



Rhetorical considerations for innovative approaches to performance and audience engagement

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ABSTRACT

This research explores how digital media could be used to enhance engagement between an audience and a presenter, orator, or lecturer. Our aim is to think creatively about what a presentation could become and how the use of digital media technologies could form an intrinsic part of the presenter/audience experience. To help anchor this concept, we devised a development framework, which is briefly described. The framework was used to develop a potential component element of a performance presentation: the use of multiple video projections that would supplement a presentation and form a connected but non-linear narrative to produce an element of a performance presentation. To contextualize the framework and assess its effectiveness, an evaluation study of a multiple video projection project was evaluated. The study revealed the importance of audience priming within the rhetorical considerations of the development framework.

Author Keywords

Performance presentations; interaction design; performance arts; audience engagement

ACM Classification Keywords

H.5.5 Information interfaces and presentation: Sound and music computing
H.5.m. Information interfaces and presentation: Miscellaneous.

General Terms

Human Factors; Design; Measurement.

INTRODUCTION

This research explores how digital media could be creatively supplemented to enhance engagement between an audience and a presenter, orator, or lecturer.

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'Presentations' typically have recognized rituals and patterns. However, if the word 'presentation' is replaced by the word 'performance', creative latitude and audience expectations become interpretively more open. Performances can be expressive and artistic whereas presentations are typically pedagogic. Performance artists often find challenging and innovative ways of conveying their work to an audience. In contrast, presenters are often limited to improving PowerPoint slides and delivery style. So we posed the question: is it possible to quantifiably improve presenter and audience engagement while using digital media as a supporting performance-based medium? Our aim is to think creatively about what a presentation could become and how the use of digital media technologies could form an intrinsic part of the presenter/audience experience. Changes in digital media production, new research directions in interaction design coupled with a growing body of artistic work and practice in the digital performance arts, mean that new opportunities exist to re-examine the constructs of the conventional presentation and seek new ways of emotionally and intellectually engaging an audience.

We began by considering possible performance-based delivery mechanisms and suggestions included: spatially distributed live and recorded audio and music; text and graphical animations; multiple video projections onto different surfaces such as the floor and ceiling; and redistributing content delivery between the presenter by mixing verbal delivery with recorded audio and visual material at different locations within the room. While many of these suggestions might provide an interesting audio-visual spectacle [4], it was important to us that audiences also gained tangible meaning from the experience, rather than merely being exposed to technological flamboyance [7].

Delivering innovative but also meaningful content was an important constraint that we imposed on this research. This is because our aim is to produce 'performance-presentations' which can be used in educational and commercial contexts as well as them being performance events in themselves. We also hope to engage an audience through a broader range of cognitive processes, making the audience active rather than passive spectators. Public events

are socially constructed through known rituals and conformance; because our proposal sits between the social expectations of a conventional presentation and those of an artistic performance, we could potentially make the meaning of a presentation performance difficult for an audience to understand. The audience's role in reading and interpreting a performance presentation may become less clear or obvious. Thus, rhetorical considerations need to be introduced to ensure appropriate and relevant meaning is conveyed from the presenter to the audience.

To help anchor this hybrid concept, we devised a development framework which would act as an instrument for evolving presentations into 'performance presentations'. Its purpose was to foster new rhetorical approaches coupled with development coherence. Our methodological approach was inspired by related research and artistic work using mixed reality described by Benford and Giannachi [1] who refer to the use of 'sensitizing concepts' as a means of providing guidance and analytical direction for exploratory fields of creative and evaluation study.

Very briefly, the framework consists of six elements. Development begins with the rhetorical aspects of the performance presentation which is related to the fundamental meaning and communication approach. These aspects are then refined further using four production parameters: modal expressions, temporal flow, spatial design and audience engagement. Thus the intended thoughts, ideas and meaning of the performance presentation are constructed by independently and collectively considering these five elements. Through this process a performance presentation is then annotated through the sixth element - an interaction model between the performer and audience. Each performance presentation has its own annotated interaction model and, because of this, audience engagement can be assessed against the audience's experiences of the presentation.

One of the potential delivery ideas we were keen to explore was the use of multiple video projections that would supplement a presentation and form a connected but non-linear narrative. Our intention was to produce a video that required deeper spectator skills. The framework was therefore used to design a three-screen (triptych) video. The interaction model was then used to evaluate the effectiveness of the video against the intended meaning developed through the framework.

INITIAL EXPLORATIVE WORK

A short spectator study was set up to explore how multiple screens could be used to convey reportage content through cognitive process of associative coherence [8] where relational or causal meaning between disparate stimuli is made by referring to repeated or recently constructed memories. The effectiveness of the artistic and pedagogical intent could then be evaluated by asking the audience to recall content themes and how they were constructed within

the video.

An experimental reportage video was produced documenting the people and manufacturing processes of a Jukebox manufacturing company. Video footage was captured with a single HD video camera along with audio recordings of interviews, machinery and general ambient noise. Still images were also taken using a DSLR camera. To gain naturalistic footage much of the first week was spent within the company meeting staff, explaining the purpose of the video and recording experimental and redundant material to ensure that by the second week, most staff were more at ease when more natural events were recorded. The managing director agreed to conduct a factory tour and this formed the primary narrative of the video. The intention was always to edit video footage so that it would be distributed laterally across three large 50" plasma screens about 500mm apart. This configuration formed a 'triptych' video – a central display flanked by two screens on either side. Detailed editorial decisions for the plot and character of the video were left until after the factory visit. However, during the recording process, certain key themes emerged.

Once complete, all digital assets were played back and a compositional structure began to emerge by bringing together the themes, the triptych delivery style and recording content. The rhetorical structure was determined by ensuring the scene setting for the video was gradual and slow paced followed by gathering complexity in the middle and concluding with audio heavy denouement. The triptych video was divided into four scenes.

Scene 1 introduced the triptych delivery style and content setting for the reportage. The key idea was for the viewer to quickly gain some inclination of the content while also indicating the untypical delivery style.

Scene 2 presented the most natural narrative with the managing director carrying out a tour of the factory. This was edited to form synchronised and unsynchronised video and audio across the three screens. One screen would contain synchronised audio and video footage, while another screen presented (without audio) what has just been seen delayed by 4-5 seconds while the third screen presented what would be seen in 4-5 seconds time also without audio. Through this process of editing, the temporal structure of the narrative is manipulated by providing the viewer with a non-linear narrative. The active video moves from screen to screen thus forcing the viewer to actively seek the screen possessing the synchronised audio footage. The intention was to distribute the video material across the screens in a way to break up the conventional continuity-editing rules common in the film industry.

Scene 3 covered the office environment. Audio and video treatment was very different to scene 2, containing looped sound samples of quiet conversations, muted radio and TV

sounds, staff interactions and social activity. Mundane and peripheral objects and office mess were photographed and repeated across the three screens. Visual and audio repetition was used to help bring out subtle details through associative coherence, for example many of the offices close to the factory floor have poorly adjusted auto-closing door mechanisms resulting in continual door-slamming noises which are completely ignored by staff. This scene attempts to connect door-slamming with manufacturing associations thus trying to bring a commonly ignored or filtered out sound to the fore and then making an association with other similar factory activities.

Scene 4 has little video content and consists mainly of an audio recording of the company founder and father of the managing director. It presents his personal and emotional thoughts on starting the company and how his sons are now managing the company. To emphasise this point, very few modalities are used, relying instead mainly on audio recording.

Much of the creative style and structure emerged while editing the video. It was not possible to compose, edit and play three videos concurrently. Therefore each video had to be painstakingly produced independently and then played back simultaneously using three separate PCs and monitors. In order to keep track of edit points, content and synchronisation, a hand-drawn timeline had to be produced plotting audio and video entry and exit points. This meant that three videos had to be produced concurrently to ensure artistic coherence. Very often ideas formed at the editing stage did not work at playback and had to be altered. At other times accidental mistakes provided opportunity for new ideas.

Once complete, explicit statements were written down by articulating the content and artistic intent of the four scenes. The first thematic intention was that viewers would become aware of the non-linear approach and would attempt to decode and analyse the different delivery styles. Associative meaning and spatial awareness should then begin to emerge as the viewer forms relationships between different delivery styles. The second intention was that they would appreciate some or all of the key cultural and organisational themes of the business such as cultural values, manufacturing methods, and environmental ambience.

SPECTATOR STUDY

A study was carried out with three objectives. 1) To explore how much of the pedagogical themes or artistic intent embedded into the triptych video was successfully conveyed and what type of audience experiences were gained from them. 2) To assess the framework as an instrument for developing performance presentations. 3) To assess the impact that a post-hoc evaluation approach would have on future creative thinking for the design of performance presentation.

Experimental design

12 students volunteered to watch the 12-minute video. All subjects viewed the video alone except for the experimenter. Eye gaze whilst watching the video was video recorded for data analysis purposes. Subjects were undergraduate students predominately between the age of 21-30 studying either psychology or computing.

After watching the video, subjects were interviewed. The aim of the first question was to elicit the quality of comprehension, initial impressions, factual recall and subjective opinions without prompts. Once this approach was exhausted, semi-structured questions were posed to elicit recall accuracy of key events and scenes, personal experiences of any cognitive load, how they felt their attention had been guided using the multi-screen design and finally an overall appraisal of their experience in terms of engagement, entertainment, and educative value.

The results from the questionnaire and interview transcripts were then reviewed and compared against the articulated themes for the video.

Results

Five of the twelve subjects consistently reported negative comments about the video. Primarily, these were concerned with a lack of a single linear narrative, stating it was disjointed and feeling lost; not being able to understand the function or purpose of the video or having a sense of unease at continually being distracted. Seven subjects reported they thought they had probably missed information. Six subjects reported having to work hard to understand the video and did not particularly enjoy seeking out the active video screen. Subjects who commented favorably usually appreciated the video for its artistic merit or expressed intrigue or curiosity about content selection. After the interview, subjects often asked for explanation about the presence of certain images or the overall meaning of the video. Comments between engagement and entertainment were strongly correlated. No feedback suggested any associations had been made between different elements of the video. Eye tracking revealed subjects had a strong bias towards the central screen even if it was not the active screen. We also asked subjects to draw a factory plan from memory to find out if they obtained a good spatial awareness of the factory. Most underestimated the size of the factory and nearly all sketches included some form of corridor with offices and factory rooms leading off it. With recall-based questions, subjects exhibited certain 'modal' blind spots by inattentiveness to audio or key episodic events even after prompting.

DISCUSSION

The broad-brush feedback gained from this study revealed salutary lessons for our further experimental work where deep audience engagement is part of the design rationale. Simply put: they didn't get it and the video failed to comprehensively convey either of the two main intended

themes. Our explanation for this is related to the contextual setting of the study. Subjects were not given any form of preparation or introduction to the video and the subject matter was unfamiliar to them. The lack of an introduction was quite deliberate because we were anxious not to bias their expectations. We were anticipating some disinclination towards the video; however, the complete lack of any awareness to the mixed modal themes by all subjects was surprising. Although the video contained some degree of ‘scene setting’, the middle part of the video was ‘modally’ dense and did not provide adequate opportunity for orientation with time to reflect on repeating modal patterns within the video.

In contrast, the video was also shown to some of the jukebox management team. Their responses were diametrically opposite to the subjects’ responses. They were amused by the juxtaposition of certain scenes and knew exactly where each shot had been taken. They commented between themselves about viewing familiar and mundane scenes in unfamiliar ways. They thought the video accurately conveyed the company but not in ways they would have anticipated. In fact the managing director was emotionally moved by the video and said it had provided him with a strong motivational lift.

Familiarity of context [2] and rules for intended and unintended engagement [6] both play a large part in comprehension and quality of experience. The different viewing experiences between the subjects and management team clearly demonstrate this. Consequently, greater consideration needs to be given to ensuring the framework accommodates audience expectations to include viewing orientation and preparation. This would have probably improved the viewing experience in the study or at least allowed the subjects to make more informed critical judgments. Therefore we need to think more in terms of the curatorial aspects [5] by providing some form of priming. Either before or at the beginning of the triptych video, rules of engagement need to be considered in more detail.

We feel confident that the development aspects of the framework will improve as we gather more audience feedback on other audio-visual delivery mechanisms. The process begins with rhetorical considerations to help select appropriate performance strategies before radiating design and development thinking out towards the production parameters and concluding with a notated interaction model for evaluation. Our intention is to continue with this iterative process by developing small component elements of a potential performance lecture until the framework stabilises. Once this occurs, performance presentations can then be designed with purposeful artistic and pedagogical intent imbedded within them. Nevertheless, these findings have helped inject caution into the way novel approaches to audience engagement are introduced and have highlighted the need for a stronger curatorial approach.

CONCLUSIONS

Brook [3] examined the constituent elements of good theatre and described the causal links between artistic intent and audience engagement. ‘A word does not start as a word – it is an end product which begins as an impulse, stimulated by attitude and behaviour which dictates the need for expression.’ This study has revealed some of the difficulties along this journey working from impulse to ‘word’. Creative innovative delivery may be acceptable within a purely artistic context but *meaningful* artistic intent requires consideration of the audience’s prior knowledge. If this prior knowledge cannot be assumed then mechanisms to ameliorate this need to be introduced into the performance presentation.

The next stage of this research is to explore what these mechanisms should be. We are currently beginning this investigation with a series of performance presentations for the National Coal Mining Museum for England, near Wakefield in West Yorkshire. Our intention is to use video and audio recordings of various aspects of the Museum, such as, mining machinery in action, interviews with living history interpreters and staff, plus archived film and audio material, to produce a number of performance presentations aimed at giving visitors a broader and deeper understanding of coal mining beyond the usual stereotypical portrayals. Our aim is to enable curators, librarians and ex-miner guides at the Museum to ‘perform’ enhanced audio-video narratives which will engage and entertain audiences with innovative but meaningful content.

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