

Patterns of Interaction and Audience Management in Recreational VMC

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ABSTRACT

Video chat systems for recreational purposes are proliferating; yet, not much research has been done on how interactions are managed as part of live entertainment experiences. This paper reports on ongoing research on patterns of interaction and audience management in recreational synchronous video-mediated communication (VMC). Drawing on data from Google+ Hangouts for recreational purposes, this research relies on Ethnomethodology (EM), Conversation Analysis (CA) and Multimodality (MM) to characterize strategies for interaction management in amateur live broadcasts. It is argued that users resort to practices from both domestic video chats and the broadcasting sphere. Intended contributions to the interactive TV and online video community are discussed. Limitations and future steps are also presented.

Author Keywords

Multiparty; interaction; live-stream; G+ Hangouts.

ACM Classification Keywords

H.5.3. Information interfaces and presentation: Group and Organization Interactions – synchronous interactions.

INTRODUCTION

This research is motivated by the proliferation of video-mediated communication (VMC) for recreational and domestic purposes. Traditionally, most research on VMC has been based on task-oriented interactions within the work environment. Much of this type of research has explored virtual teams and how they collaborate when team members are located in different geographical areas [1, 4, 7]. Apart from the job environment, the use of VMC has increased considerably within family and personal settings.

Several studies have analyzed how VMC is used to connect with family and friends [2, 13, 19]. New video systems are being designed to support the sharing of everyday activities in various media spaces [13, 14, 24]. Media spaces are being studied for their ability to support dyadic as well as multiparty interactions in the context of domestic life.

Recreational VMC that is broadcast live in public and semi-public contexts appears to share characteristics from both domestic video conferencing and the broadcasting sphere. As users of a domestic video chat platform, participants engage in activities previously discussed in the literature, such as show and tell, gossiping, and personal updates among others [2]. From the broadcasting sphere, users draw on practices such as non-directed performances and the disclosure of personal information pervasive in reality TV [22]. Furthermore, characteristics from interactive TV such as viewers' participation through live chats [9, 12] or live text commentaries (LTC) [3] are also observed. In many cases, there's an explicit goal to gain viewers and to evaluate and curate the content being created. As any emergent media environment, recreational synchronous VMC presents a general challenge: It needs to be analyzed descriptively before a more informed analysis can be achieved [8, 21].

Among the many broadcasting platforms for personal and social use, this research focuses on Google+ Hangouts. G+ Hangouts allow users to interact in public, semi-public or private settings through text, video and audio modalities. As a public platform, G+ Hangouts support multiparty interactions of up to 10 participants (up to 15 for some selected users) that are streamed live through YouTube. As a semi-public platform, single users or groups of friends can open up their interactions and allow strangers to join in. Interactions range from unstructured and recreational exchanges to highly structured interviews led by appointed hosts. The convergence of public and semi-public settings, distributed multiparty interactions, and live-stream component may bring engagement strategies to the fore as users are in the interactional limelight.

AIM AND RESEARCH OVERVIEW

The main aim of this research is to characterize amateur broadcasters' practices aimed at engaging interlocutors and audiences. Interaction management is a complex concept

that can be addressed from different disciplines and at various levels of granularity. The following three broad questions are the focus of the present research.

1. *How are disruptions managed?* Multitasking and interruptions are common and even expected in recreational VMC since users engage in co-activities and juggle physical and digital spheres. It has been noted that in domestic VMC users do not just handle but rather exploit disruptions as conversational resources [19]. As part of the entertainment experience, users appear to account for disturbances in various ways, such as loosened relevance [8]—apparent non-sequiturs—and amplifications of said disruptions.

2. *How is interaction management carried through the visual mode?* Access to one’s own video feed and to interlocutors’ reactions may contribute to the hyper-performative environment observed in the data. Furthermore, the sense of *being observed in interaction* appears to be central to the entertainment experience. Users appear to resort to different visual practices that are explicitly other-oriented. As a result, the video feed acquires higher modal density [18] and carries much of the interactional weight.

3. *How are levels of participatory status and peripherality [17] managed?* Despite the expected centrality of video, users do present different levels of engagement by adjusting their visual and aural availability. At the same time, interactions naturally become unfocused and some users gravitate towards other activities. Different multimodal configurations appear to be used to manage participatory status.

METHODOLOGY

This research draws on Ethnomethodology (EM), Conversation Analysis (CA) and Multimodality (MM). One of the advantages of using EM is that interactional processes can be studied as they emerge. This is due to the shared notion that the orderliness of interactions can be recognized and reproduced by participants [5]. Together with EM, CA is a canonical approach in the study of VMC. It emphasizes the structural mechanisms of human interaction as they emerge [11, 20]. Finally, MM is drawn upon as a methodological approach to transcribe and represent multimodal data [16, 23]. EM, CA and MM are related in their emphasis on sequentiality since all action is seen as embedded within other communicative segments [6].

The multimodal transcript designed for this research focuses on how participants make use of the multimodal potential afforded by the medium to manage interactions. This research draws on a simplified combination of the canonical transcription conventions designed by Jefferson [10], conventions to signal non-verbal cues proposed by Rintel [19], and overall modal classification discussed by

Kress [15]. The transcription is broadly divided into *verbal*, *visual* and *LTC*. The verbal section refers to the interactions mediated by audio but also includes descriptions corresponding to bodily conduct. The *LTC* section contains all interactions carried through typed text by audience members and broadcasters.

DATA

Around 18 hours of G+ Hangouts were gathered from One Person Shows (one single broadcaster), Hangouts On Air (three or more distributed broadcasters), and Public Hangouts (semi-public multiparty video chats). Interactions were coded in two rounds. First, main activities and practices were coded, which shed light on recurrent and salient themes for analysis. Second, group-generated interruptions, external interruptions, and medium constraints were coded in order to analyze disruptions management. For the analysis of visual salience, coding was done on the basis of marked gaze, pointing gestures, show and tell, physical performance, outing, tour cams, and distributed performances. Currently, patterns of participatory management are being coded.

Table 1 below shows the data overview in terms of Hangout types, number of samples per type, total number of users per type, and users’ gender.

Hangout Type	No. of Samples	Data Time	No. of Users	Gender	
				F	M
One-person Shows	10	3 hrs.	11	36%	64%
Hangouts On Air	20	12 hrs	102	24%	76%
Public Hangouts	10	3 hrs	72	31%	69%

Table 1. Data overview

G+ Hangouts were also coded in terms of broad activity types in which users were engaged. Table 2 below presents a summary of these main activity types.

Hangout Type	Main activity types
One-person Shows	Channel/ Game curation Exam / homework review Gameplay Greetings LTC reading Outing Personal anecdotes Play act/ Performance Self-promotion Show and Tell

Hangouts On Air	Tours
	Unfocused streaming
	Updating audience
	Channel maintenance
	Channel/ Game Curation
	Counting viewers
	Cross-modal conversations
	Discussions
	Fan-fiction
	Gameplay
	Gossiping
	Greetings
	Interruptions/ multitasking management
	LTC Reading
	Meta-medium discourse (e.g. cam policies)
	Meta-modal talk
	Motherhood - Advice
	Outing
	Personal anecdotes and updates
	Play act/ Performance
Plea for suggestions	
Questions and Answers	
Self-critique	
Self-promotion	
Setting rules of engagement	
Show and Tell	
Tours	
Unfocused streaming	
Updating audience	
Watching together	
Public Hangouts	Cross-modal conversations
	Discussions
	Friends' reunion
	Meta-medium discourse (e.g. cam policies)
	Outing
	Show and Tell
	Tours
Watching together	

Table 2. Main activity types

INTENDED CONTRIBUTION

By addressing the management of disruptions, visual conduct, and participatory status, this research contributes to the interactive TV and online video community in terms of further exploring how users co-create entertainment experiences. Due to their dual public/private nature, their multimodality, and their support of live-streaming, recreational VMC offers the possibility to further understand how users improvise and engage in interaction management. It is argued that characteristics from both domestic video chats and the broadcasting sphere can be identified. Furthermore, it is argued that the entertainment experience is substantially derived from interacting with viewers, co-broadcasters and the system itself as well as the sense of being observed in interaction. Some themes related to current efforts within interactive TV and online video are discussed below.

1. Live-streams bring together the domestic and the digital sphere in a setting that encourages multitasking. As a consequence, disruptions and multitasking become part and parcel of the interactive experience, yet it is not entirely supported. For example, many LTCs go unnoticed by broadcasters engaged in group validated co-activities such as gameplay. At the same time, disruptions breaking from or into the domestic sphere may need to be further addressed within design systems.
2. Being observed in interaction with others and with the system itself is part of the fun. Broadcasters in recreational VMC do much more than just converse in talking head format [13]. The visually anchored practices observed—performances, outing, tour cams, show and tell, distributed performances—highlight the visual mode and users’ bodily conduct. This type of expressive and performative practices may also benefit from further design.
3. Visual salience notwithstanding, users do engage at various levels of peripherality and participatory status. This practice is common and appears to be for the most part tolerated. Consequently, supporting different levels of engagement may contribute to the creation of more enriching entertainment experiences for all users.

Overall, exploring interactional patterns in these settings may contribute to the interactive TV community and creative industries by deepening understanding of users’ behavior. Finally, this research is intended as a contribution to the emerging body of research on domestic and recreational VMC as well as to current research efforts to better understand multimodal interaction in naturalistic settings.

LIMITATIONS AND FUTURE STEPS

Following the ethnographic tradition, this research does not attempt to generalize about its findings. One major issue of EM, CA and MM is that coding and transcribing are extremely time intensive. This may result in data being left unanalyzed due to time constraints. Nevertheless, by following this well established approach in naturalistic settings it is expected that locally emergent practices can be best understood. Subjective methods such as diaries, interviews and self-reports would be valuable complements to the methodology applied here in order to include users’ perspectives.

Future steps include a further characterization of patterns used in recreational synchronous VMC as an entertainment experience. In addition, resources drawn from other formats, such as domestic video conferencing, reality TV and interactive online video experiences need to be outlined. On the basis of said patterns, implications for the

design and support of entertainment practices within interactive online video need to be further explored.

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