

# Nighttime visual media production in club environments

Engström, A., Esbjörnsson, M. and Juhlin, O.

Mobility, Interactive Institute, P.O. Box 1197, SE-164 26 Kista, Sweden

{arvide;mattia;oskarj}@tii.se

## ABSTRACT

We analyze how VJs produce visuals to support DJs in dark and noisy club environments, enhancing the overall experience. We suggest that mobile technologies could improve the interaction between the audience and the VJ. As a first step to the generation of new applications, we tease out some characteristics of VJ production and live performance, which might influence the design of such technologies. We specifically focus on the ways in which VJs interact with the audience and the computer interfaces, as well as how they orient towards specific aesthetic ideals.

## AUTHOR KEYWORDS

VJ, club, public displays, hybrid media, real time editing, socializing, nighttime, visualization.

## INTRODUCTION

We present preliminary findings from an interview study of VJing. The term VJ is short for Video Jockey and was first used in clubs in New York and San Francisco in the 1970's to refer to a person using video, film projections and lights to accompany a DJ's music set [Crevits, 2006]. VJing has since then spread internationally and the VJs of today are visual artists working in a variety of settings such as live concerts, museums, shows and art galleries, although clubs and nightlife remain the main platform. The VJs in this study all perform in club settings, although not exclusively, and their rich interaction with the audience and the DJ is mainly mediated through images and music. At the core of VJing is a drive toward new artistic expressions and exploration of hybrid media forms and technologies. The parallel development of electronic music and DJing is of course a main influence. Increasing processing power in graphics cards and development of dedicated hardware, software and open source mixing tools also present new possibilities to push the boundaries of live interaction with visual content.

We suggest that user generated content will be increasingly important in the production of hybrid media [Engström et al, 2007]. Hence, we investigate the possibilities for designing services which invite the club visitors to collectively create VJ-material. There are a number of dimensions which have to be addressed, i.e. social interaction, aesthetics, interaction with technology, and the interrelationship between those dimensions.

The rather extreme club environment [Sheridan et al, 2004] sets specific demands on the design of such technology, but to view these circumstances only as problems would of

course be a misinterpretation. Rather, nighttime hedonic activities, darkness and the designed space and soundscape of the club are vital parts in the VJ's and DJ's mediated interaction with each other and with the audience. The visuals are produced and performed in a way that is oriented towards these factors. In the live performance, the visual material is controlled partly manually, partly automated through sensors etc., in a complex interaction with music, people and environment. This orientation provides interesting new opportunities for interaction design of new visual media. In the following we present a preliminary analysis of an interview study with VJs. We bring forth a set of dimensions we have found to be relevant for the design of mobile collaborative hybrid media production tools.

## ANALYSIS

We have interviewed nine VJs from five VJ groups from Sweden, Finland, France and Spain. As part of the research we have also visited several VJ performances in club and festival settings in Sweden, Finland and Japan. The interviews were recorded and transcribed. A number of design dimensions emerged when we analyzed the material.

### Aesthetic Concerns

VJing is a common term referring to a form of presentation, how visual content is combined and performed live. The origin of the content may be any combination of graphics, video, 3D animation, photography, film etc. The aesthetics are as diverse, and they certainly influence and determine how a VJ performs and interacts during a live set. Visuals are designed to work in dark spaces on a diversity of screen setups. Darkness, light and color are important factors as bright images light a dark room and emphasize the screen surface. At the same time, brightness and color are effective in producing captivating images. A high tempo and distinct rhythm set different demands on preparation and performance than a more ambient style using seamless video loops or generative graphics.

### Interacting with the Media in the Darkness

#### *Standardized vs. customized setups*

The favored setups of hardware and software components used differ greatly between performers. Some general characteristics of a basic setup can be described but it is evident from our study and other work [Crevits, 2006] that setups are customized to a large extent to fit the individual performance style. All the VJs in our study, however, base their performance on laptop computers running dedicated

VJ software. Most use external mixers and have experimented with input devices such as live cameras, and two of them develop their own software or software modules.

#### *VJ's relation to the collection of media content*

The video bank, a matrix where video clips, animations and graphics are organized visually as thumbnails, is the commonly used interface metaphor for media content in VJ and live performance software. The layout of the video bank determines to some extent the formatting and structure of pre-prepared material in that it promotes a "random access" model of retrieval and limits the number of clips displayed in the interface, for instance. However, the structuring of clips follows to the preceding process of editing and rendering, which is ultimately a matter of artistic style and preference. Although preparation of material is a large part of any VJ's work, some have more structured ways of organizing their media content according to a planned sequentiality of a VJ set, while others view a predefined structure as hampering to improvisation during the live performance. Viewing the content during production in a studio can be very different from interacting with it live in a club environment. *"..but then you don't know in advance which clips work. There are several which unexpectedly look good out on the club, and these may be the easiest to produce, you didn't even think when you made them, but they are damn good.."* (YS).

#### *VJ interacting with the music*

As stated above, the goal is to project media which is in synch with the music. Accordingly: *"..most of our clips have a strong rhythm, there is something pulsating in them. Consequently it is easy to tap in with BPM.."* (DA). Even if this is the most common scenario, one of the VJs stated that he had been experimenting with: *"..AV-connections, more samplings from the VJ side. More audio from video clips and animation, bringing it in, and sending it back to the music mixer, to kind of merge it all together.."* (MW). Hence, he interacted with the music in the 'opposite' direction.

#### **People around the VJ**

##### *Ambient interaction with the audience*

Although the VJ is standing very close to the audience, and normally a bit above them, the interaction is highly constrained. The audience struggles with relating the visual effects to the people on stage. When they do talk to each other this often becomes obvious. One VJ says that *"..often we're mistaken for the DJ. Drunk chicks who asks if we can play some R&B.."* This does not mean that there is no interaction. They interpret the activities of the audience as a feedback to what they do. In that sense they are successful if the audience dances. They are also successful if they take a visual interest in their graphic production. However, if the

audience just look at what they are doing, this could be negative feedback: *"...[W]e don't want people to just stand and gaze at our graphics, we want people to dance.."*. They look for the subtle combination of people dancing and looking at their stuff: *"..if someone is dancing looking at a screen, then we understand that it contributes to the atmosphere.."*. Hence the interaction with the audience is highly subtle, or ambient, and occurs partly mediated through the dance per se.

#### *Orientation to the DJ*

The orientation of the visuals and the audio is a concern for either both DJs and VJs or just for some of them. In general it is the DJ who 'leads the way' and the VJ who tries to follow. In both cases, the synchronization of the media types is a central concern. First, it is very rare that VJs and DJs talk to each other during the set. The dark and noisy club setting hampers such interaction. However, it is possible to collaborate as long as they are within visual sight of each other. *"..it's enough looking at the DJ, you can see when he's changing records and so.."*. Second, the interaction could be rehearsed and preplanned, which gives them better opportunity to talk and show each other what to do. Accordingly, some of the VJs preferred working with DJs they knew, and had some prior collaboration with.

#### **CONCLUSION**

In a live performance the VJs interact in and through their visuals, with an orientation to synchronization with the music, as well as with a concern for the ambience among the audience. Our interviews reveal an initial list of such concerns which could be of importance for the design of support for increased audience interaction. The next step in understanding our material will be to focus on the links between the interaction with the audience and the interaction with VJs, their technology as well as their aesthetical preferences i.e. the ways in which video interaction with audience might affect their style and collaboration with their co-producers.

#### **REFERENCES**

1. Crevits, B. (2006). The roots of VJing – A historical overview. In *VJ audio-visual art + VJ culture* (ed. Michael Faulkner/D-Fuse). Laurence King Publishing. pp. 14-19.
2. Engström, A., Esbjörnsson, M., Juhlin, O. and Norlin, C. (2007). More TV! - Support for local and collaborative production and consumption of mobile TV. In *Interactive TV: A Shared Experience TICSP Adjunct Proceedings of EuroITV 2007*. pp 173-177.
3. Sheridan, J. G., Dix, A., Lock, S. and Bayliss, A. (2005). Understanding Interaction in Ubiquitous Guerrilla Performances in Playful Arenas. In *Proceedings of HCI 2004*. Springer Verlag. pp.3-18.