R.g.b-project

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ABSTRACT
R.g.b-project is an experiential project in which participants are invited to interact with the surrounding environment mediated by the concepts of the R(ed)G(reen)B(lue)-color space, the color space commonly used in digital technology. Participants are asked to go on a color-walk using a video camera to document one of the three colors, Red, Green or Blue. The footage is then imported into a computer application, the R.g.b-surveillance machine. This application uses the biases of digital imaging technology towards the colors, red, green and blue to create a cinematic tool. The participants create a dialogue with this tool's parameters in relationship with the camera, the color pallet of the environment they are shooting in and one's own perception of red, green and blue

Author Keywords
participatory art, new-media, RGB-colorspace, politics of digital imaging technology, color perception, computer programming

INTRODUCTION
The R.g.b-project started in 2004 as part of my theses requirements for the MFA program at the School for Contemporary Arts, Simon Fraser University, in Vancouver, Canada. [1] The project can be categorized as a site-specific, participatory event that leads to a screening, installation or a happening. The creation process is broken down into three stages. The first stage consists of a performance lecture wherein the concepts behind the R.g.b-project are explained. The second phase is participatory and entails the documenting of colorwalks. The last phase is the site-specific installation or new-media happening. Each phase is adaptable to present circumstances.

The Project

The project was initially motivated by a specific question: Computers present us with a multitude of choices, but do they provide the user freedom of choice? More and more so, computers are becoming a black box accessible only to the "experts". Consumers of these products are left with a set of choices. Choices that are predetermined by standards derived from average perceptual qualities that are quantified by programmers and the hardware. This is precisely the case with the color space RGB. Standardization of these colors is not the same for each individual's perception of red, green and blue, thus leaving the consumer with color choices that are determined by principles of digital technology. These principles are not always clearly identifiable. The terminology regarding color, for example sharp, true, or "a choice of millions of colors", clouds over the choices made in developing this technology. The R.g.b-project seeks to investigate the principles of digital color representation as determined by manufacturers and programmers. Does digital technology favor certain colors above others? Does the use of these technologies constrict, or confine in some way, our ability to interact with our environment?

Different people participating in the project allow for multiple interpretations of red, green and blue. Through juxtaposing these multiple interpretations against the standardized perception of digital technology, questions can be asked concerning the technological, historical, cultural, bias towards these colors. At the same time the project raises awareness regarding the standardization of these colors by digital technology in how color is used in each location. The choice of camera has a significant influence on the nuances of the colors red, green and blue; it makes it difficult to express oneself through an individualized use of color. The participants are forced, consciously or not, to make thematic choices, namely, a focus on signs, a focus on detail and barely recognizable images, people, and overview shots. (The argument for using predominantly consumer–cameras is made because biases would become more visible through the automated choices in a consumer camera, limiting the color pallet of the footage shot. The automated white balance setting is key in this argument because, in a camera, all color is determined by its relationship to a white point. What that white point is, is imbued with cultural and political biases.)

The conclusion of the research is that the individual's color idiosyncrasies didn't show through an interpretation of color, but through a personal approach regarding the documenting, namely the topic or method of shooting, for example predominantly signs, or a conceptual approach of the assignment.

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THE PARTICIPATION

Participants are invited to interact with the city through the concepts of the RGB-color space, a color space commonly used by digital technology. They go on a colorwalk using a video camera to document one of the three colors, Red, Green or Blue. Though what the participants document is largely determined by the location, the participants are not asked to give a portrait of the area, although some might choose to do so. They are asked to engage with one of the three colors in relationship to the place, keeping in account the parameters of the computer application, the R.g.b-surveillance machine.

While documenting their walk the participants use a technique called in-camera editing, which is easy to learn and allows for a direct engagement with the environment and the video-camera. The participants are free to choose the location and the size of the area they walk in, but it has to fall within the city limits. Consequently, the created clip is inputted into a computer application developed in Max/MSP/Jitter.[2] This computer-program acts as a surveillance machine through only highlighting what the program 'thinks' is red, green or blue. If the program can't find the specified color, the sound of the clip is heard. An inherited quality of video footage is that it comes with one video-channel and two audio channels. The computer program works so that the sound illustrates the absence of the image and the image manipulates the processing of the sound. Here, an equal dialogue is created between sound and image. Before the participants go on the colorwalk they are made aware of these parameters of the computer application. It is important for the participants to understand that the footage shown in the installation is filtered through a computer-program, which selects the footage through standards regarding its proximity to digital technologies parameters of red, green and blue and not as much on personal/artistic values. The boundaries of what is standardized by the technology in relationship to the personal perception, creates a new kind of cinematography. This means that the notion of 'good' and 'bad' footage is judged by concepts based on the standardization of color by digital technology. The computer-application, the R.g.b-surveillance machine, is a collaborator, a medium that has a message.

Participants responded very differently to the project: some see it as a playful and creative means, which allows them to engage with the environment in a different way; others see it more as a conceptual exercise. Overall participants have said the experience heightened their senses and made them more aware of color and the use of colors in relationship to digital technology. Mostly, the participants have been artist and academics; I have not targeted a specific group or community, though there are interesting possibilities in this approach, for example creating a color portrait of a specific neighborhood.

THE INSTALLATION

The results of the colorwalks filtered through the R.g.b-surveillance machine is shown as installation or as a performance. This part of the project is site specific to the city or place the project was shot in; the installation becomes a mediated extension of this place. A key element of the installation is the relational quality the image and sound have to an actual physical space. This relationship is created within the viewer through recognizing familiar elements of the city in the footage. The installation consists of a computer and monitor set-up that allows participation through a keyboard and a projection, that shows the filtered footage and sound which is heard through a two-channel speaker system. The viewer interacts with the footage through creating an edit list – like a jukebox – and adding new edit points in the existing footage. The names the participants give to the edit-points create their own poetic interpretation of the footage and another level of interfacing with the city.

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