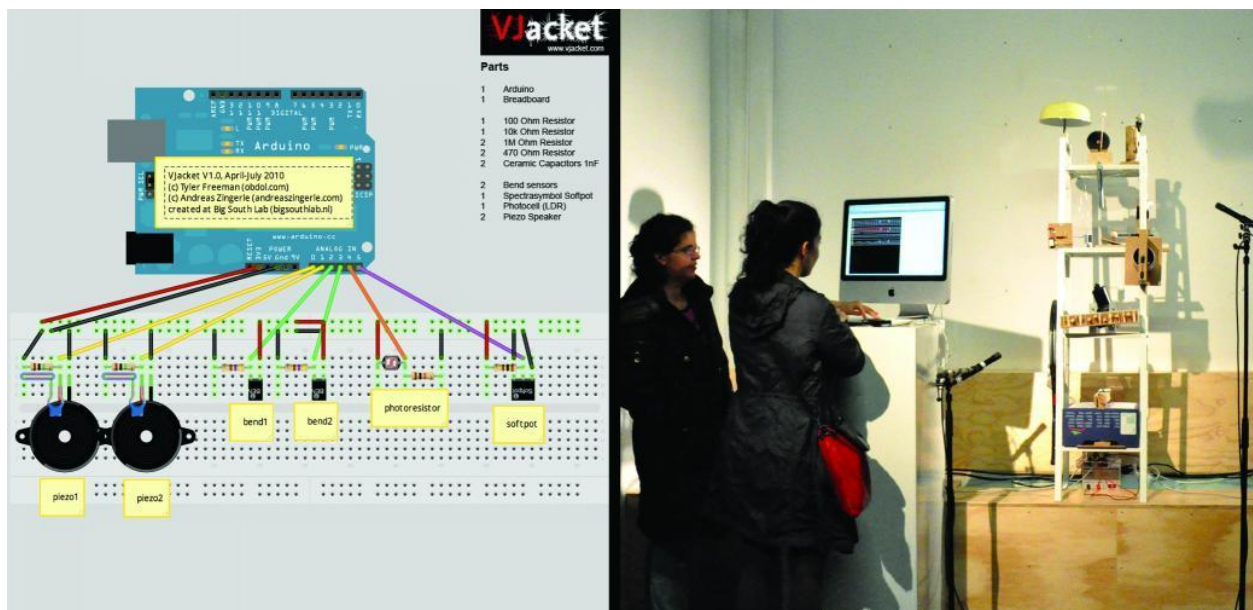


COLLABORATION MODELS IN BIG SOUTH LAB

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This paper highlights the co-creation processes of two electronic art and design works in the Big South Lab; the VJacket coordinated by Andreas Zingerle and Tyler Freeman and The Big South Orchestra, coordinated by Lars Kynde and Maartje van den Hurk in collaboration with 12 youngsters. We'll examine the design models and the co-relation between the deployed collaboration models and the projects' qualitative outcomes or co-ownership.



Design document VJacket (L), presentation Big South Orchestra (R). CC some rights reserved The Patching Zone (Zingerle, Tyler, Kynde, Nigten).

The context: Big South Lab

Big South Lab was the second project that The Patching Zone realized in Rotterdam South, in the borough of Feijenoord. The Patching Zone developed the Big South Lab project for young people between the ages of 15 and 27. The Big South Lab is modeled around training, through workshops and co-creation projects, in the creative media field. Big South Lab, executed and initiated by The Patching Zone and its partners, distinguishes itself from competitors and other initiatives through its way of working: above-average students and young professionals addressed a socially relevant project as a team. The team combines some principles of participatory design, co-creation and interactive art. This means that stakeholders (young people/residents) play an important role in the design, realisation and distribution process. Their roles vary from designers, usability testers, interns, scouts, trend watchers, co-owners of projects. **[Nigten]** Negotiation and collaboration are central in The Patching Zone approach; in this paper we'll investigate the consequences of the chosen collaboration models in Big South Lab.

The VJacket is a piece of wearable technology that enables the wearer to interact wirelessly with audio-visual processing software. Implemented in the jacket is a sensor network consisting of bend, touch and hit sensors that you can trigger and control your preferred audiovisual effects in realtime, all from the comfort of your own jacket [VJacket] The jacket invites you to move your body to trigger these effects, show your rhythmic expression or just dance to your favourite music and create visuals at the same time.

Our objective was to create, with the VJacket, an alternative way to access and manipulate audiovisual content. Inspired by research projects like “the Djammer” [slyaden], “Go Dance” by [negrillo] or the “sensorsuit” that was used by the Dutch performer ‘Eboman’ [eboman] we wanted to free the DJ/VJ from the ‘behind the screen’ posture you can normally find them at parties or in nightclubs. This objective was combined with the interest of the project’s focus group. In general a lot of teenagers try to express themselves through fashion, dance and music and want to show this at social events and parties. The designers’ initial concept, originating from media art, was suggested to be interesting for the focus group as a starting point, while details for the design were developed with the two representatives of the focus group.

Following the objectives, we split the development process of the VJacket in different design phases, each covering a specific field within the making process. This resulted in modular workshops where we gave introductions into ‘Vjing and software’, “Wearable technology”, ‘Arduino and sensors’, ‘Alternative controllers used in VJ performances’ and ‘Making of the jacket’ [bsl]. Tyler Freeman [odbol] and Andreas Zingerle [az] both work in the media art field and realized various projects as VJs, interface designers, musicians or experimental film directors. Teaming up at the Big South Lab [bsl] we did several workshops for teenagers and young adults in the Rotterdam-Zuid area, examining a creative (mis)use of technology. The two bsl interns Geoffrey Frimpong and Kevin Brito were our scouts into the subculture of the neighbourhood. Considering several design choices like comfort, style, sensor placement and content creation we were planning, designing and prototyping, in several ‘peer2peer sessions’, a second version of the VJacket with them.

A more detailed overview on the design challenges and technicalities can be read in our paper “Enabling the VJ as Performer with Rhythmic Wearable Interfaces” [az, tf].

THE VJACKET DESIGN CYCLE

The VJacket was developed in an iterative way, we describe the major steps of the design and development process that we took. The design cycle was based on a pragmatic approach that showed a parallel with the combined approach for user centered and user driven design Eric Reiss gives. [Reiss] ‘Firstly, we organized a series of user centered workshops based on the information we received from our scouts, we prepared a series of workshops that generated feedback on the design decisions and informed the next steps for the design process. For example; we hosted the ‘Vjing and software’ workshop. The students were very fast learners and by the end of the two hour workshop they had already created a VJ set to play for a hip-hop concert that they were performing the next day. Now it was time to show them how to use alternative controllers and OSC to affect the visuals. We started with the WiiJ Video program, an application that allows you to VJ using gestures and motion tracking using the Nintendo Wii remote. [<http://wiijvideo.com>] This workshop was held at the Go-for-IT! Relaunch Festival, and there

were even young kids trying the controller who excelled at controlling the visuals with little or no training.

In one of the final workshops, we worked with the students to develop their own VJacket, here we shifted from a user centered approach towards a user driven and finally for the last parts towards a participatory approach within the given boundaries of the VJacket design framework. The VJacket hardware was designed in a modular way, with the ability to choose exactly which kinds of sensors you wanted to use. The circuits and software were designed as to allow any combination of sensors, which can be swapped with other sensors by attaching them with velcro. The variable sensor position allows for comfortable attachment and finer sensor control customized to the wearer [gemperle, 4].

This modular design was tailored, according to principles from participatory design, for particular users such as for step dancer Geoffrey Frimpong. This version allowed us to use all percussive piezo sensors, so he could slap different parts of his jacket during the dance for a dominantly rhythmic, staccato audiovisual performance. In contrast, the other custom made version for Kevin Brito, reflect his dance style and is more smooth and flowing, so he made a lot of use of the bend sensors and slide sensors during dancing. In this way, each sensor in a person's VJacket is an extension of that person's style: just as an expensive suit is tailored to follow the contours and movements of an individual's body, the VJacket's sensors are placed to capture and accentuate the performer's natural style, creating a highly personalized instrument.

VJACKET'S STATE OF AFFAIRS

The VJacket was presented to the public in several smaller events and presentations and also shown in a big event that took place in November 2010 at the Creative Factory [cf] in Rotterdam. The development process was documented and resulted in 'Do-It-Yourself' explanations that can be found on popular community sites [make] [instructables], and the source code for the Arduino2OSC software is available for download and collaboration on the VJacket website [VJacket]. The VJacket is a work-in-progress by the designers Freeman and Zingerle.

Kynde reports on the design process of the Broad Band Band, Big South Orchestra

The following part of this paper is an analyzes of the co-design and development process of the interactive musical installation, the Broad Band Band [BBB], that was presented at the Big South Event, on the 19th of November 2010. The installation consisted of a variety of small mechanical instruments activated by motors and solenoids, controlled from multiple computers via a network based graphical interface.

BIG SOUTH ORCHESTRA: FIRST PHASE OF THE DESIGN CYCLE

During the first phase we, the designers, Lars Kynde [LK] and Maartje van den Hurk, created the overall concept, the framework and interface of the installation.

In contrast to the two later design phases, we (the designers) took part as participants. We were working creatively within the overall structure of The Patching Zone.

The Big South Lab priorities to be incorporated were: “Elements of music, interactivity and technology, implemented via the Processpatching-approach [PP] (meaning transdisciplinary collaboration as found in electronic art) and The Patching Zone-approach (meaning participatory design, bottom-up approach, and involvement of the stakeholders)”

BIG SOUTH ORCHESTRA: THE SECOND PHASE OF THE DESIGN CYCLE

The self-playing mechanical instruments used in the installation were created during a workshop with 12 participants (18-26 years old). The workshop participants were invited to create an electro mechanic musical instrument each. To do this they were provided motors, solenoids, materials for building and sound production and the necessary tools. The participants were free to experiment and build on the basis of their individual ideas. On the other hand they were restricted to use the material available, and though we had tried to find as big a variety of components as possible with the emphasis on letting the materials be as non-specific as possible, it was impossible not to influence the creative process through these pre-choices. The participants were encouraged to work independently on each their instrument, so that everyone would go through all the steps of the creative process. On the other hand they were also allowed to help each other and to interchange ideas. We, the workshop leaders, changed gradually our behavior during the day of the workshop, allowing gradually bigger freedom and independency to the participants. We, the designers, started as masters and by the end of the workshop days we worked as peers with the participants. Even though the changes happened gradually, I could sum it up to three different roles that we took during the workshop-day: Initially, we started as initiators (masters) presenting the idea and giving the assignment. We moved from the previous ‘user centered’ working model towards ‘user driven’ model as we passed the authority on to the participants and with that came also our trust in their self-responsibility of finding the right solution. Still we walked around the table to overview the process and assisted them when this was needed.

Thirdly we put ourselves completely on the same level as the participants, sitting around the same table building our selves more instruments, and at the same time sporadically giving advises to the projects in process. Since they were also increasingly helping each other, the distance between workshop leader and participant became smaller towards the end of the workshop. The results became a broad variety of instruments all with very distinct personalities reflecting the different personalities of their creators.

BIG SOUTH ORCHESTRA: THIRD PHASE OF THE DESIGN CYCLE

The installation let the public take the role as composers. The interface functioned as an empty musical score rolling over the screen from right to left. The score was ready for notes to be drawn by the visitor. During the presentation two computers were connected and synchronized via a local network. That made it possible for two composers (visitors) to work together on the same musical score simultaneously.

BIG SOUTH ORCHESTRA: FEEDBACK FROM THE FOCUS GROUP

During the day of presentation, the interest of the visitors was mostly centered on the creative interaction. They were trying to find the most cool rhythm or building up an ideal sequence of sounds to be executed, enjoying the compositions as they took shape.

At the same time, the visitors did not express any need for saving or recording their compositions, or otherwise keeping or using the results after the creation, even though they put a lot of time into building up the compositions and exploring the interface and the instruments, they did express great joy interacting with the instruments and each other, creating a piece of collaborative music.

Concluding thoughts on both projects

The VJacket's development cycle showed how much the makers and the focus group share interests in Interaction Design, photography, music, street culture etc. Sharing these interests made it a fun time to plan the VJacket, work on different workshop proposals and create special content for it. It needs mentioning that the cycle of engagement for the content workshops was much shorter than the required engagement time span for the development of the entire VJacket project. The short concentrated workshop cycles were focused on direct outcomes, after several afternoons the participants finished their own movie, in some hours they made a rap, mixed sound or participated in a VJ session. Workshops with direct results and short cycles that focused on topics or media expressions that were somehow familiar to the focus group worked well and also generated relevant material. The quality of the workshop's outcomes varied a lot from aesthetically convincing to more well done and amateurish.

Working over a longer term with the youth from the neighborhood on the VJacket turned out to be problematic due to the lack of many continuity aspects that made it impossible to create a presence with the VJacket team within the neighborhood society or creatively-influence the youngsters' minds. The creators Freeman and Zingerle created the first prototype within 2 months in a user-driven way. After the lack of qualitative input from the focus group the designers decided to develop the second prototype more according to a user centered design. Although the two focus group collaborators kept on being interested to work together they did not seem to feel any ownership and it was difficult to plan a performance with the jacket and to motivate the interns to create their own film clips to VJ with.

Compared to the initial objective of the VJacket, the user-centered design process was a good attempt to start from, whereas the user-driven process was more problematic. The quality of the project's outcome therefore can only be measured according to the makers' design and media art standards and we feel that we did not succeed in creating co-ownership. The cycle that is suggested by Eric Reiss that includes the option to jump between user centered and user driven could not be established. The VJacket is still a work in progress but seems to meet the designers desired artistic qualities.

Kynde states on the results of the Big South Orchestra:

'If I personally should say what I took with me from the Big South Orchestra project, then I would put the emphasis on the experience the project gave me. I would mention the knowledge and skills gained from my own research and the help from my colleagues and the experts, and I would certainly mention the experience gained by leading the workshop.' Kynde continues: 'the final outcome of the process, was of course part of the process itself, and those two can therefore be difficult to separate. Yet I would state that the value of the final work, meaning the physical outcome, seems infinitely small compared with the value of the experience. I agree thus with the general reactions that I got from the other frameworks during this project, namely that the process was experienced as more valuable than the final result'. [...] 'The success criterion for the Big South Orchestra was mainly mutual inspiration and learning during the creative process, secondarily the artistic quality of the installation produced.' We therefore can state the process was successful, if we take the enthusiasm of the participants as our main indicator. Although, the participants did enjoy the making process, they did not engage with the final results.'

OVERALL CONCLUSION

As an overall conclusion one can state that we can determine a co-relation between qualitative outcomes and the co-creation process in the Big South Band project. In this project the quality of the collaboration among the youngsters and the designers can be considered as being of high quality, if we take the participants enthusiasm and their presence as a reference. For the presentation of the Big South Orchestra, the makers mention the interaction as another qualitative parameter though here a new audience came in. One therefore can state that high quality input and engagement in the workshops did, in this case, not generate a need for workshop participants to showcase the work. A similar pattern can be observed with the short workshops in the VJacket design cycle. The content workshops (short time span) were well attended and generated qualitative outcome. The longer term collaboration was more difficult to establish in the VJacket development process, here the designers decided to leave the planned user driven approach and to continue according to a user centered approach. The quality of the VJacket's final outcome will therefore be measured from a designer's viewpoint only.

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