The interface between pragmatics and Internet-mediated communication: Applications, extensions and adjustments

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ABSTRACT

Pragmatics addresses central features of human communication, specifically how interlocutors fill the gap between what is said and what is eventually communicated. The aim of this chapter is to review several applications of pragmatics to Internet-mediated communication, and to assess how the mediated, virtual nature of this communication requires analyses beyond those based on physical, face-to-face scenarios. On paper, two broad and apparently incompatible premises constitute the foundation of these distinct applications. On the one hand, Internet-mediated communication “makes no difference” for a pragmatic analysis, in the sense that we do not have specific cognitive mechanisms to interpret online discourses that differ from the ones used in face-to-face communication. On the other hand, though, Internet “makes all the difference” for pragmatics, since the inferential gap-filling made by Internet users, intended to turn online texts (e.g. typed utterances) into valid interpretations, is influenced by the interfaces used for interactions and the range of contextual support that users can access in the interpretation of these online discourses. This chapter will review several existing pragmatic analyses of Internet-mediated communication but with an emphasis on a cognitive pragmatics (cyberpragmatic) framework (Yus 2011a).

1. Introduction: Pragmatics

Levinson (1983), in his famous chapter devoted to finding a definition for pragmatics, concluded that this theoretical perspective is too heterogeneous to be brought under a single umbrella definition. Nowadays, most analysts within pragmatics at least agree that the importance of analysing context unifies most theoretical perspectives within pragmatics. For example, Fetzer & Oishi (2011: 1) stress that “pragmatics is fundamentally concerned with communicative action and its felicity in context,” and Fetzer (2011: 25) further underlines that “the pragmatic-perspective paradigm provides a general cognitive, social and cultural perspective on linguistic phenomena in relation to their usage in forms of behaviour, accounting for the dynamics of language and language use, as is reflected in the premises that meaning is not a product and given but rather dynamic, multifaceted and negotiated in context.” However, the scopes of analysis differ enormously across disciplines.

Beyond the acknowledgement of the importance of context in human communication, pragmatics has evolved into a diversified approach to language and, inevitably, to an array of branches or schools that somehow give the impression of a certain lack of homogeneity within this linguistic paradigm. For the purposes of this chapter on pragmatics and Internet-mediated communication, though, pragmatics will be treated as a unified research trend in its interest in context and in the role that it plays in (un)successful communication on the Net. The underlying premise will be that what is coded in communication (words, gestures, etc.) highly underdetermine the speaker’s or writer’s intended interpretation. In other words, there is a more or less significant informational gap between what people say and what they intend to communicate (and what is eventually interpreted). As has been claimed within cognitive pragmatics and especially relevance theory (Sperber & Wilson 1995), communication entails (a bit of) coding (whose literal meaning would be studied by semantics) and (a great deal of) inferring (with the aid of contextualisation), which is the main scope of pragmatic research. This is a typically radical contextualist position, according to which “in order for the semantic content of a sentence to express a full-blown proposition, or in any case the proposition meant by the utterer, it has to undergo a number of processes of enrichment, expansion, specification or modulation” (Belleri 2014: 83).

Needless to say, not all authors agree on this radical distinction between coding/inferring (and semantics/pragmatics). And the same applies to the differentiation
among pragmatic disciplines. An example is Herring (2004); she lists five discourse analysis paradigms: (a) text analysis (identification of structural regularities in texts); (b) conversation analysis (analysis of the mechanics of interaction); (c) pragmatics (interpretation of speaker’s intentions); (d) interactional sociolinguistics (socio-cultural meanings indexed through interaction); and (e) critical discourse analysis (meaning and structure related to ideology and power). By contrast, my own conceptualisation is different, discourse analysis being just one of the branches of pragmatics, which would be the superordinate, umbrella term for all the disciplines. Text analysis (a), if carried out within a de-contextualised approach, would not be part of pragmatics, but semantics. The other disciplines (b, d, and e) are also branches of pragmatics, and all of them would share an interest in analysing the role of context in communication, either with a more text-centred role (e.g. its role in utterance comprehension) or with a wider social or interactive role (e.g. context made up of social meanings shared and enacted through conversations).

The analysis carried out in this chapter will take pragmatics as the broad label for this linguistic discipline, which contains a number of sub-disciplines linked to one another through an interest in the importance and the role of contextualisation in communication. The next Section outlines general issues of a pragmatics of Internet-mediated communication and the alterations (or adjustments) that this virtual medium generates (or demands) when trying to apply the research carried out in physical contexts to situations in which there is a lack of physical co-presence and communication is typically text-based and hence cues-filtered. Section 3 is devoted to my proposal of adding the terms non-intended non-propositional effect and contextual constraint to the inherent propositional object of research in pragmatics. These terms are interesting because they shed light on why certain kinds of Internet-mediated communication are fruitful despite being apparently useless or irrelevant, among other possibilities. They also entail the incorporation of other disciplines to the overall proposition-centred pragmatic research. Finally, Section 4 contains a proposal of a layer-arranged pragmatic analysis of Internet-mediated communication: constraints, discourse, conversation, audience, collectivity and non-propositional effects. The chapter ends with a few concluding remarks.

2. Pragmatics of Internet-mediated communication

When applying pragmatics to Internet-mediated communication, the analyst is faced with two apparently contradictory statements. On the one hand, Internet makes no difference, in the sense that in this virtual environment users also interpret other users’ utterances with the aid of context, engage in (a)synchronous conversations, store, update and reproduce social meanings via interactions, etc. Therefore, applications of the different pragmatic disciplines to this virtual environment are straightforward. However, on the other hand Internet makes all the difference, since virtual communication often takes place in a cues-filtered environment, typically text-based (even nowadays), and with fewer options and resources for contextualisation (e.g. lack of nonverbal communication, of physical co-presence, etc.). At the same time, Internet-mediated communication shatters traditional genre configurations and defies deterministic positions regarding its limitations compared to communication in physical contexts. According to Herring et al. (2013), the Net enables new kinds of participation, of fragmentation, new ways of co-constructing meaning that transcend traditional notions of conversation, narrative, exposition, and so forth.

In this sense, a challenge that analysts face when applying pragmatics to Internet communication is that the prototypical interaction, namely an individual who intends to communicate some propositional information to another individual through some coded content (a one-to-one schema typically used in cognitive pragmatics and specifically relevance theory) is altered or blurred in this virtual medium. As was commented upon in Yus (2015a), communication on the Net frequently entails a radical reinterpretation of this traditional communication schema. This reinterpretation will suit some users (eager for more dynamic forms of interaction, who like to be participants in the act of communication and
take full responsibility for making interpretive or plot decisions) while discouraging others (who prefer a more traditional and guided way of interpreting discourses). Nowadays, with the rise and ubiquity of the Internet, what we rather have is: [1] new authors/speakers (e.g. collective co-creation, hybridisation of reader-writers, etc.); [2] ...who produce new forms of text (audio-visual, multimodal narratives, link-mediated choices for the flow of discourse, etc.); [3] ...through new interfaces (new verbal-visual designs, multimodality, interfaces aiming at usability); [4] ...directed at a new kind of hearer or reader (active, dynamic, often contributing to the authorship of the text); [5] ...who come up with a typology of interpretations (the author’s intended interpretation -if any- is often diluted and the choice of interpretations ends up being mainly the addressee’s responsibility).

Besides, from the cyberpragmatic point of view rooted in relevance theory (Yus 2010, 2011a, 2013), it has been claimed that the characteristics of the different interfaces for Internet communication (chatrooms, instant messaging, e-mail, social networking sites, etc.) affect the quality and quantity of contextual information accessed by users, the mental effort devoted to interpretation, and the choice of an interpretation. Hence, what we can label the medium’s material qualities (basically its position on the verbal-visual and oral-written scales in terms of options for contextualisation, but also its level of usability) will have an impact on the eventual choice of an interpretation and its quality (Yus 2013). Consequently, we can arrange all Internet media in a scale of contextualisation, ranging from plain text-based communication to context-saturated video-mediated interactions. On paper, an application of pragmatics to these Internet media initially yields two research issues with surprising outcomes:

1. The lack of contextual richness on the text-based end of this scale should lead to dissatisfaction both in producers (due to the effort needed to compensate textually for the lack of orality in their messages) and receivers (due to the potential for misunderstandings and dissatisfaction with the need to make up for the lack of options for contextualisation). A whole array of theories, grouped together under the generic label of theories of information richness in Yus (2007), claim that this loss in contextualisation and depth of available information may be critical for the declining quality of interactions on the Net, leading to dissatisfaction and eventually to unwillingness to engage in online interactions. Among others, we can briefly list the following: (a) Media Richness Theory (Daft & Lengel 1984): the media discourses may be arranged in a continuum of informational richness, the Net being rather low in richness.1 (b) Social Presence Theory (Byrne 1994): interlocutors need to be aware that they are mutually involved in the conversation, a feeling that decreases -leading even to a total lack of interest in the conversation- when the contextual information available to both interlocutors is reduced due to the qualities of the channel. And (c) Reduced Social Context Cues Theory (Sproull & Kiesler 1986): by reducing contextual cues, users tend more to display anonymity and de-personalisation and less to emphasise social aspects of interaction. De-personalisation weakens the value of social norms, and the lack of communicative fulfilment due to the aforementioned reduction of contextual cues makes users frustrated and uninhibited. By contrast, lack of cues has also been valued for levelling power relationships and allowing shy users to express their thoughts without the burden of the impact of their physical presence.

However, users consistently contradict the claims of these theories of information richness. Indeed, users choose their most convenient medium (e.g. WhatsApp), not the best in information richness (e.g. video-enabled phone calls), and draw from whatever resources available to make the most of their options for contextualisation, even if communication is text-based, as has been claimed by the Hyperpersonal Communication Theory (Walther 1996). Surprisingly, users often prefer text-based interactions (e.g. typed mobile instant messaging) despite the existence of more context-saturated options (e.g. phoning from the

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1. Four factors are proposed in order to determine the information richness of a medium: (1) the capacity of the medium to transmit multiple contextual cues; (2) immediacy of feedback; (3) use (or lack of use) of natural language; and (4) option for personalisation or lack of it.
very same device which they are using for texting). A recent meme that spread across social networking sites stated the following: “First SMS, then came WhatsApp, now you record an audio file, and your friend records a reply. If they continue like this, they will end up inventing the telephone” (my translation).\(^2\) The underlying piece of criticism points toward why users do not use a rich medium such as a phone call and, instead, prefer limited communicative options such as the audio file (whose conversations are mainly successions of messages, rather than a true synchronous interaction) or the typed text plus emoji on WhatsApp. The answer (and the challenge for pragmatics) lies in the fact that these limited forms of Internet-mediated communication generate rewards in the form of non-propositional effects that compensate for the effort devoted to using them. Text-based interactions may be limited in contextualisation, but they offer users compensations such as freedom from imposition on the interlocutor, time to plan the message, lack of exuded information on the user’s physical appearance, etc. This is why a proposition-centred pragmatics has to be complemented with the role that non-propositional effects play in eventual (dis)satisfaction with the online act of communication (see next Section).

2. In the last few years an evolution has been detected from a time when the value of interactions on the Net arose from the relevance of the propositional content transmitted, whereas now we are facing a time of non-stop phatic connections among users, in which the intrinsic value of the content exchanged is null, that content being simply an excuse for permanent connection. As Miller (2008: 398) correctly remarks, we are currently witnessing “a shift from dialogue and communication between actors in a network, where the point of the network was to facilitate an exchange of substantive content, to a situation where the maintenance of a network itself has become the primary focus.” That is, communication has been devoid of interest in informational content, which has become subordinated to sustaining networks and non-stop connected presence. This has resulted in a rise of what Miller (ibid.) calls phatic Internet. Surprisingly, this kind of apparently useless information raises a lot of interest in users, who devote many hours on a daily basis to this kind of phatic connection. In this sense, pragmatics has traditionally focussed on the interface between the coding and inferring of propositional content, exhibiting some reluctance to address phatic effects or the importance of feelings and emotions altering eventual interpretations. The proposal of the term non-intended non-propositional effect (next Section) aims to make up for this increasing importance that (apparently) utterly useless content generates in Internet users.

3. Beyond discourse comprehension: Non-intended non-propositional effects and contextual constraints

Relevance theory (Sperber & Wilson 1995), a cognitive pragmatics theory, claims that all the stimuli that humans pay attention to (e.g. utterances, gestures, but also elements of the surrounding environment, etc.) are selected due to their potential interest, while many others are discarded due to their irrelevance. This general cognitive trait is covered by the cognitive principle of relevance: “Human beings are geared to the maximization of relevance” (Sperber & Wilson 1995: 261). However, this theory is more interested in narrowing down this broad cognitive trait to the specificity of verbal communication. In this case, and included in the aforementioned cognitive principle, there is another communication-centred principle, the communicative principle of relevance: “Every act of ostensive communication conveys the presumption of its own optimal relevance” (Sperber & Wilson 1995: 158). This presumption sets inferential strategies in motion in order to turn the schematic meaning of the words uttered by the speaker into a contextualised and meaningful proposition matching the intended interpretation.

This evolved cognitive ability also applies to Internet-mediated communication, in

\(^2\) Original in Spanish: “Primero el SMS, después vino el WhatsApp, ahora grabas un mensaje de voz, y tu amigo te graba la respuesta. Si siguen así van a inventar el teléfono.”
which users also pay attention to potentially relevant stimuli (an entry on Facebook, a tweet on someone’s account, a WhatsApp message flashing on our mobile phone screen, etc.). However, the underlying assumption in these principles is that the information itself is relevant enough to be worth the hearer’s interpretive activity. This claim clashes with today’s tendency (especially in Internet communication) to find relevance not in the objective value of the information transferred to other users, but in the effects that using this information - even if its propositional content has no objective value - produces on these users, as has already been mentioned in passing. In other words, nowadays we witness a huge amount of Internet-mediated exchanges whose interest does not lie in the content communicated, but in what the act of communication as a whole generates in users, producing an offset of non-propositional effects that compensate for the lack of relevance that the content objectively possesses. Internet interactions are filled with (apparently) irrelevant utterances if we analyse them from a purely informative point of view, but they do provide relevance in foregrounding or generating non-propositional assumptions such as awareness of co-presence inside the group or network of friends who are synchronously inter-connected, as well as relevance in the mutual manifestness of being acknowledged in the conversation, even if not actively participating. In mobile instant messaging conversations, for instance, “there is an interest in demonstrating that the user is part of the interaction, part of the collectivity, and very often, underlying the posting of photos, videos and recorded audios, there is a covert need to feel noticed and acknowledged by friends or collectivities” (Yus forthcoming).

As a consequence of the specificity of Internet-mediated communication, in previous research an extension of cyberpragmatic research (and, in parallel, of relevance-theoretic research) has been proposed by adding an element that plays a part in the eventual relevance of Internet-mediated communication, but which is not tied to the relevance of the content being communicated (Yus 2011b, 2014a, 2014b, 2015a, 2015b, 2015c, 2016), namely non-intended non-propositional effect, which refers to feelings, emotions, impressions, etc. which are not overtly intended, but are generated from the act of communication, and add (positively and negatively) to the interest derived from utterance interpretation or have an impact on the mental effort required for processing the utterance.\(^3\)

Besides, Internet communication is affected by a number of interface-related and user-related qualities that may also alter the eventual estimation of the relevance of the act of communication. These are mainly related to the users’ management of the interface, the kind of relationship existing between interlocutors, the user’s personality, etc. They affect the eventual (un)succesful outcome of Internet-mediated communication. In this sense, the following term was also proposed in previous research: contextual constraint, defined as “aspects that underlie or frame communication and interaction (i.e. they exist prior to the interpretive activity) and constrain its eventual (un)succesful outcome” (Yus forthcoming).

This pair of terms allows us to explain why some users spend hours exchanging utterly useless messages, why some users feel frustrated upon finding it extremely difficult to manage an interface in order to achieve their communicative goals, etc. In a sense, these added elements operate at a different level from proposition-centred interpretations (explicit, implicated, etc.). The latter are constrained by the communicative principle of relevance and the expectation of informative reward. By contrast, these new terms are instead constrained by the cognitive principle of relevance, since they cover aspects not directly tied to the content of what is exchanged on the Net, but nevertheless alter the estimation and eventual relevance of the act of communication as a whole.

The proposal of adding these elements to the normal formula for the interpretive procedure within cognitive pragmatics also entails a broadening of research and a cross-breeding of disciplines, since now several conclusions obtained from sociology, anthropology, computer science, etc. may also have to be taken into consideration insofar as

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3. Needless to say, these effects occur not only in Internet-mediated communication, but in any kind of communication (see for instance Cornelia Ilie’s chapter in this book on the pragmatics-rhetoric interface). However, the effects may be more substantial in Internet-mediated communication.
they shed light on why messages exchanged on the Internet achieve relevance and eventual user satisfaction beyond discourse interpretation (more on constrains and non-intended non-propositional effects in Sections 4.1 and 4.6, respectively).

4. Layers of pragmatic analysis of Internet-mediated communication

4.1. Layer 1: User and contextual constraints

Communication on the Net is constrained by a number of factors that influence the eventual (un)successful outcome of the act of communication. They frame, as it were, communication and have an impact not only on the quality of interpretation, but also on the willingness to engage in sustained virtual interactions. Constraints exist in every act of communication. They exist prior to the interaction and hence should not be an inherent object of pragmatic research, but their role in the outcome of communication makes their analysis relevant to determining why communication on the Internet is satisfactory or fruitless.

![Diagram showing contextual constraints and non-intended non-propositional effects in Internet communication.](image)

As can be seen in Figure 1, both contextual constraints and non-intended non-propositional effects (see 4.6 below) may be divided into those related to the use of an interface (user-to-system communication) and those related to the exchange of information among users (user-to-user communication). Among the former, we can list (a) “affordances” of the sites for virtual interactions (the design and options provided, for instance, by Facebook, constrain the kind of interactions that are possible therein); (b) familiarity with...

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4. For example, in Yus (2016b) a number of contextual constraints were listed that play a part in why humorous communication (e.g. jokes) ends up (un)successful, including the suitability of the humorous text in the context of the interaction, the hearer’s background knowledge and beliefs, the interlocutor’s sex, the interlocutor’s sense of humour, and the relationship holding between interlocutors.

5. Eisenlauer (2014: 74) writes about material substratum of the different Internet interfaces, which enables or constrains textual practices and social interactions. Needless to say, these affordances are constantly evolving, with new capabilities being introduced every now and then as happened, for example, with the messaging option.
the interface (effort or lack of effort when using the links, frames, etc.); expertise in using web-mediated discourses (mastery of oralisation, combinations of text and image, editing and upgrading sites, etc.); (c) web page usability (good arrangement of text and image, good structure of links, which allows for accessing content without unnecessary effort); (d) reasons for surfing the Net (work, leisure, looking for a specific item of information or using the web to kill time); and (e) presence/absence of effort-increasing elements on the interface (pop-up advertisements, density of content on the site, problems with bandwidth, etc.).

Concerning user-to-user communication, the following contextual constraints are worth mentioning: (a) degree of mutual knowledge existing between interlocutors (enhancement of shared information entails increased solidarity and feelings of connectedness prior to communication); (b) known addressee vs. anonymous addressee and casual conversation vs. topic-focused conversations (different types of discourse and communicative strategies depending on the type of interaction and the interlocutor); (c) familiarity with topics, jargons, expected background knowledge (assumed background knowledge of topics, jargons, etc. works as barrier of in-group discursive specificity, see 4.5 below); (d) reason for the act of communication (casual chat, formal piece of communication, getting information on a topic, etc. entail different expectations in the interaction); and (e) personal traits, personality and sociality (one’s personal and social qualities influence eventual quantity and quality of use of Internet-enabled interactions).

Next in Figure 1, both constraints and non-propositional effects may be associated with the sender user or with the addressee user, thus introducing further elements that might play a part in eventual (un)successful interactions on the Net. And finally, the user may or may not be aware of the existence of these constraints and effects, even if they still play a part in the eventual quality of virtual acts of communication. For example, a narcissist personality is a constraint that influences the users’ active uploading of discourse on a profile, and also a non-propositional effect if, as a result of intense interactions and comments from peers, the users strengthen this narcissist personality. But the users themselves may not be aware of the existence of this constraint and this effect.

As can be deduced from these listed contextual constraints, these variables that frame interactions on the Net are important for a thorough pragmatic analysis of Internet-mediated communication but, at the same time, entail an extension beyond pragmatics and into other disciplines such as computer science (for interface-related constraints, for instance), sociology, anthropology or psychology in the analysis of personal and social attributes of the interlocutors that affect the production and comprehension of discourses on the Net.

4.2. Layer 2: User to user by means of discourse

Pragmatics is “the study of how more gets communicated than is said” (Yule 1996: 3). As such, it conceptualises discourse as open to multiple possible interpretations in a context. In other words, what speakers (or users) code is more or less different from what is meant with the discourse produced. In general, addressees undergo a chunk-by-chunk processing of the utterances in a linear way, extracting explicit interpretations and (if any) implicatures with the aid of context, and the processing of previous stretches of discourse becomes a preliminary context upon which subsequent parts of the discourse are interpreted. There should be little difference in how Internet users accomplish this interpretive procedure compared to listeners in physical contexts (but see below); and disciplines such as computer-mediated discourse analysis or digital discourse analysis cover similar areas to the ones addressed by offline pragmatic research.

An essential term at this layer is genre, roughly defined as “a common intuitive concept -a sense that features of language aggregate in recognizable patterns, and that these aggregations indicate something important in the uses of language in context” (Giltrow & Stein 2009: 1). Indeed, the purpose of a genre is not an individual’s private motive for

within Facebook.
communicating, but a purpose which is socially constructed and recognized by the relevant organizational community and invoked in typical situations (Orlikowski & Yates 1998). As Lomborg (2014: 42) correctly states, the consolidation of a genre takes place “from the mobilization, reworking, and adjustment of existing knowledge and previous experience, as well as from the recurrent interaction with other (more established) practitioners of the genre.” Discourses on the Net exhibit similar patterns both in the way they are processed and in the way genres are stabilised and enacted in interactions. However, several qualities of virtual communication and online discourse should be taken into account:

Firstly, the degree of genre (dis)similarity between online and offline genres depends on how inherent to the Net the genre in question is. Research in this direction differentiates evolutions of virtual genres depending on how related they are to their offline counterparts (see Orlikowski & Yates 1994, Shepherd & Watters 1998, Crowston & Williams 2000, Herring 2013a: 7, among others). In a nutshell, some offline genres are transferred to the Net without variation (e.g. “pdf files” of printed articles for scientific research). These should not lead to substantial alterations in their processing and contextualisation. By contrast, other offline genres are adapted to the Net. The content is similar, but options for choosing interpretive paths lead to variations in contextualisation, as happens with portals of online news that upload the same content as the printed newspaper but offer the user options such as links to other resources, access to the archive, added audio-visual content, graphics, etc., and therefore the users take some responsibility of what progression their reading activity takes, and various possible strategies for contextualisation would run parallel to these choices. Finally, some genres are autonomous, have been created on the Net without offline counterparts, as happens with social networking profiles, RSS news feeds, etc. Here reading paths and contextualisation are mainly the reader’s responsibility, since a typical feature of these autonomous genres is the lack of predicted processing of information and the user is granted full freedom of which link to click on, which tag from a parallel frame to select, which order of content to choose, and so on.

Secondly, as has already been mentioned in passing, the prototypical act of communication, namely “a single addresser, who intends a single interpretation (and interpretive path) with a single piece of discourse directed at a single addressee” is altered or blurred (see Dynel 2014: 38), leading to a reconsideration of its elements, and posing a challenge for traditional pragmatic analysis:

1. Single addressee. Of course, single authors or speakers with some specific interpretation in mind are still pervasive on the Internet. We find single addressers in blogs, instant messaging, social networking profiles, etc. But there is an increasing trend towards multi-authoring (e.g. Wikipedia), collaborative discourses where it is increasingly harder to differentiate who the author is (and what interpretation is expected). Sometimes a multiplicity of authors construct the eventual piece of online discourse beyond the initial user’s control. An example is the entries on social networking profiles. The owner uploads photos and texts but what the readers often value as part of the initial discourse uploaded is the friends’ comments to these posts, thus creating an unintended authorial multiplicity for the eventual text processed, which is a combination of post and comments). According to Manago (2015), other-generated information is regarded as more truthful on social networking sites because it is perceived to be unsanctioned by a profile owner. It has been demonstrated that the user’s friends prioritise peer commentaries over self-statements on the profile.

2. A single interpretation (and interpretive path). As has been stated several times in this chapter, online discourses no longer exhibit a linear processing path, and are instead open to multiple choices in terms of links, frames, tags, multimedia content, etc. Cohesion and coherence are mainly achieved through a sort of inferential patchwork in which the user tries to make sense of different chunks of discourse from different sources and with different discursive features (verbal, visual, audio, multimodal...). Media convergence has brought about unpredictability of reading sequences and the author has been devoid of responsibility for eventual interpretations.

3. A single piece of discourse. At the same time, convergence allows for a multiplicity
of types of communication within the same platform (Herring 2013a: 16). As Spilioti (2015) illustrates with social networking sites, Facebook users can post a status update (asynchronous) and chat with friends in real time (synchronous), and posts exhibit combinations of more than one mode (e.g. text-video or photo-text). Compared to traditional text-based communication, social media interaction draws extensively on multimodal constructions of meaning, where language is only one semiotic resource in users’ everyday practices. And texts are now typically encoded with multimodal combinations whose partial meanings cannot be understood without the aid of the other discourses in the multimodal combination, as is typically the case of Internet memes.

4. Directed at a single addressee. Single addressees are still found on the Net, of course, especially in messaging conversations, chat rooms, etc., but there is a growing trend towards multi-party conversations in which users either co-construct the eventual interpretive paths or participate at different levels and intensities in the act of communication (see 4.3 below).

Finally, at this second layer it is necessary to comment on the quality of many online discourses in their hybridisation of oral and written properties (oralised written text, as it was called in Yus 2011a), and how users resort to different techniques of oralisation including text deformation (repetition of letters, creative use of punctuation marks, etc.) and the use of emoticons/emoji in order to connote their typed texts not only with an additional layer of orality, but also -and crucially- with a more realistic version of the feelings, emotions and underlying intentions beyond textual explicitness (e.g. in ironical communication) that would not be conveyed without the aid of these enriching techniques (see Yus 2005). This opens up nice areas of pragmatic analysis that move beyond the rigidity of typed text and into more dynamic combinations of text and image, and into hybrid oral and written features of discourse. In this sense, although it is undeniable that very often the origin of these creative techniques lies in the user’s awareness that typed text is not rich enough to convey feelings, emotions or attitudes, on many occasions users resort to them with other purposes, including humour, the creation of a more vivid or colourful text, or an enhancement of areas of mutuality with other users, among others. Take emoticons/emoji, for instance; they were initially created to connote typed text with the user’s emotions or nonverbal behaviour, but the range of their uses is more extensive. In Yus (2014c), for example, up to eight functions were proposed: (a) to signal the propositional attitude that underlies the utterance and which would be difficult to identify without the aid of the emoticon, as in (1a); (b) to communicate a higher intensity of a propositional attitude which has already been coded verbally, as in (1b); (c) to strengthen/mitigate the illocutionary force of a speech act, as in (1c); (d) to contradict the explicit content of the utterance (joking), as in (1d); (e) to contradict the explicit content of the utterance (irony), as in (1e); (f) to add a feeling or emotion towards the propositional content of the utterance (affective attitude towards the utterance), as in (1f); (g) to add a feeling or emotion towards the communicative act (feeling or emotion in parallel to the communicative act), as in (1g); and (h) to communicate the intensity of a feeling or emotion that has been coded verbally, as in (1h):

(1) a. I have no time to get bored, nor to read :((
    [I regret that I have no time to get bored, nor to read]
  .
  b. I hope you’ll always remember my Spanish lessons :-).
  c. Stop writing about me! You’re obsessed! XDDDDDDD.
      [the force of the directive is softened by the emoticon].
  d. Text commenting on a photo of a shop with the same name as the addressee
      user. I didn’t know you had a shop in Alicante :)))))). Kisses.
  e. What a hard life you lead xD.
  f. Saturday at home :-).  
      [Spending Saturday at home makes me happy].
  g. How pretty!!! Some parties, uh! You never stop!!!! :-).
  h. Sounds great!! So excited to see you!! :-)
4.3. Layer 3: User to user in interaction

On the Internet, users engage in conversations, among them synchronous oral dialogues (Internet-enabled mobile messaging calls, videoconferencing, Skype), multi-party typed chat conversations (on web servers), one-to-one typed dialogues (WhatsApp, Messenger), audio-file conversations (recorded files exchanged between users); and typed asynchronous interactions (email mailing lists, Internet fora, dialogues on a user’s photo or post on a social networking site profile, chained comments on a blogger’s posting, etc.).

In theory, pragmatic disciplines such as conversation analysis, interactional sociolinguistics or ethnomethodology should be capable of accounting for how online conversations are structured. And the last two include a social connotation in their analyses, also found on the Net.

1. Conversation analysis (CA), typically *dissects* conversations into turns, analyses the role of turn transitions, pauses, silences, overlappings and interruptions, together with interactional combinations such as adjacency pairs and latched turns.

Problems for a direct applicability of CA to conversations on the Net stem from their textual and interactional properties. Concerning the former, specifically in the case of text-based chat interactions within a central, general-purpose screen, conversations show alterations and disruptions that pose challenges for a prototypical CA study. Among others, these are worth mentioning (Yus 2003): (a) The servers reproduce utterances in their entirety, and hence simultaneous feedback or anticipatory inferencing are missing in this kind of interaction. (b) In the common area, messages with a specific addressee are mixed up with messages to the whole audience. (c) Some utterances are clipped, one part being located in an initial message and its continuation may be located after a number of messages from other users. (d) Participants in the conversation are not co-present, so interactional feedback is difficult. And (e) conversations may be overlapping, with threads mixed up in different sequences allocated by the server.

Regarding interactional constraints, online conversations often move beyond the prototypical dyadic structure and into a multi-party quality. For instance, Bou-Franch & Garcés-Conejos Blitvich (2014: 21), in their analysis of YouTube interactions, conclude that these constitute *online polylogues* where users can participate on two levels, either contributing actively to the textual polylogues being generated in the thread, or passively, without posting audiovisual and/or textual responses. Besides, different participants in the polylogue have access to different additional communicative actions.

In any case, more focussed interactions are also possible. Apart from typical one-to-one conversations, Spilioti (2015) comments that social networking sites often follow a *prompt focused* topic development in conversations. Topics develop as a number of messages respond to an initial prompt (e.g. a status update, a tweet, a video or a photo). These comment threads exhibit a more limited topical development, since comments respond primarily to the initial prompt throughout the thread.

2. Interactional sociolinguistics aims at explaining how interlocutors signal and interpret meaning in social interaction (Bailey 2015). Unlike CA, more interested in the structure of conversation, interactional sociolinguistics focuses on how meaning and overall interpretation are achieved. Besides, it shows an interest in how sociological (and cultural) knowledge and communication influence each other in making sense of the speaker’s intentions. These foundations are clearly applicable to Internet-mediated communication, but it is Goffman’s work that has been more intensely applied to virtual interactions, especial his proposal of the term *stage*, referred to the distinction between the roles that users play in society at the front stage of interactions and the personal reality that lies at the backstage of

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6. This is the case of one-way transmission systems such as web-based chat rooms. Although Blyth (2013) comments that two-way transmission systems, in which the user can see the message as it is being typed, are becoming popular, to my knowledge one-way systems are still the norm in most of the interfaces for interactions, including recent ones such as Facebook’s messaging conversations.
their identities, the part that hides behind this social playground.7

3. Finally, for ethnomethodology conversations are a unique source of information on social and cultural knowledge. In other words, everyday instances of communication may be regarded as social realities, and this allows us to trace the social aspects of the individuals by the way they speak in specific communicative scenarios. Although conversations on the Net are not situated on many occasions, in the sense that interlocutors share a common scenario and elicit similar social meanings through their interactions, this pragmatic perspective may also be applied to virtual interactions.

4.4. Layer 4: User to audience

A pragmatics of Internet-mediated communication should include the analysis of online narratives, aimed at an audience that shares with the author some portions of mutual knowledge regarding posts and previous narrative chunks. For example, faithful readers of a blog may be able to extract from new posts all the implications and presuppositions that are only accessible by sharing a store of information with the author’s previous posts (access which is often assumed in the production of the entries), whereas occasional readers may find it difficult to fill in the informational blanks that the author does not code and whose knowledge is taken for granted.

An interesting aspect to bear in mind regarding online narratives is that there is a clear difference -in pragmatic terms- between narratives that demand a purely linear processing of the successive chunks of text, and those which offer the user partial or total freedom to choose which sub-plot of the narrative to follow, which link to click on, which tab in a parallel frame to select, etc., with the user turning into the maker of his/her own narrative plot, and the author’s role being left as the mere provider of narrative threads without a favoured processing path, as is the case with the latest computer game plots. Although all narratives are processed in a similar cumulative way that takes the chunks of text that have just been processed as preliminary contexts upon which subsequent chunks are inferred, different types of narrative will demand different lines of processing and parallel amounts of processing effort depending on aspects such as usability, reader involvement or demands for mutuality. Blog entries, for instance, are arranged with the most recent post first, and this arrangement may affect this cumulative picture of processing, especially in chained posts, since occasional readers often have to backtrack to previous entries in order to seek the necessary background knowledge that allows for optimal comprehension of the most recent post. In any case, these possibilities that the Internet opens up for narratives entail new communicative forms that blur the prototypical narrative genre. Georgakopoulou (2013: 698), for instance, writes that “social-interactional approaches to narrative, including small stories research, have shown the importance of attending to the context-specific aspects of narrative tellings so as to understand how narrative genres shape as well as are being shaped by the norms and social relations of the situational and socio-cultural contexts in which they occur.” The Internet is certainly a new environment which shapes new forms of narrative and blur the previously consolidated features of the narrative genre.

Elements that may also alter inferential strategies for new narratives include the (un)predictability of links to click on, and the role of pictures and their processing in the eventual overall interpretation (these pictures may work as ‘anchorages’ of the accompanying text and vice versa). Besides, certain narrations play a part in social identity shaping and community bonding, especially those which are multi-authored or demand from readers the aid and advice of a community of users to move effectively through the unpredictable narrative threads (a non-propositional effect that provides user satisfaction beyond narrative content).

7. Pan (2013) cites two further contributions by Goffman that are applicable to online interactions: (a) the relationship between interpersonal meanings and social structure, which entails careful attention to the symbolic value of what is said and done, as well as to abstract forms of social life; and (b) the concept of face, that is, the positive social value a person takes for him- or herself, which needs to be maintained through social interaction.
4.5. User in a group of users

Several pragmatic disciplines have done research on social aspects of communication and the effects that communication produces on feelings of group membership, stabilisation of social rules and norms, etc. Among them, the ethnographic approach should be emphasised, but the application of this socially-connotated approach to virtual settings entails a reconceptualisation of its objectives, methodology and even the way data are gathered from sample dialogues and interactions. As Hine (2000: 21) correctly underlines, ethnography is particularly appealing for what users do online, considering that an increasing part of our lives is now lived online. However, moving ethnography online involves some re-examination of the methodology. The analyst cannot live among the users to conclude what social aspects are assumed and reinforced through online interactions; instead, partial logging onto the social sites is expected. Besides, identity play and anonymity are frequent on the Net and the ethnographer may well be deceived in his/her research. Regarding this online/offline ethnographic interface, Androutsopoulos (2008) suggests dividing its online counterpart into two varieties depending on the balance existing between research online and offline. The first type would focus on the Internet in everyday life, analysing the integration of new communications technologies into the life and culture of a community, that is, a kind of blended ethnography in which offline activities are equally important. The second variety addresses everyday life on the Internet, with the Net as a unique environment where specific varieties of culture and community are formed and fostered.

In the case of pragmatics, my intuition is that in general people’s awareness of social aspects leaks, as it were, from instances of communication, generating a store not only of general social qualities of the person’s environment, but also qualities regarding the position of the individual within the group. An interesting proposal in this direction is Escandell-Vidal’s (2004), who proposed a picture of human cognition capable of processing, almost simultaneously, both the specific information from utterances, and the social information obtained from the processing of verbal stimuli. Basically, she refers to two cognitive skills (or faculties) of the human mind: one (which may be called the inferential cognitive system) is responsible for processing the utterance, while the other module (called the social cognitive system) contrasts the information obtained in the interpretation of utterances to already stored social information. These systems or faculties are different but also inter-dependent. Besides, both systems share a quality: universality (that is, both systems are found in all human beings). The inferential system is geared to obtaining the most relevant information from the utterances that are processed on an ordinary basis. The social system, on the other hand, is devoted to obtaining and stabilising social features that are assessed during daily interactions with others.

Internet users would generate and manage social qualities through interactions, in a similar way to offline communication. For example, certain types of online discourse (or some form of online code of behaviour, interface use, etc.) are only comprehensible to those who belong to a specific social group within some bound space of the Net, thus generating feelings of community membership and parallel feelings of being excluded for those unable to understand the discourse properly (Yus 2014d). An example of discourse fitting this role of

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8. In Yus (2012), up to five diachronic stages of relationships between people’s offline and online lives were proposed: (a) Early 90s: Online life as irrelevant (few people had an interest in the virtual environment); (b) Late 90s: Online life as alternative (a time of nicknames, identity play and text-based communication); (c) Early 2000s: Online life in a time of offline virtualisation (growing time spent online, growing virtualisation of physical spaces for interaction); (d) Mid 2000s: User as a node (users do not differentiate between online and offline spaces, the user is a node of intersecting hybrid interactions); and (e) Nowadays: Online/offline congruence (same as the previous stage, but with an emphasis on online-offline congruence, that is, the user is expected to be the same individual in both environments).

9. However, the social system is also culture-specific, since every culture has a particular way of organising shared social and cultural representations and there are even different ways of conceptualising the world we live in depending on the culture, together with different ways of engaging in communication and interaction.
community bonding is the use of letters and numbers (instead of Arabic characters) among the Tunisian youth, a sort of hieroglyphic that is only comprehensible to them, and not to others such as some adults with whom they do not want to share the information from their posts, thus emphasising their group membership and feelings of community bonding. An example from a Facebook dialogue is quoted in (2), together with its translation (3):

(2) User 1: hhhhh rit kifeh normalemnt User 4 hya eli ta3ti elmahba.
User 2: s7i7 w lezenhma t5arej el Fatra 3la cha7riyetha lol ken mazelt ma 5arajtech ya User 4 a3ti el amir 7ata 50 d sada9a tadfa3ou al bala2
User 3: 7ata enaaaaaaaninaa :)
User 4: A User 2 walah 5arejet fatra ...yezi 9alu 5o dinars ....men antom hahaha ...mesbeh wena na3ti metfakerni ken 3am hamadi yaatih esaha ...naarefkom ghayrlin hhhh

(3) User 1: hhhhh you see, normally User 4 has to offer the \textit{mahba} [tradition in which money is offered as a present for \textit{Eid al-Fitr}, celebrated after \textit{Ramadan}; normally offered to children].
User 2: it’s true and she also has to give the \textit{fatra} for having a job [an amount of money stipulated by imams and given to the poor], we propose User 4 to offer Amir 50 dinars as \textit{mahba} and \textit{fatra}, so that bad omens will be suppressed.
User 3: to me too [she has to offer the \textit{mahba}].
User 4: User 2, I swear I already did the \textit{fatra}... and also the 50 dinars... you are naughty... I haven’t stopped offering the \textit{mahba} all day… the only person who did not forget to give me the \textit{mahba} is uncle Hamadi... I am sure you’re jealous.

4.6. Layer 6: User and non-intended no-propositional effects

Pragmatics has traditionally analysed the communication of propositions which match, to a greater or lesser extent, the propositional information that the speaker intends to communicate (i.e. thoughts). Propositions are typically explicit or implicated, and come in degrees (strongly or weakly communicated). In a way, it is sensible to base a pragmatic theory on the analysis of propositions. They are accountable in truth-conditional terms and possess content that allows us to trace the speaker’s intended meanings. The problem is that on many occasions the key to successful acts of communication does not lie in propositional content but in certain non-propositional effects, and this is particularly pervasive on the Internet, where users spend hours exchanging utterly useless (propositional) content which, nevertheless, provides them with alternative sources of satisfaction through non-propositional effects, most of which are not intended by the speaker (as part of communicated content), but are simply generated from the act of communication making up for the low informational quality of the discourses transferred to the addressee users. As argued in Yus (2016a), non-intended non-propositional effects are important, since they have an impact on (a) the positive/negative outcome of Internet acts of communication; (b) the preference for a specific site, medium or channel; (c) why certain interactions are (un)profitable despite the lack of/existence of interesting information; (d) one’s awareness of personal and social roles (through interactions); and (e) what kind of \textit{residue} is leaked from everyday acts of communication (and how it makes us feel).

So far, several areas of Internet communication have been studied with an emphasis on these non-propositional effects, of a positive or negative quality, including mobile phone apps for tourism (Yus 2014a), new digital narratives (Yus 2015a), and mobile instant messaging (Yus forthcoming).

A more recent analysis has focused on the communicative value of non-propositional effects for the shaping and management of online identity (Yus 2016a). These aspects entail
the incorporation of other disciplines (sociology, anthropology...) into the pragmatic analysis in order to assess the effectiveness of the online act of communication as a whole. Indeed, online interactions are excellent sources of non-propositional effects regarding personal and social identity shaping, especially in a time in which many interactions take place in situations that lack physical co-presence and therefore language is important for foregrounding aspects of the user that would be taken for granted in a face-to-face situation. Among all the possible positive/negative effects that may be beneficial or detrimental for the act of communication as a whole, the following may be listed, in the form of feelings of... 1. connectedness, of social awareness, feeling of being part of the interactions and friendships; 2. reduced loneliness; 3. being noticed by others, by the user’s community; 4. willingness for self-disclosure; 5. generated social capital; 6. social isolation and dissatisfaction; 7. well-being through emotional display of one’s and other users’ feelings; 8. increased mutuality of information; 9. enhanced/reduced self-esteem and generation of positive/negative emotions; 10. control over privacy and disclosure; 11. reduced inhibition (plus increased self-disclosure); 12. community or group membership, of belongingness, of being acknowledged by others; and 13. being useful to the community (e.g. via user-generated content) and increased trust.

5. Concluding remarks

Pragmatics has clear and straightforward applications to communication on the Internet. The same communicative strategies, inferential steps and management of interactions that are at work in offline, face-to-face exchanges, are also performed in online scenarios. However, the application of pragmatic theories to Internet-mediated communication often entails an adjustment or reconceptualisation of the hypotheses, methodologies, and conclusions used in the analysis of offline communication. This chapter has reviewed some of the key issues and debates that may be put forward in the application of pragmatics to virtual, Internet-mediated communication.

References


10. These would be user-related non-propositional effects (originating from user-to-user interactions). In the same way as happened with contextual constraints and as pictured in Figure 1 above, there would also be positive/negative interface-related non-propositional effects (originating from the user’s interaction with an interface). In Yus (2016a) some of these effects include: 1. (Dis)satisfaction from being (unable) to use the interface appropriately and obtain/produce the expected information and interpretations. 2. Individuation/personalization vs. social connectedness (users expect information in a highly personalized way, adapted to personal profiles and preferences). 3. Effects of dealing with information processed: from information overload, from multi-tasking; psychological effects of dealing with infoxication (when the user is overwhelmed by the amount of information to process), etc.

Yus, Francisco. 2014c. “Not all emoticons are created equal.” Linguagem em (Dis)curso (special issue on relevance theory) 14(3): 511–529.


Yus, Francisco. 2015b. “Should relevance theory analyse what is non-propositional, non-intentional but yet affects the eventual relevance?” Paper delivered at Relevance Round Table Meeting 4. Institute of English Studies, Jagiellonian University of Kraków, September.

Yus, Francisco. 2015c. “The discursive management of the phatic Internet (and how to explain it pragmatically).” Paper delivered at Approaches to Digital Discourse Analysis (ADDA). Valencia (Spain), November.

