Manfred Krifka*

Commitments and beyond

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1 Introduction

The target paper by Bart Geurts, "Communication as commitment sharing: speech acts, implicatures, common ground" makes the point that speech acts, as the principal units of human communication, should be understood as expressing public commitments, not intentions or beliefs as Gricean pragmatics would have it (cf. Bach and Harnish 1979 for a prominent account in this framework, also Truckenbrodt 2006 in this journal).

The commitment approach is by no means a new proposal, as Geurts makes clear with several references, like the introductory article to a collection on the topic by Brabanter and Dendale (2008). In particular, the influential paper by MacFarlane (2011) makes a powerful argument for the commitment view of one particular speech act, assertion. It would have been worthwhile to mention a particularly early expression of this view with Charles Sanders Peirce (cf. the overview article in Tuzet 2006); Peirce (1931–1958) defined the act of assertion as

an act which renders [the speaker] liable to the penalties of the social law (or, at any rate, those of the moral law) in case [the asserted proposition] should not be true, unless he has a definite and sufficient excuse. (CP2.315)

Also, I would like to point out the work of William Alston, who defended a normative view of speech acts since Austin's work came out. Alston (2000) stresses as the main effect of speech act the responsibility the utterer is undertaking. According to him, speech acts work

not by any "natural" facts about the speaker – his beliefs, perlocutionary intentions or whatever – but by a "normative" fact about the speaker – the fact that he has changed his normative position in a certain way by laying himself open to the possibility of censure, correction, or the like in case the conditions in question are not satisfied. (p. 70)

Geurts offers a number of new arguments for the commitment-based view, e.g. from language acquisition (children need not be masters in mind-reading in order to communicate successfully in language) and from the role of

E-mail: krifka@leibniz-zas.de

^{*}Corresponding author: Manfred Krifka, Leibniz-Zentrum Allgemeine Sprachwissenschaft (ZAS) and Humboldt-Universität zu Berlin, Schützenstr. 18 10117 Berlin, Germany,

communication in society (stable commitments are essential for action coordination). I found one argument by Geurts particularly interesting: He reminds us that beliefs are not closed under logical consequences (the holder of a propositional attitude may not be aware of the consequences of the proposition), whereas commitments are. This is the very foundation of argumentative discourse. In German, there is a saying, *Wer A sagt, muss auch B sagen*, "He who says A must also say B"; there is no saying with the meaning "He who thinks A also must think B".

I am in substantial agreement with the arguments and conclusions by Geurts, and so there might not be much for me to talk about (see Pagin 2004; Harnish 2005 for a critical discussion of the normative, commitment-based view from an intention-theoretic perspective). But I still have something to say. In Section 2, I will add a few additional arguments against the intention-based and in favor of the commitment-based analysis of one prominent speech act type, assertions (or constatives). In Section 3, I will point out that there is linguistic evidence for a structural level at which commitments are expressed. In Section 4, I will discuss the phenomenon of committing oneself to one's beliefs and intentions, where the lines between the two approaches appear to be blurred. And in Section 5, I will take up the issue whether all speech acts are commitments. I will answer this question in the negative, as otherwise we would dilute the notion of "commitment" so much that it becomes meaningless. The first two parts should be taken to be complementary to Geurts' paper, the third expresses a somewhat different opinion.

2 Arguments against intentions and for commitments

I will concentrate here on assertions, or constatives, as a major speech act type. I take it for granted that the purpose of an assertion is to communicate propositions, that is, to make them part of the common ground. The question is, how this is achieved. As Lauer (2013) reminds us, the mere utterance of a linguistic expression that denotes a proposition is not sufficient. Lauer discusses various options how to account for the assertoric force that brings it about that assertions can be used to communicate.

There are just-so stories that build the communicative effect into the very nature of assertions. Stalnaker (1978) proposes that assertions add a proposition to the common ground, the presuppositions of the participants in a conversation. Farkas and Bruce (2010) develop a more complex model of the same idea that

allows for negotiating by the participants. Such analyses are not wrong, but incomplete. They just stipulate the function of a speech act, here, of assertions, and do not explain them by tracing them back to more general principles.

There are theories that refer to intentions that speakers have when asserting a proposition. They come in two flavors. The first states that in asserting φ , the speaker S publicly expresses that S believes φ . If the addressee A thinks that S is reasonable and informed, then this might constitute a good reason for A to believe φ as well. This immediately explains Moore's paradox,

(1) #It is raining but I don't believe it.

as the assertion it is raining actually expresses the proposition "S believes that it is raining", and hence we end up with a blatant contradiction, "S believes that it is raining and S does not believe that it is raining", or somewhat more contrived, "S believes that it is raining and S believes that S does not believe that it is raining". However, we sense that there is a clear difference between (2)(a) and (b) that is not easy to explain under this theory.

- (2)a. It is raining.
 - b. I believe that it is raining.

The assertion (2)(b) appears weaker and easier to defend if challenged. This comes as a surprise, as the propositions "S believes ϕ " and "S believes that S believes that φ" are near equivalent. At any rate, we should assume that the second entails the first, and hence (b) should even be stronger.

There are other problems with the account as well. In particular, it would be very easy for a speaker to avoid consequences if φ is false. If A challenges S's assertion (2)(a), S could point out that S really believed φ at the moment of uttering (something that can be difficult to disprove). S could also state that the assertion was a mere exposition of a belief that φ , not meant to communicate φ itself.

The second flavor of the intentional theory assumes that in asserting φ , the speaker S expresses an intention that the addressee A believes φ. A recognizes this intention by S, and this constitutes for A sufficient reason to come to believe φ as well. (There are more complex recursive versions of this story). This would explain a variant of Moore's paradox, which we may call the "Belief Transfer Paradox":

(3) #It is raining, but I don't want you to believe that it is raining. Moore's paradox (1) can be explained as well: The addressee A might be suspicious to be asked to believe a proposition that not even S believes. However, this version would make the following two statements rather equivalent, which they are clearly not:

- (4) a. It is raining.
 - b. I want that you believe that it is raining.

Also, the second version of the intentional theory cannot explain why the following sentence is not contradictory:

(5) Believe it or not, Susan and Bill will marry.

The common locution *believe it or not* is certainly not in the scope of the "S wants that A believes … ". But (5) also cannot be spelled out as "S does not care whether A believes ϕ or not, S wants A to believe ϕ ", as "S wants A to believe ϕ " appears contradictory to "S does not care whether A believes ϕ or not". This point was made already by Searle (1969: 46), who observed: "I may make a statement without caring whether my audience believes it or not but simply because I feel it my duty to make it." I take this to be a serious problem for the intentional theory of assertions.

There are theories of assertions that refer to societal norms. Stenius (1967) and Williamson (1996) have proposed constitutive rules that require a person to assert only propositions that are true. This constitutes a good reason for addressees to believe the asserted proposition as well. Lewis (1975) makes this explicit with his convention of truthfulness and trust: Speakers assert only true propositions, and addressees, correspondingly, trust these propositions. Conventions may arise by a coordination game but then achieve normative status in the sense that participants do not have a reason to deviate from them. The problem that I see with this is that truthfulness and trust do not appear an arbitrary convention, like driving on the right side of the road; it is difficult to see how a society could work at all without this very rule.

The commitment view, as I see it, is a variant of the normative view. It adds some bite to the requirement that speakers should be truthful by pointing out that there are sanctions if they are not, and states that these sanctions are the reason why addressees have a reason to trust the speakers. According to the commitment view, if a speaker S asserts a proposition ϕ then S guarantees for the truth of ϕ . In other words, S becomes publicly liable to the truth of ϕ , and if ϕ turns out to be false, then S may experience social sanctions. As Peirce (1931–1958) puts it in another passage:

At any rate, [an oath] would be followed by very real effects, in case the substance of what is asserted should be proved untrue. This ingredient, the assuming of responsibility, which is so prominent in solemn assertion, must be present in every genuine assertion. (CP5.546)

At the very least, the trustworthiness of the speaker S, hence the ability to communicate, may be reduced in the future. The existence of sanctions, and the knowledge that S wants to avoid sanctions, are the reason for A to believe φ . As speaker and addressee know about this mechanism, we can explain why the speaker can communicate a proposition in the first place. I think that sanctions are an essential ingredient of the normative view, and should supplement Geurts' argument.

The commitment view explains the oddness of the commitment or blaming paradox:

(6) #It is raining, but I don't want to be blamed if it is not raining.

This can be spelled out as "I make myself responsible for the truth of the proposition that it is raining, but I don't want to be blamed if it is not raining", which is contradictory if responsibilities entail blames. Moore's paradox (1) can also be explained, as it would be odd for S to commit to the proposition "it is raining" and to the proposition "S does not believe that it is raining": It is rational to commit to a proposition that one believes to be true, as otherwise one runs the risk of sanctions. And even if one knowingly commits to a proposition that one knows to be false and tries to get away with it, it would be foolish for this deceptive move to also indicate to the addressee that one does not even believe the proposition oneself. On the other hand, the intentional view is not easy to reconcile with (6), as "I want you to believe that it is raining, but I don't want to be blamed if it is not raining" does not appear to be paradoxical.

The belief transfer paradox (3) also finds a natural explanation: The typical reason to commit to the truth of a proposition is to communicate that proposition; why else run the risk that such a commitment entails? But there are exceptions to this motivation for a proposition. Taken literally, (5) is such an exception, but of course it can also be understood as a clever rhetoric device to mark that a proposition that one commits to is particularly hard to believe, and hence produce the effect of a particularly strong assertion. There are other exceptions, e.g. if S in front of an adversarial jury that S has no hope to convince explains:

(7) Just for the record: I am innocent.

I supplied arguments for the commitment analysis of assertions that I find particularly compelling. The arguments brought forward against the commitment view by Pagin (2004) and Harnish (2005) I do not find convincing. I would like to turn here to one counterargument by Pagin (2004), who points out the difference between (8)(a) and (b):

- (8) a. It is raining.
 - b. I (hereby) commit myself (to the truth of) that it is raining.

This does not show that in (8)(a) the speaker does not undergo a commitment, rather that there are different ways to do so. The explicit performative in (8)(b) does this in a rather roundabout way that implicates some non-prototypical way of commitment (cf. Levinson 2000 for M-implicatures). This gives the impression that (8)(b) is not "asserting" that it is raining. Also, the notion of assertion may be restricted to using the standard grammaticalized form of committing to the truth of a proposition, and there simply may be other ways to achieve a similar result, like by explicit performatives. This is quite similar to Open the window! and I order you to open the window; only the first is an imperative.

Lauer (2013) advocates a mixed view of assertion, according to which S commits to the belief that φ. This is a good analysis for (2)(b), but is problematic as a general analysis of assertions, as it would not sufficiently distinguish between (2)(a) and (b).

It is worthwhile to highlight one aspect that the intentional theories and the normative theories of assertions mentioned here have in common. They all assume that by asserting φ , the proposition φ becomes part of the common ground by some pragmatic reasoning – because A takes the belief of S that φ seriously, or because A heeds the wish of S that A believes φ , or because A recognizes the social damages to S if S commits to φ when φ is false. This means that for all three theories, the perlocutionary effect of the assertion, that φ enters the common ground, comes about by conversational implicature. It is an indirect, albeit intended, effect by which we communicate propositions. Phrases like believe it or not, or just for the record can be seen as explicit ways to cancel this implicature. Not all attempts to cancel the implicature will work, for example,

(9)#I don't want you to believe it, but John stole the money.

is decidedly odd because the public commitment to "John stole the money" contradicts the proposition that the speaker publicly commits to with "I don't want you to believe it".

The commitment view of assertions also provides a more direct and convincing account for what happens in lying (Meibauer 2014). For commitment

theorists, a lie is a commitment to a proposition that is false. If detected, S has to expect sanctions, in any case, will lose credibility and the effectiveness for future communication will be diminished. There might be excuses if the speaker had good reasons to believe that the proposition was true, or if in what a speaker thinks to be lie the proposition turns out to be true after all (cf. Turri and Turri 2015; Wiegmann et al. 2016). But one can argue that these are just mitigating factors that might be brought up as excuses in order to reduce the sanctions. – Contrast this with lies in the intentional approach to assertions. If to assert a proposition is to express a belief that this proposition is true, then one would need an independent principle stating that it is bad to express a belief in a proposition that one thinks to be false. Presumably, this would lead to a version of the commitment approach after all. Similarly, if asserting a proposition is to express a wish that the addressee should believe the proposition, then we would need an independent principle that it is bad to express such a wish if the proposition is false. But why should this be morally bad, as a matter of principle? The intention to make belief might actually be to the benefit of the addressee, and hence morally justified. But notice that it is still a lie, a commitment to a falsehood, even if it can be excused (a "white lie"), given the circumstances.

Furthermore, according to the intentional view there would be no difference between lying and a particular form of deception, namely, pretending to have a belief that a proposition is true. But there is a difference. If a person takes an umbrella when leaving the door, feigning a belief that it is raining, and makes sure that the addressee sees this and even realizes the intention that the addressee sees it, this is not a lie, as the assertion *It is raining* would have been.

I would like to mention one aspect of Geurts' notion of commitment that needs further discussion. Geurts considers commitments in general, and assertive commitments in particular, to be relations between two individuals, the speaker and the addressee, and a propositional content. It is, in a sense, a contract between the speaker and the addressee, that "[the speaker] is committed to [the addressee] to act in a way that is consistent with the truth of [the proposition]". In contrast, I have characterized assertions as "public commitments by the speaker to the truth of a proposition". We might avoid the qualification "public", and talk about "a commitment by the speaker to the addressee that the proposition is true". As a result, assertions become private contracts between two interlocutors.

What is the best view in this matter? Typical assertions certainly are directed toward a specific addressee, or group of addressees, and this is captured by the fact that there are transitive verbs like tell in Mary told Sally that Bill is ill that express this relation. After all, it is the addressee who the speaker wants to accept the asserted proposition in the common ground. However, there are also assertion-denoting predicates that do not specifically refer to addressees, as in Mary said/claimed that Bill is ill, and this points toward the public side of assertion. Kant states in Über ein vermeintliches Recht aus Menschenliebe zu lügen (On a Supposed Right to Lie from Philanthropy) that even lies that do not harm the addressee in any way are not allowed because they undermine the general source of trust. And Lewis (1975) sees it as an essential part of the convention of truthfulness and trust that nearly everyone observes it nearly all the time. So it is plausible that in an assertion, the commitment to the truth of a proposition is of a more general nature. In particular, if a speaker asserts a proposition the addressee can assume that the speaker would assert the proposition to other addressees as well (except, of course, if there are reasons to keep it secret). This is different from promises, which are more like a contract between the speaker and the addressee only. Geurts proposes a rule of "Integrity" that conflicting commitments to different addressees should be avoided that goes into that direction, but it stops short of the notion of a public commitment; it only excludes that a speaker commits to φ to one addressee and to $\neg \varphi$ to another.

3 Specifying assertions

I will turn in this section to a linguistic phenomenon that argues for assuming commitments in the linguistic representation itself. We observe that assertions can be modified as to the nature of the commitment. This can be done by explicit performatives as in (10). Such sentences are not asserted; rather, the main verb specifies the type of speech act, which in the cases at hand are special types of assertions. In comparison to standard commitments, swear raises legal consequences when the proposition turns out false, whereas claim indicates that the commitment to the proposition satisfies a certain legal need.

- (10) a. I (hereby) swear that the above-stated information is true and correct.
 - b. I (hereby) claim that the information I provided is complete.

Another way of specifying the nature of the commitment is illustrated by the sentences in (11), where expressions that relate to the type of commitment are underlined.

(11) a. By God, I did not fire a single bullet.

- b. For the life of me I'll never understand why you squandered your beauty.
- c. It was a truly wonderful job.
- d. Most people are honestly not as judgmental of ourselves as we are.

Examples (12) illustrate a few commitment specifiers in German: ungelogen "truly", lit. "not lied", the Southern German meiner Seel "by my soul" and beileibe + negation, "by no means", lit. "by my body".

- (12)a. Die U-Bahn fährt ungelogen immer bis auf 5 cm genau an dieselbe Stelle.
 - b. Dafür wollt ich mein Lerchenfelder Eckhaus geben, meiner Seel! (Hugo von Hofmannsthal, Rosenkavalier)
 - c. Das gesammelte Wissen ist beileibe nicht das gesamte Wissen.

Examples (13) show commitment specifiers in Egyptian Arabic, where they appear to be used frequently (cf. Mughazy 2003).

(13) a. wallaahi / winnabi / wi?ingiil ma-?axatt-iš ḥaaga (Egyptian Arabic) by.god / by.the.prophet / by.the.bible I did not steal anything

Let us have a closer look. The sentences in (11) are assertions, but the underlined adverbials affect the level of commitment. In (a), a divine witness is invoked, which elevates the level of commitment because it raises the level of potential sanctions; this also holds for the Arabic terms in (13). In (b), the stakes for false commitments are also raised – according to the literal meaning, the speaker puts his or her own life in pawn. This also applies to the German terms meiner Seel and beileibe, at least according to their etymology. With the sentential adverbial honestly or German ungelogen the speaker excludes dishonest or joking commitments. – Such commitment specifiers are typically used when the speaker fears that the proposition may not be sufficiently trustworthy to the addressee; to communicate such propositions successfully, it may help to raise the commitment level. By this reason, they appear to develop easily into markers of emphasis that indicate that the proposition is particularly noteworthy, with emphatic focus on the expression that indicates the presence of alternatives that would be less remarkable, and more believable (e.g. single, or single bullet in (11)(a)).

The precise syntactic and semantic implementation of commitment specifiers is still in need of further research, as they have not been recognized for what they are. But it is plausible that such phrases require a notion of assertion that involves the notion of commitment. For example, we can paraphrase (11)(a) by I guarantee, with God being my witness, that I did not steal the money or I make myself liable, with God being my witness, that I did not steal the money. It is unclear how the notion of belief or intention to make the addressee believe could accommodate modifications like by God. The paraphrase I want you to believe, with God being my witness, that I did not steal the money certainly is beside the point – even if S stole the money, S still might be justified in invoking God that S wants A to believe that S did not steal the money. Also, the paraphrase I believe, with God being my witness, that I did not steal the money is odd. It only can be understood as invoking God for the commitment of S that S believes S, and then the assertion makes quite a different, and weaker, commitment.

As there is linguistic material, like *by God* or *wallaahi*, that targets the commitment expressed by assertion, we should also expect that there is a level of syntactic representation of a commitment layer. Notice that commitment specifiers can, but need not, be parentheticals that somehow hover above the syntactic structure of a sentence. But then they have to be integrated in it. I have proposed a "Commitment Phrase" in Krifka (2015) that may provide the proper target for commitment specifiers.

4 Committing to beliefs and intentions

It is worthwhile to consider cases in which a speaker commits to a belief in greater detail. We have seen that there is a distinction between the assertion *It is raining* and the assertion (14), a distinction which makes the analysis of assertions as expressions of speaker's beliefs implausible.

(14) I believe that it is raining.

But what does this sentence actually express? Interestingly, the difference between beliefs and assertions were discussed already by Peirce. Peirce contrasts the public act of an assertion from the private "act of assent", which is

an act of the mind by which one endeavors to impress the meanings of the proposition upon his disposition, so that it shall govern his conduct, this habit being ready to be broken in case reasons should appear for breaking it. (CP 2.315)

In another note, Peirce uses the term "judgement", of which he says:

A judgment is the mental act by which the judger seeks to impress upon himself the truth of the proposition. It is much the same as an act of asserting the proposition, or going

before a notary and assuming formal responsibility for its truth, except that those acts are intended to affect others, while the judgment is only intended to affect oneself." (CP2,252)

This passage resonates with Geurts' discussion of the notion of internal coordination. - Frege, in *Der Gedanke* (The Thought) (1918), appears to make the same distinction when he states (highlighting is mine):

Two things must be distinguished in an indicative sentence: the **content** (Inhalt), which it has in common with the corresponding sentence-question, and the assertion (Behauptung). The former is the thought (Gedanke), or at least contains the thought. So it is possible to express the thought without laying it down as true. Both are so closely joined in an indicative sentence (Behauptungssatz) that it is easy to overlook their separability. Consequently we may distinguish:

- the apprehension of thought thinking (Fassen des Gedankens, das Denken),
- the recognition of the truth of a thought judgement (Anerkennung der Wahrheit, das Urteilen)
- the communication of this judgement assertion (Kundgebung dieses Urteils das Behaupten)

Interestingly, Frege initially mentions just the distinction between two parts of "indicative sentences" (assertions), already introduced in the Begriffsschrift (Frege 1879) with the distinction between a proposition $-\varphi$ and the assertion of this proposition marked by the judgement stroke, $|-\varphi|$. But then he goes on and lists three parts, the proposition, the judgement that the proposition is true, and the communication of that judgement. Frege does not make much out of the distinction between judgement and assertion, and it seems that commentators, e.g. Dummett (1973), did not highlight this distinction either.

The rather obvious analysis of sentences like (2)(b) in the commitment approach is that S commits to the proposition "S believes that it is raining". Such commitments to beliefs can also serve to propose that the embedded proposition, "It is raining", should become part of the common ground, in a way that is similar to the process advocated by the belief theory of assertion: S publicly commits to S's belief that φ , S trusts that A considers S to have a wellfunded opinion about the truth of φ , and thus S's assertion that S believes that φ constitutes a good reason for A to accept φ into the common ground.

There are other ways to commit to one's own judgements about a proposition, for example by using epistemic adverbials like certainly, probably and presumably, or discourse particles like perhaps or German wohl.

- (15) a. The most notorious poisoners of the animal world are certainly the snakes.
 - b. The central village was probably self-sufficient.

- c. A missing egg is presumably an indication that a predator is around.
- d. The idea can <u>perhaps</u> be most easily visualized in terms of Schroedinger's cat.
- (16) Peter ist noch immer nicht da, er wird den Termin wohl vergessen haben.

There is evidence that such epistemic adverbials and discourse particles are not part of the proposition to be communicated, but rather are tools to manage the type of commitment of the speaker. For example, in (15)(b), S wants to convey the proposition that the central village was self-sufficient, but hedges the stakes by committing only to the proposition that S considers it probable. This is an instance of a "subjective" epistemic operator, where the epistemic authority is assigned to the speaker or, in embedded clauses as in (17), to the subject of the embedding clause.

(17) The archaeologist believes that the central village was <u>probably</u> self-sufficient.

In contrast, "objective" epistemic operators, as expressed by epistemic adjectives, are part of the communicated proposition itself. A sentence like (12) communicates the proposition that some trustworthy epistemic authority considers it probable that the central village was self-sufficient.

(18) It is probable that the central village was self-sufficient.

The distinction between subjective and objective epistemics was discussed by Lyons (1977: 797ff.) with distinct readings of epistemic verbs like *may* and *must*. Such epistemic verbs may indicate "the subjectivity of the speaker's commitment", or they present a probability "as an objective fact" (e.g., as in rolling a dice, when probabilities are fully known).

It appears that epistemic adverbs and particles clearly tend toward the subjective interpretation, whereas epistemic adjectives always are interpreted objectively (cf. Wolf 2015). There is an interesting asymmetry: Sentences with epistemic adjectives can be negated, whereas sentences with epistemic adverbials and particles cannot undergo negation (cf. Bellert 1977; Ernst 2009; Wolf 2012):

- (19) a. It is not certain / not probable / unlikely that the village was self-sufficient.
 - b. The village was *incertainly / *improbably / *unlikely self-sufficient.

In German, the adverb wahrscheinlich "probably" can be negated, but unwahrscheinlich, as an adverb, has a different meaning, as an emphasizer, with the meaning "incredibly". The fact that subjective epistemics cannot be negated can be explained by their assumed function, as devices to hedge the commitment to a proposition that the speaker wants to put into the common ground. After all, with a subjective epistemic operator the speaker S still wants to communicate a proposition φ , but only by committing to the proposition that S considers φ probable, likely, or certain. If S would commit to the proposition that S considers φ not probable, or not certain, then there is no reason for the addressee A to muster enough trust in φ in order to admit it into the common ground. In contrast, with objective epistemics, S wants to communicate the proposition that φ is probable, or that φ is improbable, as judged by some objective source, and there is nothing wrong with that.

There is another difference between subjective and objective epistemics that is predicted by the assumption that the function of subjective epistemics is to put the non-modalized proposition into the common ground in a more cautious manner. With a subjective modal antecedent, a supporting discourse move can easily take up the non-modalized proposition, as in (20), but not if the antecedent is an objective modal, as in (21).

- (20) A. The central village was probably self-sufficient.
 - B. *I believe it, too.* (= I believe that it is was self-sufficient).
- (21) A. It is probable that the central village was self-sufficient.
 - B. *I believe it, too.* (= I believe that it was probably self-sufficent.)

The assumption that epistemic modals are not part of the proposition to be put into the common ground, but rather belong to the machinery by which this is done, may also help to explain the phenomenon of NEG raising. As it is well-known (cf. Horn 1989), in many cases sentences like (22)(a) and (23)(a) can be logically strengthened, and understood as the corresponding (b) sentences.

- (22) a. I don't think that a predator is around.
 - b. I think that no predator is around.
- (23) a. The archaeologist doesn't believe that the central village was selfsufficient.
 - b. The archaeologist believes that the central village was not self-sufficient.

The idea is that sentences like (22)(a) and also (23)(a) can be seen as committing to subjective judgements (by the speaker, or by another person like the archaeologist), with the main purpose of making a non-modalized proposition part of the common ground. In the case of (23)(a), this is by invoking another relevant authority (which can also be expressed by According to the archaeologist, the central village was self-sufficient; cf. Krifka 2014 for such "proxy" speech acts). We have argued that this precludes wide-scope negation over the epistemic operator, here think and believe. But if the purpose of these sentences is to express some positive epistemic evaluation of the embedded proposition, then they come with the requirement that the epistemic authority (the speaker in (22), the archaeologist in (23)) has some epistemic attitude or other toward the embedded proposition that would support putting a proposition into the common ground. And from that the propositions "S thinks that no predator is around" and "The archaeologist believes that the central village was not selfsufficient" follow. For example, (22)(a) negates that the speaker thinks that a predator is around, but as a subjective epistemic, requires that the speaker has an opinion about the embedded proposition that a predator is around. If S has some epistemic attitude toward φ but does not believe φ , then S does believe $\neg \varphi$. This is the explanation offered by Bartsch (1973), defended by Gajewski (2007), that NEG raising predicates come with a presupposition that the subject has an epistemic stance toward the embedded proposition. Here, I related it to the general function of such epistemic modifiers.

Whether this line of thought can be successfully applied depends on whether we can explain which predicates allow for NEG raising, and which ones do not. In general, epistemic and evidential predicates like *think*, *believe*, *expect* and *seem*, *appear*, *sound like* permit NEG raising, in contrast to communicative verbs like *say* and *claim*. These latter verbs refer to acts of communication, and there is no general support from the inference from not having publicly committed to a proposition φ to having publicly committed to $\neg \varphi$. But notice that such inferences may occasionally hold if such verba diciendi are used for communicating propositions indirectly, as in *The weather report didn't say that there will be snow tomorrow*, from which an inference may be drawn that according to the weather report, there will be no snow tomorrow. Also, there are known differences between lexical items with apparently the same meanings across languages (e.g., *hope* is not NEG raising, German *hoffen* is), which would have to be dealt with.

I should mention at this point volitive predicates like *want, intend, choose* and predicates of obligation such as *ought* and *is supposed* are NEG-Raising predicates (cf. Horn 1989: 323); I assume that they do not occur in assertions (they do not involve commitment to the truth of a proposition) but rather to optative acts, to which we turn now.

5 Commitments and the issue of emotives

In this section, we will have a closer look at the nature of commitments generated by speech acts. Our question is: Is every speech act based on a commitment relation between speaker and addressee relating to a proposition? Geurts discusses constatives (assertions), commissives like promises, and directives like commands as the major speech act types. Certainly, in a commissive speech act the speaker commits to the addressee to act in a way to make the proposition true. In a directive, the speaker wants to commit the addressee to act in a way to make the proposition true, and commits to agree with this goal - Geurts is right that directives contain such speaker commitments. If the speaker utters a command, and the addressee adheres to it, the speaker cannot, after that, complain that the addressee behaved in that particular way. Another case which shows that directives can come with speakers' commitments is evident with directives of the sort Stay healthy! that do not put the addressee under any evident obligation, and perhaps express a wish, or perhaps a magic spell, by the speaker.

However, constatives, commissives and directives are not the only speech acts. Here I would like to discuss speech acts for which, I think, the notion of commitment often does not make much sense. These speech acts are generally called "expressives", even though the class of expressive speech acts as recognized in Searle (1976) is considerably broader, including complex social acts like thanking, apologizing, and congratulating. Searle does not say much about such acts except that their propositional content is presupposed and that they lack a direction of fit – they do not claim anything about the world, or intend to change the world. According to Norrick (1978), they express emotions, not beliefs or intentions, and thus we may call them "emotives." This term appears to be better suited because one can also "express" a belief, an intention, or a commitment. This corresponds to "emotive meaning" as described in Stevenson (1937: 23), as a "tendency of a word [...] to produce affective responses in people"

Geurts suggests that emotives are nothing but constatives (assertions) that attribute a psychological state to the speaker, as in the following example:

(24) I'm sorry that there is nutmeg in the pudding

I think that this misses what is special about emotives. True emotives do not commit the speaker to the truth of a proposition. (24) might have a reading that amounts to the assertion that the speaker has feelings of regret that there is nutmeg in the pudding. But there is a more prominent reading that cannot be captured by this assertoric paraphrase.

The essence of emotives is the expression of an emotional attitude, typically by the speaker. This attitude can come with a broad range of flavors – surprise, admiration, disgust, but also desire (cf. Grosz 2011 for a treatment that covers both exclamatives and optatives as involving assignments of values on scales, namely scales of unlikelihood and desirability). Emotional attitudes are often factive – the entity or proposition to which the speaker expresses an emotional stance exists or is true. But this is so only with exclamatives, not with optatives. Rather, optatives are anti-factive, as they implicate or presuppose that the desired state does not hold.

The basic emotives are interjections like *Ouch!* and *Wow!* that express emotional attitudes of pain and amazement to contextually given phenomena (*ouch* is mentioned in passing by Geurts). It feels beside the point to say that a speaker is "committed" to having pain, or to being amazed, by such interjections. It is true that the hearer can extract information from interjections – that the speaker experienced pain, or finds something amazing. And it is also true that the speaker can intend to communicate with such emotive interjections, in a way that might very well be described in Gricean terms. The speaker might even deceive the addressee by using emotives in an insincere way. But a person cannot "lie" by using emotives in this way, any more than a person can "lie" by pretending to be asleep while in fact being awake. Lying is a form of deception, but not every deception is a lie.

I take this to be evidence that emotives are quite different from assertions. If there is a commitment coming from emotives, then this is due to expectations that emotional preferences of persons are persistent. Assume that John and Mary ate poached eggs and beans for breakfast in a hotel, and Mary was raving about it. Now John prepares poached eggs and beans at home, and Mary is not pleased. John can rightly be astonished, and say: *I thought you liked it!* But it would not be appropriate to accuse Mary of lying.

Emotives that contain expressions that denote the object of the emotive attitude, like surprise or desire as in (25)(a,b), are no different from interjections in that respect except that they contain expressions that identify the object of surprise or desire.

- (25) a. What a terrible mistake you made!
 - b. If only I were rich!

I will not go into the nature of these objects that evoke an emotive stance – it has been suggested that they involve a scale, cf. Rett (2011), Grosz (2011). What is evident is that they are not assertions, and hence differ from (26) (a,b).

- (26) a. You made a terrible mistake.
 - b. I have a wish to become rich.

Grosz (2011) argues for this difference to assertions by pointing out that confirming and denying reactions like That's right or That's false are fine with assertions but do not work well with exclamatives and optatives. However, I would like to point out that examples with volitive predicates like want and wish and exclamative predicates like be sorry, be surprised and be shocked can form sentences like (24) or (27)(a,b) that can also be used to express emotional reactions.

- (27) a. I am shocked that you made a mistake!
 - b. I want to become rich!

I suspect that just as with the assertion of the speaker's epistemic stances toward propositions, cf. (14), there are assertions of the speaker's emotive stances. Just as with standard emotives as in (25) they are not subject to confirmation or denials. We find a similar mixture of assertoric commitments and emotive expressives with optative and exclamative adverbials, e.g. luckily and surprisingly, as well as with derogatory expressions like WASP or kraut and epithets like bastard or idiot. The most common way to model such mixtures is by the twodimensional semantics of Potts (2007), who distinguishes between a descriptive and an expressive dimension in semantic representation. Perhaps it would be more appropriate to assume different kinds of speech acts, like commitments to propositions and emotive stances, that can mix in one and the same sentences.

It is intriguing to see the type of communication afforded by emotives as a precursor of true assertions. With emotives, a speaker expresses some attitude or other toward an entity or state-of-affairs. This is a subjective matter from which other persons can glean information about that entity or state-of-affairs by an abductive reasoning process that is a best explanation of this expressed attitude. This is similar to reasoning from other natural phenomena. With assertions, the table turns around: The speaker expresses a guarantee that some state-of-affairs holds. This is when the speaker can be said to be truly committed to it.

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