



UvA-DARE (Digital Academic Repository)

Models of language: towards a practice-based account of information in natural language

Andrade Lotero, E.J.

[Link to publication](#)

Citation for published version (APA):

Andrade-Lotero, E. J. (2012). Models of language: towards a practice-based account of information in natural language Amsterdam: Institute for Logic, Language and Computation

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Chapter 3

Alternative accounts of language and information

The assessment of formal semantics that I developed in the previous chapter starts from the perhaps unusual idea—that is, unusual in the context of mainstream contemporary theories of language—that any account of language should preserve our descriptions of our uses of signs in general, and language in particular, in everyday life. Such a starting point arises from the conviction that language and meaning are not natural kinds, but symbolic ones—where ‘symbolic kinds’ designates those concepts the extension of which depends on the proper use of signs that express those concepts (see §2.1.1). On the basis of this supposition, I developed a criticism of the widespread conception of language as a set of sentences generated from a set of syntactic and semantic rules and the concomitant conception according to which linguistic competence is tacit knowledge of such syntactic and semantic rules. Given that the criticized conception of linguistic competence underwrites popular accounts of linguistic information and linguistic communication—i.e., popular at least among formal semanticists—, my critique of such conception has also consequences for these accounts. Paramount in this assessment is the idea of incomplete understanding—i.e., that speakers can make correct uses of expressions that they are not (fully) competent with. The idea of incomplete understanding played a pivotal role in most of the previous chapter, not only in my arguments against formal semantics, but in the development of an alternative model of linguistic communication. The question remains, what conception of linguistic competence allows us to account for this idea of incomplete understanding? How can we account for linguistic information on the face of successful communication despite incomplete understanding? What exactly does the concept of language as a symbolic kind come down to?

To address these issues, insights shall be sought by examining some recent accounts of language and meaning. The accounts I have chosen for this purpose are Tomasello’s usage-based account of language (§3.1), and Brandom’s pragmatic

inferentialism (§3.2). In the next chapter I will develop my own account of language and meaning, which is a version of the motto that “meaning is use,” where the relevant notion of “use” is underwritten by the notion of a ‘role in a social practice’; to this effect, I shall make use of the theory of social practices developed by Theodor Schatzky.

The choice of these accounts is not completely fortuitous, as I will explain in a moment. Unfortunately, there was no time to explore in detail other important theories of language, in particular, Wittgenstein’s, Davidson’s, Putnam’s and Burge’s, Horwich’s use-theoretical account of meaning, the evolutionary, computational paradigm of Simon Kirby, and Vigotsky’s socio-cultural approach to language and thought. Such comparison must remain as a suggestion for future work.

There are three main reasons why I would like to examine here Tomasello’s usage-based account of language. To begin with, Tomasello’s account stands out in opposition to the idea that language and its meaning can be studied beforehand, and hence independently of, language-use. Moreover, his account of what information language conveys is connected with the use of language in situations (in particular, with what he calls joint attentional frames), which is concomitant to an alternative conception of linguistic competence that relies on cognitive and social-cognitive skills. Finally, his rich descriptions of empirical facts and such a detailed step-by-step account of the language acquisition process serves as a valuable source of empirical data for any account that intends to carry out an empirical study of language.

There are three main reasons why I would like to examine here Brandom’s pragmatic inferentialist project. To begin with, Brandom stands out in opposition to the traditional concept of content (information) in semantics, namely, that of the representational approach. More importantly, he opposes to it an account of content based on the role of sentences and subsentential expressions in practices (more precisely, their role in a particular kind of practice). Another reason is that Brandom’s account of understanding leaves room for a discussion of incomplete understanding. Finally, Brandom contends that the kind of practices that confer content (information) on sentences and mental states are fundamentally and irreducibly social.

3.1 Tomasello’s Constructing a Language

3.1.1 A usage-based account of language

Tomasello’s (2003) approach to language, which frames itself within the so called usage-based theories of language,¹ is introduced as an alternative to the current dominant approach in linguistics, namely Chomskyan linguistics.

¹See, e.g., Barlow and Kemmer (2000); Goldberg (1995, 2006).

The Chomskyan revolution in linguistics—which has sustained a number of transformations through the decades—maintains the conviction that natural languages are generated from syntactic rules that govern the structure of sentences. Such rules are stated in terms of abstract syntactic categories, where ‘abstract’ means that they are independent from the “properties of utterances that are accessible to experience” (Cowie, 2010). Along with such abstract categories, a distinction is posited between what can and what can not be learned by a child during her language acquisition process, since by definition abstract categories cannot be learned through experience. That is “[t]he gap between what speaker-hearers know about language (its grammar, among other things) and the data they have access to during learning is just too broad to be bridged by any process of learning alone” (*Idem*)—this claim is known as the “argument from the poverty of stimulus.” According to Chomskyan linguistics, human children are born with a Universal Grammar, which contains the principles that determine the structure of any possible human language. Any particular language is, according to Chomskians, generated by the rules determined by the Universal Grammar once the main parameters are tuned to the contingent input the child receives from her environment.² It is worth noting that, in order for such a line of thought to go through, one must abide by what Tomasello calls the Continuity Assumption, namely, “that basic linguistic representations are the same throughout all stages of child language development—since they come ultimately from a single universal grammar” (Tomasello, 2003, p. 2).

The argument from the poverty of stimulus has been amply debated in the literature and it would take us too far afield to recapitulate here the main lines of argumentation, pro and con.³ Suffice it to say that Tomasello is particularly short, but in my view effective, in assessing such an argument: he claims that “the principles and structures whose existence it is difficult to explain without universal grammar [...] are theory-internal affairs and simply do not exist in usage-based theories of language—full stop” (*Ibid*, p. 7).⁴

At the background of the opposition between usage-based and Chomskyan linguistics lies a different conception of the nature of language. The conception of the study of language as an abstract and formal description of meaning-independent rules must be replaced, according to Tomasello and usage-based theorists of lan-

²Chomsky claims: “It seems plain that language acquisition is based on the child’s discovery of what from a formal point of view is a deep and abstract theory—a generative grammar of his language—many of the concepts and principles of that are only remotely related to experience by long and intricate chains of quasi-inferential steps” (Chomsky, 1965, p. 58).

³But see, e.g., Pullum and Scholz (2002); Fitz (2009); Cowie (2010).

⁴See also Tomasello’s brief mention of Chomskyan linguistics’ internal problems about language acquisition (*Ibid*, p. 7): (i) the linking problem: How can the child link her abstract universal grammar to the particularities of the particular language she is learning? (ii) the problem of continuity: How can we understand the changing nature of children’s language across development if universal grammar is always the same? See also the critique of universals (*Ibid*, §2.1.3, pp. 19ff).

guage, by a conception where the essence of language is its symbolic dimension—i.e. how it is used in everyday life. The role of grammar is thus derivative from the symbolic dimension. Grammar exists in as far as it facilitates and enhances the symbols humans use to communicate with one another. Grammar is a by-product of human pattern recognition capacities applied to communicative settings: patterns of use become consolidated into grammatical constructions. Constructions are the basic building blocks of language. Words and idioms are constructions, and so are intermediate sequences of words, mixed sequences of words and syntactic variables, and abstract patterns of words. Constructions are symbols that consist of a mix between syntax and semantics. Grammatical constructions “are nothing other than the patterns in which meaningful linguistic symbols are used in communication” (*Ibid*, p. 5).

According to Tomasello, linguistic symbols are human specific ways to communicate. As opposed to non-human animals, whose communicative exchanges consist in manipulations of other’s behavior and emotional states, human communication consists in manipulating the attentional states—i.e., the mental state a person is in when paying attention to an object—of other persons. Emergence of symbols is a phylogenetic process; emergence of grammar is a cultural-historical affair. Hence, the process of language acquisition is a cultural issue, and the mechanisms that bring about this acquisition are use-driven.

The central tenet of usage-based theories of language implies that language structure is learned and hence not innate. These two claims, namely that language structure depends on its function and that it can be learned, have as a consequence that no principled distinction can be made between linguistic core and periphery, as Chomskyan linguists stipulate. Accordingly, usage-based theories of language should abide by the claim that the mechanisms and evidence available to the child in her language acquisition process are enough to learn all there is to be learned about structure—i.e. adult linguistic competence. Part of the strategy is to come up with simpler descriptions of such an adult linguistic competence, and to claim that the same structure need not apply across different stages of language acquisition.

The notion of linguistic competence does not consist, as it did in Chomskyan linguistics, of a Universal grammar of generative rules. According to usage-based theories of language, linguistic competence consists of “the mastery of a more complex and diverse set of linguistic representations which includes the core, the periphery and many things in between” (*Ibid*, p. 6).

The Continuity Assumption from Chomskyan linguistics is not operative here; although any stage of linguistic competence must be described by appealing to structured inventories of constructions, such a structure need not be constant and somehow present across stages.

3.1.2 Human symbolic communication

Tomasello claims that animal communication consists in the use of signals as a way to manipulate other's behavior and motivational states. For example, the purpose of alert signals is to prompt evasive actions against predators. Such signals are not learned. As opposed to animal communication, human symbolic communication is an independent, human specific ability. Linguistic communication is a special form of human symbolic communication. The two main human specific characteristics of communication are its symbolic and its grammatical nature. The symbolic dimension of human communication is that symbols are aimed at the attentional states of others. The grammatical dimension establishes that symbols are used together in patterned ways, patterns that take on a meaning of their own.

The account of the symbolic dimension of human communication starts with a new kind of social cognition—'new' in the sense of species specific—, which likely evolved as a result of adaptation. This new kind of social cognition consists in the capacity human beings have to understand one another as intentional and mental agents, which then leads them to the attempt to manipulate other's intentional and mental states for various cooperative and competitive purposes.⁵

The manipulative aspect of symbols seems *prima facie* closely related to what Tomasello calls the intersubjective property of symbols, namely that everyone knows that everyone is potentially both a producer and a comprehender of those symbols. There are three fundamental characteristics to symbols (see *Ibid*, p. 12). First, symbols have the (only) purpose of directing the attentional state of others to outside entities. Second, such use is merely declarative, that is, simply to inform other persons of something with no expectation of an overt behavioral or motivational response. Third, the information transmitted through a symbol is fundamentally perspectival "in the sense that a person may refer to one and the same entity as *dog*, *animal*, *pet* or *pest*, or the same event as *running*, *fleeing*, *moving* or *surviving*—depending on her communicative goal with respect to the listener's attentional states" (*Idem*).

⁵A number of relevant quotes on this point are the following: "Intentional agents are animate beings who have goals and who make active choices among behavioral means for attaining those goals, including active choices about what to pay attention to in pursuit of them" (*Ibid*, p. 21). "[Intention reading behaviors] would seem to indicate an emerging understanding of other persons as intentional agents like the self whose psychological relations to outside entities may be followed into, directed, and shared" (*Idem*). "Sounds become language for young children when and only when they understand that the adult is making that sound with the intention that they attend to something. This requires an understanding of other persons as intentional agents who intend things toward one's own intentional states" (*Ibid*, p. 23). It might be important to notice that, even though the manipulation of the intentional and mental states of others can be made in order to pursue various cooperative and competitive purposes, Tomasello seems to assume that such a manipulation can be a purpose on its own, and that as such it is independent from these further purposes.

There are three main axis to the perspectival character of the information transmitted by symbols. They are the granularity-specificity (thing, furniture, chair, desk chair), the perspective (chase-flee, buy-sell, come-go, borrow-lend), and the function (father, lawyer, man, American; coast, shore, beach).⁶

Tomasello's notion of communication—which is basically a Gricean model of communication (see §1.3.2)—can be described in the following, schematic way. Agents *A* and *B* know that they both have mental states that attend to outside entities. Suppose that symbol *S* is shared between *A* and *B*, that is to say, that both *A* and *B* know that they are both producers and consumers of symbol *S*, and that they attribute it the same function—i.e., *X*'s tokening of a linguistic symbol *S* has the purpose of directing *Y*'s mental state to an outside entity *E* with a particular perspective. Thus, when *A* tokens symbol *S*, *B* knows that *A* intends for him to direct attention to *E* with the particular perspective mandated by symbol *S*. Accordingly, *B* changes his attentional state in the directed way.

This model of symbolic communication bears on the notion of language via the central tenet of usage-based theories of language, namely that grammar emerges from language-use. Indeed, the notion of language use is precisely the notion of symbolic communication.⁷

3.1.3 An account of language acquisition

One of the important consequences of this conceptualization of language is that it brings about a change both in the notion of linguistic competence and in what the appropriate stimulus is in language learning. These points are closely intertwined. The notion of linguistic competence does not consists of a core of abstract rules. It consists rather of a structured inventory of constructions. Hence, to explain language acquisition is to explain how children acquire such a structured inven-

⁶Tomasello speculates about the origins of such a perspectival character in the following way: “And because the people of a culture, as they move through historical time, evolve many and varied purposes for manipulating one another’s attention (and because they need to do this in many different types of discourse situations), today’s child is faced with a whole panoply of linguistic symbols and constructions that embody many different attentional construals of any given situation” (*Ibid*, p. 13). It is worth noting that an ambiguity resides in the previous explanation. One interpretation is that people of a culture have the purpose of manipulate one another’s attention in many different types of discourse situations, and the other interpretation is that people of a culture want to manipulate one another’s attention in different ways for different purposes—i.e. the ambiguity resides in whether the manipulation of attention is in and of itself the purpose, or rather if the manipulation of attention is the means to achieve an independent purpose. The argument seems to carry plausibility due to the latter interpretation, but Tomasello’s model requires the former interpretation: communication is, at least conceptually, independent from the subsequent purposes (behaviors and motivational states) that can be achieved with communication.

⁷It seems that the notion of language-use is, therefore, separated from any further purpose related to the tokening of a linguistic symbol, such as getting someone to do something, etc.

tory.⁸ Constructions are symbols, and to show how one acquires symbols one has to appeal to social-cognitive skills used in social exchanges. As a consequence, the stimuli relevant for language acquisition are not just bare grammatical expressions, but the full-blown linguistic and extra-linguistic components of the social exchange. Surely it must be possible to give an account of how the final stage of language acquisition was brought about by such an enriched stimulus, Tomasello claims. Children have at their disposal much more powerful learning mechanisms than simple association and blind induction: association and induction are integrated with other cognitive and social-cognitive skills.

The skills available to the child in the language acquisition process come in two breeds: intention reading and pattern finding abilities. The former are abilities which “are necessary for children to acquire the appropriate use of any and all linguistic symbols, including complex linguistic expressions and constructions” (*Ibid.*, p. 3). According to Tomasello, not only are they unique to human beings, but they enable linguistic communication as well as a variety of other cultural skills and practices, such as tool use, pretend play, rituals, etc. *Intention reading* abilities are the following (*Idem*): (a) establishing shared attention; (b) following another person’s attention and gesturing; (c) directing the attention of others by gesturing; and (d) learning the intentional actions of others. These abilities develop in normal cases after the first 9–12 months of age in human infants. The latter kind of skills are *Pattern finding* abilities, which are (*Ibid.*, p. 4): (i) the ability to form perceptual and conceptual categories of objects and events; (ii) the ability to form sensory-motor schemas; (iii) the ability to perform statistically based distributional analyses on perceptual and behavioral sequences; and (iv) the ability to create analogies across two or more complex wholes, based on similar functional roles of some elements in these different wholes.⁹

In favor of this account of language and language acquisition Tomasello mentions, among several others, the following, interesting fact. A child’s language starts to emerge around the end of her first year, which coincides with the development of these cognitive and social-cognitive skills. Moreover, there seems to be a high correlation between a high development of these skills and a high development of linguistic skills in 1-year-old children (i.e., high development relative to this very same population).¹⁰

⁸“If linguistic constructions are meaningful linguistic symbols in their own right, then children can use function or meaning to assist in their acquisition, just as they do in their acquisition of smaller linguistic constructions such as individual words” (*Ibid.*, p. 6).

⁹A Chomskyan linguist will accept that the child has all these abilities. The important question to him is why they are relevant as far as language learning is concerned. The answer from usage-based theories of language is based on their quite different notion of language. For language is, according to usage-based theories, a structured inventory of constructions that consolidate patterns of use—in the sense of modifying other people’s attentional states. Thus, language acquisition requires all these abilities that help modifying other people’s attentional states.

¹⁰“In the current account, children begin to acquire language when they do because the

According to Tomasello's notion of language, the description of the language acquisition process starts with an account of early holophrases—i.e., one-unit utterances of unparsed adult expressions, such as *Lemme-see*—, it then moves on to an account of words, going through simple (multiple-word) constructions, and finally to more complex and abstract constructions.¹¹

It is beyond the scope of the present work to give a detailed discussion of this process. For current purposes it is most relevant to carry out a closer scrutiny of the “early intention reading skills” that are at work in the acquisition of holophrases. For these skills, according to Tomasello, ground the child's “comprehension of the symbolic dimension of linguistic communication” (*Ibid.*, p. 31). These are (i) joint attentional frames; (ii) understanding communicative intentions; and (iii) role reversal imitation.

A joint attentional frame is constituted by a child, a caretaker, an object, and an interaction between them. Joint attentional frames are underwritten by the ability to “interact triadically with other persons.”¹² A joint attentional frame is a triadic relation in which the participants' attention is shared and directed to an object. The frame is situated in the sense that the attention to an object occurs when both participants are engaged in a joint activity with the object. This activity, and the goal to which it is directed, plays a fundamental role in the definition of the frame in the sense that, if the arguments of the triadic relation are the same but the activity different, the joint attentional frame is not the same. Tomasello calls this feature the *intentional definition of the frame*. Finally, such an activity requires different roles (e.g., diaper-changer and diaper-changee), and these roles, Tomasello claims, are understood by all the participants of the frame.

learning process depends crucially on the more fundamental skills of joint attention, intention-reading, and cultural learning—which emerge near the end of the first year of life. And importantly, a number of studies have found that children's earliest skills of joint attentional engagement with their mothers correlate highly with their earliest skills of language comprehension and production” (*Ibid.*, p. 21).

¹¹“Many accounts of early language development describe the process [of language acquisition] as one in which children first acquire words and then combine them, perhaps via rules, into sentences. This is basically a structural point of view, and it is aimed at languages like English, which are very isolating, not at languages like Inuktitut. From a more functional point of view, children are hearing and producing whole utterances, and their task is to break down an utterance into its constituent parts and so to understand what functional role is being played by each of those parts in the utterance as a whole” (*Ibid.*, p. 40).

¹²“1-year-old's newfound ability to interact triadically with other persons enables them to participate in relatively extended bouts of social interaction mediated by an object in which both participants constantly monitor each other's attention both to the object and to themselves [...] the basic point is that joint attentional frames are defined intentionally, that is, they gain their identity and coherence from the child's and the adult's understanding of ‘what we are doing’ in terms of the goal-directed activities in which we are engaged [...] another crucial feature of joint attentional frames is that the child understands both the adult's and her own roles in the interaction from the same ‘outside’ perspective—so that they are all in a common representational format” (*Ibid.*, pp. 21f).

As for communicative intentions, Tomasello adapts a Gricean notion of communicative intention. In the latter framework, there are informative intentions—i.e., the intention that an audience entertains a certain proposition—, and there are communicative intentions—i.e., the intention that an informative intention be recognized. This seems to fit in well with Tomasello's claim that “communicative intentions are a special type of intention in which an individual intends something not just toward an inert object but toward the intention[al] states of someone else” (*Ibid*, p. 23). A communicative intention seems to fulfill two different roles: that of intention as directedness or aboutness, and that of intention as purposeful or goal-oriented attitude. Such a Janus-faced property of communicative intentions make them fit to describe the mental states of the participants of a joint attentional frame. This is why Tomasello claims that “[c]hildren understand adult communicative intentions, including those expressed in linguistic utterances, most readily inside the common ground established by joint attentional frames” (*Ibid*, p. 23).

The third intention-reading skill is that of role reversal imitation. It might be considered as a particular form of imitation in which the child learns to use a symbol towards the caretaker in the same way in which the caretaker used the symbol towards the child.¹³

What role do these skills play in the early stages of language acquisition? Tomasello gives a detailed description of this role for the case of the child's acquisition of gestures and early holophrases. To begin with gestures, there are three main types of gestures: ritualizations, deictic gestures, and symbolic gestures; and there are two main processes by means of which a child learns these gestures, which we shall see in a moment.

A ritualization is an “effective procedure for getting something done” (*Ibid*, p. 32), such as the child's raising her arms to be picked up. Ritualizations are acquired by operant conditioning, which exemplifies the first learning process. The child simply recognizes that by producing a particular gesture she obtains a particular result. This learning process “is essentially the one by which nonhuman primates learn their gestures (Tomasello, 1996). [But since] it does not involve understanding communicative intentions or cultural (imitative) learning of any sort, it does not create a shared communicative symbol” (*Ibid*, p. 32). None of the three intention reading abilities are necessarily at work here.

¹³“To learn to use a communicative symbol in a conventionally appropriate manner, the child must engage in role reversal imitation: she must learn to use a symbol toward the adult in the same way the adult used it toward her. This is clearly a process of imitative learning in which the child aligns herself with the adult in terms of both the goal and the means for attaining the goal; it is just that in this case the child must not only substitute herself for the adult as actor (which occurs in all types of cultural learning) but also substitute the adult for herself as the target of the intentional act (that is, she must substitute the adult's intentional state as goal for her own attentional state as goal). The result of this process of role reversal imitation is a linguistic symbol: a communicative device understood intersubjectively from both sides of the interaction.” (*Ibid*, p. 27).

Deictic gestures, moreover, are used to direct the caretaker's attention to entities. The clearest examples of deictic gestures are showing—e.g., when the child holds up an object to the adult—, and pointing. At this stage, it is possible for the child to use these deictic gestures while at the same time she still does not understand other people's deictic gestures. Such a situation might occur when pointing is learned as a ritualization—e.g., the child points as a means of orienting her own attention, but this gesture is followed up by the caretaker's excitement and thus the child associates pointing with sharing excitement with the caretaker (*Ibid*, p. 34). This means that the ability to understand communicative intentions is not yet developed or utilized. Tomasello claims that a deictic gesture becomes symbolic to some extent when the child only uses the gesture to simply share attention with the adult.¹⁴

The third kind of infant gesture is that of symbolic gestures. “These are communicative acts that are associated with a referent either metonymically or iconically. Examples include sniffing for a flower, panting for a dog, holding arms out for an airplane, raising arms for big things, and blowing for hot things” (*Idem*). Some of these gestures are learned by association, just as ritualizations, but they are usually learned by role reversal imitation. These are, according to Tomasello, full-fledged symbols, although they do not seem to require a joint attentional frame, since a child can be panting in the presence of her caretaker to symbolize a dog without there actually being a dog around. However, they do require the ability to understand communicative intentions.

Now, as for holophrases, they are one-unit utterances of unparsed adult expressions—i.e., “such expressions as *I-wanna-do-it*, *Lemme-see*, and *Where-the-bottle*” (*Ibid*, p. 38). Holophrases, “are entire semantic-pragmatic packages [...] that express a single relatively coherent, yet undifferentiated, communicative intention” (*Ibid*, p. 39). These communicative intentions are “most often the same [...] as that of the adult expressions from which they were learned” (*Ibid*, p. 36). Children use these holophrases to achieve particular goals.¹⁵ Tomasello gives a number of examples of holophrases used by his daughter, some of which are the following (adapted from *Ibid*, p. 37): *Play-play*: First used as an accompaniment to her “playing” the piano, then to name the piano; *Mess*: First used for the result of knocking down blocks, then when she wanted to knock them down; *Make*: First used in block play to request that a structure be built, usually so that she could knock it down (and make a “mess”). Holophrases occur inside joint at-

¹⁴“It is also of crucial theoretical significance that human infants point for others not just for imperative motives—to get help with something—but also for declarative motives such as simply wishing to share attention with them” (*Ibid*, p. 34).

¹⁵These goals include: “to (a) request or indicate the existence of objects; (b) request or describe the recurrence of objects or events; (c) request or describe dynamic events involving objects; (d) request or describe the actions of people; (e) comment on the location of objects and people; (f) ask some basic questions; (g) attribute property to an object; (h) use performatives to mark specific social events and situations” (*Ibid*, p. 37).

tentional frames and require the ability to understand communicative intentions. Hence, Tomasello claims that the child's learning holophrases can be explained by role reversal imitation.

Intention reading abilities are not enough to explain how children learn more complex expressions, but pattern recognition abilities come to the rescue. A detailed discussion of how Tomasello explains the learning process relevant for these complex expressions is beyond the scope of this dissertation. A few words should suffice to give an idea of the gist of this process. The child utilizes her pattern recognition abilities to segment both expressions and their communicative intentions in order to match the components of the former with the components of the latter. In this way, according to Tomasello, the child is able to extract productive linguistic elements.¹⁶

3.1.4 Remarks on Tomasello's insights

There is much to commend in Tomasello's account of language. I will review first what I think are the pros of such account—with a little touch of my personal understanding on the matters—, and then make a short discussion of what I think are its cons.

Pros

To begin with the pros, I believe that one of the biggest contributions of Tomasello's usage-based approach, and in general the growing literature on usage-based theories of language, is that they make semanticists aware that linguistics is not necessarily Chomskyan linguistics. That is, there are alternative ways in which an empirical study of language can be setup and alternative ways in which the relevant questions of significance can be answered, different from accepting Chomsky's far-reaching commitments.

One of the main points of rupture with Chomsky's commitments, point which we must wholeheartedly embrace, is that linguistic competence is not tacit knowledge (or cognizance) of rules, but rather it arises from a cluster of cognitive and social-cognitive abilities that underwrite language comprehension and production. Moreover, the account of such abilities, given that language is a socio-cultural affair, cannot be given only in biological or evolutionary terms (more on these abilities later on).

Tomasello's approach makes it clear that linguistic competence need not be rule-based and uniform across a linguistic community (ranging from infants of

¹⁶“[T]here is a different syntactic work to do if the child is to extract productive linguistic elements that can be used appropriately in other utterances, in other linguistic context, in the future. For this the child must engage in a process of segmentation, with regard not only to the speech stream but also to the communicative intentions involved—so as to determine which components of the speech stream go with which components of the underlying communicative intention” (*Ibid*, p. 38).

several stages of development to competent adults). Consequently, it suggests that it is imperative that our models of human communication must take into account a disparity in the underlying grammatical competences of the participants of the linguistic exchange. This is a straightforward consequence from the conception of communication as recognition of communicative intentions and the rejection of the Continuity Assumption. For it is claimed that children's linguistic competence is constituted by an unstructured set of constructions, unlike adult's linguistic competence; it is also claimed that children are able to understand communicative intentions codified in complex constructions as spoken by adult speakers and, reciprocally, children's holophrases convey the same communicative intentions as adult's expressions.¹⁷ Hence, linguistic communication, in particular adult-child linguistic communication, is successful despite the uneven linguistic competences of the participants.

Moreover, if we do not accept the Continuity Assumption, we need not accept either that all competent speakers of a community possess the same set of constructions. As a corollary, the notion of language as a set of sentences starts to lose its ground; for, given that there need not be a designated set of constructions, among the sets of constructions that constitute the linguistic competences of the speakers of a community, that represents the language of such community, then there is no unique set of 'well-formed' sentences generated from a unique set of constructions.¹⁸ Hence, language, being a socio-cultural affair, might well be said to consist of an open-ended collection of signs that are used in patterned ways.¹⁹ In Tomasello's words:

Language, or better linguistic communication, is thus not any kind of object, formal or otherwise; rather it is a form of social action constituted by social conventions for achieving social ends, premised on at least some shared understanding and shared purposes among users (Tomasello, 2008, p. 343).

¹⁷Compare: "[C]hildren's early one-word utterances may be thought of as 'holophrases' that convey a holistic, undifferentiated communicative intention, most often the same communicative intention as that of the adult expressions from which they were learned" (*Ibid*, p. 36).

¹⁸The last step in this line of argument relies on the claim that these uneven sets of constructions generate different sets of well-formed sentences; which is perfectly acceptable because of the following observations: (a) among these sets of constructions there must be those sets that represent children's 'ill-formed' sentences; and (b) competent adults' sets of constructions do not generate the same set of sentences (unless stipulated by fiat with an idealized notion of competence).

¹⁹By an *open-ended collection* I mean that no totality of things is recognized, which must either belong or not (or belong to a certain degree) to such a collection. That is, the actual extension of an open-ended collection is not a relevant matter. By *patterned ways* to use signs I mean that signs appear usually along with other signs, and that patterns of use can be discerned in a statistical fashion in a corpus of data; but there need not be any commitment as to the actual existence of these statistical patterns in the mind/brain of the speakers whose speech/writing belongs to such corpus.

Another prominent feature of this approach is that a language-user is considered as a goal-oriented agent all the way down, that is, the goal-orientedness is, as it were, built-in in the analysis of semantic competence and semantic interpretation (although Tomasello's approach makes room for a distinction between semantic competence and pragmatic competence, see fn. 20 below). Moreover, the social-cognitive skills, which participate in semantic competence, are given a detailed description and are well structured. Above all, it is particularly interesting that Tomasello understands joint attentional frames as the locus of language-use, and gives pride of place to their intentional definition.

Finally, Tomasello gives a detailed presentation of what he calls pattern finding abilities and gives a detailed account of their role in the process of language learning, the description of which is rife with empirical data.

Cons

Now, there are a number of aspects from Tomasello's approach that do not fit in with my requirement of preserving our descriptions of our uses of signs in general, and language in particular, in everyday life, to which I now turn.

First of all, our attention should be put on the notion of a symbol (see fn. 5 for quotes on Tomasello's notion of a symbol; compare also the three fundamental characteristics of symbols (Tomasello, 2003, p. 12)). Tomasello suggests that a symbol, as such, can be used with the only purpose of directing someone's mental state to outside entities with a particular perspective. Closely related to this point is the conception of what language-use amounts to. To use language, according to Tomasello, consists in directing X 's mental state to an outside entity E with a particular perspective. This is the so-called human-specific characteristic of symbolic communication.²⁰

But if we wish to preserve our descriptions of our uses of signs in everyday life, Tomasello's definition can only be taken as a starting point of a more encompassing notion of a symbol. In fact, there are reasons to think that Tomasello had in mind an even broader notion of a symbol than his attempt at a definition will have captured. For instance, take the case of symbolic gestures, such as sniffing for a flower, panting for a dog, etc. (*Ibid*, p. 34). These examples suggest a richer notion of a symbol in two senses. Firstly, there need not be a *shared* referent of

²⁰It is not relevant for our purposes whether the outside entity E is present or not at the moment of the use of the symbol, although it is interesting to note that it has been suggested that only humans, and no other primate, can use symbols to refer to absent entities (see Liszkowski et al., 2009). And it is not relevant because the ensuing broadening of the notion of a symbol goes well beyond reference to an entity, absent or not (see further below in the text).

It seems, therefore that, if we take at face value such definition of a symbol, whatever other use language is put to, it is either not symbolic or derived from symbolic communication. This in turn suggests that a distinction can be made between semantic competence—i.e., the ability to use signs to direct someone's mental state to outside entities with a particular perspective—and pragmatic competence—i.e., the ability to use signs in other ways.

a symbolic gesture. For instance, if the symbolic gesture is panting for a dog, “a dog” is unspecific, that is, it could be just any dog or no specific dog that the gesture-maker has in mind. Or in any case what dog the gesture-maker has in mind need not be the same than the dog the addressee has in mind. This need not imply that the symbolic gesture was not successful. For, secondly, the symbolic gesture might well be produced to prompt a range of emotions or to obtain an emotive response. If the child sniffs for a flower, she might well just want to evoke again in herself and her mother the nice feeling from earlier in the afternoon when they were playing together in their fresh smelling yard. This need not require for mother and child to share attention on a specific flower (either present or not), nor is the gesture less of a symbolic nature for that matter. The point is clearer in the case of holophrases. They are “entire semantic-pragmatic packages [...] that express a single relatively coherent, yet undifferentiated, communicative intention” (*Ibid*, p. 39). Yet, the goals that a child intends to achieve with holophrases include to request an action, describe the actions of people, ask some basic questions, and use performatives to mark specific social events and situations (*Ibid*, p. 37; see also fn. 15), which suggest that a broader notion of a symbol fits in better with Tomasello’s own descriptions of empirical phenomena. For these holophrases are full-blown symbols, and yet what they achieve goes beyond, and is categorically different from, sharing attention to an outside entity with a particular perspective.

What is more, the notion of a symbol must be broad enough to cover cases such as the following: (a) expressions that are used to prompt emotions and affections such as “Hi, good looking!,” “Don’t be afraid,” “Well done!,” etc.; (b) adverbs that elicit emotive qualifications over actions and that serve specific purposes in a conversation such as “definitely,” “apparently,” “amazingly,” “indisputably,” etc.; (c) expressions that refer to ‘symbolic kinds’ such as “tax,” “salary,” “government,” “meeting,” “hearing,” “agreement,” “signature,” “championship,” etc.; and, of course, (d) mathematical and other expressions that have systematic roles in a wider framework and do not have any specific referential purpose.

The previous remarks extend to the notion of a joint-attentional frame. Such frames are defined as requiring that their participants act on an external entity. However, there are joint actions of the participants that involve no external entities—e.g., chitchatting, flirting, solving a mathematical problem, giving directions, etc.; and, furthermore, there are joint attentional frames that do not require joint actions.

Moreover, Tomasello claims that a symbolic gesture is learned through role reversal imitation, which is required for the so-called intersubjective property of symbols—i.e., that everyone knows that everyone is potentially both a producer and a comprehender of those symbols. Note, to begin with, that this property makes part of a *theory* about symbols, not part of a *description* of an empirical phenomena. Now, to claim that symbols have the intersubjective property, described as above, and that symbols are therefore learned from role-reversal im-

itation, has far reaching consequences. If a child is to learn the term, say “car” from role reversal imitation, this implies that she understands the perspective under which the adult conceives a car when addressing the child. But why is this so? Has not the adult quite a richer conception of what a car is than the child does? How about terms such as “justice,” “liberty,” “god,” etc. about which it is hard to share a perspective? More generally, it seems to me that the intersubjective property of symbols is in conflict with incomplete understanding. Given the paramount role that the notion of incomplete understanding plays in my approach, Tomasello’s appeal to such property underlies a substantial disagreement with the descriptions of language-use that constitute the starting point of the present inquiry.

3.2 Brandom’s methodological phenomenalism

3.2.1 Inferentialism and commitments

Brandom starts out his *Making it explicit* with the sentence “ ‘We’ is said in many ways” (1994, p. 3). He is interested in a principled (i.e., philosophical) way to explain what defines us, as human beings, and asks “What would have to be true—not only of the quaint folk across the river, but of chimpanzees, dolphins, gaseous extraterrestrials, or digital computers (things in many ways quite different from the rest of us)—for them nonetheless to be correctly counted among us?” (*Ibid*, p. 4). Brandom presupposes that what demarcates us, as human beings, is that we can attribute intentional states to each other and that these intentional states have contents that are *about* something (see *Ibid*, pp. 67f).

Brandom sees a dominant trend in Western philosophy of mind and language according to which the content (the ‘aboutness’) of both mental states and sentences must be conceived as representational.²¹ Thus arises the so-called “problem of intentionality,” namely, how a representing stands for something represented.²²

One of Brandom’s qualms with representationalism—i.e., the conception of content as representational—is the tendency to conceive of the representational relation—i.e., the relation between representing and represented—either as primitive or as based on a relation of designation, which in turn is conceived as primitive. The gist of Brandom’s discontent is that neither the representational relation nor the designation one is adequate to play the role of ‘unexplained explainer’

²¹“The master concept of Enlightenment epistemology and semantics, at least since Descartes, was *representation*. Awareness was understood in representational terms—whether taking the form of direct awareness of representing or of indirect awareness of represented via representations of them” (Brandom, 2001, p. 7).

²²“The problem of intentionality,” in Stalnaker’s words, “is a problem about the nature of representation. Some things in the world—for example pictures, names, maps, utterances, certain mental states—represent or stand for, or are about other things—for example, people, towns, states of affairs” (quoted in Brandom, 1994, p. 69).

(see *Ibid.*, pp. 69ff). He argues that nothing is a representing of something that is represented unless in virtue of a subject that treats the representing as the represented.²³ There is no content, he claims, either of mental states or sentences, without a content-bestowing activity, and that such an activity must “be seen not as a kind of passive reflection but as a kind of active revelation” (Brandom 2001, p. 8; see also Brandom 1994, pp. 146ff).

However, the idea that content exists only in virtue of a content-bestowing activity, as such, does not entail parting ways with representationalism. After all, such a content-bestowing activity could be, as it were, a sort of ‘representational’ activity. But for Brandom, to treat a representing as something represented means to treat *in practice* a representing as something represented. This idea leads Brandom to posit an intrinsic connection between know-what and know-how in the sense that an account of the former should be given in terms of, or should be reduced to, an account of the latter.²⁴ In other words, knowledge that such-and-such is the case must be explained in terms of, or be reduced to, practical knowledge. However, Brandom claims that not any kind of practical knowledge will do. For he cashes out the concept of practical-knowledge-that-bestows-content in a very specific way. To him, the way in which representings stand for something represented is to be understood in terms of practical knowledge of inferential relations among representings.²⁵

What characterizes the conceptual as opposed to the non-conceptual realm, according to Brandom, is not the representational character of a passive mind, but rather the inferential articulation of the doings and sayings of the participants of a particular practice.²⁶ The species specific cognitive ability that we humans have is our demand and consumption of reasons. That is to say, an event in the world is an action, and not a mere behavior, only in virtue of its being performed for a reason; and a reliable discriminatory ability is a perceptual response only

²³See (Brandom, 1994, pp. 72ff). Compare also how Peregrin (2008) illustrates this thought: “[I]magine that we literally take a label with a string of letters and stick it on an object, say on a car. Does it mean that we have given a name to the car? Not really: it may count simply as a decoration of the car, or as an indication of the owner of the car, etc. What accounts for the difference between taking the string on the label as a name and taking it as something else? Well, it seems that it is the habits and social practices of the community in question: if sticking names on cars is something usual, then it is likely to be taken as a name and [hence to] be a name; in other cases it may not” (Peregrin, 2008, p. 36).

²⁴Brandom’s intention is to provide “an account of knowing (or believing, or saying) *that* such and such is the case in terms of knowing *how* (being able) to *do* something. It approaches the contents of conceptually *explicit* propositions or principles from the direction of what is *implicit* in practices of using expressions and acquiring and deploying beliefs” (Brandom, 2001, p. 4).

²⁵“[I]t is the practical inferential proprieties acknowledged by such attitudes [of treating an inference as correct or incorrect] that make noises and marks mean what they mean” (Brandom, 1994, p. 174).

²⁶“The master idea that animates and orients this enterprise is that what distinguishes specifically *discursive* practices from the doings of non-concept-using creatures is their *inferential* articulation. To talk about concepts is to talk about roles in reasoning” (Brandom, 2001, p. 10).

in virtue of its providing reasons.²⁷ In other words, perceptions provide reasons, actions stand in need for reasons, and assertions both give and ask for reasons.²⁸

Thus, the gist of Brandom's philosophy of mind and language is the reconstruction of "autonomous discursive practices" (Brandom, 2008, p. 117).²⁹ Participation in such practices is what underwrites that its participants' utterances and mental states are contentful; autonomous discursive practices bestow content on both sentences and mental states.

I will not be interested here in Brandom's technical analysis of such practices, but in the presuppositions of why these practices achieve what they are supposed to achieve.

Brandom's explanatory strategy consists in explaining simultaneously both the content of expressions and the content of mental states.³⁰ Inferential relations come to the rescue in order to play a Janus-faced role: they underwrite both the account of semantics and the account of conceptual understanding.

On the semantic side, the notion of the semantic content of a proposition is defined in terms of its specific inferential articulation (see, for instance, Brandom, 1994, pp. 113ff). This inferential articulation has three important characteristics. First, it is *not* derived from 'representational' semantic concepts, such as reference or truth—on the contrary, Brandom wants to reduce reference and truth to this inferential articulation. Second, such an articulation is based on material

²⁷"The judgments that are our perceptual responses to what is going on around us differ from responses that are not propositionally contentful (and so are not in that sense intelligible) in that they can serve as reasons, as premises from which further conclusions can be drawn. Actions, which alter what is going on around us in response to propositionally contentful intentions, differ from performances that are merely behavior (and so not intelligible in terms of the propositionally contentful intentions that elicit them) in that reasons can be given for them; they can appear as the conclusions of practical inferences" (Brandom, 1994, p. 11).

²⁸The double role of assertions, namely, that they give and ask for reasons, leads Brandom to suggest that assertions have pride of place among speech acts. This prominent place comes down to the idea that the content of assertions must be explained first, so that the content of other speech acts can be made sense of in relation to the content of assertions. Assertion has played a prominent role in philosophy of language, because of its purported role both in the expression of cognitive attitudes and in the definition of linguistic meaning (Pagin, 2008a), and nowadays there is a good deal of discussion about the very notion of an assertion (Brown and Cappelen, 2010; Williamson, 2000). However, I will not delve into the adequacy of Brandom's definition of assertion, or on his assumption of explanatory primacy over other speech acts.

²⁹On the issue of the autonomy of discursive practices, compare: "[T]he inferential identification of the conceptual claims that language (discursive practice) has a *center*; it is not a motley. Inferential practices of producing and consuming *reasons* are *downtown* in the region of linguistic practices. Suburban linguistic practices utilize and depend on the conceptual contents forged in the game of giving and asking for reasons, are parasitic on it" (Brandom, 2001, p. 14).

³⁰"[A] *relational* expressivism will understand linguistic performances and the intentional states they express each as essential elements in a whole that is intelligible only in terms of their relation. According to such an approach, for instance, one ought not to think that one can understand either believing or asserting except by abstracting from their role in the process of asserting what one believes" (Brandom, 2001, p. 9).

inferences, that is, the validity of such inferences involves the content of sentences and not their form.³¹ And third, this articulation is understood in a normative way.³²

Strictly speaking, what enters into inferential articulation is not the sentence *qua* syntactic entity, but rather its concomitant doxastic commitment. “Doxastic commitments are essentially a kind of deontic status for which the question of *entitlement* can arise” (Brandom, 1994, p. 142, emphasis in the original). There are several kinds of commitments, among them discursive, perceptual, practical, and inferential. For instance, my deontic status can be described as my being committed to the discursive commitment that “I own this computer in front of me”; to the perceptual commitment that there is a computer in front of me; to the practical commitment that I treat my computer with care; and to the inferential commitment that if my computer breaks down, I have someone repair it.

A person’s deontic status can be conceived as the set of her commitments,³³ which in turn can be conceived as the coordinates that define her place in the spacial-temporal-social universe that she lives in. This universe is determined by the way in which commitments are related to other commitments; these relations are what underwrites the content that an autonomous discursive practice bestows on sentences and mental states simultaneously. It is worth noting that the notion of the content of a commitment is a holistic notion, which means that the content of a particular commitment depends on the content of other commitments. Brandom gives no algorithmic recipe to determine the full content of a commitment, or to reduce it to other notions; it seems that the universe of commitments is taken as a primitive, irreducible notion.

3.2.2 Methodological phenomenalism and incomplete understanding

On the conceptual side, to fully understand a commitment (a sentence, a perception, an action) is to grasp its *correct* inferential connections with other commitments in the spacial-temporal-social universe. Furthermore, to grasp inferential connections is a ‘kind of know-how’, a sort of mastery of the game of giving and asking for reasons.³⁴ This practical aspect of understanding, as well as its norma-

³¹See Brandom (1994, pp. 102ff). For a brief discussion of the relevance of the material aspect of inferences as regards the three-fold structure of the inferential articulation of semantic content see Andrade-Lotero and Dutilh-Novaes (pear).

³²“Content is understood in terms of proprieties [in the sense of correctness] of inference, and those are understood in terms of the norm-instituting attitudes of taking or treating moves as appropriate or inappropriate in practice” (Brandom, 1994, p. 134).

³³This set is different from the set of the commitments self-attributed or attributed to someone else, see below.

³⁴“Grasping [a] concept [...] is mastering its *inferential* use: knowing (in the practical sense of being able to distinguish, a kind of know *how*) what else one would be committing oneself to by applying the concept, what would entitle one to do so, and what would preclude such

tive aspect, as we shall see in a moment, seem to allow for a notion of incomplete understanding. Compare:

Understanding or grasping a propositional content is here presented not as the turning on of a Cartesian light, but as practical mastery of a certain kind of inferentially articulated doing: responding differentially according to the circumstances of proper application of a concept, and distinguishing the proper inferential consequences of such application. This is not an all-or-none affair; the metallurgist understands the concept *tellurium* better than I do, for training has made her master of the inferential intricacies of its employment in a way that I can only crudely approximate. Thinking clearly is on this inferentialist rendering a matter of knowing what one is committing oneself to by a certain claim, and what would entitle one to that commitment" (Brandom, 2001, pp. 63f).

I read Brandom in a way that makes room for the idea that our abilities are always limited.³⁵ The agent's limited abilities are represented in terms of the limited amount of commitments that she can consider (by attributing them to another or to herself) at any time, and by the limited amount of inferential connections that she has a good command of. That our abilities are limited comes together with another aspect of understanding, namely, its normative aspect—i.e., the correctness of inferential relations. For the fact that such abilities are limited should be assessed against a measuring-rod, i.e., a point of comparison that allows us to show that such abilities are limited.

Brandom assumes that there is a distinction between concepts and our conceptions of them (note the plural). Such a distinction must be understood as a gap between how we actually apply a concept and how it ought to be applied. Since to fully understand a concept, according to Brandom, is to grasp its correct inferential connections, this gap comes down to the difference between grasping inferential connections and grasping all and only the correct inferential connections of a concept. Compare:

[This approach] distinguishes the proprieties governing correct use in which the concepts grasped by individuals consist, on the one hand, from the

entitlement" (Brandom, 2001, p. 11).

³⁵"Practitioners are not in general omniscient about the commitments implicit in their own concepts [...] One can (according to an interpreter or scorekeeper) have bound oneself by one's practice, in part because of the things one was actually dealing with, in such a way that using a particular word is correct in one circumstance and incorrect in another—even when the individual so bound cannot tell the situations apart" (Brandom, 1994, p. 332). See also: "[O]ur practice puts us in touch with facts and the concepts that articulate them—we grasp them. But what we grasp by our practice extends beyond the part we have immediate contact with (its handles, as it were); that is why what we grasp is not transparent to us, why we can be wrong even about its individuation. How the world really is determines what we have gotten a hold of; but even though for that reason we do not know all the details about it, we still genuinely grasp it" (Brandom, 1994, p. 632, emphasis in the original).

dispositions to apply concepts, make inferences, and perform speech acts, in which an individual's grasping of a concept consists, on the other—and so distinguishes concepts from conceptions of them (Brandom, 1994, p. 635).

Brandom presents a so-called perspectival account of concepts, also known as *methodological phenomenism*, which is intended to accommodate the gap between actual dispositions to draw inferences and the inferential connections that ought to be drawn.³⁶ This account comes about via two interrelated tenets. The first tenet is that the idea that the content of an expression is about an objective “world of facts,”³⁷ as such, depends on the “sense of appropriateness” that comes with the application of the expression's content. By “sense of appropriateness” Brandom means the conviction that the application of an expression's content is correct or incorrect depending on how the “world of facts” actually is.³⁸

The second tenet starts from the assumption that “[i]t makes no sense to specify or express a propositional or other conceptual content except from some point of view” (Brandom, 1994, p. 594), and combines it with the assumption that every perspective of application of a concept must *always* distinguish between what is *taken to be* correct from what is correct (*Ibid*, p. 593).

Methodological phenomenism entails that there can be no privileged perspective of application of a concept, because from such a perspective no distinction could be made between what is taken to be correct and what is correct. As a consequence, there is no perspective from which it can be established that a concept has been correctly applied—although this should not entail that the concept has not been correctly applied.

It is worth noting that Brandom's methodological phenomenism seems to imply incomplete understanding across the board. For the claim that there is no privileged perspective of application of any concept entails that, for any concept, there is no complete grasp of all and only the inferential relations the correctness of which determines the content of the concept.

At this point the question arises how Brandom accounts for concepts and our relationship with them. For if our conception of a concept reduces to a sort of practical ability to make inferences between commitments, and if our conception of a concept is different from the concept as such—which reduces to a place in the

³⁶Brandom uses different terms to refer to this account. For instance, “methodological phenomenism,” “normative phenomenism,” “tactile Fregeanism,” “I-Thou model of application of concepts.” I will only use the first terminology.

³⁷It is worth noting that for Brandom, the “world of facts” does not only comprise empirical facts, but also normative facts. This notion of world depends on the idea that “facts are just true claims (in the sense of what is claimed, not the claiming of it)” (Brandom, 1994, p. 625).

³⁸“Part of what it is for our concepts to be *about* an objective world is that there is an *objective* sense of correctness that governs their application—a sense of appropriateness that answers to the objects to which they are applied and to the world of facts comprising those objects” (Brandom, 1994, p. 594).

spatial-temporal-social universe of normative relations between commitments—how can such practical ability, which ‘lives’ in a non-normative universe, touch the normative universe that confers content to concepts and sentences? Brandom believes that the social-perspectival character of methodological phenomenalism underwrites the normative aspect of conceptual and semantic content.

3.2.3 The social-perspectival character of concepts

Content is defined in terms of inferential connections between commitments. In turn, a commitment is, as it were, a normative creature with physical manifestations, such as sentence-tokens, perceptions, and actions, according to the kind of commitment they are manifestations of. These manifestations give rise to commitments in virtue of the *propriety*—i.e., correctness—of their connections with other manifestations. What deontic status a person is in is conceived as the set of her commitments, which is different from the set of commitments that are attributed to her by another person, or even by herself. But a fundamental aspect of Brandom's philosophy is his contention that such deontic statuses are grounded in people's attributions of commitments to one another—and hence that practical inferential abilities give rise to the normative universe of commitments.

There are two key elements in such account of normativity. One key element is the distinction between *acknowledged* and *undertaken* commitments (see Brandom, 1994, p. 197). The former are those commitments the agent explicitly avows as well as the commitments that she ‘knows-how’ they inferentially follow from the first ones. The latter are those commitments that, according to another agent, she ought to acknowledge, which include commitments that she might well have not acknowledged.

Another key element is that the inferential articulation of commitments is sensitive to collateral commitments: what commitments follow from an avowed commitment depends on what collateral commitments the avower undertakes.³⁹ To make this last point clearer, we can distinguish between two kinds of ‘inferential significance’: the *perspective-relative significance*, and the *perspective-independent significance* of a particular commitment p (*Ibid*, p. 635). Let Φ be a set of commitments—which we shall call a *perspective*. The perspective-relative significance of p with respect to Φ is the pair $\langle \Gamma_\Phi, \Delta_\Phi \rangle$, where Γ_Φ is the set of commitments from which p can be inferred utilizing as assumptions the commitments in Φ , and where Δ_Φ is the set of commitments that are inferential consequences of p utilizing as assumptions the commitments in Φ . The perspective-independent significance of p is the function that for each Φ returns the perspective-relative significance of p with respect to Φ .

³⁹“[T]he inferential significance of a claim (what its consequences are and what would count as evidence for it) depends on what auxiliary hypotheses are available to serve as collateral premises.” (Brandom, 1994, p. 475).

When a commitment p is avowed by an agent B , the interpretation of the content of this avowal, from another agent's perspective, say A 's perspective, consists in the perspective-relative significance of p with respect to the set of commitments that A attributes to B . Note that it could be the case that B acknowledges a set of commitments Φ_1 that is different from the set of commitments Φ_2 that B undertakes (according to A). Furthermore, the perspective-relative significance of a commitment p with respect to Φ_1 might well be different from the perspective-relative significance of p with respect to Φ_2 —i.e., $\langle \Gamma_{\Phi_1}, \Delta_{\Phi_1} \rangle \neq \langle \Gamma_{\Phi_2}, \Delta_{\Phi_2} \rangle$. Hence, if B avows p , the interpretation of the content of this avowal might result in a different perspective-relative significance for B than it does for A .⁴⁰

The inferential articulation that Brandom takes to define conceptual content is the perspective-independent significance, which requires, as Brandom puts it, the ability to move from perspective to perspective.⁴¹ That this definition of conceptual content depends on the ability to move from perspective to perspective is what determines the social-perspectival character of conceptual content. That is to say, it is because the definition of the perspective-independent significance requires a prior definition of different perspective-relative significances that Brandom claims that the consideration of various perspectives is essential to conceptual content—whence the ‘social’ in the social-perspectival character of concepts.

Before I move on to some remarks on Brandom's approach, I shall try to explicate a bit further his account of concepts. I shall go about doing this by means of an analogy with vision. Though analogies with vision are, in my view, by and large misleading as regards meaning and understanding, it might be worth trying to explain Brandom's social-perspectival approach to concepts by means of the following analogy. It is not difficult to see that, given a point, F , and a plane, P , any three dimensional object, X , determines a unique projection into the plane P with focus F .⁴² The projection is, as it were, a photo of X . Let us conceive of F and P as a ‘perspective’ from which X is seen. Clearly, as far as perception is concerned, an object is always perceived from a perspective; there is no perceiving an object but from a perspective. Furthermore, since an object determines its projection into each and every perspective, in a sense, the object can be characterized by the collection of its projections into each and every perspective.

⁴⁰Thus, communication is threatened if it is defined as the transmission of the same perspective-relative significance. For discussion, see Brandom (1994, pp. 473ff); Scharp (2003); Penco (2008).

⁴¹“[G]rasp of a concept [...] requires that one be hooked up to the function that takes as its argument repertoires of concomitant commitments available as auxiliary hypotheses and yields inferential significances as its values. Carrying on a conversation involves being able to move from perspective to perspective, appreciating the significance a remark would have for various interlocutors” (Brandom, 1994, p. 635).

⁴²The plane P determines, as it were, the angle of the projection, and the distance between the point F and the plane P determines the size of the projection.

Now, a perspective, as far as Brandom's approach is concerned, is conceived as a set of commitments, Φ . The projection of a particular commitment, p , is the perspective-relative significance of p with respect to Φ . In just the same way as there is no perceiving an object but from a perspective, there is no grasping a commitment but from a perspective (i.e., the perspective-relative significance with respect to Φ). Insofar as each and every projection is determined by the conceptual content of p , such content can be characterized by the collection of its projections into each and every perspective (i.e., its perspective-independent significance).

This analogy is illuminating because we can make sense of why Brandom claims that moving from perspective to perspective is essential to mastering concepts; why some perspectives can be more 'privileged' than others (such as the metallurgist's and the layman's as regards the concept tellurium); and why there is a principled distinction between the concept as such and a conception of it. Indeed, in the visual analogy, moving from perspective to perspective amounts to getting to know an object by moving around it and thus seeing it from every perspective; likewise, in Brandom's approach, moving from perspective to perspective amounts to grasping a concept by grasping its inferential connections with respect to every set of commitments. Moreover, in the visual analogy, there are more privileged perspectives to seeing an object than others, such as a clear vision with white light; likewise, in Brandom's approach, there are 'perspectives' with more, or more 'accurate', commitments with respect to which to draw a perspective-relative significance. Finally, in the visual analogy, though an object can be characterized by the collection of its projections, the object as such is categorically different from such collection; likewise, in Brandom's approach, though a concept can be characterized by the collection of its perspective-relative significances, the concept as such is categorically different from such collection.

3.2.4 Remarks on Brandom's insights

In the remaining of this section I shall review what I think are the pros of Brandom's account of language—with a little touch of my personal understanding on the matters—, and then make a discussion of what I think are its cons.

Pros

Brandom stands out in opposition to the traditional concept of content (information) in semantics, namely, that of the representational approach. He opposes to it an account based on the role of sentences and subsentential expressions in inferential practices. Using a sign (sentence or subsentential expression) is then connected to other things the agent ought to do, perceive, or say. In this respect, Brandom's notion of information goes beyond Tomasello's notion of a symbol; for the latter is only connected with a perceived object from a particular perspective.

Brandom's notion of information purportedly reproduces such particular case of a perceived object (but see below), as well as other circumstances where no object is perceived and dealt with.

Moreover, as Tomasello did with joint-attentional frames, Brandom acknowledges that the information of a sign is tied to the situation where it is used, because the inferential connections depend on the set of commitments that are undertaken at a particular moment by a given agent. This is, *prima facie*, in agreement with the suggested conclusion, in the previous chapter, that there is no independent interest in the meaning of mere combinations of words, since our descriptions of experiences of language-use are always tied to particular situations.

Brandom's account of understanding leaves room for a discussion of incomplete understanding, as opposed to Tomasello's own account. Such discussion relates to the limited abilities of agents (whence the distinction between acknowledged and undertaken commitments), and this fits in well with the conception, hinted at in the previous chapter, that linguistic competence seems to be more of an embodied, and hence limited, ability rather than an abstract, 'implementation-free' kind of software.

Cons

Now, one of the most appealing claims that we can find in Brandom's work is his idea that understanding the content of sentences and concepts consists in mastery of a practice. The most pressing questions with the specific way in which Brandom develops this idea are the reduction of representationalism to inferentialism, the autonomy of discursive practices, and the conception of semantic/conceptual competence. I shall deal with these questions in turn.

It is contentious that Brandom sets as a measuring-rod of his own approach the requirement that representational vocabulary be explained in terms of inferential vocabulary (see Brandom, 1994, pp. 135f). The most immediate problem with such move is that Brandom's theoretical apparatus does not meet this requirement.⁴³ Moreover, and more importantly for our purposes, it seems to me that it is misguided to narrow down the content of concepts and sentences to just one kind of information, no matter if it is referential or inferential. To set representationalism as a measuring-rod is then a misconceived strategy; it falls too short of what needs to be explained. Many words in our everyday life carry information in virtue of their roles in our day-to-day, non-inferential practices; we should not try and reduce such kind of information to either representational or inferential content (see below). Thus, the representational-rod is inappropriate to begin with.

Furthermore, inferential relations fail to account for important aspects of our practices that bestow information on expressions, such as purposes, emotions, and

⁴³It would take us too far afield to go into the details of this issue, but see Lepore and Fodor (2001).

our bodily experiences. This entails that there are roles of expressions in practices that cannot be explained on the basis of inferential relations. As a consequence, Brandom's conception of inferentialist content cannot explain the information carried by a range of expressions. For instance, we can master all inferential relations regarding terms such as money, flirting, visas, reading, giving back change, etc., and yet if we are not able to carry out the practices in which these terms play a role, we cannot understand the information that these expressions carry (see below). This limitation of inferential relations as regards linguistic information also relates to the issue of the autonomy of discursive practices. For to draw inferences does not provide access to many practices—such as the above-mentioned ones—that nevertheless bestow content on a range of expressions.

The information carried by expressions such as “Hi, good looking!”, “Cheer up!”, “Shame on you!”, etc., is such that it is mostly determined by an affective component that governs their use. Furthermore, understanding expressions such as “How much?”, “Here's your change”, etc., depends on familiarity with practices that cannot be reduced to a sheer drawing of inferences. In other words, mere familiarity with drawing inferences in a vacuum or a Chinese room, without familiarity with our day-to-day practices, will not give one access to the information that the above-mentioned expressions carry. For instance, to correctly understand the expression “Here's your change” one needs to recognize the proper uses of this expression, which in turn requires one to recognize when someone has correctly given change to someone else who has just payed in cash. And one cannot recognize this if one is not familiar with the practice of giving back change.

Another remark has to do with Brandom's conception of semantic/conceptual competence. Although he does not use the term ‘semantic competence’, Brandom claims, as we have seen above, that mastery of a concept can be conceived as mastery of a perspective-independent significance—i.e., a function that, given a set of collateral commitments (i.e., a ‘perspective’), returns the commitments that follow from such concept and such collateral commitments, as well as the commitments from which such concept follows. Semantic/conceptual competence can then be identified with mastery of the perspective-independent significances (for short, significances) that constitute the contents of our concepts.

I have two qualms with such a conception of semantic/conceptual competence, viz., the contention that it is a social-perspectival account of concepts, and the contention that it can explain our grasp of concepts.

To begin with the social-perspectival account of concepts, it is Brandom's idea that such significance provides an explanation of the social and intersubjective character of our concepts. For the significance itself is defined as a function that returns the inferential connections that are appropriate to a particular commitment, corresponding to the varying perspectives of different agents. Such a definition is also used as a way out of an impasse to define communication as transmission of inferential relations, given that inferential relations are taken to depend on collateral commitments and these are different from agent to agent—the way

out is that communication is possible because the agents share a significance that allows them to obtain the inferential relations that are proper to each of these varying collateral commitments.

But to call such a definition ‘social’ does not make it into a social account of concepts. For nowhere is it required that there be more than one single agent who projects her own significance into a world that only she inhabits. Since she might well change her set of collateral commitments as she goes around her lonely world, she needs to be able to move from past-perspectives, going through present-perspective, to future-perspectives. All the while, and for the same reason, she will need to move from perspective to perspective; but she will be lonely. So there is no reason why such a ‘social-perspectival’ account of concepts must be legitimately called ‘social’.

This is not in agreement with our descriptions of our uses of signs in everyday practices. Though some practices can be carried out in solitude, the individual that carries them out was introduced in these practices inside a cultural, multi-personal, environment. Moreover, many practices only work because there are participants with asymmetric familiarity with other practices; this is the case of the explanatory practices that I shall discuss in §4.1.4. The ubiquitous phenomenon of successful communication regardless incomplete understanding also occurs because of the asymmetric familiarity of the members of a community with some practices (see §2.2.3). Finally, many practices cannot be carried out with just one single participant, such as trading, money exchange, flirting, comforting, giving directions, etc.

Now, as regards Brandom’s contention that mastery of a perspective-independent significance can account for our grasp of concepts, we should bear in mind that such a significance is not taken to define an embodied ability, but a normative status of what agents ought to do (Brandom, 1994, p. 636). Significance is a normative notion that must not be conflated with the dispositions an agent actually possesses. Compare:

Conceptual contents on this inferential conception—and so what interlocutors are really committed to by using particular expressions (performing particular speech acts)—codify *proprieties* of scorekeeping. Any scorekeeper who attributes a conceptually contentful commitment may get these wrong, just as anyone who acknowledges or otherwise acquires such a commitment may get them wrong (*Ibid.*, p. 627).

Thus, Brandom’s detour through the ‘social-perspectival’ account of concepts, and the distinction between acknowledged and undertaken commitments, only moves the bump around the rug; an explanation is still required as to how agents relate to significances that determine the *correct* inferential relations that should be attributed to one another.

Brandom makes here a clever move: he invites us to conceive of ourselves, as theorists, as members of the community of agents inside his account of the game

of giving and asking for reasons (*Ibid*, pp. 639ff). Thus, the question as to how agents relate to significances is (purportedly) made equivalent to the question as to how agents attribute significances to other agents. For a theorist, Brandom says, who asks the question as to how an agent relates to a significance, is just another agent that does the same as everyone else in the game of giving and asking for reasons: keeping score.

By making this move, Brandom can also face the challenge of explaining just how well his account fits in with what happens around us—that is, that his game of giving and asking for reasons should be taken seriously as a model of what we in our everyday life do. The above-mentioned move entails that we should not look for a perfect fit between such account, couched in normative terms, and our descriptions of what happens around us, couched in descriptive terms.⁴⁴ And the reason why no perfect fit is to be found is because the account describes what norms agents should follow, not what the agents actually do; a mismatch here does not entail that the norms described by the account are not in force, but that they are broken. Compare:

Interpreting the members of a community as engaging in discursive practices is interpreting them as binding themselves by objective, shared concepts whose proprieties of use outrun their dispositions to apply them. There is no answer that could be given in advance as to how much one must be able to get right in order to be interpreted as hooked up to one concept or another. Massive individual differences in inferential dispositions among interlocutors are compatible with interpreting them all as nonetheless governed by (answerable to) the same set of conceptual proprieties. For it is compatible with interpreting them as talking about the same objects, answering to the same set of objective facts (*Ibid*, p. 636).

Concomitant with this demand of adequacy is the gerrymandering problem, according to which any set of actual performances underdetermines the norms that govern such performances; for there are always diverging norms that equally accord with any given set of actual performances but differ with respect to other performances (*Ibid*, p. 645). Brandom claims that by conceiving of the theorist as just another member of the game of giving and asking for reasons provides us with the right way to face these difficulties: we can thus choose the norms that are in force in our practices, regardless of their violations in practice, among a range of different options that nevertheless accord with these observed doings. Compare:

Thus the collapse of external into internal interpretation means that the problem caused by the existence of gerrymandered alternatives to any par-

⁴⁴“Talk of grasp of concepts as consisting in mastery of inferential roles does not mean that in order to count as grasping a particular concept an individual must be disposed to make or otherwise endorse in practice all the right inferences involving it. To be in the game at all, one must make enough of the right moves—but how much is enough is quite flexible” (*Ibid*, p. 636).

ticular discursive interpretation of another community from the outside is displaced to the context of interpretation and projection within our own community. This regress to our own interpretive practices dissolves, rather than solves, the gerrymandering problem concerning the relation between regularities and norms. For there is no general problem about how, from within a set of implicitly normative discursive practices, what we do and how the world is can be understood to determine what it would be correct to say in various counterfactual situations—what we have committed ourselves to saying, whether we are in a position to get it right or not (*Ibid*, pp. 647f).

The only work that remains to be done is to make explicit the norms that we already follow, as players of the game of giving and asking for reasons; we are such players, we just did not know it.⁴⁵ This is what Brandom claims to be doing in his oeuvre, and what explains the name “Making it explicit.”

But as clever as this move seems at first sight, it remains to be seen whether it actually fits the bill. For it assumes, to begin with, what it needs to prove, namely, that the account of our grasp of concepts is adequately given in terms of inferential relations and significances. Second, it only addresses the question as to which significance one should attribute to the agents playing the game, but does not address the prior, and initial, question as to how an agent relates to a significance. The difference between these questions can be made perspicuous by analyzing in more detail the move from theorist to scorekeeper. The move is as follows: a theorist who asks the question as to *how* an agent relates to a significance is an agent that does the same as everyone else in the game of giving and asking for reasons, that is, she asks *what* significance ought to be attributed to another agent’s assertions. But clearly these are different tasks: the theorist focuses on the ‘how’, whereas the scorekeeper focuses on the ‘what’.

Hence, if no explanation is given how an agent relates to a significance, there can be no addressing of the question as to which significance, among many, an agent should choose. That is to say, if no sense has been made of the notion of the relation between an agent’s practical dispositions to draw inferences and the inferences she ought to draw, no sense can be made of the notion of an agent’s choosing to attribute this or that set of inferences that another agent ought to draw.

That no sense has been made of such relation between practical dispositions and normative inferences follows if we take seriously Brandom’s claim that

⁴⁵“The norms that determine the propriety of choices as to which discursive practices, and so which implicit conceptual norms, to attribute to those we take to be talkers are not available in advance as a set of explicit principles. They are implicit in the particular practices by which we understand one another in ordinary conversation” (Brandom, 1994, p. 646). “For our own practices come to us with the norms in; . . . We are always already inside the game of giving and asking for reasons. We inhabit a normative space, and it is from within those implicitly normative practices that we frame our questions, interpret each other, and assess proprieties of the application of concepts (*Ibid*, p. 648).

our abilities are always limited, as discussed above. For such limitation should amount to an agent's not being able to draw all the right consequences from a commitment, or not being able to attribute the commitments that she ought to attribute—and hence, not being able to completely 'hook up' to the perspective-independent significance. Consequently, Brandom has not given a satisfactory account of semantic/conceptual competence: he has not explained what it means that an agent relates to a normative set of inferences that constitutes the content of a concept or the meaning of a sentence. Such set remains as abstract and mysterious as Frege's notion of a thought, which lives in a third-realm of non-physical, non-mental entities.

We should now turn to the presentation of the outline of a theory of language and meaning that acknowledges the insights from the discussions in this and the previous chapter, and that meets the criteria of adequacy that I have set for such endeavor.