Cyberpragmatics was coined in Yus (2001; second revised edition 2010a, 2011) as an attempt to study Internet-mediated communication (henceforth IMC) from a cognitive pragmatics point of view and, more specifically, from the theoretical framework of relevance theory (Sperber & Wilson, 1995), although other theoretical approaches were also addressed when appropriate.

Relevance theory claims that our cognition is biologically geared to the maximization of relevance from the different inputs that reach our minds. Since we cannot possibly pay attention to all the barrage of information that we can process in a specific context, human beings have developed an ability to filter out potentially irrelevant information and to focus their cognitive resources on what might provide informational reward. This is the case, for example, of certain interesting information arriving from the surrounding physical world, of our thoughts (some of which are more likely to be entertained than others in the current context), and also of information conveyed by means of words in verbal communication, the main focus of relevance theory. This biologically rooted ability is covered by the so-called Cognitive principle of relevance: “human cognition tends to be geared to the maximization of relevance”. However, the main focus of relevance theory is verbal communication. As soon as people speak to us, their utterances create expectations of relevance, and this is covered by the Communicative principle of relevance: “every act of overt communication conveys a presumption of its own optimal relevance”.

Crucially, aiming at optimal relevance when interpreting the speaker’s utterance involves weighing up the likelihood of several interpretations, all of which are compatible with the utterance that has been coded. For an interpretation to be selected as the most relevant one, it has to be the interpretation that provides the best balance between two conditions:

Condition (a): An assumption is relevant to an individual to the extent that the positive cognitive effects achieved when it is optimally processed are large.

Condition (b): An assumption is relevant to an individual to the extent that the effort required to achieve these positive cognitive effects is small.

The picture is not one of dismissing any interpretation that is more effort-demanding than others. In reality, and also in IMC, we are often ready to expend additional mental effort if we obtain some supplementary reward (cognitive effects) in exchange. For instance, to a question such as “¿Does Susan eat meat?”, an answer such as “No, she doesn’t” is straightforward and very easy to process, whereas an answer such as “She is a vegan” is more effort-demanding since the hearer has to access “vegans do not eat meat at all” from context to conclude that she does not eat meat. But the speaker will be more satisfied with the second answer (it also provides the reason why she does not eat meat) than with the first one (a simple answer) because the eventual relevance is higher. One of the aims of cyberpragmatics is to analyze why Internet users often find relevance in text-based communication even though several options of contextualization (web cams, microphone) are available. It also analyzes how users fill the gap between what is coded and what is interpreted and the role of technological aspects of IMC in the eventual assessment of relevance (cognitive effects versus processing effort, as mentioned above).

Specifically, several aspects are stressed and addressed by cyberpragmatics:

[A] In IMC, just as in face-to-face (henceforth F2F) communication, the addresser users have communicative intentions and have to devise their messages in such a way that the intended interpretation is selected by their addressee users.
[B] Internet users resort to inferential strategies when interpreting messages on the Net, but these do not differ from the ones that they use in the interpretation of utterances in F2F communication with physical co-presence. There is only one biologically rooted ability to turn words into relevant interpretations, regardless of the type of utterance, the channel used, and the richness of contextual information.

[C] *Addresser users* expect their virtual interlocutors to access some specific contextual information that enables them to reach the intended interpretation of their messages. Similarly, *addressee users* invariably access contextual information as an inherent part of their relevance-seeking inferential activity.

[D] An important claim in cyberpragmatics is that the characteristics of the different applications for Internet communication (chat rooms, Messenger, e-mail, web pages...) affect the quality and quantity of contextual information accessed by users, the mental effort devoted to interpretation, and the choice of an interpretation. Indeed, cyberpragmatics analyzes communicative exchanges that take place in all forms of IMC and what we can label their “material qualities” (basically their position in the verbal/visual and oral/written scales in terms of options for contextualization) will have an impact on the balance of cognitive effects (i.e., interest) and mental effort obtained during the relevance-seeking interpretation. Very often, the cues-filtered quality of IMC increases the effort to reach an interpretation that would have been much easier to access in a F2F interaction.

[E] There is a link between relevance and the interfaces of programs for IMC. The non-expert users who face problems to surf the Net, to use the applications, etc., will face supplementary mental effort even before interactions with other users or the processing of documents from web pages start. Expert users, on the contrary, will obtain the highest reward from Internet without the burden of technology-related effort. Actually, the kind of language exhibited on the Internet indicates which users are experts in IMC (Yus, 2003).

[F] Much of cyberpragmatic research focuses on the users’ ability to connote their messages with different attributes of orality, typically found in the vocal (e.g. repetition of letters and creative use of punctuation marks) and the visual (e.g. emoticons) channels of oral interactions. Again, a certain level of oralization will inevitably have an impact on the users’ balances of effects and effort in their search for relevance. Therefore, cyberpragmatics analyzes the challenge that users face when they attempt to compensate for this lack of orality. And very often more effort has to be devoted to tracking down underlying intentions, feelings and emotions conveyed by text-based utterances (Yus, 2005).

In this sense, all the forms of IMC can be arranged in a *scale of contextualization* ranging from those with a high level of contextual support (videoconference, Internet-mediated telephone, web cam-mediated chat rooms, etc.) at one end of the scale and plain text-based communication at the other end. In any case, there is always an informational gap between what is typed (i.e., coded) and what is interpreted, regardless of the level of contextual support. This is the so-called *underdeterminacy thesis* (Carston, 2002), which predicts gaps between what the speaker says and what the speaker intends to communicate, and also between what the speaker says and what the hearer interprets. In other words, what is coded and what is intended and interpreted are related in terms of resemblance, rather than identity.

Needless to say, this filling of the gaps is made easier if the channel of communication is capable of providing a lot of contextual support, especially concerning visual and oral nonverbal information typically communicated in parallel to verbal utterances. If communication on the Net only relies on typed text, several additional informational gaps are generated that have to be filled inferentially:

What the addresser user intends to communicate.

*only resembles...*
What the addressee user could have listened to (in a F2F situation filled with oral and visual contextual information).
only resembles...

What the addressee user actually reads.
only resembles...

What the addressee user interprets.

Undoubtedly, users devise different strategies to oralize their messages and texts in order to make them richer in terms of contextualization, and cyberpragmatics also addresses these strategies. For instance, in Yus (2005), it was concluded that what was labeled textual deformation (repetition of letters, creative use of punctuation marks, emoticons, etc.) aids in the communication of attitudes, feelings and emotions in chat rooms. However, and unlike the predictions, addressee users failed to infer degrees in the intensity of these attitudes, feelings and emotions related to the amount of text typed by the addresser user. This textual deformation seems to work as an “either/or strategy”, that is, if there is textual deformation more intensity is inferred, but different amounts of textual deformation do not lead to inferred degrees of intensity.

The assessment of relevance when interpreting IMC can also be altered by the qualities of the program interface (Yus, 2008, 2010b), often by gratuitously increasing the users’ mental effort, since very often they have to devote supplementary cognitive resources to use that interface, besides the effort to select an interpretation. For instance, the interface of chat room applications often puzzle even expert users, especially when following and interpreting threads of conversations on the main page of the chat room.

An interesting focus of cyberpragmatic research concerns how advances in the level of contextualization provided by the interface (e.g. web cam added to the instant messenger) generate (or not) better balances of cognitive effects and mental effort in the user’s search for relevance. On paper, these improved interfaces should aid IMC by reducing the effort related to the use of the interface and by aiding in the correct choice of interpretations, but this is not always the case. For instance, avatar-mediated communication (e.g. Second Life) is supposed to be a richer medium of communication, but the effort demanded to control the avatar’s nonverbal behavior may not offset the number of cognitive effects obtained in return. At the same time, though, in Second Life users can type their messages or use the audio facility (the latter being an increased level of oralization and hence of contextualization).

Cyberpragmatics also analyzes the interpretation of discourses that have been exported to the Internet (especially from a printed format to an electronic one) and how the new medium generates alterations in the users’ assessment of relevance and also in the decisions concerning how much information is conveyed and how it is organized and offered to the user. This is the case of newspapers and advertising, both of which exhibit new formats and ways of presenting information adapted to the requirements of the screen and to the level of context accessibility that the new reader/user can access compared to the reader of the printed version.

Another area of research within cyberpragmatics concerns the social side of IMC, especially the way IMC is used to sustain and assess group membership and (personal) social networks (Yus, 2007). A growing number of social uses of Internet are centered upon language as part of the effort to keep a profile in a weblog or in a social networking site, to inform people of daily activities via Twitter, to use content generated in collective achievements such as Wikipedia, to manage virtual communities, etc. In these cases, the “social benefit” obtained from
these forms of IMC offsets the effort required to keep this level of commitment to the other users.

Weblogs and social networking sites, as well as microblogging services such as Twitter, were not addressed in the initial version of Cyberpragmatics (Yus, 2001) but they are covered in the second revised and extended edition (forthcoming 2010). They satisfy the user’s individual and social communicative needs and provide interesting insights on how optimal relevance may be obtained not only in the interpretation of messages but also in group-related assumptions and mutual network awareness. Profiles in social networking sites such as MySpace or Facebook are an excellent way of monitoring one’s personal and social identities in terms of number of contacts, access to personal news items, and embedded instant messaging services. This is why they have become so popular in the last few years.

At the same time, one of the social qualities of Internet involves discourses created by users for other users, the so-called Web 2.0 or the trend of user-generated content (as in Wikipedia). In terms of relevance, the proliferation of texts may be detrimental to the users’ assessment of relevance. To start with, the high quantity of available information may alter the user’s willingness and ability to filter it and process it in an efficient way. Besides, information on the Internet is often not structured in a hierarchical way, in the sense that there is no “authority” backing up the relevance and trustworthiness of what is about to be read (by filtering the potentially irrelevant information, trusting the source, etc.) and therefore the effort devoted to processing such amount of information may be too high. For example, the portals devoted to user-generated news (e.g. Digs) have been criticized for the anarchic way of publishing newsworthy events.

Finally, illicit or non-legal (or simply annoying) uses of the Net may also alter the user’s estimation of relevance by uselessly increasing the effort to access the most relevant information. A clear example is the spamming of e-mails that make the reading of authentic and interesting messages utterly impossible (Freeman, 2009). Besides, in most chat rooms, there is typically a frame on the screen with all the nicks of the users that are currently online and connected to the program. Normally, by clicking on one of these nicks, the users start a private conversation with that user, but, instead, very often they are led to a web page that advertises products. This is frustrating for the users and a clear threat to an optimal balance of cognitive effects and mental effort. Similarly, the so-called pop-up advertisements intrude on the user’s current task making the access to relevant information much harder. Finally, user-generated projects such as Wikipedia have been attacked by cyber-activists altering the content of its entries and hence lowering the users’ level of trust in that site as a source of relevant information.

SEE ALSO: Politeness in Computer-Mediated Communication; Pragmatics of Asynchronous Computer-Mediated Communication; Pragmatics of Chat

References


Yus, F. (2003). El chat como doble filtro comunicativo. Revista de Investigación Lingüística 2,
vol. 5, p. 141-169.


**Suggested readings**


