

Graffiti Dance

Interaction of Light, Information, and Environment

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ABSTRACT

Graffiti Dance creates a collaborative space for the voice of a local community to express a statement about the world around them. Several participants become graffiti artists, painting with an arsenal of lights via virtual graffiti mechanisms. Colors, images, and terms from popular sources (syndicated news Images & Twitter) and local influences (from mobile uploads) are suggested for use in the graffiti. Participants and viewers watch the graffiti's creation and receive feedback provided by a set of dancers who interact with the virtual (light) and physical space. Graffiti Dance presents a holistic experience using a plurality of sources that reflects our understanding of the world around us, how we speak out in public forums, and how we interpret the creative act.

Author Keywords

Graffiti, projection, dance, community, network, art

ACM Classification Keywords

H5.m. Information interfaces and presentation: Miscellaneous.

General Terms

Human Factors

INTRODUCTION

Graffiti is typically classified within three genres: vandalism, identity, and political. While there is fair categorical intersection, the voice is generally that of the artists (taggers) with the spray cans. The graffiti artist then waits for feedback displayed over the lifetime of the tag; as either its immediate removal or its longevity. Lately, we have seen technological tools using lights and lasers for graffiti acts, yet the response from providence to feedback remains as static as its aerosol analog. If one can deliver providence and feedback at the time of creation, can the work and its experience be amplified? For providence, how can we provide assistance about the current online zeitgeist and from the local surroundings? For feedback, how can we provide a more immediate and responsive feedback in-situ? Can we support and intensify the experience of both the graffiti artist and the spectator?

Graffiti Dance addresses the state of graffiti and technology from providence to feedback; the first performance is scheduled for late October 2009 at the Berkeley Art Museum. Graffiti Dance is a multi-user interactive, light based graffiti installation that is built on top of the MobiSpray platform [2], which uses a set of motion-sensor enabled cell phones (spray devices)



Figure 1 Mobispray on several artifacts: World Tour': Potts Point Neighborhood, Sydney (upper left), Guggenheim museum, New York (upper right), Houses of Parliament, London (lower left), Siwash Rock, Vancouver (lower right)

that allow each graffiti tagger to paint colors via a projection onto an exterior space.

To address providence, taggers can choose to stencil various media from online sources that are fed, in real time, to the spray devices. The media (images and text) comes from various online sources that are representative of the overall Internet zeitgeist; images are pulled from the Associated Press while salient words are fetched from Twitter. Additionally, local spectators can influence the taggers by sending images and photos using a mobile upload from a personal Internet-device (such as modern cell phones). All of the media is stylized via a real-time posterization filter.

Feedback is delivered from two interactions: the taggers interact with each other as well as a group of dancers in the space. The taggers share control of the projection and will have to work with each other to create the overall visual collage; each tagger will have the ability to write over another tagger's work, creating a collaborative interchange. The dancers also become a part of the visual display of graffiti, responding with movement to the colors, images, and directional movement of the projections, becoming a liaison of sorts between the graffiti and the taggers. Their presence engages the spectator, tagger, and performer, creating a tri-directional conversation that intensifies and reveals the connection between audience and art. The presence of a physical component provides added intention and a more specific relationship to the space for the tagger.

POSITION

Recently, the argument questioning novelty, innovation, and legality in reproduction and commercial art has resurfaced [5]. Graffiti Dance draws from similar creative license and is focused on the temporality of the performance itself; the

overall experience is a dancing interplay between a flux of light, popular media, and a creative physical response. It creates a community experience that is based in cultural reality, virtual markings, and physical interplay between what we see and what we care to say.

COMPONENT DESCRIPTION

Graffiti dance is a composition of three components: the light graffiti, Network Arts, and structured, improvised dance. Each component has a specific interplay with the others from providence to creation to feedback. The Graffiti Dance performance presents the overall ecology.

MobiSpray

At its core, Graffiti Dance deploys MobiSpray, an interactive art tool for creating ubiquitous ephemeral digital art [2]. Artist and creator of MobiSpray, MobiLenin has painted light graffiti in a guerilla manner on the surfaces of buildings like Guggenheim museum in New York to natural landmarks (Figure 1). In MobiSpray, the cell phone is employed as a virtual spray can to spray dabs of digital paint onto the physical environment via large-scale projections. Other artists have experimented with related projects. Wodiczko [3] has created large-scale projections of politically charged images. GRL's 'Laser Tag' [4] tracks a green laser pointer across the face of a building to generate light tags.

MobiSpray provides a high degree of freedom, it affords the luxury of painting anytime, anywhere on anything while being able to roam around your targeted object in the real physical space, near or far. A cell phone serves as a freehand drawing tool (using a built in accelerometer) for virtual color spraying, while being an image capturing device and a processing unit to handle digital stencils. A drawing client on the mobile phone communicates wirelessly with a drawing server on a standard PC for the purpose of painting on a virtual canvas. The canvas is projected with a video projector onto some landmark. The MobiSpray platform offers a variety of virtual spraying nozzles such as blob and brush, but also an *image nozzle* that places plain images on the canvas and a *stencil nozzle* that places stencils on the canvas to spray on. Additionally, a multi-user mode allows simultaneous collaborative drawings.

Community and Network Arts

Graffiti Dance uses two principles for finding and presenting media: Network Arts and Autonomous Expressionism [1]. Network Arts rejects capricious tendencies of web-search driven art exhibits by addressing the semantics and semiotics of the source. In short, an installation should take in to account that an image hosted on the New York Times versus the Wikipedia has radically different contexts. Autonomous Expressionism prescribes a creative framework that empowers artists and exhibits with a logical flow and representation to guide viewers through a performance when dealing with media at a mammoth web scale.

At the heart of Graffiti Dance is a community system that pulls from online sources as well as local uploads. As an ex-

tension to Autonomous Expressionism, Graffiti Dance determines what should be presented on the limited real estate on the phones as well as coordinates the efforts across a set of collaborative taggers.

Dance

The movement component of Graffiti Dance draws from the lineage of "if/then" methodology introduced by choreographer Richard Siegal in 2004. This method structures the interaction of dancers on stage based on rules and structured models. Graffiti Dance takes this concept in a new direction by weaving the temporal components of MobiSpray into a live, interactive performance based on a feedback loop between the audience users, the syndicated text and images or free form colors they choose from programmed mobile phones, and the dancers. Utilizing universal movement descriptors, Laban Movement Analysis, the dancers will be trained to respond with specific movements and quality of movement to a range of visualizations. For example, the free form color "green" will be the signal for an immediate Quick and Direct gesture of the right arm. Architectural forms pulled from the syndicated images (for example a neo-colonial home appears) will require the dancers to embody the relating elements of space (for example Federalist-inspired columns may emphasize verticality). Any verb that is projected from the pool of text will result in a literal translation: "Housing Prices Continue to Fall" will inevitably lead to a falling action. The choreographic and creative aspect of this performance structure plays with the unpredictability of what images may appear. The goal is a unified, cohesive, and purposeful performance by the dancers that maintains an element of improvisation and spontaneity, an intentional and dynamic connection with the audience, as well as a holistic range of movement qualities.

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