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## Conversational Practices and Presence: How the Communication Structure Exploits the Affordances of the Medium

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## **Abstract**

Communication practices are strictly interdependent on the resources afforded by the medium, and on the combination of functionalities offered. In this contribution we frame this great variation of resources in terms of presence affordances, since they anchor the communication practices to the specificities of a certain environment. A corpus of mediated conversations recorded in different settings and collected within the PASION project will be examined to this purpose. It will be shown how the structure of the actions sequence, starting from turns and actions constituting it, varies across environments and how nature of the medium is reflected in these variations. On the one hand, this shows that similarities and differences across communication environments can be captured by using the presence concept. On the other hand, this shows how communication practices encapsulate presence cues, and offers a concrete example of they way in which they can be qualitatively investigated.

Keywords--- Conversation Analysis, Presence, Communication Structure

## 1. Introduction

Under specific circumstances, being in a certain place represents a genuine source of amazement, as when the person can see her body from outside [6], or can maneuver a robot located in another part of the planet. In these examples, the coordinates and criteria through which the person is associated to her space of action depart from those considered as "natural" or "common", calling for a better understanding of the overall nature of the presence experience.

Transportation and communication technologies may seem lees exotic than simulations and out of body experience, but nonetheless, in the words of Amin and Thrift, they are bringing about "a wave of re-mediation of everyday life, in which the very fabric of presence and absence, departure and return is reworked (...) (p. 98) [1]. Transportation and communication tools multiply the presence possibilities, making available a great variety of environments to human action.

This realization is - on a scientific level - a direct consequence of the current theoretical appreciation for the strict relationship between actions and the environment in which they are carried out. Communication actions and practices are maintained as closely interdependent with the environment in which they emerge, in the sense that they are always locally situated and based on the infrastructural and symbolic artifacts available [3]; and in the sense that these very practices contribute to define the nature of the environment, its meanings and implications. In this sense, communication is not just about signs and conventions, but is also practical and material [25]. The concept of presence can synthesize this relation, making it indissoluble.

This paper addresses the strict, bidirectional connection between communication practices and the presence affordances of the mediated environment. The study is carried out within a research project aimed at identifying and augmenting the presence cues in collaborative tools. It will show that presence is an important contextual factor to be taken into account when studying communication, and a viable framework to make sense of the variety of communication environments currently available. It will also contribute to the field of presence by illustrating how qualitative methods can investigate the ongoing definition of the speakers' presence while talking in a mediated environment. More generally, ethnography and conversation analysis can provide a useful viewpoint to observe and make sense of the detailed, on-going way in which people establish their presence while acting in a certain environment.

## 2. Theoretical background

## 2.1. Presence, place and action

Several research programs contribute to the understanding of presence; the one instantiated by this work is an action-based approach (more deeply discussed in [23]), addressing presence as a public, situated phenomenon, instead of an intimate, individual feeling or state.

The theoretical foundations of this program are rooted in the human geography literature of space and place [1], in the theory of mediating artifacts of cultural psychology [5] and in the situated action theory [24], which all emphasize the strong interdependency between the local environment and human cognition. The presupposition is that actors delegate part of their cognitive efforts to resources that are external to their individual mind [26; 5; 15; 14;12; 11] so that cognition is actually located both internally and externally to the subject. The key to establish a connection between these distributed resources is pragmatic: by acting, the internal and external resources available to the subject are organized, and acquire a certain (pragmatic) meaning. The interdependency between human cognition, action and the environment means that humans can be understood only by situating them in their local place of action.

Relating presence to action permits to overcome several dichotomies, such as interpreting the meaning of a mediated experience on a pragmatic level, without making it a purely subjective phenomenon; and the individual action can be observed without loosing connection with the socially shared, recurrent practices and preferences it relates to (when should I manifest myself and how? What are the legitimate ways to manifest presence so as not to be socially sanctioned as deviant, insane, etc.?). Finally, this approach is particularly suitable to a project –like PASION - on augmented environments, since it does not assume a quintessential difference between mediated and natural environments: they both rely on some sort of mediation through the use of material and symbolic artifacts; therefore it offers a unifying framework to account for presence in natural, mediated and mixed environments.

From the theoretical perspective outlined so far, doing something (including not doing anything) also conveys being somewhere: acting means to define a presence in the place of action, to both the actor and the others [28; 13; 23]. Presence is a relational quality that connects the agent with an environment, and is dynamically achieved and maintained by acting in that environment. Studying presence means then to be able to connect the actor's experience to the specificities of the environment in which it occurs. While this connection is often assumed, the goal of the study program instantiated by this work is the direct understanding and exposition of the modalities through which this connection operates. The adoption of an ethnographic, qualitative analysis of action is a means to this goal.

## 2.2. Situated conversational practices

Communicative actions are carried out by resorting to cultural practices. All these practices rely on the display and recognition of cues: speakers structure an utterance peppering it with cues allowing the interlocutor to recognize the kind of endeavor they started, and to take it up. A case in point is represented by the changes in tone and pace in a politician's speech in which the audience detects the moment to start applauding [4].

Some of these cues are offered by the medium, and conversational practices exploit them. Conversation Analysis (CA), in particular, is renown for situating communicative actions in the context in which they occur. Started in the

seventies to show how even a mundane event such as everyday conversation can contribute to establishing the social order at large, CA has then expanded to include the study of several different informal and institutional situations, as well as interactions mediated by different kinds of tools: landline telephone [17], instant messaging programs [21], text-only computer mediated communication [8], multimedia message service [11], radio calls [10]. By examining a corpus of conversations collected in similar social situations, CA extracts the practices recurrently available there, constituting a recognizable, distinct form of 'talk-in-interaction'. Having observed the circumstances in which certain practices are used, and knowing the larger scenarios in which they are used, the analyst is then more equipped to interpret single conversations in detail, setting apart what is expected from what is a transgression, what is relevant from what is not, and connecting each conversational move with what has been hinted to previously in the context.

The way in which conversational practices relate to the nature of the medium, though, has not been directly addressed as a general discourse, reflecting on what 'mediation' means to conversation in the first place. Studies tend to show what 'holds' and what changes in specific forms of mediated conversation with respect to more familiar ones, or what resources for interactional coherence are available in a certain mediated environment.

Since the conversational time, space and modality vary across different media, according to their specific affordances, we are convinced that the CA apparatus, with its focus on the spatio-temporal articulation of the conversational resources, has several keys to capture the implications of using a medium to communicate, This is why we adopted an approach inspired by CA

In the rest of this contribution, we will first illustrate the data collection procedure and setting. Then we will describe the analytic approach and units, which will offer a first opportunity to consider how presence affordances can be reflected in the structure of a mediated conversation. The last section will dwell on the structure of conversation, and on the organization of action sequences.

## 3. Data

The remarks contained in this paper and the examples substantiating them derive from a huge and variegated collection gathered within the PASION project, and analyzed from several different perspectives. The collection contains mediated conversations occurring in various settings, each one belonging to a different study. In this paper, we will consider the conversations collected within three studies: Crossfire2, Ragnarok and Virtual Holidays.

## 3.1 Crossfire2

In Crossfire2, teams of 10 participants at a time are hosted in a large pc room at the university premises, and have to find

some goblets hidden in a large virtual world, with the help of messages distributed across the world itself.

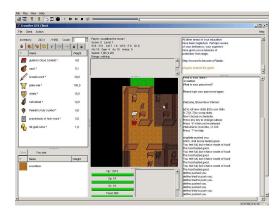


Figure 1 One image of the Crossfire world with other game information all-around

The world is built out of an open-access platform called 'Crossfire', accessed on-line from the participants' individual station. Participants can communicate via dyadic Skype<sup>®</sup> textual chat (one-to-one) to exchange and circulate information. 12 teams playing for 4 sessions of 20 minutes have been observed. The game environment is very large, so only the portion of the 'world' immediately surrounding the participants' avatar, and the avatars of other participants navigating in that region, is displayed to the user. (Figure 1).

The second study included in this database is called 'Virtual Holidays', thanks to the topic of the communication consisting of a collective decision-making on the details of a common travel. The study includes 12 groups of 4 people each. The four group members connect simultaneously to the Internet for the duration of the task (Figure 2), and discuss on the travel plan while using the world wide web to find relevant information. Communication occurs via Skype® textual conference (4 people to 4 people). The session lasts as long as it takes to complete the task.

Finally, Ragnarok is a massive multi-user on-line roleplaying game (mmorpg); events called "wars of empire" (woe), where participants have to conquer a castle, are scheduled by the members of a same guild and take place regularly during the week. The data of our study are collected during 34 minutes of one of these wars.



Figure 2 Four participants involved in the Virtual Holidays task

The environment in the Ragnarok study is quite complex; it consists of the virtual world with each participant's avatar (more than 80) (Figure 3), the game chats and a voice conference involving a restricted number of players (22). Only a small portion of the virtual world is visible at a time on one player's screen. Four typologies of game chats are available: public, to the party, to the guild, private. The chat window also contains messages notifying about various events related to players (log in, log out, commands). Finally, 22 participants talk to each other by using a voice-over-IP service external to the game environment, called Teamspeak®. A nickname of the players connected via this channel is visible on the computer screen; when a person speaks, a led next to her/his nickname enlightens.



Figure 3 A screenshot from Ragnarok showing the tridimensional world with some avatars

In all studies, participants shared a synchronous textual communication environment; in Ragnarok, some participants also shared a synchronous audio environment.

### 3.2. Data

Two kinds of data were used: the log files of the chats and the video-recordings of the activity on each participant's screen (except for Ragnarok, where the screen of only one player was recorded). The log files contained the ordered sequence of messages sent to the chat, with username of the sender and timestamp of the delivery. The videos showed the screen of the pc, with all the events going on there during the session; one important source of information was represented by the window were instant messages were written before being sent to the chat, since this allowed to solve some ambiguities in the interpretation of the chats, e.g. which messages were in the chat when a participant started writing.

## 4 Communication units

The chat logs and the audio file transcription from Ragnarok are all analyzed with the qualitative approach of Conversation Analysis (CA), focusing on the sequential development of communication, and then on the stepwise, moment-by-moment achievement and orchestration of presence on the medium.

Units of analysis are turns, actions and sequences. The definition of these units is a careful endeavor since one cannot simply transfer the definition adopted in audio conversations or face-to-face interaction to any other form of mediated communication. Reflecting on these units is actually a first encounter with the presence affordances of the medium and their exploitation in the communication practices.

Turns

A turn is a single contribution from one participant to the communication. In some environments, there may be overlaps making the identification of the boundaries between turns quite challenging; however, when mediated communication has an 'entering' function to deliver the turn on the communication floor, then turns 'have a technical definition with little ambiguity'[21, p.345]. In the instant messaging system we have used (Skype®), a message appears in the shared chat space only when the 'enter' key is pressed on the keyboard, allowing the delivery of the text written up to that moment in the composition window. A turn consists then of one message sent to the chat.

Tum production and turn display are separated activities: the former is an individual activity taking place on the composition box of the instant message program, whereas the latter is a shared activity, taking place on the common window of the people logged into a chat together. Some instant messages programs features an icon or a message showing whether someone is in the process of writing some text; this creates an additional layer in the turn production process,

where letting manifest the existence of a turn is separated from giving access to its production or to its final content.<sup>7</sup>

Users can play with all these layers to orchestrate their communication strategies and their presence. For instance, they can get involved in several conversations at the same time, without the interlocutor noticing it. Or, as reported in [2], they can split actions into several chunks, delivered in subsequent messages so that the delivery of each chunk is a cue that something else is still going on in the composition window.

In audio conferences, such as Ragnarok's voice talk, turns are different. Turns represent the start and end of each participant' verbal intervention, including possible overlaps. In this mediated environment, turn composition (pronunciation) and delivery are simultaneous. The turn is accessible since its incipit but given that participants cannot compose messages simultaneously as in the chat, then the overall extent of each participant's intervention is potentially shorter than in the chat.

#### Actions

By producing turns at talk, people also perform actions, such as offers, orders, or announcements, identified here according to the definitions of conversation analysis; for instance, an announcement is any kind of speech with which the speaker reports something that is supposed to be relevant and new to the interlocutor [18].

Communication media differ in the modality in which verbal actions are performed (visual, audio, ...) and in the kind of actions afforded. An acoustic signals allows to attract the receiver's attention and establish a co-presence with him/her on the communication medium; or a 'being in the process of writing' cue allows the writer to have the interlocutors delay the delivery of their own messages until s/he enters the one s/he is composing. The specific configuration of functions implemented in the medium translates into different possibilities for action, and into different layers of co-presence. For instance, one can be connected to the communication medium, but not available to communication.

There is not a one-to-one correspondence between turns and actions: one actions can be distributed into several subsequent messages, or several actions can be packed in the same turn, as in extract 1below from Virtual Holidays.

## Extract 1

11:04:18 LARA: viva barcellona allora..anche a me è piaciuta tanto!e poi diana puoi prendere spunto dalle nostre super offerte x il tuo prossimo viaggio..

long live Barcelona then...I liked it very much as well!

And Diana from our super offers you can get inspiration for your next trip..

 $<sup>^7</sup>$  This occurred in the Skype® system, but not in the Ragnarok system, nor in the version of the Skype® system used when the Virtual Holidays data were collected.

11:06:12 CARLOTTA: eh sì infatti:)intanto sogno..giulia ho trovato qualcosa sullo shopping che potrebbe esserti utile..vedi tu..http://www.turismospagnolo.it/

oh yes, right@in the meantime, I'm dreaming...giulia I found something about shopping that you may use..you see... http://www.turismospagnolo.it/

Carlotta's turn is composed of two different actions, one aligning with the previous assessment from Lara ("oh yes, right © in the meantime, I'm dreaming") and one opening a new sequence with an announcement addressed to another interlocutor, Giulia (giulia I found something about shopping that you may use...you see... http://www.turismospagnolo.it/).

This relation between turns and actions may be eloquent of the kind of co-presence usually expected in a certain medium. For instance, in text messages exchanged via cell phones the interlocutors do not need to be on the medium simultaneously. If the sender cannot wait for the reply, she will pack several subsequent actions in the tiny space of an SMS, trying to anticipate what would be the possible content of the receiver's message [22]. The same kind of asynchronicity happens sometimes also in our chats, when participants are dealing with several things at the same time and cannot be always on the chat. Thus they may pack several subsequent moves as in Extract 2 below.

### Extract 2

[12:48:02] TAVOLO: sto finendo il cibo e non riesco a trovarlo Tu l hai trovato Se si dove

I'm running out of food and cannot find it Did you find any If you did where

Here 'Tavolo' seems to be middleway between leaving a note, and starting a conversation; he anticipates what would be his next question ("if you did,where") after the receiver answers the first one ("did you find any"). This constructs the conversation as one where the speaker is not supposed to wait for the interlocutor's turn before asking the subsequent question, even though this second question is conditioned by the answer obtained from the first one. The kind of co-presence Tavolo is oriented to in this turn is not one in which the interlocutor is constantly attentive and ready to answer, and in which he is not able to be waiting for an answer. In other words, this message hints to the fact that both interlocutors are involved in a synchronous conversation but that they are also busy in other activities, which is actually the case.

Turn and actions are than mapped into each other in ways that reflect the affordances of the medium and of the whole complex environment in which they are operating, and that display the kind of presence they are able to maintain (see also [22]).

# 5. Sequence structure in CMC and patterns of social presence

Communication unfolds by connecting one action to the previous ones, and by projecting a relevant next action afterwards [18]. This sequential mutual engagement among interlocutors creates shared meanings, and rests on the cues made available to the interlocutors by their context. It is then likely that an important way to distinguish between mediated environments is by reference to the opportunities they offer to coordinate initiatives and interventions, and in the way in which these opportunities are exploited in a specific strategy to organize the exchange. An effective instance of presence cues implicit in the conversation structure is the way in which the exchange is started. For instance, using or not a greeting is an interesting hint on the way in which the presence of the other is treated, and on whether this presence is something relevant to be addressed or not.

In this forth section, we will first resonate on whether opportunities for coordination exist, or mediated conversation contains instead an intrinsic threat to conversational coherence and social presence. Then we will examine different aspects of a sequence that reflect the different opportunities for presence offered by the medium.

## 5.1 Mediated communication and disruption of copresence

In a conversation, as was mentioned above, the unit is not the 'utterance', but the verbal 'action': performing an action is the interlocutors' relevant business to carry out when speaking [20]. Actions are sequentially connected to each other by way of pragmatic ties. The way in which a verbal action is constructed - the topic, the grammar and the format - provides cues to what may be relevant as a subsequent utterance.

Scholars have sometimes been concerned with coherence in mediated conversation, afraid that its alleged poorness with respect to face-to-face communication could end up in a disrupted consistency between communicative moves. In particular, "text-only CMC has been claimed to be interactionally incoherent due to the limitations imposed by messaging systems on turn-taking and reference" [8, p.1]. The underlying presupposition according to which face-to-face always represents the ideal communication setting, however, has been questions, as several strategies through which interactional coherence is obtained in mediated communication have been identified [27].

One main source of coherence emphasized by Conversation Analysis is the sequential organization of communication turns from different speakers. A basic sequence, according to conversation analysis, is the so-called 'Adjacency Pair' (AP), which is composed by two subsequent actions produced by different speakers, in such a way that the former makes relevant the production of another action of the same type immediately after it. Paired actions of this kind are questions and answers, for instance. The first action in this

sequence is called 'First Pair Part' (FPP), the subsequent action is called 'Second Pair Part' (SPP).

From this definition, we understand that what pairs two subsequent actions together is not the mere order of production, and not even the mere adjacency to each other, but the fact that an action is produced in a way that makes it a suitable second pair part to the kind of sequence started by a first action. In other words, the connection between two actions in an AP rests on the availability of cultural practices creating paired types of actions, and on the cues disseminated in each action by the people producing them and displaying the reciprocal link.

In mediated conversation, the first occasion to produce the second pair part is often not immediately adjacent to the First Pair Part.

### Extract 3

1 SIMONE: ho visto un sito del festival... è un po serioso!!!

I saw a festival's website...it is a bit serious!!!

2 MATTIA: beh, ovvio

well, of course it is

3 SIMONE: http://www.eif.co.uk/

http://www.eif.co.uk/

4 MATTIA: siamo in scozia, non in Giamaica

it's Scotland, not Jamaica

5 LUCA: Metà luglio HEBRIDEAN CELTIC FESTIVAL Festival di musiche celtiche con esecutori locali e

internazionali www.hebceltfest.com

half-July, HEBRIDEAN CELTIC FESTIVAL, festival with celtic musics with local and

International executors www.hebceltfest.com

 $6\ SIMONE:$  ok , ma non è che dobbiamo diventare 60enni

ok, but we do not need to be like 60 years old

7 MATTIA: basta bere

just drink

8 SIMONE: molto meglio Luca

much better Luca

9 MATTIA: ok

ok

These turns are extracted from Virtual Holidays, and participants are organizing the activities during the trip they are planning to do. The first proposal comes from Simone, but with some elements of criticism by the proponent himself (it is a bit serious); Mattia disaligns from Simone's concern (well, of course it is it's Scotland, not Jamaica). Then Luca makes what seems to be another proposal, in the same category of the first one, namely a music festival. After this turn, in line 6 Simone shows to disalign from something that was said before (ok, but we do not need to be like 60 years old). Which turn is he connecting to? The closest turn with an argument and with a topic related to Simone's is not the one immediately prior to it, in line 5, but an earlier one, in line 4 by Mattia (it's Scotland, not Jamaica). This is a first instance of a sequence where adjacency has not to be taken in its most restrictive sense; in addition, while Mattia continues with a further reply (just

drink) Simone stops orienting to him and comments on the other proposal that Luca had made in line 5 ('half-July, HEBRIDEAN CELTIC FESTIVAL, festival with celtic musics with local and International executors www.hebceltfest.com'). Again the reply to Simone's proposal is not adjacent in a strict sense. Still, participants seem to be able to organize and develop the sequence of interventions coherently.

Like in extract 3, despite the fact that messages can be written simultaneously, and that messages belonging to the same floor may not follow each other closely [21], sequences of actions are frequent and can be very long and articulated. Out of all messages exchanged in the three studies we considered, the percentages of isolated ones, which do not belong to any sequence, amount to 16.53% in Crossfire2, 4.54% in Virtual Holidays, 13.10% in Ragnarok. Participants tended, at least, to complete the basic adjacency pairs, and in many cases to further develop the sequence with expansions [18].

One may wonder whether these sequences are actual, coherent sequences, where participants take up previous messages and carry on the action initiated. When none of the actions following a FPP, especially if the addressee is specified, takes up the job of completing the sequence with an SPP, then that FPP is left *unreplied* as in Extract 4 from Crossfire2.

Extract 4

15.34.18 SPEAKER1: ti ha risposto l'ale?

did Ale answer to you?

15.37.19 SPEAKER1: ho il calice delle due torri

I have the goblet from the two towers

15.37.50 SPEAKER2: molto bene *very good* 

The first message performs an action, a question ('did Ale answer to you'), that makes relevant an answer after it. Three minutes later, the same speaker produces another turn, an announcement ('I have the goblet from the two towers'), which is not connected to his previous one and starts another sequence. The interlocutor intervenes at this point, providing a comment to the announcement ('very good') The initial question is left unreplied and its adjacency pair incomplete.

To see whether maintaining coherence was a constant concern for participants in our studies, we looked for unreplied actions. To be more demanding in this examination, we even included as replicable actions not just FPPs, but also the SPPs that were expansion relevant; these are actions that close an adjacency pair but whose format makes another action relevant next, leaving room for a possible re-opening of the sequence with a post-expansion, as in extract 5 from the Virtual Holidays study.

Extract 5

[15.14.12] SPEAKER7: allora...meta? so...destination?

[15.14.25] SPEAKER11: spagna? *spain?* 

The proposal in the second message, in response to a question by Speaker7, is shaped as a question (as is often the case in our corpus), making relevant a subsequent sequence dealing with it. This is an instance of what we called an expansion relevant SPP, which- in our data- takes usually the format of a candidate answers [29].

From the analysis of FPPs and expansion-relevant SPPs, it turned out that participants tended to provide a response when it was expected 64% of the times in Crossfire2, 63% in Ragnarok, and 80% in Virtual Holidays. Also, as shown in [16], completion seemed to be associated to the recurrence of a certain action format in the setting. In Virtual Holidays, where participants had to organize a travel and fill in 7 days of trip, proposals in Virtual Holidays were quite frequent (15.04%), and 84.45% were replied. In Crossfire 2, where participants had to find a treasure in the mediated environments., proposals were very infrequent (1.64%) and 46% were left unreplied In other words, there seem to be action formats to which a reply is only weakly relevant in a certain context, strongly relevant in another.

In the mediated interaction we have considered there is then a tendency to produce coherent, complete sequences, even though with definition of turn and adjacency that needs to be adapted to the medium used to communicate. This means that the interactive attempts from one person are not left unattended by the other participant, and that the presence in this shared communicative environment is not negligible or inconsequential for the other. In the next paragraph, we will consider the structure that a sequence can take in different presence conditions.

## 5.2 Co-presence and multiple actions

Speakers structure their communication according to a participation framework [7], which acknowledges and elaborates on the fact of being present in the same environment. One aspect of conversation showing how co-presence is defined in a certain environment is the way in which multiple actions are dealt with.

Multiple actions are actions that have already been produced by someone else in the conversation; more precisely, they are actions that occupy the same position in the same sequence as other actions [based on 18, pp. 157-8, note 54). They can be produced either by the same speaker (repetitions), or by different speakers.

*Multiples* can be in the second position of a sequence, 'multiple SPPs', as in Extract 6. These multiple SPPs are usual in environments where nobody is aware of who is writing something, because the message composition is not accessible, and several participants start composing a reply.

Extract 6

16:56:36 VALERIO: chiamate il tipo?? io sono nel palazzo

can you ((plural)) call the guy? I'm in the pink building? 16:56:50 GUIDO: adesso lo vado a chiamare..

I'm going

16:56:52 MARCO: è qui con me!!

he's here with me!!

16:56:56 ETTORE: è appena uscito dalla mia stanza

he just left my room

In this 4-participants chat, all interlocutors reply to Valerio's question, entering their messages in the chat almost at the same time, as is apparent by the timestamps.

If a person can see another participant producing the same action s/he's about to produce, because it is already in the chat or because on-going turn production is accessible as in a voice-conference - then there is a chance that a multiple in course of production is adjusted to take into account its redundancy. This involves a self-repair in the writing of the message, as already shown by [19], or the inclusion in the message of cues acknowledging its redundant nature, as in extract 7 from Ragnarok.

Extract 7

[1.33] FENCER: che cos'è quella iron?

Iron what is that?

[1.36] WILDSTAR: def 2 mins

def 2 mins

[1.38] DARTILUS: che cos'è quella skill è vero

right what is that skill?

Dartilus requires an explanation to Iron after Fencer's request ('Iron what is that?'), and displays the awareness of Fencer's request by starting his turn with an alignment to it ('right what is that skill?').

Another example is extract 8 from Virtual Holidays:

Extract 8

11:07:33 VANESSA con colazione! c'è una cucina?

Breakfast included! Is there a kitchen?

11:11:26 VANESSA ostello ha cucina?

Hostel has kitchen?

11:13:16 VANESSA ma c'è sta cucina o no?

come on is there a kitchen or not?

Vanessa repeats three times a FPP that is not being replied by anyone; her repetitions take into account their being repetitions, as the formulation changes slightly to become something more similar to a complaint in the end.

Extracts 7 and 8 are multiples FPPs. Multiple FPPs are frequent when the recipients are not all co-present on the same medium. In Crossfire 2, the conversations in the group is dyadic: people can only use dyadic chats, so in order to contact

all the members of the group they need to open several dyadic chats. One example is offered by 'Tavolo' who writes two semi-identical messages in two different chats, one to Occhiali (extract 9) and the other to Martello (extract 10).

### Extract 9

TAVOLO to OCCHIALI at 12:44:17 Sei riuscito a trovare il cibo Se si dove

Did you manage to find any food If you did so where

## Extract 10

TAVOLO to MARTELLO at 12:48:02 sto finendo il cibo e non riesco a trovarlo Tu l hai trovato Se si dove I'm running out of food and cannot find it? did you find any, and if you did, where?

Here the same action is produced by Tavolo who opens with it several conversations. Of course, only Tavolo is aware of the fact that this action is a multiple. Multiple FPPs are also used in Ragnarok, where recipients may not be oriented to the speaker because they are involved in other concurrent businesses.

### Extract 11

[4.26] SMOKING: OKY ALL ALBERTA OKY ALL ALBERTA

In Extract 11, Smoking repeats the order 'oky all alberta' several times, to make sure that all take it into account. In synthesis, the production of 'multiples' and then of actions that are redundant (and then potentially sanctionable) is tolerated in certain environments, and reflects the configuration of the shared space in the medium.

## 5.3 Presence and the responsibility to interact

Another aspect of sequence construction that reflects the co-presence of multiple participants is the level of individual responsibility to provide a reply. The presence of multiple attendants or witnesses of a FPP can dilute the responsibility for providing an answer, all the rest being equal (expertise, role in the task,...). If responsibility to reply is less *focused* then more people could feel entitled to contribute, and even when the FPP addresses a specific participant, it may not be considered impolite to pre-empt the reply.

Dyadic chats cannot support generic responsibility to reply: since there are only two people in the chat, it is evident who is supposed to be a respondent. For these reasons, in the Crossfire study the responsibility to reply is very personalized. Differently from Crossfire, Virtual Holidays and Ragnarok

features several participants on the same conversational space, and examples of generic, diffuse responsibility to reply are several, as in Extract 11.

### Extract 11

[11.34.20] SPEAKER32: arrivo ore 15.30 a Londra, sistemazione nell'albergo figo, boccetta e via a Buckingham Palace e British Museum con questo concludiamo il pomeriggio, cena e festa arrival at 3.30 p.m. in London, accommodation at the cool hotel, a shower and out to the Buckingham Palace and BritishMuseum with this we conclude the afternoon, dinner and party

[11.34.32] SPEAKER33 says: ok

[11.34.53] SPEAKER34 says: ma come primo giorno...non dovevamo arrivare a Bristol what do you mean first day, weren't we supposed to arrive in Bristol?

[11.35.12] SPEAKER33 says: primo giorno a Londra intende first day in London she means

In the third message, Speaker34 requires an explanation for Speaker32's announcement; however, it is Speaker33 who provides the explanation.

Sometimes responsibility to reply is not only diluted but suspended because of the great number of recipients. In Ragnarok, 47% announcements are left unreplied. To the battle going on in Ragnarok, announcements serve to adjourn the other players about the current status of the situation; probably because of the fast pace of the activity, but also because of the higher number of participants receiving the announcements, replying is considered as superfluous. Instead in Crossfire2, announcements are delivered in dyadic chats, and are replied to [16]

## 5.4 Hybrid presence and action sequences

Most of the mediated conversations considered in this study occurred in a mediated environment that was not the only one in which participants were present: besides the chat, participants were also present in the graphic environment of the game in Crossfire2 and Ragnarok, and in the WWW during the cooperative travel planning of Virtual Holidays. Participants managed all these spaces at the same time not as parallel spaces but as connected ones, all functional to the general group task, and this was reflected in the sequential structure of the interaction. Participants tried to connect spaces that would otherwise be parallel, by copying the same message to several chats; by chunking an action into several messages to make recipients aware of an upcoming message; by transcribing a message from the audio-conference to the chat, so as to reach everyone. Participants also copied URLs from their WWW browser to the chat, and then delivered it in a message, as in extract 12.

## Extract 12

10.34.53 LINA: in che cavolo di sito siete in what bloody website are you

10.35.13MICHELA:http://www.hostelspoint.com/res/trans.php ?aff\_ID=55ù&aff\_lng=IT&country=221&citta=324 &giorno=22&mese=5&anno=2006&notti=6&x=44 &y=9

10.35.18 MICHELA: io sono su questo *I'm on this one* 

In Virtual Holidays, this happens 159 times, out of 5876 action (2,71%). In the extract above the link is used as an answer to a question; most of the times its role in the sequence is more centrifugal, as in extract 13.

## Extract 13

10.36.29 ARTURO: http://www.expedia.it/default.aspx

10.37.19 ARTURO: vi linko questo sito che permette di vedere già cosa fare!! ps. a me va bene tutto, non ci sono problemi di denaro ne di gusti

I'm linking this web site which allows to see what to do!!

ps. I'm ok with everything, no problem with money
or taste

10.37.55 FRANCESCO: visto il link...ma se io voglio darmi anche un po' all'avventura? tipo uscire dai canoni... seen the link...but what if I wanted something adventurous? Like something unusual...

The text of the URL in the first message serves as a pointer to another object, which is outside the space of the chat. This single action sequence crosses several spaces: part of it is performed in one space, and part in another space. What is complex about this sequence is that unless the recipients acknowledges also verbally the receipt of the link or comments on it, as in the extract above, the second pair part is not accessible within the sequence, consisting of the recipient clicking on the link of his/her web browser.

Hybrid sequences are produced also when actions are performed in different modalities as in Ragnarok, when orders are produced verbally and executed non-verbally by performing an operation in the game environment.

# Conclusions: Presence affordances and presence practices

Computer-mediated communication has triggered the interest in the relation between content and medium since McLuhan 'the medium is the message' famous phrase. In this paper, we explicitly addressed this interdependency using presence as the key to explain it. By no means does this represent a deterministic argument according to which the tool determines the way of usage; on the contrary, this is an argument in favor of the reciprocal influence between the conversational practices and the affordances of the medium,

including its material properties. In fact, the same medium can host very different conversational practices.

The variety of functionalities implemented in the different communication media represents a kaleidoscope of configurations, where otherwise joined functions decoupled, and where functions that could elsewhere be separated are re-joined. Presence served here as a red line along which to understand the great variation in the coordinates offered by mediated communication, making sense of the differences and similarities between them. The modalities and spatio-temporal coordinates to intervene on the mediated environment are reflected in the communication practices developed by the users; in this way presence affordances becomes presence achievements, constantly articulated during the interaction on the medium. This articulation is visible in the configuration of actions and turns, in the different layers of actions and spaces on which presence can be orchestrated and in the structure of the actions sequence with its multiples, replies and hybridities.

Some phenomena already highlighted by other studies have been included in this overview, but other phenomena hinted here would deserve a study on their own and a larger, deeper discussion. We hope that this contribution would inspire other scholars in pursuing this kind of investigation, and in considering the analysis of verbal actions as an insightful method to understand the presence affordances of a specific mediated environment.

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