DOES CONTEXTUALISM MAKE COMMUNICATION A MIRACLE?[1]

ERNESTO PERINI-SANTOS

Department of Philosophy
Federal University of Minas Gerais/CNPq
Av. Antônio Carlos, 6627
31270-901 BELO HORIZONTE, MG
BRAZIL

epsantos@fafich.ufmg.br

Abstract: In this paper, I argue against the thesis suggested by Cappelen and Lepore (2005), according to which if contextualism were true, communication would require many items, and therefore would be fragile; communication is not fragile, and therefore, communication does not demand a large number of conditions, and contextualism is false. While we should grant the robustness of communication, it is not guaranteed by some unchanging conditions, but by different flexible mechanisms that enhance the chances of mutual understanding at a relatively low cost – this is true, in particular, of different feedback mechanisms and of alternative ways to make the same information mutually available. Communication is not a series of successive, individual and independent actions; dialogues are a kind of joint activity in which misunderstandings are jointly repaired by participants as part of the very activity they are engaged in. Moreover, as we consider the roles of hearers in a conversation, we see that no construal makes Cappelen and Lepore's argument both plausible and relevant. The hearer can either be overhearer or a certified participant. If the hearer is an overhearer, it may be the case that he easily misunderstands what is said, but it has no consequence to the understanding of what takes place in a dialogue, since, ex hypothesi, he is not a party to it. If the hearer is a participant, many of the conditions of mutual understanding will be assured in the

---

dialogical activity itself, and both he and the speaker will make efforts to assure that mutual understanding do take place, as part of their responsibilities as parties to a dialogue – and their argument is not plausible.

Keywords: Communication. Contextualism. Robustness. Dialogues.

O CONTEXTUALISMO TORNA A COMUNICAÇÃO UM MILAGRE?

Resumo: No meu artigo, argumento contra a seguinte tese de Cappelen e Lepore (2005): se o contextualismo fosse verdadeiro, a comunicação demandaria muitas coisas, e seria portanto frágil; a comunicação não é frágil, logo, ela não demanda muitas coisas e o contextualismo é falso. Devemos aceitar a robustez da comunicação, mas ela não é garantida por condições mínimas invariantes, e sim por diferentes mecanismos flexíveis que aumentam a chance da compreensão mútua a um custo relativamente baixo. Este é o caso de diferentes mecanismos de feedback e de diferentes modos de uma informação ser mutuamente disponível. A comunicação não é uma sucessão de ações individuais e independentes; diálogos são um tipo de atividade conjunta, e incompreensões são reparadas conjuntamente pelos participantes do diálogo como parte da atividade mesma na qual eles estão engajados. Além disto, se consideramos os diferentes papéis conversacionais de ouvintes, vemos que não há modo de tornar o argumento de Cappelen e Lepore ao mesmo tempo plausível e relevante. O ouvinte pode ou bem ser um participante confirmado da conversa ou não. No segundo caso, talvez incompreensões possam ocorrer facilmente, mas isto nada revela sobre o que ocorre num diálogo. Se o ouvinte for um participante do diálogo, muitas das condições da compreensão mútua são asseguradas pela atividade dialógica ela mesma, e os participantes do diálogo esforçam-se para que incompreensões não ocorram, como parte de suas responsabilidades como participantes do diálogo.

Palavras chave: Comunicação. Contextutalismo. Robustez. Diálogos.

I

One of the arguments Cappelen and Lepore offer against contextualism claims that if we accept contextualism, we are bound

to accept that communication is nearly a miracle.[2] It is not easy to see what precisely their argument is. They start with Anne Bezuindenhout's tentative list of the elements allowing one to pass from the semantical potential of an expression to its value in a given situation. The list includes, among other items, knowledge of what has been activated from the prior discourse context, of what is perceptually available, and of general principles governing conversational exchanges:[3] The argument seems to be that the more conditions are required to understand what is said, the more unlikely it is that they are met by participants in a conversation, or the more likely it is that small changes in the conversation situation will lead to the breakdown of communication. Since, according to contextualism, many things are required for a hearer to understand what is said, often it will be the case that what is said is simply not understood, with the consequent breakdown of communication. I will call this argument 'the argument from the robustness of

---

[2] "The simple idea is this: If RC [Radical Contextualism] were true, it would be miraculous if people ever succeeded in communicating across diverse contexts of utterance. But there are no miracles; people do succeed in communicating across diverse contexts of utterance with boring regularity. So RC isn't true.", Cappelen and Lepore (2005): 123. See also p. 184.

[3] "(i) Knowledge that has already been activated from the prior discourse context (if any); (ii) Knowledge that is available based on who one's conversational partner is and on what community memberships one shares with that person; (iii) Knowledge that is available through observation of the mutual perceptual environment; (iv) Any stereotypical knowledge or scripts or frames that are associatively triggered by accessing the semantic potential of any of the expressions currently being used; (v) Knowledge of the purposes and abilities of one's conversational partner (e.g. whether the person is being deceitful or sincere, whether the person tends to verbosity or is a person of few words, etc.); (vi) Knowledge one has of the general principles governing conversational exchanges (perhaps including Grice's conversational maxims, culturally specific norms of politeness, etc.)." Bezuidenhout (2002): 117.

communication': if communication required as many items as contextualism says it does, it would be fragile; communication is not fragile; therefore, communication does not demand a large number of conditions, and contextualism is false.

The gist of this argument lies in the robustness of communication: if A understands B's utterance *u* in a situation *s*, in any situation *s'* sufficiently similar to *s*, in which B utters *u'*, sufficiently similar to *u*, A understands *u'*. The argument seems to be that, given the number of requirements contextualism imposes on communication, we can easily pass from a situation in which mutual understanding takes place to a situation in which it doesn't.

While I think that we should grant the robustness of communication, contextualism does not imply the fragility of mutual understanding. Cappelen and Lepore propose examples of situations that, apparently, would support their argument – they list the ways putative requirements of understanding may not be fulfilled: the speaker may be wrong about the audience, the audience may be wrong about the speaker, both can be simultaneously wrong in multifarious ways, and they know this can happen.[4] And all this

---

[4] Cappelen and Lepore (2005): 182-183. Here is one of their examples: "Take you, our reader. We have no idea who you are; we know next to nothing about your beliefs; we don't know anything about your perceptual environment; ... We are aware of no known shared previous conversation with you. Yet, nonetheless, we have an audience for this book and you're it." They probably suppose that the reader of their book can understand what they say – otherwise, it wouldn't be an example of understanding in degraded conditions. It is not clear though that this case can be construed so as to make their point. On the one hand, some of the conditions are clearly not necessary for understanding, but we have no reason to suppose that anyone has ever claimed they were – it is the case, for instance, of knowledge about the perceptual environment (notice, however, that they can count on the fact that the reader actually sees the book). On the other hand, some conditions are met by the readers that do understand their

do not prevent mutual understanding. Cappelen and Lepore go from the remark that speakers, much more often than not, are understood, to the supposition that this fact can only be explained by imposing fewer requirements on mutual understanding – presumably the meaning of the words. But it is not the only way to explain the robustness of communication. I will suggest another strategy: the fulfillment of many of the requirements is guaranteed by different mechanisms that are not easily missing in current ordinary conversations. Cappelen and Lepore misidentify the source of the robustness of communication.

II

We may start with the observation that speakers do take into account, in choosing their words, the audience, so that mutual understanding tend not to start at a degraded level. Obviously, the speaker may be wrong about what the audience believes and knows, about what the audience remembers about previous conversation, about how the audience perceives their shared environment etc.[5] This is certainly true: a speaker may be wrong about all that, just as anyone can be wrong about almost anything. But just as this fact doesn't mean that our beliefs are not reliable, the fact that speakers and hearers may have wrong expectations and beliefs about each other doesn't mean that communication is a rare feat. Let us begin with the third requirement of Bezuidenhout's list: knowledge that is

---

book, such as the knowledge that has already been activated from the prior discourse context. The case is insufficiently described to show their point, but it won't be of much interest anyway. A theory of language should not be built upon the understanding of written language. The basic setting for language use, as Herbert Clark says, is face-to-face conversation: "it is universal, requires no special training, and is essential in acquiring one's first language.", Clark (1996): 11.

  [5] Cappelen and Lepore (2005): 183.

available through observation of the mutual perceptual environment. We tend to choose words that pick up things we think belong to our shared environment, when this is relevant. The reliability of our knowledge of what is part of the mutually perceived environment does not seem to be very different form our reliability concerning perceptual knowledge in general. This is not something that can easily be missing. The first item, the knowledge of what has already been activated from the prior discourse, does not seem to be easily lost either: words used once in a conversation tend to be reused. This pattern reveals not only an agreement in conceptualization – which helps to assure the common grasp of the fourth item, the knowledge of "any stereotypical knowledge or scripts or frames that are associatively triggered by accessing the semantic potential of any of the expressions currently being used" –, as Brennan and Clark have argued, but as words become entrenched in a dialogue, the chances of forgetting the topic of a conversation are diminished.[6] There is no reason to think that all the conditions of understanding can be easily lost in a conversation.

All this seems rather evident, at least to me. It is maybe less obvious that speakers choose their words paying attention to the different kinds of audience they may have for the same utterance. Clark and Schaefer describe the situation as follows:

> When we talk, we design our utterances for all the people we believe may be listening. But we don't treat listeners equally. We implicitly relegate to a caste system depending on our responsibilities and intentions towards them.[7]

The common ground, and the cumulative nature of dialogues, crucial in mutual understanding, will be different for different audiences:

---

[6] Clark and Brennan (1996)
[7] Clark and Schaefer, "Dealing with Overhearers" In Clark (1992): 248.

the speaker takes into account not only the addressee and the side participants, but also the overhearers. What distinguishes, within an audience, participants and non-participants is the fact that the former hold certain responsibilities towards each other:

> **Principle of responsibility**. In a conversation, the parties to it are each responsible for keeping track of what is said, and for enabling the other parties to keep track of what is said.[8]

Obviously, one may fail to act according to such principle, out of boredom, for instance. Even if it is difficult to evaluate the extent to which people misunderstand each other for just being bored, it is clear that someone who fails to keep track of what is said for this reason violates this principle and is therefore the one to blame for misunderstanding (or for being misunderstood), if that is the case.

III

The idea that cognitive mechanisms are robust has an important role in the influential book by Tim Williamson, *Knowledge and its Limits*. It provides an interesting clue to understand what happens in communication. One crucial feature that shows the robustness of knowledge is its stability in time:

> Knowledge is superior to mere true belief because, being more robust in the face of new evidence, it better facilitates action at a temporal distance. Other things being equal, given rational sensitivity to new evidence, present knowledge makes future true belief more likely than mere present true belief does.[9]

Likewise, as we consider the progress of a dialogue in time, we will be able to identify the source of its robustness.

---

[8] Clark and Schaefer, "Dealing with Overhearers" In Clark (1992): 251.
[9] Williamson (2000): 101.

To see how it happens, it is interesting to take a look at robustness of other mechanisms. I will follow a paper by Hiroaki Kitano on biological robustness.[10] Kitano begins with the following point:

> Robustness is often misunderstood to mean staying unchanged regardless of stimuli or mutations, so that the structure and components of the system, and therefore the mode of operation, is unaffected. In fact, robustness is the maintenance of specific functionalities of the system against perturbations, and it often requires the system to change its mode of operation in a flexible way.[11]

In our case, the suggestion is that, instead of looking for some unchanging few conditions, we should try to see the flexible ways in the mutual understanding is assured.

Kitano identifies four ways for a system to assure its robustness: system control, alternative mechanisms, modularity and decoupling. I will focus on the first two points: communication exhibits systems of feedback control and of redundancy of information that help to assure mutual understanding. Acceptance cycles, proposed by Herbert Clark and co-workers, are systems of positive and negative feedback:[12] participants in a conversation make

---

[10] Kitano (2004).

[11] Kitano (2004): 827.

[12] "The basic process, which may be called the *acceptance cycle*, consists of a presentation plus its veredict. Let x, y, and z stand for noun phrases or their emendations. A presents x and then B evaluates it. If the verdict is not positive, then A or B must refashion that presentation. That person can offer: a repair x', an expansion y, or a replacement z. The refashioned presentation, whether x', $x+y$, or z, is evaluated, and so on. Acceptance cycles apply iteratively, with one repair, expansion, or replacement after another, until a noun phrase is mutually accepted. With that, A and B take the process to be complete.", Clark and Wilkes-Gibbs (1986): 24.

efforts to establish the mutual belief that listeners have understood what is meant by the speaker. If the listener doesn't see what object is aimed at by the speaker, she will indicate it, and the speaker is expected to propose a new presentation, until the listener gives an acknowledgement sign, followed by a confirmation by the speaker.

This process limits the extent to which wrong expectations of the speaker concerning the audience, and of the audience concerning the speaker, may affect mutual understanding: they are corrected in the course of a dialogue. Not only there is a mutual control that corrects misunderstandings, but once an agreement is reached, the very words that reflect such agreement tend to be reused – what Brennan and Clark call a "conceptual pact".[13]

Before we go further in exploiting the ways in which robustness is guaranteed in communication, some brief remarks are in order here. The first one concerns the conception of communication that seems to be behind the argument Cappelen and Lepore offer: they seem to conceive communication as a series of successive, individual and independent actions. But dialogues are a kind of joint activity in which misunderstandings are jointly repaired by participants as part of the very activity they are engaged in. The second remark concerns the level at which we should look for the robustness of such processes: what is robust is the joint activity itself. Indeed, this robustness can only emerge as a result of individual capacities, but mechanisms such as conceptual pacts and acceptance cycles are part of conversations, and do not make sense if seen as actions of a lone individual.

A further aspect of robustness in communication, the redundancy of information, appears as we look at the knowledge available through observation of the mutual perceptual environ-

---

[13] Brennan and Clark, 1996.

ment. There is an important research concerning the selection of the referent, when there is a conflict between the potential referents that belong to a common ground and those that are perceptually accessible only to the hearer. The results are, or at least seem to be, conflicting. On the one hand, some results indicate that very early in the understanding processes hearers tend to use the common ground as one of the constraints in the language processing.[14] Such sub-personal mechanism is not a very expensive help to mutual understanding. On the other hand, it seems that, when an object is visible only from the hearer's point of view fits better the description, the addresses behave egocentrically:

> [...] they [show] a strong tendency to consider hidden objects [...] as potential referents. [...] In general, [...] addresses searched among objects visible to them, even if those objects were clearly not accessible to the director, and therefore not part of common ground.[15]

The early selection of what is mutually accessible is indeed a way to make the fulfillment of the third element of Bezuidenhout's list – the mutual knowledge of the perceived environment – less expensive. But what if the second hypothesis is true, that is, if, at least in some situations, adressees have such an egocentric behavior? Keysar and Barr notice that participants in a conversation

> ... exploit the fact that their own perspective tends to be serendipitously mutual, and avoid the extra cognitive work involved in computing the mutuality of information.[16]

---

[14] See Hanna and Tanehaus (2005).

[15] Keysar and Barr (2005): 86.

[16] Keysar and Barr (2005): 88.

Obviously, this confidence on the mutual access to what is one own's context may lead to misunderstandings. But again, such misunderstandings tend "to surface over the course of the conversation":

> ... the multimodal feedback present in face-to-face situations, as well as the way conversation tends to build on itself, may provide language users with much-needed, perhaps even redundant, checks on their understanding. In fact, the interactive nature of the conversation, with its abundant feedback and other checks on understanding, might itself account for why speakers do not seem to expend valuable resources tailoring utterances to mutual knowledge, and why listeners do not always use mutual information when comprehending these utterances.[17]

Such mechanisms of feedback control and of redundancy of information won't be too easily lost, as we pass from a situation in which mutual understanding takes place to other similar situations. They assure the mutual knowledge of what is "available through observation of the mutual perceptual environment" and of the topic of the conversation, the knowledge of which is redundantly informed by the fact that "a typical conversation tends to keep its topic".[18]

---

[17] Keysar and Barr (2005): 91.

[18] "Interlocutors know both what they are talking about and what each has said so far. They know this information individually as well as mutually. But when they rely on conversation record, they need not consider the fact that it is mutual; they could just use it because it also known to them. The fact that a typical conversation tends to keep its topic also makes the mutuality of the topic relatively redundant. I know the topic, I do need to also think about the fact that you know it too or that we mutually know it. It is possible that in most cases we could manage to coordinate meaning jointly with our individual knowledge.", Keysar and Barr (2005):, 88-89.

It would be certainly interesting to exploit how the other mechanisms (modularity and decoupling) that tend to guarantee robustness in biological systems could apply to our present concern. As we take into account such facts, at least the burden of the proof is shifted: Cappelen and Lepore have to show either that such mechanisms can easily fail or that they do not assure communication – more precisely, merely presenting a (supposedly) extensive list of conditions for communication doesn't show, in itself, that the items of the list can easily fail. On the contrary, I propose that the robustness of communication does not have to be based on some minimal unvarying conditions, i.e. on the meaning of words, but on different, flexible and iterative mechanisms, that reliably assure that many requirements of mutual understanding will be met at a not very high cost.[19]

Let us recap. Cappelen and Lepore's argument seems to start with a reasonable point: communication is robust, so that if A and B understand each other in a situation *s*, in any situation *s'* sufficiently similar to *s*, A and B should still be able to understand each other. According to Cappelen and Lepore, given the number of requirements contextualism imposes on communication, we can easily pass from a situation in which mutual understanding takes place to a situation in which it doesn't, and therefore communication would be fragile; communication is not fragile; therefore, it does not demand a large number of conditions, and contextualism is false. According to their position, robustness is guaranteed basically by one minimal unvarying condition, the meaning of the words.

---

[19] Notice that, although a person might refuse to engage in a joint activity – whatever are the consequences of this to a theory of understanding –, sub-personal mechanisms seem to a large extent unaffected by such attitudes.

However, as we have already noticed, communication, at least in its basic setting, i.e. face-to-face communication rarely (if ever) starts at a degraded level. Speakers do often tailor their words according to their audience, organized at different levels, so that the chances of the fulfillment of the requirements are increased. More importantly, there are mechanisms that will correct misunderstandings that might appear in the course of a conversation. Robustness of communication is not guaranteed by some minimal extremely stable requirements, but by different flexible mechanisms. Conversations have different feedback mechanisms of control, and many of the items relevant to mutual understanding are redundantly informed in the course of the interaction. The mutual knowledge of many of the items in Bezuidenhout's list, that seemed so demanding to Cappelen and Lepore, are clearly guaranteed by such mechanisms, such as the knowledge of what has already been activated from the prior discourse context or of what is available through observation of the mutual perceptual environment. This seems to be the best way to understand the robustness of processes.

IV

It may appear that my argument misses the target, which is communication "across diverse contexts of utterance." Situations in which this might occur include, I suppose, cases where the hearer is not in the context of the speaker, or is unfamiliar with some of the aspects of what the speaker takes as part of the common ground.[20] In any dialogical situation, we must distinguish between participants and non-participants. This distinction is crucial to account for the way a speaker designs her utterances taking into account different people she believes to be part of the audience.[21] And once this

---

[20] Cappelen and Lepore (2005): 125.
[21] See Clark and Schaefer (1992).

distinction is granted, it becomes impossible to consider whether people understand each other or not without considering their specific roles in conversation. A participant in a conversation should make herself understood to other participants, indicate when she doesn't understand what is said, and keep track of what is said. None of this is true of an overhearer, that is, someone who is part of the audience but towards whom the speaker holds no responsibility.[22]

Let us take one of the putative examples of "communication across diverse contexts of utterance": a person may be unfamiliar with the reasoning deployed in a conversation. Suppose that this person is the addressee. The speaker should choose her words so that the addressee will be able to follow what she is saying, and should control whether this is the case or not. The addressee, in his turn, should indicate whether he understands what is said or not. If we consider a side participant, towards whom the speaker holds the responsibilities of enabling him to keep track of what is said, a similar process will take place, probably with less feedback. Failures of mutual understanding may be repaired in such process. Now, the correction itself may fail, and it can be iteratively applied. We do count on the reliability of such processes, they are part of many of our common activities, and the more important this activity is, the more we will make sure that the reasoning is mutually grasped. The very principle of responsibility in conversations should make it plausible that the correction mechanisms will work. But what if the speaker is an overhearer, that is, a listener who is not part of the

---

[22] This is not exact: there is a further distinction, between a bystander, an overhear whose presence is fully recognized, and an eavesdropper, "listeners who have access to what the speaker are saying, but whose presence is not fully recognized." Obviously, utterances are designed taking into account bystanders, not eavesdropper; see Clark and Schaefer (1996).

conversation?[23] The speaker holds no responsibility towards him, and if she is not understood, nothing that is expected from a dialogue will be missing. No mechanism designed to assure mutual understanding will be used here: no feedback control, no collaboration, no designing of utterances aiming at enhancing the chances of mutual understanding.[24] Nothing in this situation could be seen as evidence for the impossibility of mutual understanding.

Cappelen and Lepore's argument faces a dilemma. Either we consider cases in which the hearer is an overhearer, or cases in which he is a ratified participant. If the hearer is an overhearer, it may well be the case that conditions of understanding are degraded, and maybe there is not much more than the meaning of the words for him to grasp what is said. But it has no consequence to the understanding of what takes place in a dialogue, since *ex hypothesi*, the hearer is not a party to it. If the hearer is a participant, the words will be chosen so that he will be able to understand and to keep track of what is said. More importantly, many of the conditions of mutual understanding will be assured in the dialogical activity itself, by sub-personal and personal mechanisms, and both he and the speaker will make efforts to assure that mutual understanding do take place, as part of their responsibilities as parties to a dialogue. We are very far from the thin understanding gleaned from the sole meaning of words. There is no construal that makes their argument both plausible and relevant to the discussion.

We may be not entirely convinced of the robustness of mutual understanding in conversations – after all, misunderstandings do happen, and we are not always sure whether we have been

---

[23] We will not take into account the possibility for the speaker to conceal what is said from overhearers; see Clark and Schaefer (1987).

[24] On the difference in understanding between addressees and overhearers, see Schober and Clark (1989).

understood or not. Let us grant that. We should remember then that this argument is part of a dialectical move: the less robust we take mutual understanding to be, the more we will ask from the context to increase its chances, and the less Cappelen and Lepore's position will be vindicated. Maybe the more important point is to see how understanding may use resources beyond what Cappelen and Lepore seem to suppose, resources that do not build only on the compositional structure of sentences. This is probably uncontroversial. However, it is important to see how such facts seriously undermine this argument against contextualism.

REFERENCES

BEZUIDENHOUT, A. "Truth-conditional Pragmatics". *Philosophical Perspectives*, 16, pp. 105-134, 2002.

BRENNAN, S. E., CLARK, H. H. "Conceptual Pacts and Lexical Choice in Conversation". *Journal of Experimental Psychology*: *Learning, Memory, and Cognition,* 22, pp. 1482-1493, 1996.

CAPPELEN, H., LEPORE, E. *Insensitive Semantics*. Oxford: Blackwell, 2005.

CLARK, H. H. *Using Language*. Cambridge: Cambridge University Press, 1996.

CLARK, H. H., KRYCH, M. A. "Speaking while Monitoring Addressees for Understanding". *Journal of Memory and Language,* 50, pp. 62-81, 2004.

CLARK, H. H., WILKES-GIBBS, D. "Referring as a Collaborative Process". *Cognition,* 22, pp. 1-39, 1986.

CLARK, H. H., SCHAEFER, E. F. "Concealing one's meaning from overhearers". *Journal of Memory and Language,* 26, pp. 209-225, 1987.

HANNA, J. E., TANENHAUS, M. "The Use of Perspective during Referential Interpretation". In: John C. Trueswell and Michael K. Tanenhaus (eds.) (2005), pp. 133-152.

KEYSAR, B., BARR, D. J. "Coordination of Action and Belief in Communication". In: John C. Trueswell and Michael K. Tanenhaus (eds.) (2005), pp. 71-94.

KITANO, H. "Biological Robustness". *Nature Reviews,* 5, pp. 826-837, 2004.

SCHOBER, M. F., CLARK, H. H. "Understanding by addressees and overhearers". *Cognitive Psychology*, 21, pp. 211-232, 1989.

TRUESWELL, J. C., TANENHAUS, M. K. (eds.). *Approaches to Studying World-Situated Language Use*. Cambridge, Mass.: The MIT Press, 2005.

WILLIAMSON, T. *Knowledge and its Limits*. Oxford University Press, 2000.