

# Looking at the Interactive Narrative Experience through the Eyes of the Participants

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**Abstract.** The topic of interactive narrative has been under research for many years. While there has been much research exploring the development of new algorithms that enable and enhance interactive narratives, there has been little research focusing on the question of how players understand and internalize their interactive narrative experiences. This paper addresses this problem through conducting a phenomenological study on participants playing *Façade*; we specifically chose a phenomenological methodology due to its emphasis on the participants' lived experience from the participants' viewpoint. We chose *Façade*, because it is the only accessible example of an experience that revolves around social relationships, conflict, and drama as its core mechanics. In this paper, we discuss sixteen themes that resulted from the analysis of the data gathered through the study. In addition, we reflect on these themes discussing their relationship to participants' backgrounds, and project implications on the design of future interactive narratives.

**Keywords:** Design, Interactive Narrative, Storytelling

## 1 Introduction

The topic of interactive narrative has been under debate for several years. What does it mean to be engulfed in an interactive narrative? Can users engage in a meaningful interactive narrative experience? Who tells the story, the designer or the player? While answers to these questions have not been formulated, the community is split.

A reasonable approach to this dilemma is to explore these questions through the design, development, and evaluation of interactive narrative experiences. Many researchers have explored the design of interactive narratives integrating believable agents [1], drama managers [2], user modeling [3, 4, 5], and planning systems [6]. In our view, the design of a good interactive narrative requires the understanding of the participants and their experience. Even though there has been much research on the development of interactive narratives, there has been very little research exploring how users view their interactive narrative experience. This paper focuses on a

research study that attempts to understand the interactive narrative experience through the voices of the participants themselves, using a phenomenological method.

For the study, we chose to use *Façade* as an interactive narrative experience; *Façade* was developed by Mateas and Stern and released to the public in 2005 [7]. While some may argue that video and computer games are rich with examples of interactive narrative, we believe *Façade* is a better choice to explore. Most video and computer games use puzzles, quests, destruction, or collection as their core mechanics, where narrative is often used for motivation or game aesthetics. *Façade* focuses on social relationships, conflict, and drama as its core mechanics.

In this paper, we report results from a qualitative study exploring the question: what is the participant's experience of interactive narrative after playing *Façade*? Husserl's phenomenological philosophy [10] best suit our research question since it seeks a descriptive analysis of the pure essence of a phenomenon voiced by several individuals. The emphasis here is on the participant voice and not necessarily statistical significance. For our purposes, we attempt to suspend judgment in order to articulate the essence of interactive narrative from the participants' in depth perceptions of their interactions. We chose to use a phenomenological method of data analysis to interpret the participant experience based on the works of Moustakas [8] and Colaizzi [9]. For this method a sample size of 7-12 participants is adequate.

The primary contribution of this work is in presenting results exploring the experience of *Façade*. In this paper, we describe the study we conducted, which resulted in sixteen themes describing the participants' experiences and thoughts after playing *Façade*. In addition, we will reflect on the relationship between these themes and participants' background, previous play experiences, and culture as well as discuss implications for future interactive narrative designs.

## 2 Previous Research

During the past few years there has been much research exploring the design of interactive narratives. Researchers within the Artificial Intelligence field, for example, have actively been seeking the development of new algorithms and systems that enable narrative adaptation and evolution as a function of users' interaction. The Oz project presented an early work in this area, where researchers concentrated on developing an interactive drama architecture composed of believable agents [1] with emotional responses [6, 11], and a drama manager that guides the drama as it unfolds [2]. Following their work, Mateas and Stern developed ABL (A Behavior Language), which allows designers to author character behaviors with joint goals. This language was used to author behaviors for *Façade* [7, 12]. In addition, few researchers recognized the utility of user modeling on drama management as a facilitator of conflict and drama [5, 13, 14, 15]. There are several research projects that explored different types of interactive narrative experiences, such as emergent narrative and third-person interaction models [16, 17].

The research works discussed above have a strong design and computational focus. Very few researchers focused on empirically evaluating the interactive narrative experience. From these few empirical studies, there are some who adopted a

quantitative method evaluating their interactive narrative experience through likert scale questionnaires gauging specific areas of interest [16, 15]. Quantitative methods have several disadvantages, however, including constraining participants' responses to the questions posed. Alternatively, other researchers explored using qualitative analysis to understand participants' experiences. Mallon and Webb [18] discuss a focus group-based research study that explores the users' interactive narrative experience within commercial role playing games. Their findings are interesting but pertain to a comparative analysis of four commercially available role playing games.

Two research projects have previously evaluated the experience of *Façade*. One study focused on evaluating the conversation interaction identifying participants' interpretation of conversation breakdown and character responses. They used qualitative analysis based on grounded theory where they triangulated data in the form of: observation notes, participants' interpretations of their actions after showing them the video of their interaction with *Façade*, and system tracing revealing the systems' inner interpretations of participants' utterances [19]. Some of their findings were similar to what we found in our study, as discussed later. The second study focused on evaluating participants' experiences across three different versions of *Façade*: two virtual desktop versions: in one version users type in their utterances and the in the other users speak their dialog; the third version is an Augmented Reality version where Trip and Grace are projected into the participants' physical space through an HMD (Head Mounted Display). They used qualitative analysis based on grounded theory to gauge the participants' sense of presence vs. engagement. Their results indicate that even though participants were more present in the AR *Façade* they were not as engaged as within the virtual desktop interface [20]. While these studies are closer to what we are exploring here, there are several differences. First, we present a phenomenology study of the users' experience of an interactive narrative. Thus, while we touch on many aspects of conversation (as discussed later), this is only one of the many elements we examine. Second, our subject pool is very different due to a different geographic location, culture, and school philosophy. Third, the study procedure and design presented is purely phenomenological in nature.

### 3 Façade



Figure 1. Screenshot of Trip and Grace with the participant interaction

The story of *Façade* [21] introduces the player as a long time friend of Trip and Grace, two Non-Player characters, who have invited the player for an evening get together at their apartment. The participant takes on a first person perspective and interacts with Trip and Grace through natural language (as shown in Figure 1). The player is also free to move about the apartment, manipulate objects, and perform simple gestures, such as kiss or hug. The game begins with him in the hallway outside Trip and Grace's apartment, where they can be overheard arguing. Once inside the apartment, he gets caught between Trip and Grace's arguments, as the drama unfolds. It is up to the player to resolve the course of the drama.

## 4 Study Design

### 4.1 Participants

We recruited eleven participants from the School of Interactive Arts and Technology (SIAT) at Simon Fraser University (SFU). All participants signed a consent form before they began the study. Since we didn't want to influence the study, we asked for participants who never played *Façade* before, but who are already familiar with new media and digital games. All eleven participants were undergraduates at SIAT enrolled in the Foundations of Game Design course. The diverse genres of games they enjoyed playing included action, role-playing, first person shooters, MMORPG, mobile, and early interactive fiction. Three of the participants have taken a course called Narrative in New Media. The average age was 24 years old; there were four females and seven males. The cultural background included six Canadians, two Canadian with Chinese decent, one Canadian with Japanese decent, one Iranian, and one Turkish. All participants received extra credit for their contribution in the study.

### 4.2 Procedure

The study included four phases. All phases occurred in one-on-one sessions taking place in a computer lab, lasting approximately one-hour. Phase I initiated within a one-on-one interview between the researcher and participants that took approximately 10 minutes. The interview started with an ice-breaker conversation, where the participant was asked to discuss his interests. He was then cued to talk about games he enjoyed playing, his cultural background, as well as his view of interactive narrative.

In phase II, the researcher asked the participant to read a description of *Façade* [[www.interactivestory.net/#facade](http://www.interactivestory.net/#facade)] and watch a YouTube clip [[youtube.com/watch?v=GmuLV9eMTkg](https://www.youtube.com/watch?v=GmuLV9eMTkg)]. The researcher then conducted a one-on-one interview exploring the question of interactive narrative again. This phase lasted around 10 minutes.

The researcher then proceeded to set up *Façade* for the participant to play for phase III. During this phase, the researcher refrained from speaking and instead took notes of noticeable actions the participant took and any other interesting observations (which were then noted as discussion points for phase IV). During play, participants were encouraged to speak about their experience, if they were comfortable to do so.

Afterwards, we saved the recorded stageplay containing the session script of their interaction. This phase lasted around 20 minutes.

Phase four involved a *Façade* post-play interview. The interview questions were devised based on what the participants remembered from their play session along with their reflections. For example, the researcher asked participant “what stuck out in your memory”, “elaborate on their non-verbal behavior such as laughing or hand-tossing”, or “perhaps what they thought about their story ending?” These questions became catalysts to discuss other aspects of participants’ play experience. Due to complexity of data and their interdependencies, together with space limitations, we report on the results collected from the fourth phase only.

Many perspectives exist regarding validation of qualitative research data. In order for us to show validity, objectivity, and significance, we address the issue of credibility as discussed in previous research [22]. We address this issue first by including an external reviewer overseeing the analysis process and second, the analysis findings (in the form of theme descriptions) is sent back to participants to check for accuracy. To date, we have received positive responses from eight out of the eleven participants, agreeing with the analysis made and meanings formulated.

## 5 Analysis

We employed Colaizzi’s method [9] for analyzing the participants’ transcripts. Written transcripts were read several times to obtain an overall feeling for them. From each transcript, significant statements that pertain directly to their lived experience were identified. Meaning units were formulated from significant statements. The formulated meanings were then clustered into themes. We found 231 significant statements (each statement averaged 3 sentences long); we extracted these statements from over approximately 580 statements of the transcribed interviews conducted for phase four. Table 1 shows example significant statements (participants’ statements) and their formulated meanings (interpreted meaning). Arranging the formulated meanings into clusters resulted in 16 themes summarized in Table 2 and described below.

**Table 1.** Selected Examples of Significant statements

Significant Statement	Formulated Meaning
I just wanted him to shut up and so I could talk to her, and force her to shut up so I could talk to him. But I wanted to get more in depth than they were allowing me to just because, I guess, the programming is looking for certain words.	Felt loss of control when interactions have little or no effect upon the story.
...in real life you kind of know your friends personality already. But in here it’s...although they are set to be “my friends”, I don’t know their personalities up until I interact with them.	Knowing a personality is drawn from previous lived experience. Learning about new personalities can take time separated from the course of the story.

**Theme 1: Interactive Narrative is Not a Game.** The conundrum of interactive narrative as a term has been a topic of debate. This was a frustration experienced by our participants as well, as they tried to define their own experience and relate it to the games they played. Five of the eleven participants made a distinction between *Façade* and games. Two discussed *Façade* as a “new form of entertainment” or “a story with game attributes.” One said it resembled the “real life situation.” Two found playing *Façade* a puzzle unfolding; one stated “puzzle[ing] it out,” while the other found “pok[ing] holes” in the system fun.

**Table 2.** Summary of 16 themes comprised from clusters of formulated meanings

Theme Descriptions – Phase Four	
1.	Interactive Narrative is Not a Game
2.	Interactive Fiction: Reading & Conversation
3.	Story Priming and Misalignment
4.	Story & Story Interaction
5.	Back-Story
6.	Character Believability (Action, Language and Comprehension)
7.	Participant Performance & Participant Interaction
8.	Clear Goals (narrative vs. Puzzle)
9.	Unsure of Control (narrative vs. Puzzle)
10.	Loss of Control – No Ownership
11.	Previous Lived Experience
12.	Social Participation (seeking to disengage)
13.	On Awkwardness
14.	Cultural Influences
15.	Replay Thoughts
16.	Testing the Boundaries

**Theme 2: Interactive Fiction: Reading & Conversation.** Three participants discussed the topic of conversation styles. They evaluated their experience with *Façade* in reference to popular games they played, such as *Kings Quest* and *World of Warcraft*. One found typing commands was similar to *King’s Quest’s* system, another pointed out the similarity between *Façade’s* conversation model and *WOW* chat conversation. Due to slight system lag in displaying the text on screen, when playing *Façade*, that participant stopped playing, he said “if there’s something the matter with the way I chat, then I give up ... I can’t continue to play because that is my voice.”

**Theme 3: Story Priming and Misalignment.** There were some misaligned expectations considering the resulting experience compared to *Façade’s* website described experience. After playing *Façade*, three participants expected the story to be different from the one experienced. This is partially due to how *Façade* was presented on the online website. One participant didn’t see how going back (to an old college friend) could lead to “this story that you wouldn’t expect.” This participant wanted Trip to explain how she introduced him to Grace. Another participant mentioned being “biased” to think *Façade* supported comedic conversation opportunities, and that his dramatic story experience “did not match.”

**Theme 4: Story & Story Interaction.** Nine participants evaluated *Façade’s* story and their interaction with it according to its plausibility, model of interaction, and

story flow. Two participants had divergent reactions on the plausibility of the story. One found the story ending “shocking” and “possible in real life,” while the other felt the story was “hard to tell” because the characters were too argumentative.

Seven participants discussed *Facade*’s unique model of player interaction with unfolding story and thought of ways to improve it. One participant found *Façade*’s conversation-based interaction “great” and more interesting than the story itself. This participant changed her affinity frequently and was “especially confused at the last part,” when Grace asks, “is what you've said tonight supposed to add up somehow, to something?”

Three participants mentioned difficulty with this model of interaction, as it continuously asked them to split their attention between following the story and taking the time to type responses. One was “so in the moment trying to get what’s going on between the two” that he felt like he missed many interaction opportunities. Another said, “I wasn’t sure if I should talk or what was supposed to happen because it was like tension building so I’m thinking do I break it or do they break it themselves.”

Another three participants emphasized more “meaningful” and “productive” interaction, for example, when “they [Trip and Grace] would ask me a question and, well clearly, I’m going to interact” but this would only serve to “piss the other one off.” Another two participants thought the story could be more interactive if the character offered to share activities, such as painting a picture together, or re-arranging the furniture.

Two participants mentioned playing their role by following the natural flow of the story since their initial responses were ineffective in stopping or changing the attitude of the argument. One reverted to this decision after he was kicked out the first time, while the other felt more immersed when he “just accepted it.”

**Theme 5: Back-story.** Five participants stated that they wanted more back-story for the characters. They wanted to know more about the characters personalities and get the “inside story” from one “point of view” or another. Knowing this would have helped them “choose proper words,” and facilitated a “more of an immersive” one-on-one dialogue. Three participants were interested to know or learn more about their own back-story “whose friend I was,” and “what kind of friend am I to them? I don’t know how deep my relationship is to them?” Knowing this would have better defined social “boundaries” especially when one participant tried to piece together why he was kicked out of the apartment “...they first want me to be involved in the conversation, but now they don’t want me to?”

**Theme 6: Character Believability** (Action, Language and Comprehension). Four participants commented on the characters’ (Trip and Grace) performance which centered upon their believability. One found their acting was “pretty good,” while another found Trip’s character to be “God awful” and “completely whiney.” One said, “...they make you feel like you’re talking to a person,” but were really “not listening.” Two felt they were “not reacting as people really would in a conversation” or “not listening,” because they “didn’t need me and didn’t answer me back half the time.” One exclaimed “are you reading what I’m writing?” Another voiced her heedless effort: “I was like sit down, calm down, you know listen; you’re not listening, listen to me, can I ask you a question all that just to be, you know (laugh).”

Another participant was expecting a “better” reaction after repeatedly kissing the characters, which got him kicked out.

**Theme 7: Participant Performance & Participant Interaction.** Four players commented on their strategies. One player acted with a purpose to “egg them on” because she “had things to say ... I had things to say to both of them”, “I could be all nice-nice”, or “I could work Trip a little bit.” All four, however, addressed limitations to perform such as “I just wanted to get in there [the conversation]” and “you realize you’re the 3<sup>rd</sup> party in the room.”

The four participants wanted more control to “start some topic”, “change the subject”, “lead the conversation”, or “alternate the argument into something else in order to see if I can get it to the point that I want.” One player was determined to change the tone of the conversation into a more positive one by saying “smile and be happy” and talking about “bunnies” because “I was hoping they would clue into what bunnies were.”

**Theme 8: Clear Goals** (narrative vs. puzzle). Five participants addressed clear, discernable goals as a strategy for success in the unfolding narrative. These participants associated a certain “function” to their role in an effort to “figure out a strategy” and “solve a puzzle.” One participant equated clear goals to having a “tangible reward or punishment” and found the story not “overly engaging.” Without clear goals one participant felt “this puzzle doesn’t listen to me” and another didn’t know if it was good or bad that “I didn’t know exactly what I should be doing. ... You’re trying to get involved in it or step away from it and they keep either pushing or pulling independent of what’s going on and you don’t really know where you might go with it.” One participant related to another game, where “you know what your ability is, what kind of role you are in, and why are you playing this role.”

**Theme 9: Unsure of Control** (narrative vs. puzzle). Seven Participants were unclear of how to control the narrative, although they knew they were controlling some aspects of it. “I wasn’t sure”, “I’m kinda confused”, and “I wasn’t really doing a lot”, are example comments. Another participant commented, “I was just typing and I don’t know how exactly it worked, whether it will just hear what I said to one or the other or it just kind of analyze what I said and make something happen. Yeah, I just didn’t know.” For another participant it was unclear to what extent he would be able to “stop Grace” or “change the situation,” since pushing the comfort tool too many times would yield a negative character response, which made him feel like “I am stopping the narration of the game.” Lastly one participant was unclear what to do after picking up the wine bottle “the fact that you could pick it up makes you think you could do something with it.”

**Theme 10: Loss of Control - No Ownership.** Ten participants felt aspects of their interaction had little or no effect on the story due to system constraints. One felt “it wasn’t my story at all, and it was like I had no part in it. It wasn’t about me and it wasn’t about anything I would know.” Another felt frustrated as he couldn’t stop Grace from walking out the door (and hence a dissolution of marriage). Although this participant was asked not to speak by Grace, he continued typing anyways: “go after her” and attempted to use the gesture options to “hug, kiss, and comfort.” Three participants felt “lost”, “left behind” or struggled to “regain control” in the story. One thought his actions were “interrupting” the story and said “I haven’t done anything, I was just there.” One commented using text conversations was “like I have a weapon,



but I don't know how to use it." One said "I wasn't even part of the conversation anymore...but I don't want to be bzzzzz, bzzzzz each time;" another said "I could not break this conversation if my life depended on it," and another said, "I wanted to get more in depth than they were allowing me to just because, I guess, the programming is looking for certain words."

Four participants focused on the conversation pacing, similar to results discussed in the previous study on *Façade* conversations [19]. One commented that the pace was "really fast" and that the story wouldn't "stall for you ... because too many things happened while typing." Three participants elaborated upon their experience in other turn-based games where "if you stall the game stalls," or "my action should trigger the next interaction." Some commented that they didn't have enough "space to say my things;" they were contently "being cut-off", as it takes them time to type or they lost the opportunity due to pacing.

**Theme 11: Previous Lived Experience.** Five participants associated their own real life experience in their understanding of the narrative. Three participants discussed "already knowing" your friends' personality prior to a similar argumentative experience. This is important as it guides the "choice of words." In *Façade*, they instead felt like they "didn't know" the characters and didn't identify with them.

**Theme 12: Social Participation** (seeking to disengage). The dramatic climate of *Façade*'s social situation discouraged six participants from fully engaging in the narrative. One was "really sensitive about negative energy." Three were not motivated in the story; they made comments, such as "why should I even care about fixing a relationship?", "I just wanted to let them figure it out", and "I'm going to remove myself from the equation" to let them "work it out," which still caused a "disturbing emotional effect." Two participants were disengaged enough to want to "give up" and "get out" of the situation. One succinctly stated "I just don't care" while another said "I felt like, I don't know, like a poor friend who doesn't know anything who doesn't know how to help because she doesn't know."

**Theme 13: On Awkwardness.** The topic of *Façade*'s awkward social situation was addressed by five participants. Participants described example awkward moments for them, including the phone call, "being trapped between arguments", "two people yelling at each other", and "bickering" which made them feel "confused", like "I don't want to be here", and "I don't see where you were going with this." One participant wanted to leave as soon as it became awkward because "in real life, I probably will not let myself get into that situation."

**Theme 14: Cultural Influences.** Playing in a social relationship within *Façade*'s narrative had cultural implications for two participants of Japanese and Chinese decent. Regarding politeness, one said "I don't think I should go around touching things," which limited her environmental and character interactions including comforting. This participant felt she was unable to "touch" Trip and Grace even though this was one of the interaction features. This participant also preferred to remain quiet (not interrupt), and wait for the conversation to naturally end. She wanted to make some hot tea with Grace in the kitchen as a means to privately speak with Grace, although this strategy was not understood. Similarly, another participant wanted to take off his shoes upon entering the apartment, and said afterwards "it sets a barrier to tell me what is not provided."

**Theme 15: Replay Thoughts.** Four participants discussed replay in relationship to their first or second playing experience. One equated “high replay value” to “intriguing characters and social dynamics” as seen in other narrative forms (i.e. books and games) although in this instance he would not replay due to themes pertaining to the loss of control and the awkward social situation. Another was interested in replay in order to explore “different resolutions” although later became more cynical in testing the boundaries of the system. Two participants wanted to replay to pursue distinctly happier endings, however, upon replay both were dissatisfied “they’d argue with almost anything” and “it got back to the same dialogue... and you’re like ah crap.”

**Theme 16: Testing the Boundaries.** Three participants explicitly discussed breaking the boundaries or “not playing by the rules” of the system. Two of which were cynical and did not care to adhere to the intended narrative experience, because one perceived it to be a “social experiment” and the other treated it as a “comedy.”

## 6 Reflections and Conclusions

This phenomenological analysis resulted in an exhaustive description of the player-narrative interaction listed in the themes above. In this section we aim to discuss some recurring patterns and explain such patterns in relation to participants’ previous experience. As noted in our previous study [23], players’ experience and comments rely heavily on their background, previous experiences, and mind set. In our view, many of the themes described above can be traced back to the participants’ background which may influence implications drawn on future designs of interactive narrative. In addition, due to the small sample of participants within this study, the analysis of the themes in relation to their background and experience will give the reader an understanding of how such patterns can be understood and generalized.

One of the most recurring patterns within the themes discussed above pertains to the participant’s multifaceted experience of control within the interactive narrative. Almost all participants touched on this aspect in the themes above. For example, many participants felt no ownership and loss of control, because they could not easily identify with their suggested role and experienced problems with pacing and natural language, which led them to conclude that characters were not listening to them. To many this was a new form of interactive ‘puzzle’ that they couldn’t map to their previous gaming experiences. Some have tried to map *Façade*’s play experience to other games, such as *King’s Quest* and *Princess Maker*. These mappings created false expectations of clear goals and a puzzle with some “positive outcome”, which caused the experience of loss of control to be more pronounced. As one participant said, it is like having a *weapon* that you cannot use. With some more feedback participants may be able to learn and develop coping strategies to handle this new form of interaction.

Related to the point discussed above, the first impression that participants got from the website and first few minutes interacting with *Façade* led them to believe that they are free to write or do anything at any point in time. However, there were inner constraints that participants soon realized, which led to an aversion reaction and loss of control, as it is widely known in psychology that impression formation plays

an important role on judgment and perception [24]. This is specifically apparent in themes 4 and 7, where some the participants commented on the lack of strategies to corner one character. Also, as discussed in the *Façade*'s study reported in [19], several participants commented on the pacing and interaction: when they should type, when they should listen, how fast they should type before the characters move on to the next beat. A few participants also discussed the loss of control due to not knowing what words would affect the interaction.

Another recurring pattern pertains to the methods by which players internalize characters, including their personality, backstory, character traits, feelings, emotions, motivations, and goals. This particular pattern surfaced in several themes including 5, 6, and 11. Participants indicated how knowing characters' back-story could facilitate their performance through informed interaction. A side effect of being sufficiently informed relates to how participants negatively assessed characters as "not reactive" or "not listening." Many participants made an analogy between this situation and real-life similar situations with friends or family. They described several inconsistencies between their previous experiences with such situations and their experience in *Façade*. For example, one participant noted that in their real-life experience, they would know their friends and thus would know how to interact with them. Others said in real-life they would just avoid such friends. These previous experiences shape their understanding and their engagement with an experience such as *Façade*.

In addition, another interesting finding from the themes discussed above involves how participants evaluated the social situation which informed how they interacted and engaged with the experience. Many found conversing on the topic of a doomed relationship or being stuck in an awkward situation unappealing. For instance, lacking social appeal led some participants to test the boundaries of the system rather than genuinely interact with the story. Playing a social situation is almost non-existent in previous forms or interactive models. This, thus, has caused much confusion and left many players feeling awkward or culturally removed.

It is worth mentioning that participants from different cultural backgrounds are also susceptible to miss-assess the social situation. For examples, subtle queues for interaction were missed for one participant due to her inability to interrupt other characters as interruption is considered impolite in her culture. These are examples of cultural norms that were expected within the minds of the participants as part of the social interaction norms, but were not facilitated within *Façade*.

In conclusion, we have presented sixteen themes that resulted from our analysis of interviews conducted with eleven participants after they played the interactive narrative *Façade*. In this paper, we presented all the themes to show the experience of playing an interactive narrative using participant's voices. The transcriptions of the interviews as well as all analysis phases were member checked by the participants themselves as well as reviewed by an external reviewer to establish validity. In addition to the themes, we also reflected on our understanding of the themes in regards to participants' previous experiences to help explain their attitudes, mind-sets, and thus actions. The contribution of this study is in the data presented as well as the methods used. We hope that this data can be used to influence future interactive narratives' design.

## 7 References

- [1] B. A. Loyall, "Believable Agents: Building Interactive Personalities," in *Computer Science Department*, vol. PhD. Pittsburg: Carnegie Mellon University, 1997, pp. 222.
- [2] P. Weyhrauch, "Guiding Interactive Drama," in *School of Computer Science*, vol. PhD. Pittsburgh, PA: Carnegie Mellon University, 1997.
- [3] N. Szilas, "Stepping into the Interactive Drama," *Lecture notes in computer science*, 2004.
- [4] M. Seif El-Nasr, "Interaction, Narrative, and Drama Creating an Adaptive Interactive Narrative using Performance Arts Theories," 2007.
- [5] B. Magerko, "Story representation and interactive drama," presented at 1st Artificial Intelligence and Interactive Digital Entertainment Conference, Marina del Rey, CA, 2005.
- [6] J. Bates, B. Loyall, and S. Reilly, "An Architecture for Action, Emotion, and Social Behavior," *Computer Science*, pp. 14, 1992.
- [7] M. Mateas and A. Stern, "Façade: An Experiment in Building a Fully-Realized Interactive Drama," presented at Game Developers Conference, San Jose, CA, 2003.
- [8] C. Moustakas, *Phenomenological Research Methods*. Thousand Oaks, CA, 1994.
- [9] P. F. Colaizzi, *Psychological research as the phenomenologist views it*. New York: Oxford University Press, 1978.
- [10] Husserl, *Ideas: General introduction to pure phenomenology*. Evanston, IL: Northwestern University Press, 1931.
- [11] S. Reilly, "Believable Social and Emotional Agents," in *Computer Science*, vol. PhD. Pittsburg: Carnegie Mellon University, 1996.
- [12] M. Mateas and A. Stearn, "Procedural Authorship: A Case-Study Of the Interactive Drama Façade," presented at Digital Arts and Culture (DAC), Copenhagen, 2005.
- [13] N. Szilas, "The Future of Interactive Drama," presented at 2005 Australasian conference on interactive entertainment, 2005.
- [14] M. Seif El-Nasr, "An Interactive Narrative Architecture based on Filmmaking Theory," 2004.
- [15] D. Thue, V. Bulitko, M. Spetch, and E. Wasylshen, "Learning Player Preferences to Inform Delayed Authoring," presented at AAAI Fall Symposium on Intelligent Narrative Technologies, Arlington, VA, 2007.
- [16] R. Aylett, S. Louchart, J. Dias, A. Paiva, and E. Vala, *FearNot! - An experiment in emergent narrative*, 2005.
- [17] D. Pizzi and M. Cavazza, "Affective Storytelling based on Characters' Feelings," University of Teesside, 2007.
- [18] B. Mallon and B. Webb, "Stand up and take your place: identifying narrative elements in narrative adventure and role-play games," *Computers in Entertainment (CIE)*, vol. 3, pp. 6, 2005.
- [19] M. Mehta, S. Dow, M. Mateas, and B. MacIntyre, "Evaluating a Conversation-centered Interactive Drama," presented at In Conference on Autonomous Agents and Multi-Agent Systems (AAMAS'07), 2007.
- [20] S. M. Dow, M.; Lausier, A.; MacIntyre, B.; Mateas, M., "Initial Lessons from ARFaçade, An Interactive Augmented Reality Drama.," presented at ACM SIGCHI Conference on Advances in Computer Entertainment (ACE'06), Los Angeles, 2006.
- [21] M. M. A. Stern, "Architecture, Authorial Idioms and Early Observations of the Interactive Drama Façade," 2002.
- [22] Y. S. Lincoln and E. G. Guba, *Naturalistic Inquiry*. Beverly Hills, CA, 1985.
- [23] M. Seif El-Nasr, M. Al-Saati, S. Niedenthal, and D. Milam, "Assassin's Creed: A Multicultural Read," presented at 2nd Annual Canadian Game Studies Association Conference, Vancouver, Canada, 2008.
- [24] D. Pennington, *Social Cognition (Routledge Modular Psychology)*. London: Routledge, 2000.