Schulz von Thun's Model of Communication

A Primer for Linguists

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Draft, November 22, 2021 Comments very welcome!

The German psychologist Friedemann Schulz von Thun presented in a series of books a model of human communication inspired by the Bühler's organon model. It can be seen as consisting of two elements: first, a model of the message, which takes into account not only the factual content expressed in an utterance, but sees as equally important what a speaker reveals about themselves, what they think their addressee is, and what they assume to be their relation with the addressee, and also, what the speaker's aim is when making an utterance. The second important element is the insistance on the fact that the message a speaker intended to send often does not correspond to the message reconstructed by the hearer, who brings their own preoccupations and biases to bear on the interpretation.

This model of communication is a promising way of conceiving of the inferences arising in dialogue, and may shed light on linguistic phenomena linked to the utterance situation. Unfortunately, the only full and detailed expositions I am aware of are in German.

This paper has two related aims: first, to present in an introductory, but critical way Schulz von Thun's model of human communication to an audience of linguists who do not read German, and therefore, cannot access Schulz von Thun's own texts; and second, to line out why this theory is of interest to linguists working in the semantics and pragmatics of natural language, or in discourse analysis.

I do not know whether this is of interest to anyone, and I am as of now hesitant to put more work into this. If you find this interesting, please contact me.

1. Introducing Friedemann Schulz von Thun

Friedemann Schulz von Thun (born 1944; seen here in figure 1) is a German psychologist. He is the author of an original model of human communication, which unfortunately is not widely known among linguists (even within Germany). His main work is entitled Miteinander reden ('Talking to one another'), published in 4 volumes from 1981 to 2007. He does not seem to have published anything in English. The only (even partial) presentation in English about his model of communication I found is a wikipedia page abount his model of the message.1 The aim of this primer is to provide an introduction to his work (and especially to first volume of Miteinander reden to an Englishspeaking audience of linguists, and in this way, to draw the attention of linguists dealing in any kind of way with verbal interaction and dialogue (pragmaticists, sociolinguists, discourse analysts, etc.).



Figure 1: Friedemann Schulz von Thun in 2014. Source: wikipedia

Schulz von Thun targeted his books to the general reader (clearly, linguists were not his main preoccupation). This, together with his main focus on therapeutic intervention in cases of failing communication, has the consequence that – to a trained linguist – he often appears to use rather allusive and imprecise vocabulary (which is however highly effective in communicating), and to sacrifice precision in the expression for accessibility. He is generally a rather unacademic and non-technical writer, and rather interested in the big picture and in getting his main points accross, rather than delving down into the minutia of detailed analyzis. This unprofessoral style has great virtues, but also limits his appeal in contexts where explicitness is highly valued and is the main source of scientific progress (such as in linguistics, or the domain I come from, which are [formal] semantics and pragmatics).

But even though SvT did not develop his ideas in order to analyse language and communication as such, and that linguists may in consequence feel that he does not always pursue his ideas to their logical end, and may sometimes even be led astray by suggestive formulations, I still believe that these ideas have the potential of improving our comprehension of inference processes in interpersonal communication, and that they can very well be integrated into linguistic models of conversation (and should be, in my mind). It seems to me that at a time where attempts are made to integrate the domains of sociolinguistics and pragmatics, SvT's model of communication has never been more relevant.

¹See https://en.wikipedia.org/wiki/Four_sides_model, consulted on 16/06/2021. The article has been flagged as having multiple issues ever since 2012.



Figure 2: A Schema of Bühler's (1965) Organon Model

2. Inspiration and Precursors

There are two main inspirations and precursors to Schulz von Thun's model of conversation: the *organon model* by Bühler (2011), and the work on pragmatics by Watzlawick, Beavin Bavelas, and Jackson (1967); indeed, one can see at least his model of the message as integrating the latter into the former. The presentation here is only meant to expose these influences; no attempt is being made to do justice to either Bühler (2011) or Watzlawick, Beavin Bavelas, and Jackson (1967).

The organon model, as illustrated in figure 2, has recently been revindicated by scholars working on expressive meaning (notably Gutzmann, 2019). The organon model is specifically stated to be a model of the (linguistic) sign,² and Bühler states that the sign has — additionally to its usual referential element (which he call the "representational" or "descriptive" function of language, also has an expressive dimension — which encodes information about the speaker (which he calls the "expressive function") – and information related to the hearer (which would then be the appealing function). The sign symbolizes objets and states of affairs, reveals (internal) states of the speaker, and potentially directs the behavior of the hearer. According to the type of discourse, one or the other function may be dominant; according to Bühler (2011: 39) cites lyric poetry as a kind of discourse rich in the expressive element, and commands especially focused on the appeal; finally, he names insults and terms of endearment as elements where there is a balance between the expressive and the appealing function.

²I am not sure it should be a general model of the sign, and maybe a more pragmatic approach would be preferable, in the light of the examples Bühler gives. I do agree that signs can encode expressive content ; for the appeal, I an less sure.

- (1) a. 2+2=4 [purely descriptive]
 - b. Ouch! [purely expressive]
 - c. Insert a coin. [purely appealing]
 - d. You asshole! / My dear! [balanced between expressive and appealing]

The second major influence on Schulz von Thun (1981) — and one that is probably as little known to linguists as SvT himself — is the analysis of the relation between speaker and hearer in Watzlawick, Beavin Bavelas, and Jackson (1967). This aspect may have been mentioned in Jakobson (1960), with the *phatic function* of language, but it is much more salient in Watzlawick, Beavin Bavelas, and Jackson (1967). They write:

All such relationship statements are about one or several of the following assertions: "This is how I see myself ...this is how I see you ...this is how I see you seeing me ..." and so forth in theoretically infinite regress. Thus, for instance, the messages "It is important to release the clutch gradually and smoothly" and "Just let the clutch go, it'll ruin the transmission in no time" have approximately the same information content (report aspect), but they obviously define very different relationships. (Watzlawick, Beavin Bavelas, and Jackson, 1967: 33)

[...]

Every communication has a content and a relationship aspect such that the latter classifies the former and is therefore a metacommunication. (Watzlawick, Beavin Bavelas, and Jackson, 1967: 35)

While Bühler (2011) still is cited in contemporary linguistic publications, I have not seen a citation of Watzlawick, Beavin Bavelas, and Jackson (1967). This is possibly due to the fact that many aspects of the book (for instance, its firm grounding in psychoanalysis) have not aged particularly well, even though the maxims of communication contained in the book deserve some attention.

Be that as it may, one can see Schulz von Thun's theory in part as a rather straightforward way of integrating the idea of "relation" into Bühler's Organon Model.

3. Introducing SvT's Model

In this section, I will try and present SvT's model as it is described in Schulz von Thun (1981). I will not always completely adhere to his exact way he presentats it, but my aim here is to follow as closely as possible the model, sometimes modifying (and eliminating) what seem to me expository shortcuts and internal inconsistencies. I will try to remain true to the spirit, rather than to the letter of the model. The presentation in this section tries to be completely informal, and to present the model on its own terms, as much as I am capable of. An attempt on how to integrate SvT with other models in pragmatics and semantics will be deferred to section 4.

It bears repeating at this point that SvT is a psychologist who is mainly interested in improving communication between persons where communication has become difficult and fraught with misunderstandings (couples in crisis, corporations, etc.). Therefore, some subjects that are of central interest to linguists (for instance, what relation does the linguistic material have with



Figure 3: The Message Square According To Schulz von Thun

what SvT calls the *message*, and where does the rest come from) are not discussed in his work, because they do not have any therapeutic (or otherwise practical) application.

The section is divided into 2 subparts: first, I will expose the account of a message in human communication according to SvT. Second, building on this, I will show how SvT conceives of human communication in a dialogic setup.

3.1. The Message according to SvT

We will start with the model of the message. In his book, Schulz von Thun represents a message in a communication between two human beings as a square, whose four sides are i) the factual content (German *Sachinhalt*) of the message; ii) the self-revelation (G. *Selbstkundgabe*); iii) the call (G. *Appell*; and iv) the relation (G. *Beziehung*). A schema of the square is depicted in figure 3. SvT is quite explicit in saying that *every* message in interpersonal communication where speech is involved has these four sides.

The intuition behind this is that, if I speak to someone in a given context – even uttering perfectly innocuous things like "*It's a beautiful day today*', I do not only transmit the factual content of the utterance concerning the meteorological situation. I cannot avoid to give away information with respect to myself (my feelings, desires, political stance, etc.), my aims (I want the hearer to do something, to acknowledge something, etc.), and also my relation with the hearer (do I want to interact with the hearer or not, do I think of the hearer as a social equal or not, do I assume the hearer to be knowledgeable in the area I am talking about, etc.). One important contribution of SvT is the insistance that problems in communication are often not related to the Factual Content, but rather to other components³ of the message. One of the explicit design

³A word on terminology: SvT generally refers to the global message as "Nachricht" (which I have translated here as *message*), while referring to individual components of the message as "Botschaft" (which is generally also translated as 'message'). There is no easy way of rendering this distinction in English, so I will describe individual sides of the square as 'elements' or 'sides' of the message.



Figure 4: Non-Linguistic Communication Squares (SvT 1981: 38)

features of the representation of the message as a square is the idea that these four different aspects are in principle of equal importance (see Schulz von Thun, 1981: 17): self-revelation or relation are thus not second-class citizens with respect to the Factual Content, which would be the pinnacle and central element of the message.

While this model looks much like a new and improved version of the organon model, there are a few important distinctions that need to be outlined. First, SvT takes this model to be a part of a model of communication; there is no committal or discussion as to whether the sign itself would encode (in all or in a few cases) some or all of the sides of the square, and more generally, in which relation linguistic signs stand to the overall message. SvT is rather non-committal as to how elements of the transmitted signal end up constituting a given side of the square, and does not discuss this issue at all; this is simply not an area of interest to him.

However, it seems that often, there is an equivalence for him of linguistic or explicitly uttered content of the message with the factual content.⁴ This is strongly suggested by the two examples he discusses in Schulz von Thun (1981: 38) where no linguistic content is involved. Both of these cases are represented in figure 4. In the first case, we see a little girl crying (without her uttering any word). In a second case, SvT discusses a case where there seems to be no communication at all: a man enters into a cabin in a train, where another man is sitting and reading a newspaper. The newcomer greets the other passenger, who does not react at all, and continues to read the journal.

In both cases, no word is uttered. However, consistent with the idea by Watzlawick, Beavin Bavelas, and Jackson (1967: 29) of the impossibility of not communicating, there still is a communication square – however, a square without any factual content, as is illustrated in figure 4.

By crying, the little girl reveals herself as being sad (self-revelation), calls for consolation, and, in this case, depicts the hearer as an aggressor, who is the cause of her sadness (cf. the left side of figure 4). The total absence of reaction by a potential conversation partner is similarly interpreted: that the sender is not interested in a conversation, because they find the other boring, that they want to be left alone, and including the call not to initiate any conversation (cf. the square on the right of figure 4). The point in the second case is not necessarily that the man reading his newspaper heard the greeting and *chose* not to respond; maybe he was simply

⁴This cannot be not completely accurate, since there is expressive content, which encodes speaker-related content, and therefore, would go into the *self-revelation* side of the square.



Figure 5: The Message Pentagon

fully absorbed by his exciting reading. However, it is a normal interpretation for the greeter to assume that the reader does not want to initiate a conversation, and this already constitutes communication (as limited as it may be).

I take it thus to be that *generally*, the explicitly coded linguistic message is to be classified as the Factual Content. However, there can be communication that explicitly targets elements that are Self-Revelation, Relation or Other-Revelation. This is classified then as metacommunication (see Schulz von Thun, 1981: 101ff.).

Now, having seen the basic outline of the message-square and a few examples, I will come to the first major departure in *presentation* of SvT's model here with respect to the format used in Schulz von Thun (1981). In his book, SvT always presents and draws his model as a square, just like I have done in figure 3. Yet, the model is slightly more involved, and in a way that can (and should) be exploited for the purpose of analyzing inference in human interaction. Schulz von Thun (1981: 183ff.) makes the point that there are actually two differing ingredients to the relation-side of the communication: i) a *you-message* (G. *Du-Botschaft*: you are such-and-such); and ii) a *we-message* (G. *Wir-Botschaft*: we are in such-and-such relation). I will refer to the former side of the communication as *Other-Projection*, and will reserve the term of *Relation* for the latter. Since in my mind, the advantage of separating these two aspects of SvT's Relation clearly outweighs the (minor) inconvenience of drawing pentagons instead of squares, I will represent henceforth messages as pentagons rather than as squares,⁵ as illustrated in the schema in figure 5 – unless presenting an analysis made by SvT in his own square-format.

While such a representation is a departure from the iconic format used in SvT's publications, it is nevertheless not a conceptual innovation of my side, but constitutes rather a visual acknowledgment of an important facet of communication already present in Schulz von Thun (1981:

⁵With modern typographical tools such as Large A and tikz, drawing a pentagon is hardly more complicated than drawing a square — a situation that was certainly different at the time when SvT developed his theory. If you feel intimidated by the prospect of drawing pentagons, please consult appendix A.

183ff.).

Now that we have a model of a message, we can move on to SvT's model of communication (which addresses only dialogue in a one-on-one perspective, but in an interesting way).

3.2. Dialogue in SvT's Model

SvT is a psychologist, and in his book, he mostly discusses cases of interest to him as psychologist, which are cases where communication does not work as expected or desired by the interactants. Such cases are probably not the habitual interactions a linguist (or a Gricean pragmaticist) would look at, but they provide interesting case studies on (often: non-cooperative) inference, in what may be considered argumentative interactions.

The first important point made by SvT is that, whatever message a speaker tries to send, there is no guarantee that the hearer restitutes the message as intended by the speaker. Therefore, we have to separate the intended message (speaker side) from the reconstructed message (hearer side). Furthermore, communication is not a one-way street: the hearer will give feedback to the speaker, which will also have to be separated in an intended feedback, and the reconstructed feedback by the hearer.⁶ The whole process can be illustrated as in figure 6, adapted from Schulz von Thun (1981: 90).

One way of looking at SvT's model is to see it from a conversation-analytic perspective: many of his examples deal with (hearer-inferred) cases of face-threats, which then prompt an aggressive reaction. Let us have a look at two examples.

3.2.1. Example 1: A Fight Around The Dinner Table

Let us look now at an example of (mis-)reconstruction of messages by SvT. The first example (analyzed in Schulz von Thun (1981: 68)) is a communication between husband and wife. They are having dinner, and there is a saucer on the table. Dinner has been prepared by the wife. The dialogue goes as follows (my translation).⁷

- (2) a. Husband: What is that green thing in the sauce?
 - b. Wife: Geez, if you don't like what I cook, you can leave and eat elsewhere!

SvT analyzes this interaction as illustrated in figure 7 (concerning specifically the husband's utterance "*What is that green thing in the sauce?*"). A first square (depicted on the left side of figure 7) represents the message the husband intended to communicate by uttering (2a); a second square (depicted on the right side of figure 7) represents the message the wife reconstructed upon hearing (2a). The only thing that the two squares have in common is the factual content (which is the presupposition associated with the question).

⁶In Schulz von Thun (1981: 90), figure 34 (apart from using squares rather than pentagons), there is a unique feedback, with no separation between what the hearer intended to give as feedback, and what the hearer assumes that feedback to be. However, there is no reason to assume that feedback (which is just another message) would be exempt from the problems of (mis-)constructed message restitution.

⁷The German original of (2a) is "*Was ist das Grüne in der Soße?*". It does not necessarily imply that the green entity is bad or not in its place.



Figure 6: Communication in a Dialogue Setting

A priori, the husband's intentions are innocent enough: his aim is simply to identify the green element he sees in the sauce, and whose nature he does not know. By asking the question, he necessarily reveals himself to be ignorant as to the identity of this particular ingredient (self-revelation), and he assumes that his wife should know it (relation), since she prepared the meal (and generally, asking someone a question does not really make sense unless the target of the question at least *might* know the answer). Notice that the intended message contains no face-threat, but rather a (a priori flattering) assumption of competence towards the wife.

However, this innocuous interpretation is not the message that is received (or reconstructed) by his wife. While containing exactly the same factual content, she takes the question to mean that her husband does not like the sauce (self-revelation), that the wants her to refrain from adding it in future meals (call), and that he questions or even belittles her cooking skills (relation). It is this reconstructed meaning with its threat to her face that causes her rather harsh reaction in (2b). Obviously, there has to be some history behind this exchange, but the following facts are interesting here: The reaction of the wife is not explained directly by the factual content (which is the explicitly transmitted meaning), but by the relation-side of the message. Relation is not explicitly stated, but inferred. And this inference is not a charitable one, but rather at odds with usual Gricean principles. The model by Schulz von Thun is perfectly able to account for such exchanges.



Figure 7: Intended vs. Reconstructed Message



Figure 8: Erzaehlmirnix (Nadja Hermann) on Non-Cooperative Inference (my translation)

3.2.2. Example 2: Analyzing Ingroup- and Outgroup Interpretations with Pentagons

In order to apply SvT's idea to a more recent example not present in Schulz von Thun (1981), and to illustrate the use of pentagons, consider the example in figure 8, a translated extract of a comic by German artist erzaehlmirnix (Nadja Hermann).⁸ The comic depicts a (failed) tentative of communication across the left-right divide, where once again, the intended message is not the one reconstructed. As we have seen already in the example in section 3.2.1, the inference does not seem to concern the factual content of the message directly, but rather the personality of the speaker (which would then concern the self-revelation). And as before, this is clearly an uncooperative inference, which cannot have been intended by the speaker. The origin of the inference must be in the reconstructed message.

⁸My translation. The German original – dating back to the time of the refugee crisis – goes as follows:

Was gesagt wird: Asyl ist ein Grundrecht
 Was verstanden wird: Ich bin ein verschwulter, linksgrünversiffter Gutmensch.

Verschwult litterally means something like "made gay"; *links-grün-versifft* is something like "left-green-dirty-through-lack-of-care", and a *Gutmensch* (literally "good-human", \approx well-meaning person) has become an all-purpose insult against people on the left, which I have tried to render by "libtard".



Figure 9: Erzaehlmirnix according to SvT: Intended (left) and Reconstructed (right) messages

Let us consider first what might be the intended message in this context. Once again, we can assume (at least for the sake of the argument) the very best intentions for the speaker, and the call simply to be to accept the claim that political asylum is a fundamental human right. For the sake of the argument, we will assume that the speaker belongs to the left side of the political spectrum, and thinks of themself as a progressive, informed and implicated citizen (self-revelation). Now, assuming that we are in a context where there is argumentation, and that the speaker and hearer diverge on this issue, it is natural to assume that for the speaker, since they expect the hearer to disagree on this matter, their own position is correct, and the hearer's position to be false. In order for argumentation to make sense, we can further assume that the hearer could learn from the speaker (which will manifest in relation and in other-projection). More generally, in argumentation, it should be assumed that by the act of argumenting, the speaker assumes that they contribute something valuable, and so far missing, to the hearer's point of view. Both relation and other-projection are toned down here, and seem innocuous. This message as intended by the speaker is depicted on the left side in figure 9.

Now, how do we get from this to the interpretation by the hearer, which is based on a very uncharitable inference? The idea is simple: assume for the sake of the argument that the hearer does not belong to the political left, or that the hearer assumes that the speaker localizes them in the speaker's outgroup, and sees them as a hostile. Now, one person's progressive enlightened citizen is another person's smug hypocritical wokester, whose principal aim is to get a validation for their professed moral superiority by virtue signalling.⁹ Even though the hearer may in principle agree with the factual content, they infer (given their assumption of self-revelation) that the point the speaker must be making concerns the speaker's moral superiority over the hearer — a face-threat that then must be taken care of by aggressive rejection. This is depicted on the right side of figure 9.

Notice that the interpretation process of the hearer is dependent on the idea that the speaker is in the hearer's outgroup, and that the speaker assumes that the hearer is in the speaker's outgroup. If we assume that speaker and hearer belong to the same (progressive) group, and if this exchange is not a real argumentation, but rather mutual reassurance of political orthodoxy, the inference

⁹In many cases, there are several evaluative visions on referentially identical social ascriptions. One may see both "progressive enlightened citizen" and "smug wokester" as *hybrid* or *thick* descriptions, see Väyrynen (2013), where the former puts a positive spin, and the latter a negative spin on what is arguably the same underlying social group.



Figure 10: Ingroup Hearer and the Effects on Inferences

process will be very different (even assuming the somewhat polemical ascriptions that could be used by a hostile hearer): the hearer has no longer any reason to object to any (implicit) ideas or claims of moral superiority of the speaker, since the speaker's moral superiority will be the hearer's moral superiority. Any inference of property of the speaker will be identical to the property at display in other-projection. The reconstructed message will in this case be something along the lines of figure 10.

Summing up the discussion of these two examples of communication which did not exactly go as the speaker intended, the model of communication by SvT explains without any problem non-cooperative inferences in a dialogical setting. Typically, the mechanism involved is that there is a divergence between the message the speaker intended, and its reconstruction on the hearer side.

3.2.3. The Hearer according to SvT

One interesting component of this model is that, contrary to many other models of communication, Schulz von Thun (1981: 67ff.) does not see the hearer in a passive role. He insists on the idea that the hearer is an active participant, and is responsible for their interpretations, and therefore has to own them. He suggests that many problems are due to interpretations by hearers that were never intended by the speaker, and in some cases maybe could not even have been anticipated. The problem is a problem of communication, and cannot be located in the speaker only.

Schulz von Thun (1981: 48ff.) goes on and provides a metaphor on how speakers tend to interpret messages. He suggests that hearers can be imagined as having five different 'ears' as illustrated in figure 11¹⁰, each one specializing in on side of the message. Furthermore, he assumes that certain hearers are more attuned in their interpretation to one particular side of the message, while backgrounding (or discarding entirely) other aspects of the message. For instance, he analyses (see Schulz von Thun, 1981: 58) a case where a husband withdraws, and his wife gets angry, as a case where it would be better to focus on the Self-Revelation of the husband ("I am tired and need to rest") of the husband, rather than on the relation side ("I

¹⁰Illustration adapted form Schulz von Thun (1981: 49). In SvT's illustration, the hearer is rather four-eared than five-eared.



Figure 11: The "Five-Eared" Hearer

don't like you anymore"). Similarly, he recommends that in (seemingly overly) aggressive verbal reactions towards children following a rather minor offense, it is often more productive to see this as venting (and thus, Self-Revelation: "Mum/Dad had a bad day at the office") rather than a statement about the relation ("Mum/Dad is angry about me/does not like me anymore").

A more general way of seeing things might be that interactions that turn out badly are those were a hearer focuses specially on the Other-Projection and Relation side of the message. In this way, the hearer will be especially attuned to detecting or inferring threats to their face, and if such a threat is detected, it will require moves to restore face. Schulz von Thun (1981: 231) cautions that if such a configuration goes on for too long, Factual Content and Relation/Other-Projection may become inextricably intermingled, such that any discussion on Factual Content will fail. In this case, he suggests to abandon discussion on the Factual Content, and move to addressing the problems on the Relation/Other-Projection side explicitly, in order to be able to disentangle and get rid of the interferences.

4. SvT's Model as an Integrative Model of Pragmatics and Sociolinguistics

In section 3, we have looked at SvT's model as presented in Schulz von Thun (1981), with the minimal addition of introducing globally the differentiation between Relation (in a strict sense) and Other-Projection. I hope to have convinced you of the ease in which cases of over- or misinterpretation by the speaker can be accommodated in this framework, and that it can provide insight into processes of inference arising from the interaction of a speaker and a hearer in dialogue. The aim in this section is to show how SvT's model could be used as a tool to integrate (contempory) pragmatics and (3rd wave) sociolinguistics, which mostly arose well after the publication of Schulz von Thun, 1981.

First of all, let us look at what the different side of the message should encode. On the most basic level, these should all be propositions (this is also true for the Call, if one sees it, as I will try to suggest below, in analogy to a relevance-topic in the sense of Anscombre and Ducrot, 1983 or Merin, 1999). This is not always the case in the examples used in Schulz von Thun (1981). We

can be more specific:

- (3) a. Factual Content: proposition
 - b. Call: proposition
 - c. Self-Revelation: predication on speaker P(speaker)
 - d. Other-Projection: predication on hearer P(hearer)
 - e. Relation: relation speaker-hearer R(speaker, hearer)

That is, the proposition in relation has to be relational, it should not be the case that the proposition in Self-Revelation and Other-Projection should involve more than one individual (that is, either the speaker or the hearer).

4.1. SvT's Model as Exemplifying Argumentative or Goal-Driven Communication

It is a standard assumption in pragmatics that in order to interpret an utterance, a hearer has to guess what are the intentions of the speaker. This has been formalized in argumentative approaches to pragmatics (see, e.g. Anscombre and Ducrot, 1983; Merin, 1999) with the notion of an argumentative goal. Especially the work by Merin integrates Bayesian procedures of analysis into pragmatics, explaining scalar implicatures beyond Horn-scales, and also, formalizing the rather elusive notion of relevance.

The Call-dimension in SvT's model can be used without problem in order to integrate such an argumentative goal, and therefore, all the benefits of such approaches to pragmatics can be integrated here.

4.2. A Convenient Way of Integrating Sociolinguistics of Style and (Traditional) Pragmatics, and Exploring Their Interaction

Recent years have seen a push to unite sociolinguistics (especially of the 3rd wave variety) and pragmatics (see, e.g., Acton, 2014; Burnett, 2019), via the notion of *personas*, that is, social roles a speaker wants to project of themself. Of course, SvT's model provides an obvious way of integrating persona-based approaches to style, since it can simply be integrated into the Self-Revelation side of the message.

However, SvT's model may go beyond that, in insisting on the necessity that one cannot just focus on the discursive construction of identity of the speaker alone; this has necessarily consequences also on the discursive construction of the identity of the hearer (the Other-Projection can also be seen as the persona of the hearer, as projected by the speaker), and the relation between these two personae.

Notice that this is not the only interpretation one can make of SvT's message model, or a necessary consequence and refinement of it. In some of his examples (think of the crying girl from figure 4, or the discussion between husband and wife from figure 7), the self-revelation clearly is not a persona, that is a social role: *I am sad* or *I don't know what that green stuff is* cannot

qualify here. On the other hand, in examples like the one illustrated in figure 8, something like a "smug wokester" or a "progressive openminded citizen" would qualify as personas.

Since SvT's model integrates discursive goals (an important source of pragmatic inference) with (potentially) persona, it can also provide a model for the interaction of persona-based inferences and conventional pragmatic "factual content-augmenting" inferences.

One notion relevant here could be the requirement for a coherent message. That is, whatever message one intends or reconstructs, there are some configurations that are not coherent. Assume that a speaker is deluded enough to (intend to) send a message containing the following elements:

- (4) a. Self-Revelation: I am a generous patron of the arts.
 - b. Other-Projection: You are a gifted, but poor painter.
 - c. Relation: I support you.
 - d. Call: Invite me for dinner at the 3-star Guide Michelin restaurant "Le Coq doré".

Clearly, there is a certain tension between the Self-Revelation, and the Call aspects: A generous patron of the arts should not try to have themself invited to dinner in a very expensive restaurant, and what is more, by an artist who cannot really afford such an invitation. This contradiction may not be obvious to a sufficiently self-centered speaker, but it will without doubt be caught be the hearer. Assume thus the speaker having (4) in mind to utter (5):

(5) "Le Coq doré" is such a lovely place. What about having dinner there tonight?"

Probably, the utterance of (5) would first be interpreted as an invitation by the speaker to the hearer. This would be one way of obtaining a coherent pentagon: by removing the inappropriate Call. But if this misunderstanding has been cleared, and the call as in (4d) is confirmed, there will probably be a different inference of Self-Revelation and Relation by the hearer, something along (6):

- (6) a. Self-Revelation: I am stingy.
 - b. Relation: I exploit you.

Generally, for the hearer, Other-Projection is probably a fixed element (since it concerns the hearer's persona), together with the Factual Content, and so, it should not be that easily be changed by inference processes. However, a hearer will probably be willing to infer non-flattering (for the speaker, that is) Self-Revelation and Relation components of the message.

The important thing is to notice that message coherence will allow for the investigation of the interaction between sociolinguistic (persona-based inferences) and pragmatic (content-based inferences) if one assumes that the latter arise from the interaction between Factual Content and Call, and that the former concerns the three remaining sides of Self-Revelation, Other-Projection and Relation.



Figure 12: Shannon: Diagram of General Communication System

4.3. Linguistic Coding vs. Inference in SvT Model of Communication

One of the unsolved — and as far as SvT himself goes: unaddressed — issues with SvT's model of communication concerns the question of how linguistic coding is related to the pentagon-model of the message, as I already discussed in section 3.1. Whereas the "conventional model" of formal semantics would be concerned merely with Factual Content (and subdividing this further into different strates, e.g., presuppositions, conventional implicatures, etc.), recent approaches have looked at content that would be classified as falling into the Self-Revelation category.

In order to see more clearly the issue, let us consider another very influential model of communication, namely the one provided by Shannon (1948), and which relies on a much more general approach to communication (that is, it is not limited to human communication). Shannon's model is illustrated in figure 12. One of the features of Shannon's model is the clear distinction between the *message* (that is, what is the meaning to be transmitted) and the *signal* (that is, whatever perceivable element produced by the transmitter to the receiver). In Schulz von Thun (1981), there is no such distinction. The status of the global message with respect to the linguistically coded elements does never appear, even though there is often an implicit assumption that what is (linguistically) said is part of the factual content.

From the litterature on expressives (for a recent example, see Gutzmann, 2019), it seems clear that some expressions explicitly code for elements that go into self-revelation. However, are there any linguistic expressions that would code for Relation, or Other-Projection, and thus demonstrate a need for these categories in linguistic analysis?

Arguably, this is at least the case for vocatives. Consider the following dialogue:

- (7) a. A: Basil, did you see Mrs. X. this morning?
 - b. B: No, sir. I have not seen her.

In (7a), A uses a firstname to refer to his addressee, whereas in (7b), B uses *sir* to address A. One can try and reduce this to expression of self-revelation, roughly as "A asserts his status as

the master", and "B acknowledges his status as a servant", but notice that both social concepts of a *master/boss* and a *servant/employee* are intrinsically relational. Therefore, such vocatives (and any vocatives described by Zwicky (1974: 795) as "sociolinguistic markedness of vocatives") do not only contain indications about what the speaker thinks of themself, but also, what the speaker takes the addressee to be, and also their relation between speaker and hearer (this is an intuition that seems to be present already in Bühler, 2011: 39, as mentioned in the presentation of the organon model in section 2). Therefore, at least some vocatives seem to require the three elements of Self-Revelation, Other-Projection and Relation for their analysis.

5. Conclusion

Schulz von Thun (1981), while currently widely unknown to the wider linguistic community, presents a promising framework for contemporary linguistic endeavors dealing with inference in a communicative setting. This paper aimed at providing a presentation of the most relevant aspects of his work to linguists, and also an outline of how these ideas could be integrated into current research on pragmatics, sociolinguistics and discourse analysis.

A. Tikz for your SvT needs

You don't want to search for hours how to reproduce the figures in this primer? I have got you covered.

A.1. Drawing a Message Square

```
\documentclass[border=1mm]{standalone}
2 \usepackage[utf8]{inputenc}
3 \usepackage[T1]{fontenc}
4 \usepackage[loosequotes]{MinionPro}
5 \usepackage{tikz,pgfplots}
6 \pgfplotsset{compat=1.15}
/usetikzlibrary{shapes.geometric, patterns, calc}
8 \usetikzlibrary{arrows}
> \begin{document}
10 % the following removes white background color
n \nopagecolor
12 \begin{tikzpicture}[line cap=rect,line join=round]
   % outer square
13
   \draw[line width=.4mm] (0,0) rectangle (4,4);
14
   % inner square
15
   \draw (0.5,0.5) rectangle (3.5,3.5);
16
   % base polygon
17
                                                      (0,0) -- (4,0) -- (3.5,0.5) --
   \draw[line width=.4mm]
18
      (0.5,0.5) -- cycle;
                                                      (4,0) -- (4,4) -- (3.5, 3.5) --
   \draw[line width=.4mm,fill=gray!60]
19
     (3.5,0.5) -- cycle;
                                                      (4,4) -- (0,4) -- (0.5, 3.5) --
    \draw[line width=.4mm, pattern=dots]
20
     (3.5, 3.5) -- cycle;
   \draw[line width=.4mm, pattern=north east lines] (0, 4) -- (0,0) -- (0.5, 0.5) --
21
     (0.5, 3.5) -- cycle;
   \node at (2,2) [align=center] {\huge Message\\ \large (Nachricht)};
22
   \node at (2,-.8) [align=center] {\huge Relation\\ \large (Beziehung)};
23
    \node at (5,2) [align=center] {\huge Call\\ \large (Appell)};
24
    \node at (-1.2,2) [align=center] {\huge Self--\\ \huge Reve-\\ \huge lation\\ \huge
25
       \\ \large (Selbst--\\ \large kundgabe)};
   \node at (2,4.8) [align=center] {\huge Factual Content\\ \large (Sachinhalt)};
26
27 \end{tikzpicture}
_{28} \end{document}
```

A.2. Drawing a Message Pentagon

But squares are easy, and you would have figured out anyway. Pentagons, though, are more interesting. This is how I did it:

```
\documentclass[border=1mm]{standalone}
2 \usepackage[utf8]{inputenc}
3 \usepackage[T1]{fontenc}
4 \usepackage[loosequotes]{MinionPro}
5 \usepackage{tikz,pgfplots}
6 \pgfplotsset{compat=1.15}
/usetikzlibrary{shapes.geometric, patterns, calc}
8 \usetikzlibrary{arrows}
> \begin{document}
10 % the following removes white background color
n \nopagecolor
12 \begin{tikzpicture}[line cap=rect,line join=round]
   % outer pentagon:
13
   \draw[line width=0.4mm] (0,0) -- (4,0) -- ++(72:4) coordinate (UR) -- ++(144:4)
14
     coordinate (TOP) -- ++(216:4) coordinate (UL) -- cycle;
    % inner pentagon
15
                            (0,0) -- (4,0) -- ++(126:0.8) coordinate (A1) -- ++(180:3
    \draw[line width=.4mm]
16
     cm) coordinate (A2) -- cycle;
    \draw[line width=.4mm, fill=gray!60]
                                            (4,0) -- (UR) -- ++(198:0.8) coordinate (A3)
       -- (A1) -- cycle;
    \draw[line width=.4mm, pattern=dots]
                                            (UR) -- (TOP) -- ++(270:0.8) coordinate (A4)
18
       -- (A3) -- cycle;
                                                        (TOP) -- (UL) -- ++(342:0.8)
    \draw[line width=.4mm, pattern=north west lines]
19
     coordinate (A5) -- (A4) -- cycle;
                                                  (UL) -- (0, 0) -- (A2) -- (A5) --
    \draw[line width=.4mm, pattern=crosshatch]
20
     cycle;
    \node at (2,2.9) [align=center] {\huge Message\\ \large (Nachricht)};
21
    \node at (2,-1) [align=center] {\huge Other-Projection\\ \large (Du-Botschaft)\\ \
     large \emph{You are such}};
    \node at (-2.5,2) [align=center] {\huge Relation\\ \large (Wir-Botschaft)\\ \large
     \emph{This is our relation}};
    \node at (6,2) [align=center] {\huge Call\\ \large (Appell)\\ \large \emph{Do this
24
     }};
    \node at (-1.5,5.8) [align=center] {\huge Self-Revelation\\ \large (Selbstkundgabe)
     \\ \large \emph{I am such}};
    \node at (5.3,5.8) [align=center] {\huge Factual Content\\ \large (Sachinhalt)\\ \
26
     large \emph{I inform you of that}};
  \end{tikzpicture}
27
28
```

```
29 \end{document}
```

A.3. Drawing the Full Communication Model

Finally, how can we do the full communication model?

```
\documentclass[border=1mm]{standalone}
2 \usepackage[utf8]{inputenc}
3 \usepackage[T1]{fontenc}
4 \usepackage[loosequotes]{MinionPro}
5 \usepackage{tikz,pgfplots}
6 \pgfplotsset{compat=1.15}
/usetikzlibrary{shapes.geometric,patterns,calc,matrix}
8 \usetikzlibrary{arrows}
y \tikzset{svtpentagon/.pic={
    \draw[line width=0.4mm,fill=white]%
10
        (0,0) -- (4,0) -- ++(72:4) coordinate (UR) -- ++(144:4) coordinate (TOP) --
      ++(216:4) coordinate (UL) -- cycle;
    % inner pentagon
                              (0,0) -- (4,0) -- ++(126:0.8) coordinate (A1) -- ++(180:3
    \draw[line width=.4mm]
13
     cm) coordinate (A2) -- cycle;
    \draw[line width=.4mm, fill=gray!60]
                                            (4,0) -- (UR) -- ++(198:0.8) coordinate (A3)
14
       -- (A1) -- cycle;
    \draw[line width=.4mm, pattern=dots]
                                            (UR) -- (TOP) -- ++(270:0.8) coordinate (A4)
15
       -- (A3) -- cycle;
    \draw[line width=.4mm, pattern=north west lines]
                                                         (TOP) -- (UL) -- ++(342:0.8)
16
     coordinate (A5) -- (A4) -- cycle;
    \draw[line width=.4mm, pattern=crosshatch]
                                                   (UL) -- (0, 0) -- (A2) -- (A5) --
     cycle;
    \draw[line width=.4mm, fill=white] (A2) -- (A1) -- (A3) -- (A4) -- (A5) -- cycle
18
      :
19 }
20 }
21 \begin{document}
22 % modified from \citet[90]{schulz81}, Abb. 34.
23 % the following removes white background color
<sup>24</sup> \nopagecolor
25 \begin{tikzpicture}[line cap=rect,line join=round,transform shape]%,>=triangle 45,x=1
      cm,y=1cm]
    \matrix (m) [matrix of nodes,row sep=2cm,column sep=2cm,minimum width=2em]
26
    {
       Sender & & Receiver \setminus
28
        & & \\};
29
     \path[-stealth,thick]
      (m-1-1) edge [] node {} (m-1-3);
31
      \draw [-{stealth},thick] (m-1-3.south) -- ++(0,-4cm) -| node [near start]
                        {} (m-1-1.south);
     \pic[scale=0.4] at (-1.2,0.2) {svtpentagon};
34
     \node[align=center,text width=1cm,draw=none] at (-0.4,1.5) {\scriptsize Intended
35
     Message\par};
     \pic[scale=0.4] at (-.4,-1) {svtpentagon};
36
     \node[align=center,text width=1cm] at (0.4,0.2) {\baselineskip=2pt \scriptsize
37
     Recon-\\structed Message\par};
     \pic[scale=0.4] at (-.4,-3.9) {svtpentagon};
38
```

- 39 \node[align=center,text width=1cm] at (0.4,-2.5) {\baselineskip=2pt \scriptsize
 Intended Feedback\par};
- 40 \pic[scale=0.4] at (-1.2,-5.1) {svtpentagon};
- 41 \node[align=center,text width=1cm] at (-0.4,-3.9) {\baselineskip=2pt \scriptsize
 Recon-\\structed Feedback\par};
- 42 \end{tikzpicture}
- 43
- $_{44} \end{document}$

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