably not' (i.e., 'Dukakis will not be a good president in all likelihood'). When a strong affirmation is expected (in response to the second question) *it's possible* is seen as weaker than *it's certain*. Hence, we infer that 'it's not certain,' which we strengthen to 'probably not.' So, which direction of the scale one should consider is very much context dependent.

The cancelability of GCIs

(12)	at	yodaat	mi	hayta	iti	be=micpe ha=yamim?	irit linor
	You	know	**who**	**was**	**with.me**$_J$	at= Mitzpe Hayamim?	Irit Lenor$_i$.

Pause.

hi hayta im baala, kamuvan.
She$_i$ **was with her:husband**, of.course.
aval hayinu be=yaxad kol ha=zman ve=
But we$_i$+$_j$-were (=hung out) together all the=time and=
dibarnu.
we$_i$+$_j$ talked. (Hebrew, cafeteria conversation overheard, April 14, 1997).

In (12) the addressee must have drawn an I-inference that the (male) speaker went with Lenor (a famous female journalist) to the resort mentioned (Mitzpe Hayamim) as a couple. Realizing this, the speaker then explicitly cancels the inference. Next is an example where the writer, having received a request from the addressee, is reluctant to assume that it was the addressee that sent the email message. S/he wants to stay neutral (for fear of pranks):

(13) **Someone (possibly you)** has requested that your email address be added to or deleted from the mailing list. (automatic message received from the internet mail list Majordomo, June 15, 2001).

While *someone* implicates (as a GCI) that the person is unidentifiable (specifically, that it is not the addressee), *possibly you* cancels that implicature. Example (14) demonstrates the importance of the local context in canceling a Q-inference (that *nine* means 'exactly nine'):

(14) (M has just invited H to a dinner party at her house at 9 p.m.)
H: Ze tesha tesha?
(Is) it nine nine? (i.e., 'is it really nine, or is it actually 9:30 or so' – according to the Israeli custom of coming late, Hebrew, June 30, 1999).

The following is a less naïve case of a Q-implicature cancelation:[16]

(15) ben 47 le=maasar 5 shanim al beilat
(A) 47 year old to=jail (for) 5 years for having.intercourse.with
ktina she=hitgorera bi=shxunato, be=meshex tkufa aruka.
(a) **minor** who=lived in=his.neighborhood, for=a long period.
((Headline)).
ha=neesham hitgorer bi=shnat 1982 be=kirvat
The=defendant lived in=(the year) 1982 near
beta shel yalda bat tesha, u=ve=meshex yoter mi=
the.houseof (a) **nine year old** girl, and=for more than=
shnatayim asa ba maasim megunim.
two.years (he) did to.her molesting deeds (=molested her).
(Hebrew, *Haaretz*, November 27, 1985).

Notice that the headline mentions intercourse with a minor (when the minor is nine years old). First, a Q-inference is generated to the effect that the victim is not a young girl, because in that case presumably, the addressee reasons, the newspaper would have used the unmarked *yalda* 'female child' instead of the

marked *ktina* 'female minor.'[17] Note in fact that the more informative description here would have been *yalda*, because it is more restricted in age (say 4–13 or so, rather than birth to 18). In addition, I-inferences generate the stereotypic assumption about the age of a minor. In the context of intercourse, it tends to be narrowed down to close to being an adult. The body of the article then cancels these implicatures, of course.

An implicature can be canceled either explicitly (as in (12, 13, 15) or implicitly (in fact, there is also a difference of explicitness between the cancelation in (12, 13) and in (15) – see Horn (1984)). Here is an example where an implicature is canceled implicitly by what is known by the addressee:

(16) PAMELA: and I was constructed,
… inside of **some woman**'s womb, (SBC: 005).

Some woman Q-implicates that the woman is not intimately related to the speaker. Still, the addressee knows that a fetus is necessarily "constructed" in her biological mother's womb. While other implicatures (M-implicatures) are certainly not blocked here, the Q-inference is canceled. And when Levinson (1979a: 380) says:

(17) An immediate puzzlement is that **many, in fact most**, of these questions request details that are already known to the questioner.

he does not necessarily wish to implicate that 'not all of these questions request…' He is probably not committed to that claim.

M-Principle blocking the application of I-Principle

(18) I get to the bank **and** I do my thing **and** I come back out **and** the, the front tire, which was low, was then once again low **and also** disengaged from the rim (LSAC).

Note that we interpret the clauses conjoined by *and* as temporally ordered. Thus, we understand that the speaker first got to the bank, then they did their thing, etc. Such interpretations are due to the I-Principle. But note that *and also* does not give rise to that temporal interpretation. Whereas *the front tire was low and disengaged from the rim* could be interpreted as the state first described preceding, and possibly causing the event of the disengagement, *and also*, a more marked expression than *and*, blocks that interpretation.

Difficulties with the GCI analysis

Horn (1984) had originally argued that the reason we can use an indefinite NP such as *a finger* intending it as an identifiable finger ('someone's finger') is that using *my finger* (for example) might create the impression that I only have one finger (and this is why it is uniquely identifiable). But the facts are that the great

majority of identifiable cases of *leg* and *finger* in SBC and LSAC (71/75 of *finger* and 119/124 of *leg*) did occur with an overt possessive pronoun. Needless to say, they are not interpreted as the only leg/finger the person has. So, if the conventional form for an identifiable finger is a possessive NP, we would expect the indefinite form to trigger a Q-inference. This is not what happens invariably. When salient stereotypic assumptions would encourage an identifiability implicature, the speaker can choose a less than maximally informative expression (*a leg/finger*, rather than *one's leg/finger*) without blocking I.

Levinson (2000) draws a contrast between (19.a) and (19.b):

(19) a. ~ I bought a good novel. I talked to **an author** about it (=his (96a)).
b. ~ I bought an old car. **A wheel** was loose.

While the author in (a) cannot be the author of the good novel, the wheel in (b) can be the wheel of the old car. How can this be if both are represented by an indefinite NP? According to Levinson, the reason is that the use of the indefinite NP (*an author*, *a wheel*) Q-implicates that the entity is not uniquely identifiable, but the wheel can still be related to the old car via an I-inference, since a car has four wheels, none of which is uniquely identifiable. Not so for the author. If the author is related to the novel, then s/he is uniquely identifiable, which the indefinite NP blocks. Hence the difference between (19.a) and (19.b). But note what happens if we change (19.a) to make it similar to (19.b):

(20) ~ I bought a good novel written by three people. I talked to an author about it.

The author in (20), although not uniquely identifiable (since there are three of them), cannot be related to the good novel. So the difference between (19.a) and (b) cannot be mechanically explained by reference to forms (definite versus indefinite) and their semantics (whether they are uniquely identifiable). It has to do with the difference between people and wheels (it's more important for us to distinguish between people than between wheels).[18]

Here is another case where sometimes I wins out, and sometimes Q does:

(21) a. ALINA: (H) .. That's why Marcia and Jim **could get up and move**. (SBC: 006).
b. RICKIE: I **could scream** but, (SBC: 008).

Note that whereas *could* in (a) triggers an I-inference (that 'Marcia and Jim got up and moved'), *could* in (b) triggers a Q-inference that 'Rickie did not scream.'

When some form (*a house*, *could get up and move/scream*) can give rise to some I-inference (because this is an easily inferred strengthening), but at the same time, there's a salient alternative to that form, which entails that very interpretation (*his house*) or there is another formulation which entails it (*got up and moved/screamed*), it's not invariably the case that Q defeats I, as Levinson claims. Ad hoc contextual assumptions guide our choice of which principle wins

out. This point has been forcefully made by Relevance theoreticians (see especially Carston, 1988). Compare the original (22) with the slightly modified (23):

(22) A: I've talked to him on the phone. We haven't seen each other since then 'cause he's he's uh fixing up **a house**.
B: Oh yeah?
A: To resell… (LSAC).

(23) ~A: I've talked to him on the phone. We haven't seen each other since then 'cause he's he's uh fixing up **a house**.
B: Oh yeah?
A: To move into…

Of course, only in (23) do we interpret *a house* as 'his house to live in.' The reason why we block this I-inference in (22) is that houses people fix in order to resell are not houses they plan to live in. No grammatical strategy can predict which principle should be applied. Interlocutors must consider the specific context, including speakers' intentions. Such findings cast some doubt about the validity of the GCI category as distinct from PCI.

Appendix 5.3

Elimination of an assumption

(1) PAMELA: #I #mean books,
words.
I mean,
… n– they just become handbooks.
You distill them,
and use them in your own way.
DARRYL: … P **No** P,
… **no,**
.. **no I don't.**
.. **I don't.**
… (H) I,
… I come up with my own ideas about that stuff (SBC: 025).

Here Darryl is trying to have Pamela eliminate an assumption she entertains with relative conviction ("books, words…"). He would like her to replace this assumption with another assumption ("I come up with…").

Relevant information need not be new

Here's an example (repeated from II: 3) where the speaker even indicates that the information in his utterance is not new. The bold-faced proposition in (2) is Relevant nonetheless, since the addressee needs to combine it with the rest of

the information to yield a relevant conclusion (something like 'let's check the facts'). In this case, then, a Given piece of information is repeated in order to make sure that the addressee relies on it in processing the previous utterance:

(2) S: efshar le=histakel bo ve=lirot. **yesh**
(It's) possible to=look at.it and=see. There.is
harey **divuax sofi**.
after.all (a) final report (Lotan: 8).

Constructing the context on the spot

In the following case, a contextual assumption must instantaneously be constructed by the addressee (Pamela):

(3) DARRYL: it it's an awfully,
it's **it's an awfully presumptuous thing**,
PAMELA: but (H),
DARRYL: **to sit down and write a book about [death**,
PAMELA: [d– –
DARRYL: **when you haven't died**] (SBC: 005).

Pamela and Darryl have been discussing a book about death that Pamela is quite enthusiastic about. Darryl is very contemptuous of the book. How does Darryl's contribution in (3) constitute a Relevant contribution against this context? Pamela needs to access as a contextual assumption something like 'The book about death we are discussing was written by an author who hadn't died.' Note that she must actively construct this assumption based on Darryl's utterance, since it is hard to imagine that she had already stored such an assumption independently. Then, considering this accessed contextual assumption together with Darryl's utterance, Pamela will infer (as a contextual implication) that Darryl is conveying that the specific book under discussion is the result of an awfully presumptuous act.

On the basic status of inferences in communication

Sperber and Wilson stress that comprehension is inferential for the main part. Indeed, the interdependence between inferring that an utterance is Relevant and simply understanding it can be seen in the following exchange, where Pamela fails to access the necessary contextual assumptions from her encyclopedic knowledge about foods consumed by people. Had she been able to access this assumption, it would have yielded a Relevant interpretation of Darryl's words. Since she doesn't grasp the Relevance of his words immediately, she seems to not know what he **means** (even though she surely understands the meanings of the words he uses):

(4) PAMELA: (H) .. It's like sometimes you go through things,
… and you come out the other side of them,
you .. come out so much better.

((PART OMITTED))
DARRYL: It's not the way with food.
PAMELA: … **What do you mean**.
DARRYL: …(H) What goes in [one way,
PAMELA: [@@@@@
DARRYL: @doesn't @come @out ### @>
@@@@@@@@@@@] (SBC: 005).

The next example shows that we automatically compute contextual implications from speakers' utterances, and when responding, that's what we relate to. Of course, we may be wrong sometimes:

(5) W: M, are you going to bed?
M: Yes, but I'm not going to sleep right away.
W: So, can I use your computer?
M: Sure (May 11, 2003).

M in (5) assumed that W was interested in talking with her, and saw his question as asking about her availability. She then gave an affirmative reply to W's explicit question, but hastened to cancel the contextual implication from her answer by implicating that she is available. It turned out that W's intention was quite different: if M is going to bed, then her computer will be available.

Processing costs

Once Sperber and Wilson claim that no **unjustified** processing cost must be imposed on the addressee, they pave the way for allowing higher processing costs for politeness, for example, where the effort is justified. And here's a case where the extra processing work achieves (i.e., is justified by) an additional, humoristic contextual effect. The example comes from a columnist for a computer magazine (John C. Dvorak), writing about a businessman named Edward Whitacre$_i$. He starts by criticizing another columnist (Coursey$_j$):

(6) **He$_j$ could have simply come out and said that the man$_i$ is a bonehead$_1$.** And note that **I would never call him$_i$ a bonehead$_2$.** In fact, **Whitacre$_i$ could be a genius for all I know$_3$.**

Unfortunately, **he$_i$ doesn't seem to be a genius$_4$.** In fact, the Whitacre$_i$ quotes I read in that same Business Week article sounded like the comments of **a man who is out of touch with a lot of issues$_5$.** (*PC Magazine*, November 7, 2005).

Note that Dvorak could have simply said something like *Coursey should have said Whitacre is a bonehead* (this seems to be the bottom line of his message). He didn't. Instead, given previous context not here cited that Coursey's words were "a cheap shot" "stoop," (1) implicates that Coursey was perhaps too harsh in his criticism of Whitacre, as if Coursey had said the very strong proposition

that Whitacre was a bonehead. Dvorak continues with (2), seemingly supporting this interpretation (I wouldn't call Whitacre a bonehead, presumably because I see no justification for doing so), except that one detects an ironical tone here (probably because of the *never*, Dvorak's defense of Whitacre seems a possibly ironical overstatement). (3) then leaves the question of Whitacre's boneheadedness open, Dvorak unwilling to commit to any clear statement on the topic. But then, (4) rules out the possibility that Whitacre is a genius. In this context, where the salient alternatives on the table are that Whitacre is either a genius or a bonehead, we are left with the latter interpretation, which is then strengthened by (5). This is a rather convoluted and inefficient way to convey that 'Coursey should have said Whitacre is a bonehead, because he is one.' There is plenty of extra processing effort involved in the interpretation. Sperber and Wilson would presumably argue that these efforts are justified, given the speaker's goal to amuse the readers.

An important assumption that Sperber and Wilson make regarding context is that it is chosen, even constructed, rather than given. In fact, for Sperber and Wilson, Relevance is treated as a given, and context is chosen in such a way as to maximize Relevance. At least this is how it looks from the addressee's point of view. The speaker can trust the addressee to perform this context selection only because she herself makes sure that the context intended by her is easily accessible, actually the most accessible one to the addressee, given her utterance. It is the speaker's utterance (in both form and content) that guides the addressee in accessing the appropriate context. Against this background, consider the following not infrequent calls that (Jewish) Israeli demonstrators for peace receive from (right-wing) passersby

(7) Ya ohavey aravim!
Vocative (derogatory) Arab lovers! (Hebrew)

Now, if the demonstrators interpret the above based on their own contextual assumptions, i.e., that it is natural and positive to love one's fellow men (and women), Arabs included, the contextual implication they will derive is that they are being commended for loving Arabs. This, however, is not the speakers' intention. The speakers' intention is to insult the demonstrators (as is indicated by the derogatory vocative), based on the speakers' contextual assumption, definitely not shared by the demonstrators, that loving Arabs is disgraceful.[19] In other words, in order to interpret the speaker properly, the addressee must take into account contextual assumptions as the speaker imagines them to be. Now, it is usually up to the speaker to take into account the addressee's contextual assumptions and work with those assumptions, but when the speaker is either not capable of doing it (as children are alleged to be), or when the speaker is relying on some consensual contextual assumptions manifest, but certainly not shared by the addressee (as in 7), the addressee must interpret the utterance against a contextual background he does not in fact endorse. Since the addressee is here put to a rather burdening process of interpretation, it might seem that

this utterance is not optimally Relevant. On one analysis the speakers of (7) are indeed not optimally Relevant. On another analysis, one could say that this high processing cost is offset by an additional contextual effect: making the racist contextual assumption salient, and even more so, forcing the liberal to rely on a racist assumption. I suspect the former account is more appropriate in this case.

But (6) and (7) are quite exceptional. It seems that in everyday conversations, speakers try to reduce processing costs for each utterance. For example, they often use more than one utterance to convey what could be construed as one proposition, so as to reduce the amount of new (relatively taxing) information per utterance. Speakers overwhelmingly follow Du Bois' (1987) preferred argument structure constraints which instruct them to avoid introducing a new agent as well as saying something about it within the same clause. The processing effort seems too demanding (see Ariel, 2008: 2.3.1 for discussion and example). Chafe (1994) proposes the one new idea per Intonation Unit constraint. Note that we then find (a) rather than (b) in natural discourse. What (a) conveys in four clauses, (b) conveys in one:

(8) a. LYNNE: (H) #Jorgensen's have a= … g=irl– –
.. or a g– –
.. you know a guy,
they've had a guy= being a horseshoer for,
a long time$_1$ you know?
(H) And they,
are um,
… (TSK) (H) **there's this girl**$_2$,
that's working with him,
for the summer$_3$?
DORIS: Unhunh.
LYNNE: And she's gonna be a ferrier (SBC: 001).

b. ~ **This girl who works with a horseshoer at Jorgensen's for the summer** is gonna be a ferrier.

When the most accessible information is not Optimally Relevant

(9) M: I wanted to talk with you about something, but I can't remember what.
W: ((NOTES SEWING THREADS ON THE TABLE)) It must have to do with thread (joking).
M: Yea, I wanted you to do Maya's jeans (joking).
W: You know, the first interpretation I got was genes with a G. (June 15, 2001, reconstructed from memory).

Given the salience of the sewing threads (not to mention the implausibility of doing anything with someone's genes), M could not have plausibly referred to

genes, but to *jeans*. W nevertheless processed 'genes' (perhaps because of his deep interest in biology), but realizing that this is not what the speaker could have intended as Optimally Relevant for him, he continued to look for another interpretation, and found it. This, then, is a case where the interpretation finally reached is consistent with the Principle of Relevance after all, even though the addressee did not access the intended interpretation immediately. It is still the first interpretation consistent with the Principle of Relevance, even if it is not the very first interpretation that W accessed.

Bridged coreference

Bridged coreferences can be seen as a case of implicated assumptions under Relevance Theory. Consider the following example of bridged (partial) coreference:

(11) The precise nature of the grammatical theory presupposed by relevance theory…forms the subject of several works by **Kempson** (see Kempson, 1988a, 1988b)… (Sinclair, 1995: 513/514).

Sinclair 1995 is a comparison between Asa Kasher's and Sperber and Wilson's pragmatic theories. If Sinclair is to rely on Kempson's writings for learning about Relevance Theory, she must assume that Kempson's articles can be taken as part of Relevance Theory. The addressee needs to recover this implicated assumption either by relying on his encyclopedic knowledge about Ruth Kempson's work, or else, by constructing it on the basis of the speaker's utterance alone, which necessitates it. In this case it is new for him, but not controversial.

The logical status of pragmatic inferences

It is not clear what the nature is of the principles we use for deriving inferences in communication according to Grice. Levinson (1983, 2000) assumes that inferencing is restricted to the nondemonstrative type, because addressees never have enough evidence to prove that their inferences are valid. The following little story seems to demonstrate this point:

(12) An Italian shoe factory interested in selling shoes on some island sends two people to do some marketing research. Two days later the first one sends the following report: It's hopeless. I've been everywhere on the island, and I did not spot a single person wearing shoes around here! The other envoy also filed a report at the same time: The sky is the limit. I've been everywhere on the island, and I did not spot a single person wearing shoes around here! (Ghil'ad Zuckermann, p.c.).

It seems that the same piece of information gives rise to exactly the opposite pragmatic inference for these two market researchers. Sperber and Wilson

accept this truism, but they argue that nonetheless, our automatic and unconscious inferencing during utterance interpretation is (also) guided by a set of deductive rules (the rules of logic, which, given a set of assumptions, automatically derive all the valid conclusions from them).[20] Thus, while Sperber and Wilson assume that the system as a whole is nondemonstrative, they argue that it contains a deductive system as part of it. Contextual assumptions are then subject to deductive rules, which yield contextual implications. The latter, recall, must result from assumptions culled from both the speaker's utterance and the context, depending on their degree of accessibility. What, then, is nondemonstrative about this inferential system? The validity of the contextual assumptions (implicated ones included). How sure can Lewinsky be of the assumption that 'It would be stupid of Clinton to have Lewinsky killed'? How sure can she be of the assumption that 'Clinton is not stupid'? Lewinsky must first upgrade the strength of these assumptions (how confident she is in them) to being true, or probably true, in order to then deduce that 'Clinton will not have Lewinsky killed.' Similarly, the first envoy in (12) adds the contextual assumption: 'People who don't wear shoes must have no need for shoes.' The second envoy adds just the opposite auxiliary assumption, namely, 'People who have no shoes must have a great need for shoes.' We now see how despite the fact that implicated assumptions are not logically based, the process of deriving implicated conclusions can be logical, according to Sperber and Wilson.

Weak implicatures

The implicatures in examples (29) and (30) of the book are strongly communicated, according to Sperber and Wilson. These are the only implicatures that have normally been discussed in the pragmatic literature, they complain. But in addition, they note, we often have a range of more weakly communicated implicatures. Consider again (36), where Darryl says that "it's an awfully presumptuous thing to sit down and write a book about death when you haven't died." We have already discussed the deduced implicated conclusion, namely something like 'the book under discussion is the result of an awfully presumptuous act.' For this implicated conclusion, as well as the implicated premise involved ('this book was written by an author who hadn't died'), Darryl is taken to be fully responsible, as if he directly asserted these assumptions. Should these assumptions turn out to be false, he would be seen as misleading. However, there are additional contextual assumptions, and following them, additional contextual implications that Pamela might derive from Darryl's utterance. Perhaps that 'the book is bad,' that 'Darryl wouldn't consider reading this book,' that 'Pamela shouldn't be reading this book,' that 'Darryl doesn't think the book is worth a discussion even,' that 'being interested in this book reflects badly on Pamela,' etc. Note that unlike the implicatures mentioned above, these are not as determinate. They are all related, but we can conjure up a rich array of them, rather than pin this cluster of impressions down to one specific implicature. Indeed,

we cannot be sure that Darryl intended any one of them specifically. This is a normal situation, argue Sperber and Wilson, and it has recently been empirically supported by Hamblin and Gibbs (2003). Gibbs reports on an experiment in which subjects were presented with utterances where speakers generated an array of implicatures. The subjects indicated that they thought that the speaker actually intended a set of implicatures, rather than one determinate implicature. The intriguing point that Sperber and Wilson make about these weak implicatures is that they are derived by the same mechanism, except that the assumptions used in their derivation are not as uniquely identifiable, nor are they very certain.

Underdeterminacy may lead to misunderstandings

(13) CLIENT: ani carix (an) tor
I need appointment
CLERK: le=mi?
For who(m)?
CLIENT: li
For-me
CLERK: le=mi, le=eize rofe?
For=who(m), for=which doctor?
CLIENT: doctor maller.
Dr. Maller (Hebrew, January 24, 2006).

Obviously, the client intended the clerk to construct the proposition 'I need an appointment with Dr. Maller for myself.' He assumed the clerk would be able to infer the information he left out. In most cases speakers can indeed trust their addressees to complete their underdetermined linguistic strings into full conceptual representations.

Constructing the explicature

(14) It's not a story of mutual and true love between a mature (male) youth and a sixteen year old (female) youth, but a married man, 35 years old at the time when the events happened, who horribly takes advantage of his influence and the hierarchical dependence between him and the two (female) youths
kedey le=kayem yaxasey min im shtehen
in.order to=have sexual relations with the.two.of.them
be=et u=ve=ona axat,…
at=one and the same time… (Hebrew, *Yediot Ahronot,* January 25, 1996).

What does it mean for the (35-year-old) teacher in (14) to have sexual relations with the two students at the same time? The readers need to infer that what is meant is that he was having sex with each of them (separately) within the same

period of time, not that the three of them ever had sex together. Failing to infer this bit of information means failing to specify what the truth conditions for the proposition in (14) are.

Justification for communicating by inference

Note that just as the neo-Griceans feel obliged to offer an explanation for why we sometimes communicate via inferred rather than via explicitly expressed interpretations, so too Sperber and Wilson explain the existence of implicatures. Like Levinson (2000), they too assume that some inferred interpretations are "cheaper" to process than explicitly stated ones (inferencing is almost instantaneous, they believe). This is probably always true for implicated assumptions. But the problem presents itself (also) in a different fashion for Relevance Theory. Sperber and Wilson also address themselves to inferences which are actually costly. Inferences involved in deciphering indirectness do require more processing effort, as compared to a direct utterance (as in (6) and (7) above). Hamblin and Gibbs (2003), who compared the processing time of utterances which did and did not require drawing implicatures, found that when implicatures were necessary, processing time was longer. Since according to Relevance Theory every utterance comes with a presumption of Optimal Relevance, the question is how come speakers implicate rather than explicitly communicate their messages sometimes. Superficially at least, this seems to be a violation of the Principle of Relevance.

The answer is that the extra processing cost is offset by additional contextual implications. Recall that Relevance depends on some balance between contextual implications and processing cost. If so, increasing the processing cost in the service of adding contextual implications does not count as imposing an unjustifiable processing cost on the addressee. Indeed, we have examined a few cases above where we verified that there are added contextual implications due to the speaker's indirectness. We have already analyzed them for (6). For (4), it is the added humorous effect which Darryl is after, and in (29) in the book, by being indirect, Tripp provides Lewinsky with the **ground** on which she bases her belief that 'Clinton will not have her killed.' Supplying the ground makes the conclusion based on it more convincing. For (30) in the book I suspect that the Relevance-theoretic explanation is not different from Levinson's. The speaker would have had to utter a lengthier utterance, something like 'So he has a mother-in-law, whom he will use as a straw man for purchasing shares illegally.' Most probably, this complex utterance would not be less demanding in terms of processing effort.

Faithfulness instead of truthfulness

Faithfulness is based on an interpretive **resemblance** between representations rather than on identity. Crucially, propositional forms resemble each other to the extent that they share analytic (related to content) and contextual implications

(derived by relying on auxiliary contextual assumptions). Hence, for Sperber and Wilson, every communicative act comes with a guarantee of faithfulness rather than truthfulness, which means that the proposition communicated is an Optimally Relevant representation of the speaker's thought, hope, fear, etc. To be sure, in order to be Relevant the speaker must be seen to endorse what she is saying, and addressees do take speakers to have produced true explicatures (and implicatures), but they assume so because otherwise no cognitive effects can follow from the speaker's message: what follows from a false assumption? Wilson and Sperber (2002) agree with Grice that "false information is not an inferior kind of information; it is just not information" (Grice, 1989: 371). Thus, that the speaker's message (her explicature, rather than the literal meaning of her utterance) is true actually follows from the Principle of Relevance, and no extra maxim is required. When the information is Relevant, we don't in fact mind if it is false. This happens when the speaker's utterance is literally false, because she has spoken loosely. For example, if the literally overstated *Holland is flat* is Relevant enough (e.g., when it yields a contextually Relevant implication that 'even an unfit person can ride a bike there'), the fact that it is not strictly speaking true is beside the point.

The importance of sociocultural expectations

Once we underscore the importance of the sociocultural baseline in determining pragmatic interpretations we can also explain cultural changes in what's considered informative enough, and what's considered more important (Quality or Quantity or politeness). Consider what (little) information doctors used to tell their seriously ill patients thirty to forty years ago (in Israel). What was considered adequately Relevant information then would not satisfy patients today. And certainly we no longer expect doctors to lie to patients (so as not to hurt them with bad news). Now, of course, these expectations can be incorporated into the three theories, since they all relativize interpretations to specific contexts. But we should remember that the theories only work given a set of sociocultural expectations which we are nowhere near spelling out yet.

Appendix 6.1

Encoded procedures involved in interpreting referring expressions

Note that zero reference (a salient gap), although lacking conceptual content, does carry a procedural code nonetheless: an extremely high degree of accessibility. Here's a relevant example:

(1) … **he**$_i$ decided not to take just one,
((PART OMITTED))
and then **0**$_i$ put the basket on the front of his bike.
… And **0**$_i$ made off with the whole basket of pears (Chafe, 1980: 312).

The zero reference here is used for the protagonist of the story of the Pear film. To see the difference between 0 and an overt pronoun, where the former encodes a higher degree of accessibility, consider the following (cited in Ariel, 1990: 120). Note that the first 0 form refers to the writer, her husband and her friend, whom they are planning to meet. Not so the later overt pronoun:

(2) $\mathbf{0}_{i,j,k}$ noxal yaxad… ve=ulay gam
(We) shall.eat (1st pl) together… and=maybe also
$\mathbf{0}_{i,j,k}$ netayel… $\mathbf{0}_{i,j,k}$ nihiye yaxad
(we) shall.journey (1st pl)… (we) shall.be (1st pl) together
ad… ve=az **anaxnu**$_{i,j}$ naxzor…
till… and=then we shall.go.back (1st pl)…
(Private letter, February 1987).

The background for this paragraph makes it clear that the plan concerns i, j and k, referred to by first-person plural forms. Since this is the most accessible antecedent here, the writer refers to them using a 0, but switches to an overt 'we' pronoun when intending to refer only to herself and her husband. This sub-group is less accessible (given this context), and hence requires a lower accessibility marker. The interesting point is that there's no conceptual difference between *anaxnu naxzor* 'we shall go back-1st pl' and *naxzor* 'shall go back-1st pl.' The verb agrees with the appropriate antecedent anyway, so the overt 'we' pronoun does not seem to add anything. Nonetheless, although conceptually superfluous, this pronoun is what signals to the reader that the referent is not the maximally accessible antecedent (the threesome), but some other antecedent which is somewhat less accessible (the couple only). It is the conventional association of 0 with maximal accessibility and pronouns with only high accessibility that accounts for the interpretation of (2). These associations between referring expressions and degree of accessibility are not only context invariant, they are conventional (for the most part), and even arbitrary to some extent.[21] Thus, addressees are well equipped with encoded procedural meanings when they set out to interpret speakers' utterances.

The need to combine codes and inferences in interpreting referring expressions

(3) a. haim **oxley agvaniot** she=**0**
Question Particle (will) eaters.of tomatoes who/which=
hushbexu be=ezrat genim enoshiyim
were.improved by human genes
yexashvu kanibalim?
be.considered cannibals? (Hebrew, *Haaretz*, October 17, 1996).

b. AD: ve=axshav naavor le= nose axer.
And=now (let us) shift to=(a) different subject.
taxlifu **oto** kibinimat.
Replace him damn.it (Hebrew, November 3, 1997).

c. ALINA: … (H) But then ~**Liza**$_i$ wanted ~**Antonio**$_j$ to see Mom's house.
.. So **they**$_{i,j}$ go barging in on ~Mar.
.. So Mom felt obligated,
to ask **those two idiots**$_{i,j}$ to lunch (SBC: 006).

The grammar can't help us decide which NP is the subject of 'were improved' in (a). In theory, it could either be 'the eaters (of the tomatoes)' or 'the tomatoes.' It is our general knowledge that tells us that it's the tomatoes that are here intended. Similarly, (b) and (c) each contain a violation of the accessibility-dictated choice of referring expressions. Both constitute special uses intended to trigger special pragmatic effects. 'Him' in (b) is too high an accessibility marker for a new topic (the then prime minister). Note that AD is giving a speech following his winning a prize for best Israeli movie actor. The audience is forced to find a highly accessible entity, about whom 'replacing' would be relevant, indicated as irrelevant to the previous topic. Many encyclopedic assumptions must enter the picture, including our presuppositions about AD's political views. (c) contains the opposite violation. *Those two idiots* is too low an accessibility marker for Liza and Antonio, who have just been referred to by the high accessibility marker *they*. Of course, Alina has a different goal in using the epithet. She wants to achieve not just a referential act, but also a predicational act. All these interpretations combine decoding with inferring.

Appendix 6.2

Consider the syntactically identical questions in (a) and (b):

(1) a. CUSTOMER: **You have coffee to go?**
SERVER: Cream and sugar?
CUSTOMER: Yes please.
SERVER: That'll be 50 cents.
CUSTOMER: (Pays).
b. CUSTOMER: **You have 1986 Corvettes?**
SERVER: Convertibles?
CUSTOMER: Yes please.
SERVER: That'll be 30 thousand dollars.
CUSTOMER: (Pays) (from Meritt, 1976, cited by Schiffrin (1988: 262).

As Schiffrin (1988) argues, only (a) is an acceptable exchange. The customer's initial question is interpreted as a pre-request in (a), but cannot be so interpreted in (b), since there is a difference between buying coffee to go and purchasing a car. This difference is part of our world knowledge, which we must bring in when interpreting (a) and (b). In other words, in order to decide whether a specific question is to be interpreted as a request or not, inferencing must be relied upon. Unlike encoded illocutionary forces, inferred ones crucially depend on context.

The role of context-based inferences in determining the intended speech act is also obvious in the following. Recall Darryl's *no* (in I: 2.j), which actually conveys agreement with Pamela's *You don't* ['want to hear anything out of a book…']. The addressee must realize that this *no* is merely an echoing of a previous negative, rather than a negative marker. The speaker is not denying anything. He is actually confirming Pamela's words. But all this is not encoded, of course. The addressee arrives at this interpretation by way of inference. And moving away from familiar territory, based on Wolof abusive speech, Irvine (1993) has argued that indirectness in insults can be achieved by more than one means. Making the propositional content inexplicit or vague, euphemistic or explicitly mitigated is one (encoded) way. But speakers can also mitigate the impoliteness involved in acts of insulting by being vague about whose voice they are presenting (maybe not their own), and even about who the insultee is. These are all indirect strategies aimed at helping addressees draw certain inferences about (mitigated) illocutionary acts. As such, they are pragmatically, rather than grammatically, expressed.

Appendix 6.3

The functions of *literally* in determining interpretations

In the following example, where the librarian wants to make sure that the meaning of *a minute* is 'one minute' (60 seconds) and not 'a short time' (i.e., longer than one minute), she directs the addressee to this interpretation by using *literally*:

(1) WOMAN IN LIBRARY: D'you have a minute?
LIBRARIAN: **Literally**, one minute (October 21, 1999).

Literally encodes that the speaker intends *one minute* to have its direct, acontextual meaning (see Israel, 2002 but see section 8.7 in the book for a variant analysis by Rachel Giora p.c.).[22] These are then cases where the ad hoc meaning is determined by relying on a coded procedure.

Interpretations determined either grammatically or pragmatically

Choices regarding 'exactly' versus 'about' readings of lexical meanings too are either grammatically indicated or pragmatically inferred. Here's a case where the speaker encodes an 'about' reading:

(2) Our flying time to Phoenix today is going to be **approximately** five hours and one minute (America West flight, February 2, 2006).

Of course, in the absence of *approximately*, interlocutors would have assumed an 'exactly' reading here, based on their knowledge of standards of precision relevant for flying times. Dubois (1987) shows how imprecision in numbers (in papers delivered at scientific conferences) is at times encoded and at times

inferred. When scientists used *close to* or *about* they **encoded** an imprecision. But when they used round numbers, such as *seventy six minutes* (p. 830), and even numbers which had one or two decimal places, their audience knew that rounding was involved, even without a linguistic cue to that effect. Imprecision was in this case **inferred**, based on the knowledge that experimental results are hardly ever round numbers.

Appendix 6.4

Originally (Frege, 1892; Keenan, 1971; Strawson, 1950, 1964/1974), presuppositions were considered semantic. They were defined as propositions which are entailed by some proposition as well as by its negation (interrogative, etc.). Presuppositions constitute a precondition for the sentence containing them to express a truth verifiable proposition. Consider the presupposition 'I caught that' (i.e., the bounced ball) in:

(1) PHIL: (H) .. Please bounce it back now.
((PART OMITTED))
PHIL: (H) That was –
.. I'm **surprised** I caught that (SBC: 027).

Note that even if we negate Phil's last proposition (*~I'm not surprised that I caught that*), the presupposition still holds true. In interactional terms, if Phil's audience hadn't watched him catch the ball they would have found his last utterance inappropriate. They would not have been able to determine whether it is true or false that he was surprised that he caught the ball.[23]

Certain linguistic expressions (e.g., factive verbs such as *be surprised*, syntactic constructions such as *it*-clefts) were identified as presupposition triggers (because negation seemed to have no effect on parts of their meaning, the presupposed part). Here is an example with two factive verbs:

(2) Mr. Kristol led by example, using The Public Interest to promote supply-side economics, a doctrine whose central claim – that tax cuts have such miraculous positive effects on the economy that they pay for themselves – has never been backed by evidence. He would later **concede**, or perhaps **boast**, that he had a "cavalier attitude toward the budget deficit." (*New York Times*, August 5, 2005).

Interestingly, while the stance expressed by *concede* and *boast* is drastically different, what remains intact under the substitution of the first by the second is the presupposition that he had a "cavalier attitude toward the budget deficit."

However, cases do exist where presuppositions are not maintained under negation (they are canceled), i.e., cases where the speaker is not taken as committed to the truth of the presupposition, despite the occurrence of a presupposition triggering form. Here's one such case. Note that the writer of (3) is not seen as contradicting himself even though the definite description *the shelters*

presupposes the existence of shelters but the *because* clause denies the existence of such shelters:

(3) Ha=toshavim gam lo racim la= miklatim be=
The=residents also (do)not run to.**the=shelters** (at=)
xol paam she= matxila hafcaca, pashut mi=shum she
each time (that)= (a) bombing starts, simply because (that)
ein miklatim bi=xfareihem.
there.are.no shelters in=their:villages (Hebrew, *Haaretz*, October 27, 1995).

At first, specific **semantic** conditions were formulated to account for such cases (see Karttunen, 1973 about plugs and filters, which can cancel presuppositions). It was soon realized, however, that pragmatic, i.e., contextual factors (rather than semantic factors) can determine cancelability, i.e., whether a speaker is held responsible for propositions she encoded as presupposed.[24] Recall that cancelability is a prime criterion for classifying phenomena as pragmatic, especially if this cancelability is not accountable by grammatical rules. If so, presuppositions must belong in pragmatics (Grice, 1981; Levinson, 1983).

How should we classify presuppositions under a code/inference distinction? What we need to address is whether some interpretation is encoded, in which case it is grammatical, or whether it is inferred, in which case it is pragmatic. Recall further that interpretations associated with specific linguistic forms need not be assigned a coded/inferred status en bloc, i.e., some aspects of these interpretations may be coded, while others are inferred. In other words, under this approach, we do not necessarily have to state what the grammatical/pragmatic status of "presuppositions" as a whole is. Recent proposals have indeed analyzed presuppositions as involving both grammatical and pragmatic aspects.[25] For the most part, they see presuppositions as encoded (entailed) for affirmative sentences and pragmatically implicated for negative sentences (because entailments naturally don't survive negation). Ariel (2008: 2.1) argues for a slightly different "mixture" between code and inference for presuppositions.

The idea is that when a speaker uses a "presupposition-triggering" linguistic expression she encodes that the information under its scope (the content of the presupposition) is assumable as **accessible** (see Ariel, 1985, 1990: 8.3; Prince, 1978).[26] Now, on what grounds can we assume that some piece of information is accessible? One good basis for such an assumption is if it is true, i.e., actually believed (or believable) by the interlocutors, because it forms part of their encyclopedic knowledge even prior to the processing of the current utterance. But, this is not the only legitimate basis for assuming an accessible status for some information. Information is also accessible if it has just been mentioned by somebody. In this case, it does not necessarily reflect the speaker's or the addressee's belief. It is merely familiar. But familiarity too entails accessibility. Here is an example where *our son* refers to an accessible entity, although not one that the speaker or the addressee believe to exist. The example is taken from the

movie *Moon over Sun*. An unrelated man and a woman are traveling together in Taliban-controlled Afghanistan, where women were not allowed in public without a male relative. When the man thinks he sees a patrol man, he proposes that they pretend to be married with two children. He then proceeds to rehearse everybody's names and, finding it hard to remember one of the names, he turns to the woman and asks:

(4) What's the name of **our son**?

Our son is a familiar discourse entity for the interlocutors. But it does not stand for a referent they believe to exist. Since researchers conflated the accessibility condition on presuppositions (*our son* denotes an accessible discourse entity) with the attribution of a true belief ('there is a son who is ours'), the inapplicability of the latter (in cases where the speaker or the addressee were not seen as committed to the presupposed assumption), was seen as a cancelation of the presupposition. This line of argument is incorrect.[27] Cancelation of the truth of the assumption is not tantamount to a cancelation of its accessibility. These two interpretations do not behave uniformly. The "presupposition" in (4) is not canceled: *our son* does refer to an accessible discourse entity. A belief in the truth of the relevant existential assumption, however, is not inferred in this case.

Instead of a uniform analysis for "presuppositions," presupposition triggers should be analyzed as accessibility markers (grammatical codes), leaving the attribution of a belief in these presuppositions to a **pragmatic** inferential process. This means that for a presupposition trigger to be used appropriately, some kind of accessibility must be attributable to the information marked as presupposed. Analyzed in this manner, factive verbs, *it*-clefts and *harey* (see also Chapter 9) **encode** that the relevant information under their scope is accessible. This much is uncancelable.[28] Note that such a theory can account for the seemingly puzzling fact that speakers use encoded presuppositions both when they are committed to a belief in them and when they are not. "Canceled" and "surviving" presuppositions are thus shown to carry the same encoded (grammatical) function: accessibility. This is a positive result in that the coded bit of meaning is invariant. "Canceled" and "surviving" presuppositions differ only with respect to the inferences they give rise to concerning the speaker's commitment to them.

Now, some presupposed material seems to be first-mention pieces of information, which are moreover not held as true by the addressee prior to the presupposing utterance. How can we justify the claim that accessibility is encoded and hence obligatorily imposed on presuppositions then? Many have hastened to give up the accessibility condition on presuppositions because of the acceptability of expressions such as *my sister*, *her husband*, *my aunt's cousin*, *my dog* on first mention, without the addressee being aware ahead of time that such entities exist (see Burton-Roberts, 1989; Grice, 1981; Horn, 1996; Lewis, 1979). However, as Prince (1978) convincingly argued, first-mention relational NPs

such as the above, as well as *the president of Mauritania*, *my car* and *the shelters* in (3) above, present entities which are stereotypically assumable by speakers. Note the following, where the speaker herself is not committed to the existence of a boyfriend:

(5) ((C has a distinct black and blue mark on her arm))
C: People will think **my boyfriend** hit me.
M: Is there a boyfriend?
C: No. (June 19, 2009).

C is at the age (26) where a boyfriend is stereotypically assumable. She then attributes this stereotypical assumption as a basis for an appropriate presupposition by hypothetical speakers. These first-mention "presupposed" entities contrast with nonstereotypical entities which cannot be presupposed 'out of the blue' (e.g., *my fire engine*, used by someone who isn't a firefighter). It is no wonder, then, that the counterexamples in the literature concern NPs such as *my sister*.[29] In first-mention "new" presuppositions, it is a stereotypic, rather than a specific assumption that is "presupposed." But it is assumable as accessible, based on our stereotypic assumptions about the world.

Next, once the speaker has used a presupposing expression, the addressee assumes that the "presupposed" information is accessible. It is then up to him to determine what the source of the accessibility is. This assignment is achieved by pragmatic inferencing. Often, but not always, the addressee reasons that it is indeed a belief in the truth of the presupposition that is attributed by the speaker to him (i.e., that it is an assumption stored in his encyclopedic knowledge). These are the prototypical cases where some piece of information is both accessible and a true belief. But this is not necessarily the case (as we have seen in 4). Note that for the most part, it is merely inference that guides the addressee's choice of accessibility basis. But the speaker can guide the addressee in the right direction, to canceling, for example, by using specific linguistic expressions, e.g., negation, or "deferrers" such as *the purported* (see Prince, 1978), as in:

(6) But there is reason to believe that the **purported** semantic distinction between factive and semi-factive is incorrect. The difference between factives and **so-called** semi-factives is said… (Kempson, 1975: 128 cited in Prince, 1978. ex. 611).

Note that *purported* and *so-called* do not cancel the accessibility of the concept 'the distinction between factives and semi-factives.' They only indicate that the speaker is not committed to the belief that there is such a distinction. Accessibility and truth are then separate interpretations, bearing distinct cognitive statuses for presupposing structures. The same differential interpretation can be seen in the following case, where the accessibility (familiarity) of *that woman* is based on the hypothetical *if* clause, but no true belief is assigned to the woman's existence:

(7) Well if we have **another woman Prime Minister** in the near future **that woman** would have to rise, in the Conservative Party at least, from a position outside the Cabinet, because there are no women in the cabinet. (Bill Heine radio phone-in).

In fact, commitment to beliefs is sometimes deduced by the addressee even in the absence of a formal marking by a presupposition trigger (as in example II: 4.b, here repeated:[30]

(8) FLAG SELLER: Would you like to buy a flag for the Royal National Lifeboat Institution?
PASSERBY: No thanks, I always spend my holidays with my sister in Birmingham.

The flag seller here can infer that the passerby believes that one need not contribute money to a charity one is not likely to benefit from (see II: 5.a–e for the whole list of assumed presuppositions).

The next example demonstrates that addressees also use inferences in their decision regarding who to attribute the presupposed assumption to:

(9) hi, she=yedioteha al odot olam ha=shedim rabu
She, whose=knowledge about the.world.of devils was.greater
mi=yedioteha al olamam shel bnei adam hikira
than=her:knowledge of the.world of mankind, **recognized**
be=xax she=ein hi dara be=gapa ba=bayit ha=gadol,
(in this) that=not she live alone in.the=big house,
u=ve=mukdam o bi=mʔuxar lo yadiru
and sooner or later not will.keep.away
ha=shedim et raglehem min ha=xadarim ha=yeshanim…
the=devils ACC their.legs from the=old rooms…
(She… recognized that she does not live alone… and that sooner or later the devils will not keep away from the old rooms, Nagib Mahfuz, *A House in Cairo*, p. 9, as translated into Hebrew).

Here the belief about the devils is only attributable to the heroine. Crucially, it is not attributed to the narrator/speaker.

We must then distinguish between material being presupposed as **accessible** and **beliefs attributable** by inference to a speaker and/or addressee (see Prince, 1978, and following her, Ariel, 1985). The first aspect is grammatically encoded for the conventional presupposition triggers, but the second is pragmatically inferred. Interpreting presuppositions in context, then, involves both decoding and inferring. In (8), the passerby is presupposing (taking as true) that one does not contribute money to a charity one is not likely to benefit from. But of course, there is no linguistic code pointing to the truth or to the accessibility of this assumption. And in (9), despite the factive verb, and despite the lack of deferrer, the speaker is not committed to 'she does not live alone….' So, while accessibility

is encoded by certain linguistic expressions, commitment is inferred. Hence, presuppositions straddle both sides of the grammar–pragmatics fence.

Appendix 6.6

The encoded function of *anyway*

Lenk's (1998) analysis shows *anyway* as **encoding** its conversational function: the closure of a segment. The closed segment can be a digression from the topic (as in (1)), or any topic the speaker wishes to change:

(1) A: They're from California. They live in L.A. Their father is the editor of a motorcycle magazine. The biggest motorcycle magazine, whatever it is.
B: Cycle News?
A: Is that what it is? Cycle News?
B: I was still working in the post office when uh, that magazine was coming through.
A: Uh huh.
B: Used to be Cycle Guide.
A: **Anyway**, it's a big, big motorcycle magazine and their mother is the Japanese lady you saw in the pictures who is an art director, art director for the motorcycle magazine too (LSAC).

Thus, even though the function at hand is crucially related to discourse structure, the way we arrive at the appropriate interpretation is by retrieving the coded meaning of *anyway*, rather than by inferring it.

Syntactic constructions marking sentential topics

Lambrecht (1980) argues that French left-dislocated NPs must be sentential topics, and hence are not really sentential arguments, which explains why they are not marked for case (note the use of *moi* 'me,' rather than nominative *je* 'I'):

(2) ~ **Moi**, je- mange…
Me, (Topic) I-(Topic agreement marker) eat… (Lambrecht's ex. 1).

The fact that such constructions are reserved for sentential topics also accounts for the nonacceptability of left-dislocated indefinite NPs (nongeneric indefinite NPs do not normally constitute sentential topics). Another structure that is sensitive to sentence topicality is the relative clause construction. Kuno (1976) has argued that in appropriate relative clauses, the head is the topic, which the relative clause comments on (see also Kuno, 1987: 23–27). Here are the examples already quoted in 2.2.2 (II: 27.a):

(3) a. ~This is the actress that I bought a book about.
b. ~*This is the actress that I left home a book about.

And this is my attempt to play on a real conversational example:

(4) a. DARRYL: … That's because I have **my own ideas** about it,
I guess.
That I'm .. pretty comfortable with (SBC: 005).
b. ~?? That's because I have **my own ideas** about it, **that I lost my notes about.**

The idea is that 'I left home a book about'/'I lost my notes about' are not so plausible as comments on 'an actress' and 'my own ideas' (the heads of the relative clauses) as the respective topics. Hence the lower acceptability of the (b) sentences. If Kuno is right, then relative clause heads must constitute sentence topics (a coded association). Thus, while sentence topics are inferred for the most part, they are also grammatically relevant sometimes.

On the need to combine codes with inferences

Consider again example III: 21.b:

(5) REBECCA: … Let's just go through,
.. um,
I– I have your statement,
but I just want to .. have you tell me, (SBC: 008).

Although *but* encodes a contrast, exactly which propositions are contrasted often has to be inferred. In this case, the contrast is between the request to tell Rebecca, the prosecuting attorney, something and the conclusion supported by the fact that the attorney already has the statement (i.e., that she has the information requested). We normally only request information that we do not already have. Here is another example of the same sort:

(6) RICKIE: .. the only thing he changed this time,
is um,
(SNIFF)
he wore a new bow tie,
and uh a different bag (hx),
.. **cause** he always had a bag, (SBC: 008).

Note that *cause* semantically encodes that *he always had a bag* serves as a reason for something previously said. But what is it a reason for? Surely not for having a different bag. Rather, it is a reason for the witness to be mentioning the different bag. Understanding this requires inferencing. It is nowhere encoded.

Appendix 8.1

Insults are clearly impolite speech acts, which may carry serious social implications. Indeed, when Alina says:

(1) ALINA: fuck you,
asshole, (SBC: 006).

she is not actually addressing the man her insult is directed to (she's here talking to her cousin Lenore). She probably would not have dared to say this to him face to face. Different cultures have different strategies regarding insults. Pragmatists, sociolinguists and anthropological linguists have therefore been interested in the topic. As we see below, insults show that the problem of the monolithic approach repeats itself at lower levels of analysis: it's not just that all speech acts en bloc cannot be considered exclusively pragmatic (6.2), but also any one individual speech act (e.g., insulting) cannot be given a monolithic analysis. Instead, some aspects are coded, some are inferred.

We begin with grammatical (encoded) aspects. Alina uses American English encoded curse words in (1). Similarly, that *gay* is used by pre-adolescents to convey 'lame' is (also) a fact about English (which may be spreading to other languages), just like the fact that Spanish *cabrón* 'cuckold' often conveys the metaphorical 'bastard' (in addition to its literal meaning) is a fact about Spanish (Mateo and Yus Ramos, 2000). The ability to treat expletives as interjections syntactically (as in *I saw those **fucking** good-looking boys again yesterday*) (Mateo and Yus Ramos, 2000: 103) is specific to English. Note that although one would expect that only anti-women societies would have the concept 'bastard,' and moreover turn it into a general insult, and only homophobic societies would turn a term for homosexuals into a general negative word, we need to distinguish between the relevant extralinguistic knowledge (the ideology that "gays are lame," which motivated the semantic change of *gay*) and the synchronic linguistic competence involved (knowledge of what *gay* means for certain people, i.e., 'lame').

If grammar is involved, partly arbitrary linguistic variability should be expected. Indeed, unlike English *bastard*, Hebrew *mamzer* 'bastard' is only used positively (even if somewhat begrudgingly), and Spanish *zorra* 'foxy' conveys 'whore, bitch or wicked,' and not 'attractive, sexy, clever,' as English *foxy* (Mateo and Yus Ramos, 2000). The counterpart of 'vagina owner-masculine' is a general Hindi insult: the referent is said to be 'feminine, an impotent' (Hall and O'Donovan, 1996). This is a conventionalized expression, which, moreover, only exists in masculine form (no 'vagina owner-feminine'). Interestingly, however, in the sub-culture of Hindi hijras, the same expression is also used as an insult, but in this community the insult does not lie in the femininity or impotence ascribed to the man so insulted, but in the maleness ascribed to him. Hijras are (biological) men, who consider themselves neither male nor female. In this case, then, the insulting content of the same expression varies in the two communities.[31] In young people's colloquial Hebrew, on the other hand, *kuson* 'little vagina-masculine' is used as a compliment for a man with the meaning of 'good looking, sexy,' coined in analogy to *kusit*, 'little vagina-feminine,' which is the counterpart feminine

compliment (Hadas Nachmias, p.c.). Insults, then, like most communication, involve linguistic codes.

Although many expressions are encoded for insults, insults are often inferred. Mateo and Yus Ramos (2000) address translators in their article about insulting. They therefore adopt a monolithic approach to the subject, and focus on a set of conventional expressions. Still, while the intention to hurt is common to insults (1), Mateo and Yus Ramos identify two other potential motivations behind the use of conventional insults: (2) an interactive goal of creating camaraderie (they claim that even the worst insulting expression can be used to reinforce social bonding), and (3) even praising the addressee (as in *lucky bastard*). It seems likely that the intention to insult is encoded for conventional insulting expressions, the other two uses constituting inferred nonliteral uses of curse words.

Culture is very much implicated in insults. Mateo and Yus Ramos explain the different affect of English *bastard* and Spanish *bastardo* (much weaker) by reference to the cultural norms attached to the interpretations of these insults in the two speech communities. Irvine (1993) (an anthropologist) emphasizes how grammatically unconventional insults can be, as well as how culture-bound they are. Her analysis demonstrates clearly that contextual inferencing, grounded in the specific culture, is heavily involved in interpreting insults (in Wolof, Senegal, but obviously the same is true for all languages everywhere). For instance, allegations of witchcraft constitute the harshest insult for Wolofs. Social factors have a role to play too: what counts as an insult may depend on the social status of the speaker and the "insultee," for example, as in the following:

(2) I'm not insulting X-S-. She's kin (Originally Wolof, Irvine's ex. 4b).

The wording of (2) certainly does not constitute a (coded) insult. Rather, since the speaker is of much lower rank than X-S-, her mere saying that they are kin is insulting to X-S-. Inferencing is also crucial in the following, where a traditional saying is used to indirectly rebuke JTI:

(3) K: (Requests to borrow a radio)
JTI: (refuses, saying she needs to listen to the news very soon)
K: (moving off) When somebody asks for trousers, their owner puts them on (Originally Wolof, Irvine's ex. 5).

As Irvine explains, the insult only goes through if we use inferences to equate between the radio and the trousers, K and somebody and JTI and the trousers owner. Irvine also shows how insults can be mitigated in variety of ways: by making the content ambiguous or euphemistic or linguistically mitigated, by asserting that the speaker is supposedly not the insulter, or that the addressee is not the insultee (or not explicitly so, actually). These are all extragrammatical strategies triggering inferences in insult interpretation.

Appendix 8.2

Encoded stance markings: additional cases

Recall II: 17, which showed the Hebrew *ein ma l=asot/ein ma l=daber* 'there's nothing to be done'/'there's nothing to say' distinction as **encoding** negative and positive attitudes respectively, and II: 19 with the English exclamative *some* ("those are **some** ferocious numbers"), which directly **encodes** a speaker's subjective stance. And here's a case where stance is directly grammaticized. Tlacolula Valley Zapotec has two morphemes for indicating irrealis/future (Munro, 2007). One of them (*z+*) in addition indicates speaker's certainty that the event will indeed take place (Munro translates it as 'surely'). While this morpheme conveys a speaker stance, the interpretation is integrated into a grammatical morpheme, which simultaneously encodes both 'irrealis' and 'certainty.' There is no justification for assigning one of these interpretations ('irrealis') grammatical status, and the other ('certainty') pragmatic status, just because it pertains to a subjective stance. The two function in exactly the same (grammatical) way.

The following case, analyzed by Verhagen (2005), shows how minimally different expressions may have different grammatical/pragmatic statuses. *Quite the contrary*, which marks a speaker's strong disagreement with another, has a specific grammatical requirement.[32] It must follow a negative sentence, where the relevant proposition (which *quite the contrary* predicates on) has already been denied. Indeed, all twenty such occurrences in the BNC complied with this requirement.[33] Here's one such case:

(1) There was certainly **no** complacency among Labour's national leaders, **quite the contrary** (BNC: *Britain on the Breadline.* Keith Laybourn, 1990).

Now, one might argue that this requirement is only reasonable, and hence, not a grammatical fact. Given that *quite the contrary* occurs when a rather strong rejection of some contextually salient proposition is intended, it makes sense for speakers to underscore the denial (hence the double marking, first by negation and then by *quite the contrary*). This may very well have been the motivation behind the rise of the convention, but even if it was, the requirement is now a grammatical convention, argues Verhagen. Indeed, similar expressions are not restricted to this pattern. For *on the contrary*, only the majority of the cases (fourteen out of seventeen in LSAC + BNC) occurred following negation, and for *the other way around*, nineteen out of twenty LSAC cases actually did not follow negation, as in:

(2) A: Okay so you went down forty but up a hundred so you went up sixty?
B: No
C: Wait, **the other way round** it's down a hundred, up forty (LSAC).[34]

In addition, Verhagen notes that while the Dutch counterpart expression, *integendeel,* behaves just like English *on the contrary*, the Afrikaans descendent,

inteendeel, does not impose the first-step denial. So, it's not always the case that when an outright denial is intended a two-stage denial is necessary, but *quite the contrary* conventionally imposes this restriction. This is no doubt a grammatical fact, despite the clear interactional motivation behind it.

Appendix 8.3

Nonliteral references

We have alluded to special referential patterns in Chapter 2: the Hebrew VIP *mi* construction (2.2.2), and the sex-differential introductory patterns (2.1.3). Note that although both make crucial use of social categories, the first is grammatical, the second pragmatic. VIP *mi*, I have argued, is restricted to people considered VIPs, and an encoded form–function correlation is involved. No nonVIP can be introduced by the VIP *mi* construction, and every person thus introduced is taken to be a VIP. The common introductory patterns for women and men in Israel (in the 1980s), on the other hand, do not constitute grammatical facts about Hebrew, and not only because they have been observed in other languages. Recall that the references to women imply that women are not important as individual personas, that we are subordinate, dependent, nonprofessional, family-oriented, etc. (and vice versa for men). It's worth noting, further, that some of the sex differences are quite categorical. For example, a familial introduction is negligible for men (occurring for 0.3 percent of the men mentioned), but 43.5 percent of the women were thus introduced, and so we could say that this is a feminine introductory pattern. Similarly, first names are rather marginal for men (2.9 percent) but frequent for women (30.4 percent), rendering first names a feminine pattern too. Finally, whereas 16.2 percent of the men were introduced by their last name, no woman was so introduced, so we could say that last names are an exclusively male introductory referring expression (Israeli TV, all data based on Ariel, 1988).

Still, although these sex-based differences are almost categorical, the fact is that they vary quite a bit in different genres (see Ariel, 1988; Ariel and Giora, 1998), and this testifies that the patterns are not grammatical. For example, the feminist magazine, *Noga*, was found to be much more egalitarian in introducing the two sexes. In general, the differences in the introductory patterns were significantly less pronounced for female writers than for male writers. This is because the patterns are only inference-based use conditions. For example, the connection between women and first names is in fact doubly indirectly inferred. First, the social convention of asymmetrically referring to subordinates by first names is based on the fact that subordinates are not as important, and hence need not be individually identified, as superiors are (first names are not as successful in picking out individuals as last names are). Then, another inferential connection associates between women and subordinates. The result of these two sociocultural associations is the observed discoursal patterns. There is no reason, then, to postulate an encoded form–function correlation between men (for

example) and introductions by last names, women and introductions by first names, etc. Support for the nongrammatical nature of this connection comes from a comparison between female and male introductions on Israeli TV, once feminist protest has been made regarding these very issues. While the biased practices have not disappeared, their radical nature very rapidly changed (see also Romaine, 1999: 137–138).

In general, many gender-related markers first analyzed as encoding masculine or feminine gender have later been reanalyzed as directly encoding other meanings, mainly various stances, indicating gender only indirectly, via inference. The Japanese sentence-final particles are a case in point. What seemed to be particles specialized for female versus male speakers (conventional use conditions for certain expressions) turned out to be sex-preferential, not sex-exclusive (associated with femininity or masculinity only indirectly). For example, according to Ochs (1992), certain such sentence-final particles encode "coarse intensity," while others encode "gentle intensity." By (stereotypic) inference, however, speakers associate the first type with males, the second with females. This is precisely the analysis we offered for the differential male and female introductory patterns in Israeli media. Ochs argues that such findings are true for social identity indicators in general. Indeed, Hall and O'Donovan (1996) find a similar phenomenon in their examination of hijra use of familiar versus respect address terms (choice of a second- or a third-person pronoun in addressing one's interlocutor). The hijra adopt a "feminine address style" when talking with women and/or intimates and a "masculine address style" when talking with men. In fact, argue Hall and O'Donovan, the former is part of an intimacy/solidarity register, the latter part of a distance/power register. It is these use conventions which are encoded for the relevant forms. Femininity and masculinity are only indirectly associated with the relevant forms, due to the sex-preferential use of the forms. Thus what were taken to be conventional form–function correlations turn out to be inferred after all.

Chapters 6 and 8 in Agha (2007) are devoted to the use of person deixis and kinship terminology. Agha's point is actually very much in this spirit, downplaying the role of codes, except that he goes overboard, and makes a strong plea for rejecting the code approach altogether. As Agha shows, specific forms (e.g., pronouns, kin terms), supposedly dedicated to certain roles (e.g., speaker and addressee, certain relatives), are not invariably used actually to refer to these roles literally. A closer examination reveals, however, that just like elsewhere, wherever inferences are involved in the referential practices he discusses, so are codes.[35] Codes are always just one ingredient in the process of interpreting linguistic utterances. Inferences can and often do modify literal codes, so that all in all, most of Agha's claims better support the less radical thesis that codes are not sufficient by themselves. It takes codes in conjunction with inferences to use language appropriately. Let's consider a few of his examples.

Thai *dichăń*, argues Agha, is said to encode '1st person feminine.' But its use is not in fact restricted to female speakers. It's used by male homosexuals,

as well as by certain royal males. When employed by the latter, continues Agha, the form carries no effeminate connotations. My interpretation of these facts is that it's likely that *dichăń* now has a dual semantic use, which accounts for the literal use as well as the two apparently nonliteral uses. The male homosexual use seems to be building off the original encoded meaning, and hence the special inference to femininity. This is an inferred meaning (generated ad hoc on the basis of the coded meaning in specific contexts, i.e., when the speaker is a male homosexual). The royal male use, on the other hand, must be another lexically stipulated use of the expression.[36]

An interesting phenomenon Agha draws our attention to is the use of the Vietnamese counterpart of the following sentence:

(1) **~Mother** already bought the hat for **father** yesterday (Agha's Table 8.3).

Spoken by the mother to her husband, *mother* is used for the speaker role, *father* for the addressee role. The father could similarly address his wife as *mother* and himself as *father*. In other words, kin terms are here used much as first- and second-person pronouns are. Now, Vietnamese does have first- and second-person pronouns, but the norm is to use the kin terms and not the pronouns when the relative is copresent. Agha in effect motivates the rise of the preference for kin terminology over pronominal addresses by reference to Confucian ideals (an inferred connection). Whereas pronominal references mark transient speaker–addressee relations, kin terms point to long-term familial roles and obligations between the speech participants. Still, once these practices become the norm, they no longer necessarily carry such stances. It is the use of pronouns under such circumstances that triggers a special (disapproval) effect (by inference, no doubt). Agha explains the effect of this use as indicating that the speaker is temporarily suspending the affective/solidarity relations between her and her addressee. So, currently, it is the use of pronouns which must be seen as an inference-triggering practice. Speakers must engage with the literal codes, as well as with the use conventions associated with them, in order to generate the intended interpretation. It is the comparison between 'I' and 'you' and say, 'grandmother' 'grandchild' which sets the inferential mechanism at work here. A similar case is the current use of Hebrew *axi* 'my brother' as an address term among male teenagers in Israel. Now there's conventionality in that the use is restricted to males (as speakers, not just as addressees) of a certain age group, but the form is used so it generates an inferred solidarity affect between the interlocutors. Note that no ambiguity arises, for siblings do not use *axi* as an address term. But the interpretation of *axi* is not (yet) conventional. This explains why the inference here carries a lot of force. This is not the case with the use of Thai *dichăń* by royal males, for example.

Another phenomenon discussed by Agha is cases where the speaker addresses himself or others, not from his own perspective, but from another's. For example, a Bengali husband addresses his wife's relatives adopting her perspective, thus calling her parents and siblings 'mother,' 'father,' 'elder brother/

sister,' etc. A Japanese father or uncle might refer to themselves as *otō/oji-san* 'father/uncle-Honorific' when talking with their son/nephew, using the honorific forms that would be appropriate for the child to use when addressing them. Similarly, a mother might address her son as 'big brother,' adopting her youngest child's perspective. Agha calls such uses "normalized tropes." It's quite clear that the initiation of such uses was inference-driven, the addressee resorting to pragmatic inferences in order to choose the intended referent. Over time, such nonliteral uses have been conventionalized, however. Who can adopt which non-self perspective is conventional, and moreover, as emphasized by Agha, language specific. Japanese parents can even refer to their only son (or to their youngest son) as *boku* 'I.' In this case they adopt his point of view. But since they tend to add a diminutive (*chan*), the referential term is not really ambiguous in actual discourse. An entrenchment of the use may render the interpretation process noninferential, although the use may still carry a special effect. This is not too different from the use of singular French *vous* to conventionally convey politeness.

Last, Hall and O'Donovan (1996) is a fascinating study of the use of grammatical feminine agreement markers (on verbs, adjectives and postpositions) by Hindi-speaking hijras in Banaras. Now, of course, feminine gender encodes that the referent is female, and masculine gender encodes that the referent is a male. Hijras, as we've mentioned in Appendix 8.1, don't see themselves as men, although they are biologically so. Now, if they perceive themselves as females, one would expect them to use feminine forms throughout when referring to themselves and to other hijras. Reality is much more complex, however. Some of them live in what the authors describe as bilingualism: they use masculine forms with society at large, but feminine forms when interacting with other hijras. So far, these are all conventional uses, although who is taken to be a nonmale is different for the hijras and for other Hindi speakers. In other words, hijras project a masculine identity to the outside world by using conventional masculine agreement markers, and they project a feminine identity with their fellow hijras by using the feminine agreement markers.

The more intriguing findings concern the alternations between feminine and masculine agreement patterns within hijra interactions. Self-references seem to be predominantly feminine, although when strong social stereotypes exist, a masculine form may show up (e.g., when the speaker talked about being a house owner, a masculine characteristic in Hindi society). Another context where self-reference may be masculine rather than feminine is emphatic and/or angry talk. When findings for third-person references are examined, they seem rather baffling. Young hijras, initiates to the hijra community, are often referred to by expressions bearing masculine agreement markers. Not so old ones. So, one of the examples Hall and O'Donovan quote is the equivalent of "She sits like this, so he'll sit in the same way" (p. 242), where the feminine form denotes the old hijra and the masculine form denotes

the initiate, imitating her.[37] The inference is that the young hijras have not yet acquired the proper feminine gender identity, and hence the masculine form. But old and superior hijras do not invariably receive feminine forms either. They do when solidarity and intimacy are intended. Masculine forms are preferred in order to convey inferior–superior relations, distance, but also anger, estrangement and contempt. Needless to say, these uses can only be inferred when speakers take into consideration the association between femininity and solidarity and intimacy, and between masculinity and distance. Once speakers combine these with specific contextual circumstances, the intended effects can be inferred (compare especially the marking of superiority as well as contempt by third-person references in masculine). There can be no code involved in these interpreted stances. This is very much Agha's argument too, but of course, the interpretations are also based on codes. In the absence of some literal code, there could be no play on the basic use for special effects, which is what the practices briefly discussed in 8.3 are all about. These special referential practices bring out the importance of combining codes with inferences.

Appendix 8.4

Another communicative strategy discussed by Drew (1992)

Consider another strategy adopted by witnesses, this one actually involving a specific linguistic expression, *I don't remember*. Drew (1992) argues that one strategy to avoid confirming an incriminating fact stated by the cross-examining lawyer is to answer *I don't remember* (or *I don't know*). Such an answer does not directly disconfirm the facts as stated by the lawyer, but it allows the witness to neutralize the lawyer's version without disputing it. As Drew notes, when the witness answers *I don't remember*, she not only avoids confirming it, she is also implicating that the details asked about (e.g., indications that she knew that the defendant was sexually interested in her) did not seem important to her at the time (or else she would have remembered them). If they were insignificant at the time, they should not form a basis for important conclusions during the court hearings either, because the information asked about is irrelevant even if it is true. Drew then concludes that *I don't remember* is very strategically used by witnesses in courts. But once again, despite the fact that specific linguistic expressions are involved (*I don't remember*, *I don't know*), the association between these expressions and the neutralization strategy is not of a code–function association. As Drew reminds us, *remember* (and *know*) first of all claim a particular cognitive state (their coded meaning). Indeed, the functions mentioned above can easily be seen as inferences drawn based on combining the **content** of the coded meaning with ad hoc contextual assumptions. So, aspects of conversational analysis may be coded (e.g., by *um*), and they may be inferred (e.g., *I don't remember*).

Code switching

As a last example of a social phenomenon, let us examine code switching, where speakers alternate between two grammatical systems (languages, dialects or registers) within the same conversation, often within the same sentence even. Our conclusion will be that even though syntactic units are often crucially involved in code switching, and even though discoursal functions are associated with code switching, decisions to switch from one language to another are not grammatically determined. Blom and Gumperz (1972) examined the code-switching patterns of speakers between the standard and the local Norwegian dialect in a small town in north Norway. They propose that in general, intimate contexts induce the local dialect, whereas more formal contexts, such as contact with government officials, induce the use of the standard dialect. However, more interestingly, Blom and Gumperz found that the same setting (teachers in class, friends meeting socially at somebody's house) is not necessarily restricted to one or the other dialect. Rather, once speakers have this potential contrast at their disposal, they make use of it to convey a variety of pragmatic and interpersonal distinctions (see Gumperz, 1982). Thus, in order to convey confidentiality, a speaker may switch to the local dialect in the middle of a service encounter conducted in the standard dialect, for example. Teachers tended to switch from the standard dialect they used in lecturing to the local dialect when they wanted to encourage an open discussion among their students. Friends, on the other hand, switched to the standard dialect when discussing matters related to expertise, for example.

Maschler (1994, 1997) concentrates on the text–metatext contrast, which is potentially highlighted by code switching. In her data of English–Hebrew code switching (but also in other works cited in Maschler, 1997), she finds that discourse markers, which guide the addressee on how to process the text, and occur at conversational-action boundaries, are often switched from the dominant language of the conversation to the other language. Here is a typical example:

(1) GRACE: … women..you think they are different?
SHIRA: … for women it's just
it just is
it's culturally more acceptable to
… ***tir'i*** ('look') there are men,
.. who can form close relationships,… (Maschler's ex. 1, transcription slightly simplified).

Note that Shira switches to a Hebrew discourse marker, which is used to signal a shift from her previous conversational move. She immediately switches back to English to make her new point. Shira used this strategy quite consistently: 85 percent of the discourse markers used in this way were in Hebrew, or at least also included Hebrew discourse markers.

Now, what is the status of code switching? "Code selection rules…seem to be akin to grammatical rules. Both operate below the level of consciousness and may be independent of speaker's overt intentions" claim Blom and Gumperz (1972: 434). Indeed, code switching consistently occurs at syntactic phrase boundaries (rather than within syntactic phrases), and the different codes each maintain their syntactic and semantic combinatorial principles (see Gumperz, 1982: chapter 4, 1996; Maschler, 1997). Also, the discoursal patterns observed by Blom and Gumperz and by Maschler (1997) (among others) are quite unconscious and certainly far from random for the most part (the statistics in Maschler's conversation are extremely high, and moreover, exceptions are explained by competing motivations). Nonetheless, we cannot claim an encoded form–function association between code switching and any one interpretation (or even a few interpretations).

As Gumperz (1982) (and others, later) argues, code switching is used for any number of other contrasts, among them, direct and indirect speech, topic and comment, different voices in the conversation, preferred and dispreferred contributions, etc. (and see Gumperz, 1996 for an intriguing example where code switching cues the addressee on how to interpret the verb *kill*). As Maschler notes, a formal contrast can be used to iconically point to other contrasts. However, determining which contrast is currently intended by the speaker's switched code remains an inferential task for the addressee. It is up to him to decide whether the speaker wishes to signal a switch to intimacy/formality, to local identity/pan-Norwegian identity, to text/metatext materials, etc., for the very same switches can highlight any one of these contrasts (as well as others). Similarly, Minning (2004) argues that code mixing among German gays and lesbians using English expressions conveys a variety of pragmatic effects. For example, it can sometimes help create a sense of a transnational gay community, but on other occasions (and with different expressions), using an English, rather than a German term creates an indirectness, since a foreign language term is not felt to be as taboo as a native term (e.g., English *lesbian* versus its German counterpart, *lesbisch*). Such decisions are then not encoded by the grammar. The change in the code merely draws the addressee's attention that some other, pragmatic, switch may (but need not) accompany the formal code switching. In fact, Gumperz (1982) himself points out that code switching does not carry a meaning, and that the interpretations derived from such acts are best analyzed as conversational implicatures. We therefore conclude that the functions associated with code switching are pragmatically derived.

Appendix 8.5

We here examine three speech styles: teasing, ironies and elaborate versus laconic speech. The research we focus on frames such uses within their social contexts, but the findings are that some marginal aspects of such styles may be encoded. Mainly, we see that there is no reason to exclude these types of

language use from pragmatics, for pragmatic inferences can motivate both the forms chosen and the circumstances in which they are favored.

An act of teasing combines antagonistic and friendly stances. While the content of the message conveyed is potentially aggressive, the interpretation is intended as not really "intended," as "nonserious play." Teasing is very much constrained to specific social settings. Mostly, it's performed between intimates, who can indeed be sure that no insult is intended, based on the strong relationship between them. Straehle's (1993) analysis of teasing exchanges between three conversation participants attests to this restriction. Two of the participants are close female friends, Carolyn and Diana. The third is a man, Samuel, that Diana is close to, in fact she is about to get romantically involved with him. Carolyn and Samuel, however, hardly know each other. Indeed, both Samuel and Carolyn tease Diana, Diana teases Samuel and Carolyn, but Samuel and Carolyn don't tease each other. Here's one such example, where Samuel is teasing Diana:

(1) DIANA: Carolyn? Your mirror is awfully tall [laughs]
SAMUEL: No, that's not a good description hh (Straehle, 1993: 215).

When Diana comments that Carolyn's mirror in her bathroom is too tall, Samuel retorts that this is not a good description of the facts, implicating the potentially aggressive 'the mirror is at a normal height, it is you, Diana, who is too short.' As Straehle emphasizes, there are many contextualizing cues, such as exaggerated prosodic features, special intonation, stress, and voice quality, in addition to audible laughter that a tease is here intended, that this is nonserious play, rather than an insult. Since all of these don't amount to conventions associating specific linguistic forms with interpretations or use conditions, inferences must be responsible for the reinterpretation of the linguistic meaning as an intended tease.

Now, Straehle also finds specific linguistic expressions involved in the teasing in the particular conversation she examines. Carolyn and Samuel refer to Diana as *she*, for example, as one would refer to an absent person, or to a child present in the conversation. The effect is reducing Diana to a less-than-adult status. They also use *we* to refer to themselves (Samuel and Carolyn) to the exclusion of Diana, with much the same effect. Diana uses the expression *shut up* only when she is teasing Samuel. She also addresses him by name and he answers her with *yes, dear* only under such circumstances. Still, despite the role of specific lexical items, these uses can and should be accounted for by reference to inferences mediating between literal meanings used in inappropriate contextual conditions, which then encourage addressees to look for inferred motivations for the special uses. Here these inferences all have to do with a pretend aggression as part of a teasing act. In other words, in all these cases we have coded messages which are very much enriched and modified by inferences based on contextual circumstances. The only difference perhaps is that in these cases, the most important aspect of the relevant context is social.

Much the same applies to Irvine's (1990) findings regarding laconic versus elaborate speech styles in Wolof. When these are examined, one might at first be tempted to classify these two styles as two linguistic codes, for they are associated (respectively) with high-ranking nobles and with lower ranks, particularly with praise singers, speech makers and such. The two speech styles are easily seen as social dialects. Noble speech is characterized by low pitch, breathy voice, low volume, little dynamic contour range and slow speed. Low-rank speech is characterized by high pitch, clear voice, loud volume, wide dynamic contour range and fast rate. The low-rank style includes many omissions of segments and even whole syllables if they are unstressed. The noble speech has a simplified morphology and syntax (they tend to use simple, unmarked syntactic structures). In addition, agreement patterns for nouns differ, with nouns classified in different categories in the two dialects.

However, the two styles are not exclusively used by the stereotypic classes they are associated with. A person of noble rank might use an elaborate style when s/he needs a favor from another noble person, for example. This in itself does not argue against positing two conventional dialects. The special use can be seen as justified by special needs. The noble person might be seen as adopting the low-rank dialect in order to pretend to be of a lower rank when in need of help. This can be inferred from the choice of a clearly inappropriate code, given relevant contextual circumstances (where the speaker is a noble). Using the "inappropriate" dialect can be seen as a means to generate special implicatures, which do not argue against the code behind the message.

But, as argued by Irvine, there is reason to suspect that much less code is actually here involved than would seem at first sight. First, Wolof do not really have two distinct speech styles. Rather, there's a continuum of laconic/elaborate speech, which speakers (of all classes) manipulate according to conversational needs. For example, at feasts organized by high-ranking families the distinctness of the two speech styles is extreme, but not so on other occasions. Second, the Wolof cultural ideology, very much in force, is that high-ranking nobles should demonstrate restraint and self control, which quite reasonably translates to laconic style. The lower ranks are stereotypically perceived to be emotional, and also expressive of their emotions. This rather straightforwardly translates to verbosity. If so, we shouldn't analyze laconic and elaborate speech styles as distinct social dialects (codes). Instead, they are mostly indirectly associated with the two classes. The characteristics of each of the styles can be seen as a set of reasonable strategies (i.e., derived inferentially) given the cultural ideology which draws a sharp boundary between the classes along the above stereotypes.

If lower ranks are supposed to be impulsive and to express their emotions vividly, it is only to be expected that in order to conform, they would use dynamic intonation contours, high pitch and marked syntactic constructions, which make focused information salient (Irvine mentions cleft sentences, left dislocations and focus-marked subjects and objects). It also explains why they are elaborate

in their speech, including many modifiers and intensifiers (such as 'really' and 'indeed'). They include many reduplications and revert to imagistic language (e.g., complex verbs which don't only describe some motion but also the noise it involves). Such devices are very useful for lower ranks, who may not be listened to as attentively as the nobles are. While for the lower ranks, the more speech the merrier, for the higher ranks, the less the better.[38] For nobles, public speech is shameful. This is why nobles use laconic, in fact grammatically incorrect, forms (as compared with elicitation forms they themselves provide). For example, since they habitually lengthen their vowels, phonologically contrastive length distinctions between vowels are lost. Their speech is not fluent, containing many false starts and incomplete sentences. In fact, nobles take measures to make their speech rather uncooperative (in Gricean terms). In addition to these features which make them rather less efficient communicators, they may cover their mouth with a scarf while talking, so that their speech sounds more like unclear mumbling. Of course, unlike the lower ranks, they can rely on their powerful social status which guarantees extra efforts on the part of addressees. They have no problem receiving the floor. In fact, the higher their rank, the less audibly clear their speech, which shows the direct connection between the means and the effect. All of these are better accounted for as reasonable speech strategies aimed at generating specific conversational goals (by inference). As Irvine concludes, the features characterizing each of these speech styles are not arbitrary. Rather, "they are products of a Wolof culture association between social ranks and affectivity" (p. 152).

Brown's (1995) analysis of Tzeltal irony fits right into the theme of this book. Brown's goal is to demonstrate how "humans are peculiarly good at, and inordinately prone to, **attributing intentions and goals to one another**…they routinely orient to presumptions about each other's intentions in what they say" (p. 153). In other words, Brown underscores the crucial role of contextual inferences in using and interpreting utterances, where codes alone are not enough. Irony involves saying one thing and intending the opposite, or at least some critical stance towards it. Its use in Tzeltal, testifies Brown, is far more prevalent than in typical English conversations. At least the women's conversations may have rather long stretches of ironic exchanges, where both interlocutors pursue an ironic mode (see her example 9). In such circumstances, argues Brown, the ironies serve to strengthen solidarity between the speech participants. Since interpreting an utterance as ironical requires the addressee's recognition that the explicit (or sometimes the implicated) message couldn't possibly reflect the speaker's true stance, it can only be successful among people who share values and stances. For example, if the speaker is explicitly asserting that it would be great for the addressee to go and have fun on the town with a Ladinoized suitor, it takes a shared value system to know that she couldn't seriously be recommending this. Marrying a Ladinoized Indian is considered undesirable among these women. The fact that speakers need not assert these positions, but rather can presuppose them, contributes to the feeling of agreement and affiliation

between the women, as does the fact that the speakers are united in their positions against some "other" position (that Ladinoized husbands are desirable), the one echoed and criticized by the ironical utterance. As such, ironies are a positive face strategy, in that they assure the addressee that the speaker shares their set of values.

But ironies do not always contribute to an affiliative mode of speaking. Brown cites examples from court cases, where the conversation involves direct conflict. Once again ironical utterances can be found, but in this case they convey hostility and negative affect. How so? How can the same discourse style have such different effects? Since the context is adversarial, it is quite implausible for the speaker to express agreement with her opponent. If expressed, the overt stance convergence interpretation will be rejected. The implicated effect is then disagreement with the addressee, hostility and indignation, quite the opposite from the friendly ironies above. Here what the speaker is taking for granted is that she and the addressee could not possibly agree with each other. Of course, if we assume that ironies (in Tzeltal or anywhere else) are not encoded for certain effects, such opposite effects are not at all surprising. What it takes to successfully interpret ironies is an appropriate evaluation of the coded message in the relevant context. An incompatibility between the content and the context can trigger an ironic interpretation by inference, according to which, the improbable content is attributed to someone other than the speaker. It is up to the addressee then to further infer the motivation behind this linguistic style. Brown's work highlights the potential affiliative as well as confrontational functions of irony due to inferencing.

So far, we have explained discourse styles by reference to pragmatics. Are there no codes involved? Although Brown's main point in her article is that irony (as well as many other conversational effects) results from intention attribution much more than from deciphering codes (alone), she does mention some conventional means which render an utterance unambiguously ironical. Thus, when the speaker uses one of a set of emphatic particles in conjunction with some specific hedging particles the utterance is obligatorily interpreted as ironical. For example, the counterpart of 'Perhaps it might be the case that P, to be sure!' is a conventional ironic formula. We can think of other conventional ironical expressions, such as *very funny*, *tell me about it* or Hebrew *mamash* 'really' (when properly intoned). According to Giora and Fein (1999), expressions giving rise to such conventional ironies are lexically ambiguous between a literal and an ironic meaning (as measured by lexical decision tasks which showed no difference between the response times to both meanings in a literal-biased context and in a nonliteral-biased context). So, while ironical interpretations are inferred for the most part, some are encoded. It is harder to come up with encoded examples of elaborate or laconic speeches and teasing. But the Israeli army Hebrew dialect is notorious for its laconic style, reflected mostly in rampant use of acronyms. And Israeli adolescents can encode that their previous utterance was only a tease by adding on *stam* 'just/for no reason,' pronounced

with a very long vowel. *Stam* then encodes that the preceding utterance was not seriously meant.

Our main point in 8.5 was that the socioculturally motivated teasing, elaborate versus laconic speech and (Tzeltal) irony need not be stipulated as "beyond pragmatics." The adoption of the specific styles can be pragmatically motivated and the interpretations sought by the speakers can be inferred, given the linguistic meaning and the specific context. Nonetheless, we can identify some encoded aspects of such instances of language use.

Appendix 8.7

Here are two examples of a psycholinguistic phenomenon that turn out to be grammatical after all. Recall that Fodor (1984) (following Bever, 1970 and others) argued that complementizers are obligatory for sentential subjects, so that the addressee processing such sentences can immediately analyze them as non-main clauses. (1) is here repeated from II: 32b:

(1) *(**That**) we eat our meals rather than fusing with them marks, I believe, a profound fact (Stuart Kaufman, *At Home in the Universe*, 1995: 123).

This restriction, although psycholinguistically motivated, is grammatical. We do not need to make specific reference to its psycholinguistic motivation. That we need a complementizer for sentential subjects (as in the current sentence of this text) is (by now) a categorical fact about English. Contextual circumstances which would enable the addressee to predict the occurrence of an initial sentential subject, thus removing the processing difficulty, would not make sentential *that* optional. The complementizer is obligatory no matter what. This is a grammatical fact (about English), a fact that requires no (synchronic) reference to psycholinguistic principles.

Next, Gernsbacher (1991) shows that initial sentences in texts, and initial segments within sentences constitute psycholinguistically prominent positions: they take longer to process. Her explanation for this phenomenon is that people carefully attend to initial information, since it lays the foundation for later information. Initial information is the basis on which they will later judge incoming information as (in)coherent, etc. This processing fact no doubt explains why languages tend to place in initial sentence position either accessible topical material, or else newsworthy information (see again 7.5). Both are important, even though in different ways. However, word order is a language-specific matter, and the fact that sentence-initial position is psycholinguistically prominent does not render the language-specific word-order principles redundant. There is, then, no coded role for initial position as directly dictated by processing factors, although the facts seem far from random, and no doubt affect our processing for Relevance. Word order, even if partially motivated, is a clearly grammatical fact.

And here's an example of a psycholinguistic phenomenon which is only sometimes grammatically specified. Consider the psycholinguistic concepts

of suppression and enhancement, which motivate various linguistic strategies but are not restricted to operating within language (Gernsbacher, 1990). These concepts may be grammatically relevant sometimes. Enhancement increases the accessibility of a concept, and suppression decreases it. Suppression, for example, is responsible for the elimination of irrelevant meanings and associations which are accessed automatically for polysemous and ambiguous words. As such, they are heavily involved in the pragmatic aspects of utterance interpretation. Indeed, according to Gernsbacher, at least one of the problems of less-skilled readers is their inability to suppress irrelevant meanings fast enough. Enhancement, on the other hand, is responsible for making relevant meanings more accessible to us. Of course, many extralinguistic factors influence the mechanisms of suppression and enhancement.

So far, suppression and enhancement seem to be purely cognitive mechanisms, which language comprehenders, just like people interpreting nonverbal stimuli, may automatically and unconsciously employ to their pragmatic benefit. However, consider the English indefinite *this* NP, as in:[39]

(2) JIM: and down at the bottom,
of this,
.. this rubble,
.. was **this little man**$_i$.
(H) who was a scientist.
And he$_i$ had **this big magnifying glass**.
(H) and he$_i$ was looking at the rubble (SBC: 017).

According to Gernsbacher, subjects asked to continue stories ending with the introduction of a new discourse entity encoded by an NP modified by *a* or by the indefinite *this* exhibited different patterns of continuations. When the entity was introduced by a *this* NP, subjects mentioned the entity more frequently, specifically so in their first clause, and they used less informative anaphoric references for it, pronouns for the most part. Gernsbacher also found that these *this* NPs suppressed the accessibility of other potential antecedents in the text. All of these findings have in common that indefinite *this* NPs encode that an enhanced degree of accessibility be maintained for their referents. This would explain why subjects tend to mention these referents more often and immediately (extragrammatical consequences), and also why subjects use more pronouns when referring to them again. Pronouns are used to refer to highly accessible antecedents. Indeed, note that Jim immediately refers to the little man again with a pronoun, and the magnifying glass, while not explicitly mentioned, is covertly invoked in the next clause (as an instrument of *looking*). Indefinite *this* NPs then show an encoded procedural form–function correlation, namely, an instruction to the addressee that the entity so referred to is to be maintained at a high degree of accessibility. This is a case where enhancement figures in the grammatical account of a linguistic expression. Prince (2006) has recently demonstrated that languages (in this case French and Yiddish) may encode the

opposite interpretation, namely, that a discourse entity is not likely to be referred to again, i.e., it can be suppressed. The expressions she studied are French *on* 'one' and Yiddish *me(n)* 'one,' which can serve as proper antecedents for intra-clausal reflexive pronouns, for example, but not for cross-sentential regular anaphoric pronouns.

Notes

1 His solution is that pragmatics be incorporated into semantics.
2 In addition, left dislocations do not obey subjacency either.
3 Ziv (1994a) also mentions constructions such as *Not without you, I won't*, which obey distinctly syntactic constraints, such as subjacency, but are not definable as one syntactic sentence in a non ad hoc manner.
4 My anonymous referee is "not convinced that grammaticality judgments are never a valid piece of evidence for grammatical theory." I agree, but the crucial point here that it cannot provide a solid basis for a grammar/pragmatics divide.
5 All approximations were expressed with *more or less* rather than with *less or more* in SBC and LSAC. The one *less or more* was used to denote two separate alternatives.
6 Hebrew does not have a quantifier parallel to English *some*.
7 I term such interpretations uncooperative inferences in Ariel (2004).
8 I thank Yoav Ariel (p.c.) for helping me locate and explain these two examples.
9 Reinforceability, however, is not unique to implicatures. As noted by Aldo Sevi (p.c.), any inference can be "reinforced," logical ones (entailments) included. Note the following example:

   i. I don't know how he did it but he did it (LSAC).

   where 'how he did it' entails 'he did it,' but it's still reinforceable.
10 This is why the claim about the universal application of the maxims may sometimes seem to be refuted. Implicatures are universal only to the extent that the relevant cultural assumptions too are identical across linguistic communities.
11 The unsaid 'it is because we all make mistakes' is more relevant to the point here. Of course, the 'do not judge me harshly' implicature is not hard to draw either, but I believe that efficiency is not the driving force behind the omission of this part, but rather face preservation.
12 Note, however, that Levinson's claim that marked expressions point to a marked situation is not quite accurate for this case. Pamela is not implicating that the birth was abnormal (extremely short, for example) in any way. In addition, the following does not refer to "abnormal children," although *children* would have been the unmarked comparable form:

   i. … there are additional ethical and/or practical constraints that limit the choice of… these methods with **human children** (Bates *et al.*, 2003).

   The 'human children' here refer to normal, "unmarked" children. The use derives from the fact that animals have been in focus before. *Human children* better serves to highlight the fact that we are switching reference from talking about animals to talking about children. Indeed, Horn (1991, 2004) rightly emphasizes that the reason for the choice of the marked form is inferred ad hoc.

13 I'm avoiding the issue of just how many justify our use of *many*, as opposed to *some*, for example.
14 The relative actually said, "It's possible, but I doubt it," which implicates something quite different. But the qualifying clause was not cited by the paper.
15 We probably strengthen 'not impossible' to 'probable,' because we assume that people try to understate negative statements on their relatives. The same applies to the strengthening of 'not certain' to 'not probable.'
16 A personal consultation with a *Haaretz* editor revealed that the use of the misleading *minor* rather than *girl* (*yalda*, literally 'female child') in the headline was intended.
17 Hebrew does not have the counterpart of neutral English *child*, which is more restricted to younger children than *boy*, and certainly *girl*, are.
18 This explanation follows Du Bois (1980).
19 See Zuckermann (2006) for an analysis of *ya*.
20 In fact, Sperber and Wilson do not adopt all the standard deductive rules of logic, because these will derive an infinite number of conclusions, a highly undesirable result, given the finite and short time in which communication takes place. Sperber and Wilson therefore assume only elimination rules attached to concepts (see Sperber and Wilson, 1986/1995: chapter 2).
21 For example, the degree of accessibility encoded by zero references somewhat differs in English, Hebrew and Chinese (see Ariel, 1990: chapters 4 and 6).
22 Interestingly, though, this does not mean that the librarian is committed to actually only devoting exactly 60 seconds to the woman. As noted by Lasersohn (1999), some slack is always allowed for, even when *exactly* is involved.
23 Another view, originally Russell's (1905), is that false presuppositions simply render the complex sentence false.
24 See Stalnaker (1972), Liberman (1973), Karttunen (1973, 1974), and see many of the articles in Oh and Dinneen (1979), Gazdar (1979), Grice (1981), Levinson (1983).
25 See Wilson and Sperber (1979), Kempson (1988a), Carston (1998), Chierchia and McConnell-Ginet (1990), Kadmon (2001).
26 I restrict presuppositions to conventional ones (i.e., specified by linguistic expressions). Researchers, however, no longer agree on the set of conventional presupposition-triggering expressions. Chierchia and McConnell-Ginet (1990), for example, take some presupposing cases as **conversationally**, not conventionally presupposing their complements. We ignore this issue here (but see Kadmon, 2001).
27 Recent semantic analyses of presuppositions have made a similar distinction. Local accommodation cases, where an assumption (the presupposition) is temporarily added on to the context, "satisfy" the requirement that the context entail the presupposition without a commitment on the part of the speaker/addressee (see Kadmon, 2001 and references cited therein).
28 Contra Kadmon (2001), I assume that the accessibility requirement must be met even under metalinguistic negation (such as 3).
29 Indeed, Kadmon (2001) distinguishes between first mentions presupposing 'I have a dog' (a noncontroversial accommodation for her), and first mentions presupposing 'I have a giraffe' (controversial, and hence a difficult accommodation). Her example where the existential presupposition ('the entire fortune…') is new (when the presupposing *Lord Humphry lost* ***his entire fortune*** *at cards last night* is used) is unconvincing, since the addressee in her example is overhearing a club member utter the presupposing utterance, which was not intended for him. Our ability to reconstruct

presuppositions is not to be confused with the proper use of presupposing expressions. My anonymous referee, however, finds that the utterance is appropriate even when the intended addressee has no prior knowledge about Lord Humphry having a fortune. Perhaps this is so because people stereotypically attribute wealth to Lords.

30 See Simons (2005) for an analysis of presuppositions as Sperber and Wilson's implicated assumptions, i.e., assumptions the hearer accepts to treat as true in order to process the utterance as Relevant.

31 Or at least, the above is one possible analysis. Another might view the general Hindi curse meaning to be the conventional code, whereas the special hijra interpretation is an inference based on that code. After all, an impotent man, is a man too.

32 Verhagen actually discusses *on the contrary*, but my data shows that his point better applies to *quite the contrary* (see below).

33 I conducted what's called a simple search of the BNC, which yields fifty random examples, but only twenty of them provided the relevant context for the hypothesis to be checked.

34 The preceding *no* is by another speaker (B), and is not a prelude to C's *the other way round* (note that C opens with *wait*, which indicates that this just occurred to her/him.

35 See Levinson (1979b) for an argument that social deixis is conventional (a conventional implicature).

36 For some reason, Agha seems to think that the code model is incompatible with ambiguities. One of the cases he quotes against the code model is French *vous*, which is, of course, ambiguous. When applied to a single addressee, it is the polite address form, but when applied to more than one addressee, it is not necessarily a polite form of address.

37 Note that this is a very rough translation, aimed at giving the flavor of the original. Pronouns are not marked for gender in Hindi, but the verbs are.

38 Irvine mentions that when a noble woman visits another they may each have a low-ranking woman doing the talking for them.

39 I use the term **indefinite** *this* NP just because it is common practice. The NP, however, is actually unmarked for definiteness, as argued by Du Bois (1980), who found anaphoric uses of the unstressed *this* NPs.

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