Adaptive Context: The Fourth Element of Meaning*

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Abstract
The present article explores the notion of communication from the point of view of the traditions that have considered context as the essential element for the optimal understanding of a message. The article describes the historical evolution of context with special emphasis on the discussion between context-free and context-bound descriptions of interaction, and chooses the Dynamic Model of Meaning as the unifier of these diverging traditions through theoretical synergy. Our approach describes a further step in the understanding of context by incorporating a fourth element in context, i.e., Adaptive Context, that we deem essential to understand cognitive dynamism. In this article we describe the role of Adaptive Management and show how this fourth element of context is basic to describe cognition in communication and to create social rapport.

Keywords
adaptive management, cognition, situational context, linguistic context, private context, common ground, Dynamic Model of Meaning

1. Introduction

Any act of communication is the realization of a cognitive process that follows a trial-and-error dynamic mental process in a conversation (Kecskes and Fenghui, 2009). This process has a social resonance beyond the mere transfer of information and is constructed with the aid of what we have called “pragmatic triangulation”. Pragmatic triangulation is the process by which the addressee, the addressee and the context constitute a liaison in which the absence or deficient behaviour of any of these three elements would make communication impossible. Pragmatic triangulation is related to the notion of

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“intention” (Grice, 1957, 1969), whereby a speaker’s coded message is decoded not only linguistically but with reference to the original intention, if successful communication exists. Intention is linked to triangulation, as it is impossible to identify or describe this metaphysical phenomenon (Audi, 1993) without reference to the participants and the context. Nevertheless, it is a real fact that, on many occasions, communication suffers from cognitive disfluencies that might lead to misunderstanding and, in these cases, the effort of participants to achieve the correct interpretation of the message is not always successful.

2. Context as an Essential Element in Communication

In general terms, the description of context as a necessary element in communication is generally based on what has been called the “coded model” (Sperber and Wilson, 1986/1995; Wilson and Sperber, 1986; Wilson, 1998). In this model meaning is encoded in a system that requires that the process of coding and decoding be always present in communication. In this model, communication does not depend on the understanding of the intention of the addressee alone and it cannot be understood as an independent, context-free act. For this model, communication always represents an exchange of meaning that is context-dependent and, to exist, needs to consider “the speaker, the hearer, time of utterance, place of utterance, and so on” (Sperber and Wilson, 2002: 6).

This approach has its origin in Contextualism, which can be considered a natural descendent of the Speech Act Theories of meaning (Austin, 1962; Searle, 1969). In epistemology, “contextualism refers to the position that the truth conditions of knowledge-ascripting and knowledge-denying sentences (sentences of the form ‘S knows that P’ and ‘S doesn’t know that P’, and related variants of such sentences) vary in certain ways according to the context in which they are uttered” (DeRose, 1999: 187). In the semantics-pragmatics interface debate, contextualists are committed to the analysis of “rich pragmatic effects throughout what is said by a sentence, or throughout the proposition expressed, or throughout semantic content” (Kecskes, 2008: 387).

Some authors within the pragmatics tradition have used a more refined terminology and have differentiated between context-free and context-sensitive utterances. Context-free utterances are not constrained by the situation in which they are being uttered, i.e., they have full-fledged autonomous meaning per se. On the contrary, utterances that are context-sensitive are ancillary to context for correct interpretation. This dichotomy has been fully studied by authors such as Cappelen and Lepore (2005), Borg (2007) or
Wieland (2009) who try to demonstrate that there is no clear boundary between context-free and context-sensitive utterances, and that every sentence might be context-sensitive depending on the situation. A typical example from the minimalist realm like “Jill is tall” (Borg, 2007: 341) seems to be true in the context of five-year-old children, however, as Borg suggests in relation “to a context in which basketball players are being discussed the proposition expressed is false, since Jill is not tall for a basketball player” (2007: 341). Therefore, even if we could say that “Jill is tall” is a context-free utterance, since it does not contain typical context-sensitive aspects such as an indexical or a demonstrative, we could say that the utterance is context-sensitive. Other prototypical examples, according to Wieland (2009: 2), are:

(a) Steel isn’t strong enough.
(b) Dumbo is big.
(c) There’s no beer left.
(d) The apple is red.
(e) My niece is tall.

As discussed above, the truth or falsehood of these utterances depends on the contextual situation and, therefore, we can infer that context-free utterances are virtually non-existent in utterances that can be uttered in a real or invented context.

The distinction between context-free and context-sensitive utterances has led to two perspectives within contextualism: what we shall call the “radical perspective” and the “moderate perspective”. The radical perspective claims that context might affect the meaning of what is being uttered radically (cf. Recanati, 2010). For instance, this same author avers that “any piece of contextual information may turn out to be relevant to establishing the correct interpretation for the speech act” (Recanati, 2002: 107). Also, authors like Searle or Sperber believe that every utterance is context-sensitive and as a consequence, context-dependent. “The interpretation of every utterance modifies the context in which the next utterance is interpreted. Context-sensitivity is the ability to take this ever changing context into account” (Sperber, 2005: 54).

In the “moderate perspective”, authors such as DeRose (1999) are concerned with the context sensitivity of epistemic claims, while others, like Stanley and Szabo (2000) claim that not every single utterance has to be context sensitive, although they state that context might affect meaning. Their approach could be related to the Natural Semantic Metalanguage theory, for which certain words – called semantic primes – in all languages have an invariant meaning and are independent of context (e.g. Wierzbicka, 1996).
The relationship between the dynamics of language and context was proposed by the 17th century philosophers, like Leibniz, who discussed the dynamic essence of language in the following way:

Whatever is thought of by us is either conceived through itself, or involves the concept of another. Whatever is involved in the concept of another is again either conceived through itself, or involves the concept of another; and so on. So one must either proceed to infinity, or all thoughts are resolved into those which are conceived through themselves. If nothing is conceived through itself, nothing could be conceived at all. (Leibniz, 1973 [1679]:1)

In other words, for Leibniz concepts are not static, on the contrary, they constantly move with the help of agents to create meaning. In our times, this tradition was followed by authors such as Violi:

It is not the existence of a given context that makes the use of the word possible, but the use of the word that initiates a mental process in the listener which seeks to construct a context in which its present use could be most appropriate. (Violi, 2000:117)

This philosophical stance has a linguistic corollary represented *inter alia* by Kecskes (2004, 2006, 2008); Kecskes, Davidson and Brecht (2005); Kecskes and Fenghui (2009). These authors argue that the relationship between language and context must be understood in a broader sense that mixes language and context, and that meaning is created and understood according to several components of context that can be more or less autonomous with respect to language. These components are: the private context, the actual situational context, and the linguistic context; and contribute to what is known as the Dynamic Model of Meaning.

### 3. The Dynamic Model of Meaning

The Dynamic Model of Meaning (DMM) avers that to guarantee the emergence of meaning we need, at least, two participants that must share a private context, i.e., “the world knowledge that is represented in the head of the interlocutors” (Kecskes, 2008: 403). The private context is realized through the formulation of words by means of what is called in the DMM the “linguistic context”. The linguistic context (the actual linguistic output) constitutes the first overt and verifiable connection between speaker and hearer, and it can only function if the utterance is in a language that the hearer shares with the speaker: “Our mind exists simultaneously both in the head and in the world. So linguistic context is what is uttered (or written) ‘out there’ in the world by
a speaker […]. So the linguistic context is created online” (Kecskes, 2006: 234).

The third element in the DMM, the situational context, is defined as “the world knowledge that is outside in the world as interpreted by the interlocutors” (Kecskes, 2008: 404). It is important to highlight that, for the DMM, the three elements are equally important and need to co-occur systematically to achieve communication, although they do not need to occur at the same time. In other words, they can occur at different stages in the communication process: “Both private context and actual situational context have a decisive role in the communication process, but at different stages” (Kecskes, 2008: 403).

To some extent, the DMM considers the meaning construed in the situational context as the corollary of a cognitive process that takes the two other elements of context (private and linguistic) as the basic elements to achieve communication: “The process of situational meaning construction includes both ‘unpacking’ (stored private contexts expressed in meaning values of lexical units) and ‘constructing’ (interplay of private contexts of interlocutors with the actual situational context)” (Kecskes, 2008: 391).

In our opinion, a volitional component in communication must be included in the DMM to create meaning and avoid misunderstanding. This volitional element has been termed “cooperation” in some models of communication (cf. Grice’s “cooperative principle”, for example). Cooperation for us represents the synthesis of the intention of the speakers to communicate, and the attention devoted to the communicative act in the situational context. To explain the notion of cooperation in communication two dominant approaches can be identified: the common ground approach and the cognitive approach. The first approach (Clark, 1996; Clark and Schaefer, 1989; Clark and Brennan, 1991) states that the mental representations adopted by the interlocutors in order to guarantee successful communication constitute what they describe as common ground. This common ground, therefore, is the result of the will to adopt and modify the mental representations exposed during an interaction.

The cognitive approach, on the other hand, maintains that language does not provide any mental representation, as all possible mental representations already exist in the minds of the speakers (Barr, 2004; Barr and Keysar, 2005; Gerrig and Horton, 2005). This model claims that the actual use of the pre-existing representations is what makes communication efficient. Therefore, it is through language use that speakers can create a common ground only by using common cognitive representations. This approach suggests that language is itself cooperative, as it is the key to activate mental representations
through interaction. In our opinion, the common ground view is more static, as it understands cognition in a sort of step-by-step information transfer, while the cognitive is more dynamic, as it considers pre-existing representations that get activated through interaction.

The DMM aims at blending both approaches through the so-called “socio-cognitive perspective” for which “communication is the result of interplay of intention and attention on a socio-cultural background” (Kecskes and Fenghui, 2009: 333). With this model, these authors underline the concept of “assumed common ground” as the “effort to converge the mental representation of shared knowledge present in memory that we can activate, shared knowledge that we can seek, and rapport, as well as knowledge that we can create in the communicative process” (Kecskes and Fenghui, 2009: 331). They conceive common ground as a twofold entity: core common ground and emergent common ground. The core common ground is the shared knowledge that pertains to a speech community, it is independent of where, when, or between whom it occurs. The emergent common ground depends on the situational context because it belongs to the individuals that create this common ground. It is a “private knowledge created in the course of communication” (Kecskes and Fenghui, 2009: 347). In this sense, meaning emergence depends upon the speaker and hearer’s shared knowledge of what is being uttered, and, obviously, to achieve shared knowledge, the interlocutors must have compatible knowledge of the personal, the linguistic, and the situational contexts.


To explain the process of optimal communication, Romero-Trillo (2007) proposed the Theory of Adaptive Management as an indispensable tool to understand how meaning is construed at different cognitive levels. Adaptive management can be defined as “the capacity of a speaker to adapt the grammatical, lexical and pragmatic parameters of discourse through a series of remedial elements and through a principled process, in order to comply with the demands of a new cognitive stage in a conversation via a cognitive standardized process” (Romero-Trillo, 2007: 83). Adaptive management functions in all the layers of communication (cognitive, pragmatic, discursive, grammatical, lexical, phonological, etc.) and is, in our opinion, essential to understand why meanings can be modified throughout an adaptation process when misunderstanding occurs, or as a means to avoid it.
The Theory Adaptive Management contextualizes Giora’s Graded Salience Hypothesis (GSH) (1997, 2003), and her description of possible meanings, in the case of misunderstanding. For her, “salient meanings are processed automatically (though not necessarily solely), irrespective of contextual information and strength of bias in the first phase of comprehension when lexical processing and contextual processing run parallel” (2003: 24). In our opinion, it is very important to underline the fact that lexical information can run parallel or even collide with context, and that to avoid misunderstanding, the understanding of lexical and pragmatic units must then be revised dynamically in the interaction.

The objective of any act of communication is to reach mutual comprehension by interlocutors and, as a result, the avoidance of mis/non-understanding (Bazzanella and Damiano, 1999). Therefore, when the interlocutor encounters a wrong or ineffective assumption of a salient lexical or pragmatic meaning, he or she will immediately revise and contextualize the situation in order to obtain the expected meaning of the utterance. This process is achieved through prior personal experience and, thus, by re-processing the lexical meaning in that particular context.

The process of interpretation of the possible meanings in a given situation is what we call “contextual sifting”, which can be defined as the process of cognitive filtering that leaves out the incorrect assumptions in a given communicative situation, and sieves through the correct elements to guarantee successful communication. In our description of contextual sifting to avoid miscommunication we do not only consider lexical or pragmatic deviations, but we also include cultural loads that can interfere in the process (Wierzbicka, 2010).

From this perspective, the DMM does not foresee or contemplate the possibility of adjusting meaning or of using remedial strategies to correct misunderstanding, as it assumes that intention and cooperation are always present in the communicative process. In other words, the DMM is dynamic – as its name indicates – and it does not fix a univocal meaning to either the words or the context, however, it is not dynamic in terms of adaptation to unexpected outcomes.

“Adaptive context” describes the process that allows the participants in an interaction to adapt the contextual parameters of discourse to reach a new cognitive stage. We believe that this fourth element is the central component that unites the three elements of context: linguistic, situational and private.

In Figure 1 we can observe how the three original elements of context are initially independent from each other but thanks to the adaptive context they modify the assumptions that the other components initially convey.
In fact, what we find in the description of this model is that meaning is the result of the interplay of the adaptive context and the three other contexts (lexical, private and situational). In this sense, the adaptive context is not concerned with content per se, but it deals with the cognitive process by helping manage the information supplied by the other contexts in a dynamic and synergic way.

In other words, the adaptive context contributes to the scaffolding of information by feeding the linguistic and cognitive strategies that can orient the stance of the speaker/hearer towards a given message. It adapts the ideas in the mind of the speakers through an online process of feedback that helps them guess the most likely optimal meaning from a pragmatic repertoire, thus, functioning at the macro-structural level of the interaction, as in the following examples from the London-Lund Corpus:

(1) B ^are you in t\ouch with the St {B/ee`s} ct/owd# / 
B or / 
A ^w\ell# / 
A you ^kn/ow#. / 
A to a ^certain ext/ent#

The pragmatic markers “well” and “you know”, each in a separate unit and with diverse tones (falling + rising), indicate the indeterminacy of the response
to the question “are you in touch with the St. Bee’s crowd?, or…”. The adaptive context would be responsible of the modulation of the response through the use of the pragmatic markers that show the stance of the speaker, and thus help the addressee mould his/her cognitive expectations. In fact, the contextual effect would have a completely different orientation if the response had offered no additional elements apart from the direct information, as shown below:

(2) B ^are you in t\ouch with the St {B/ee`s} cr/owd# / B or / A to a ^certain ext/ent#

In fact, we can say that (2) is probably counter-intuitive as the use of a rising intonation in the response – typical of questions – would be anomalous, were it not preceded by a marker that serves as a pragmatic springboard to allow for a response with an interrogative intonation.

Therefore, we cannot separate the essential function of the adaptive context without considering the role of intonation in this process (Romero-Trillo, 2001). In fact, it is very likely that the response would have presented a falling intonation, with a meaning of conviction, if the adaptive context had not been present:

(3) B ^are you in t\ouch with the St {B/ee`s} cr/owd# / B or / A to a ^certain ext\ent#

Another interesting fact is that the appearance of one of the two pragmatic markers alone would also give a different meaning to the response:

(4) B ^are you in t\ouch with the St {B/ee`s} cr/owd# / B or / A ^w\ell# / A to a ^certain ext/ent#

Or alternatively,

(5) B ^are you in t\ouch with the St {B/ee`s} cr/owd# / B or / A you ^kn/ow# . / A to a ^certain ext/ent#
the responsibility of the linguistic context and its interaction with the situational context: “Our mind exists simultaneously both in the head and in the world. So linguistic context is what is uttered (or written) ‘out there’ in the world by a speaker in a situation (situational context), and is matched (‘internalized’) to the conventionalized, standardized contexts represented by *lexical units ‘inside’ our heads* (prior knowledge)” (Kecskes, 2006: 234, our italics).

5. The Structure of Adaptive Context

As a cognitive tool that structures communication towards an optimal stage of mutual comprehension between speakers, the organization of the adaptive context is as follows:

I. Operative adaptive context. Its aim is to deal with the management of concepts and language comprehension to make a conversation flow without disruption.

II. Involvement adaptive context. Its aim is to deal with the management of social rapport to safeguard the face of the interactants.

The operative adaptive context signals the orientation of the message and helps the addressee’s comprehension of the speaker’s stance, as can be seen in the following examples:

(6) a. I have something else to tell you.
   b. Well, I have something else to tell you.
   c. Look, I have something else to tell you.
   d. Ehhh, I have something else to tell you.

The first example (6a) presents some straightforward information. This information is then pragmatically charged in the second example by indicating the start of a turn or topic; in the third example, we find an attention-getting element that signals the special importance of what follows; and the fourth example shows some hesitation by the speaker due to fear, caution, insecurity, etc. Therefore, the operative adaptive context would help speakers in a conversation create the necessary attitudinal comprehension to process the propositional meaning from a textual perspective.

The involvement adaptive context can present a further sub-classification: rhetorical and overt. The rhetorical adaptive context serves to verify correct understanding but does not require a response from the listener. They take correct cognitive reception for granted. The overt adaptive context seeks to avoid miscommunication through metalinguistic verification. It is mainly verbalized by fixed expressions that different languages formulate with a varying
degree of discourse grammaticalization (Romero-Trillo, 2001 and in press). The overt adaptive context can be addressee-oriented: “do you know what I mean?”, “if you see what I mean”, or self-oriented: “is it clear what I mean?”. Sometimes the addressee might confirm correct or incorrect comprehension.

The structure of the adaptive context would then be as shown in Figure 2.

Therefore, the involvement adaptive context contributes to the creation of the necessary cognitive orientation to understand the force and aim of the message in the mind of the speakers. Thus, the cognitive result of an interaction varies through the use of adaptive management, as in the following example:

(7) a. You know, I have something else to tell you.
    b. I have something else to tell you, you know.

These examples show the value of social rapport by creating a shared common ground in which the addressee is granted the status of “knower” before the message is conveyed, which cognitively differs from the use of the marker after the information in a position that often lacks tonicity, and is perceived as an afterthought. This phenomenon, with all its different meanings and variants, has been described as “sympathetic circularity” (Romero-Trillo, 2001), because although the turn is hypothetically passed onto the addressee, the turn movement is circular and the speaker will invariably continue talking after this message.
In the cases of overt involvement, adaptive context modifies the cognitive interpretation of the message with a more powerful, and usually pragmatically incisive, propositional interaction:

(8) a. Your results are not as good as expected.
    b. Your results are not as good as expected, if you see what I mean.
    c. Your results are not as good as expected, is it clear what I mean?

The first example (8a) states an objective fact, while the second and the third clearly presuppose a negative consequence that is emphasized through a metalinguistic reference to the proposition already expressed. It is also interesting to underline that there is a difference in the degree of the force of the markers, which increases when the marker self-refers to the speaker (is it clear what I mean?), compared to the more “neutral” and addressee-interpretative (if you see what I mean).

6. Conclusions

This article has reviewed the theories of context and linguistic meaning and has explained the importance of including the adaptive context for the understanding of the process of communication in conversation. The adaptive context represents the addition of an independent cognitive component to the management of the process of understanding a message, as a supplement to the elements of context described by the Dynamic Model of Meaning: situational, private and linguistic. These elements, described in our model contribute to the lexical conformation of meaning through the words of interlocutors. However, although the DMM assumes the variability of lexical meanings, it does not consider the adaptation needed to avoid and manage misunderstanding inside the system. The description of the adaptive context has shown the essential role of this fourth element to agree on common meaning through “contextual sieving” to manage the flow of information in interaction.

As a conclusion, we are convinced that adaptive management is the unifying and necessary stage in the creation of meaning in interaction. In other words, the speaker-hearer cognitive interplay needs to be built upon a subsequent staging of situational, private and linguistic contexts which are reallocated in a communication process that depends on the strategies used to explore comprehension and avoid misunderstanding. In this sense, it can be said that adaptive management functions as the mechanism that moulds the cognitive stance of the interlocutors with respect to the cognitive construction of the message.
References


