

**The Kamza and Bar Kamza Project:  
Participatory Digital Storytelling by Networked Data Sharing.  
UC San Diego**

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We are developing a system for networked public participatory viewing using a shared canvas and script driven database allows dynamic linking and association of user contents to a main story-line. This method of presentation introduces transformative concepts of social creativity, harnessing the tools of social media, semantic web and machine improvisation into one networked computer system.

The current system grew out of an ongoing "debate and commentary play" project conducted at UCSD. During the first year, a novel presentation format were created around a Talmudic story, Kamza and Bar Kamza. The Talmud has been commonly suggested as an early example of hypertext, and the layout of the Talmudic page, with embedded commentaries, was used as a model for developing the system's core logics.

The project resulted in a first public show in March 2008 at CALIT2-UCSD. The show alternated between an artistic rendering of the story, videos of scholarly commentary, and live debate and discussion, with additional continuous interactivity throughout. Within the immersive environment, the audience was able to engage by using a host of means ranging from semantic web tools to more conventional means. The experience gained during this time has helped us both to define more precisely the technological challenges such collaborative interaction faces, and to develop a system for accommodating new audiences and telling new stories. In January, we have another show, which will take place just before the conference. For the conference, our demonstration of the system will include a part of the January show, with attendees as audience members. Please watch our introductory video for the project, online at <http://www.youtube.com/watch?v=tTf3IHH0B3g>

**Two Hurdles: Technology and Audience.**

The first hurdle is the construction of a framework designed to allow for differing digital media types to be composited on a variable number of displays in real-time. Along this framework, a suite of applications will be developed including a server to send data about the story over a network to remote

participants, and a client to allow live viewing of a performance in progress as well as allow multi-modal interactive feedback (a shared canvas).

The architecture is intended to be as flexible/extensible as possible while also providing the speed and efficiency needed to render many media assets in real-time. To assure a high level of portability, a simple XML layout is used as the interchange format, which sidesteps the usual need for specialized media processing. Client-server interfaces will be developed with participatory gestures communicated through established standards (HTTP, SMS, etc) in an attempt to create an open system that allows future additions and modification while leveraging other, mature technologies. For example, a laptop user can select images that she likes and post them for others to view, both online and on large screens of the theatrical space. Meanwhile someone with a cell phone can text in his opinion.

The second hurdle is to trigger participation for general (non-specialist) audiences practiced in the passive modes of reception typical of gallery spaces, music, movies and theater performance. With this comes a host of challenges regarding the performance's atmosphere, audience's understanding of the story, the appropriate role for each input and output device, the linkage of different sites of discussion, and the realistic zones of flow for multi-modal communication

While particular environments subjectivize individuals as passive silent onlookers, these same people can be quite active participants in the 'performance' of their everyday live. By adopting techniques made common by web2.0 services such as Wikipedia, Twitter, Flickr, and Nico Nico Douga, the project provides familiar affordances for participation. Inevitably, such provisions precipitate differential privileges of access between those with laptops, Blackberries, cell phones, and those nearer or further from input devices provided in the performance space. By distributing the burdens of creative, editorial, receptive, and interpretive power between participants we hope to allow multi-modal communication without drowning the audience in channels of information.

The proposed system opens a broad area for future research, such as questions of data association between user input and database in the context of the story, possibilities of auto-collage for coherent and aesthetical composition of user media on the limited spatial and temporal resources of the presentation, monitoring and data mining user activities for and against story moderation, and the layering of past user interaction on present performances.

The main goal of the Kamza and Bar Kamza Project is to fashion a new communicative act linking content driven performances, contextualizing media

assets, and individuals and groups in the audience by what are not just lines of connection, but, ultimately, Deleuzian “lines of flight”, opening outward. This new communicative act becomes possible by the design and implementation of mechanisms for the creation of new meanings. To the extent storytelling usually centers on a rigid story, these mechanisms of meaning fracture the dominance of that story. In such an environment, interactive interpretation is itself the performance.