

# Connecting through pulse

*Working notes*



*Foto: Mads Høbye*

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Every time the Suitcase finishes a project, we write [reports](#) analysing the specific method we have used and describing the process and our insights about the audience experience. This report, however, is somewhat different. It describes an ongoing process in which the Suitcase explores fundamental questions about the nature of art and our perception of it. In this current project, we specifically explore the relation between art and auditorium – between the artist and the audience. We do so from a technological perspective as we ask how digital technology may affect the perceived connection between the audience and the artist on stage. The project is called *Connecting through pulse* and it is a collaboration between PhD in Interaction Design and co-founder at [illutron](#), [Mads Høbye](#), artists from The Royal Danish Theatre, and A Suitcase of Methods.

In this report, we describe how we explored this perspective in three different settings – a technical test, a lab, and a workshop. These are described further below. The project is an ongoing exploration, and with each new setting and from each new perspective, new questions and points of interest seems to arise. This means that we have a growing amount of insight but no fixed or finished conclusions. The tests and workshops have helped us to uphold a continuous exploration of elements such as *engagement*, *relation*, and *art & technology* from a new perspective. We have published [brief posts](#) about the work before, but in this report, we will reflect on what we have learned so far from these initiatives and how this knowledge may be relevant to others working with (knowledge about) arts and audience.

## The idea behind the pulsating heart

The idea of exploring the perceived connection between the audience and the artists on stage using heart rate monitors and a pulsating heart stems from a workshop with [Medea research lab](#) at Malmö University and The Royal Danish Theatre. Here, we realised that the university students had completely different reactions to the art experience (in this case ballet) when experiencing a ballet training in comparison to watching a complete ballet performance in an auditorium.

The enthusiastic students were impressed by, and felt connected to, the ballet dancers when watching them in class working to perfect their steps and positions. They witnessed the hard work that is a prerequisite for a high quality performance. However, when watching the same dancers in their costumes on stage performing the same steps with perfect precision, the students felt uninterested and uninspired. For this group, the struggle and the process going on in class was much more interesting than the finished 'product' – the actual performance. This experience indicates that relatability is of great importance when it comes to feeling connected to what is happening on stage.

Taking this knowledge as point of departure, we wanted to explore how this element of relatability to the struggle for perfection could be incorporated into a regular dance performance, and how digital technology may help this process. After the initial workshop, the students at Medea made a simple prototype of a heart, because they felt the heart could be a strong symbol of connecting both with the physical and the emotional aspects of the dancer and the performance. We wanted to further develop this idea and this model of a heart so we asked Mads Høbye to create prototypes of a pulsating heart, which could give the audience a simulated physical sensation of the dancers' heart and thus give them an idea of how hard the dancers were working.

## The way it works

Mads returned to us with three different prototypes, which all communicated with a heart rate monitor placed on a ballet dancer. The monitor sends information about the heart rate through a computer to one of the prototyped hearts, which vibrates and/or blinks in the pulse of the heart.

From left to right the prototypes were

- 1) a metal version, which made a distinct and loud clicking sound when it was 'beating'.
- 2) a glass heart which lit up and vibrated,
- 3) a small velour bag, which made a squeaking sound and a movement that simulated a heartbeat.



Foto: Mads Høbye

## The first test

Our first test took place during a regular ballet class at The Royal Danish Theatre. This was a technical test to make sure everything worked and that the dancers could wear the heart rate monitor while moving around. We also checked the reach of the signal from the monitors, to ensure that the dancers could move freely to the back of the stage without us losing the signal from their heartbeat. You can watch a small video of the test [here](#).



Foto: Mads Høbye

## The lab



Foto. Mads Høbye

A couple of months later in June 2017 we were ready to test the three hearts on a small audience during a theatre 'lab' session. A ballet dancer from the Royal Danish Theatre wore the heart rate monitor and danced a beautiful adagio a couple of metres from the audience. Our focus was on the audience's perception of the various hearts and on how the technology and artefacts affected the experience of the dance.

During the performance, we made observations and afterwards we had a group conversation with the audience and the dancer. We asked very openly how they experienced the dance, the heart, and the combination of the two.

A couple of things became clear to us during this lab: First of all, we quickly dismissed the loud metal heart. The audience found it too disturbing and distracting. Furthermore, some of them felt that they themselves became the centre of attention when holding this loud object. It was uncomfortable for them. Consequently, it turns out that the final artefact must tread a fine line between supporting and enhancing an art experience without drawing too much attention to itself.<sup>1</sup>



Foto: Mads Høbye

## Feedback and insight from the lab

The audience appreciated the overall experience with the lab. However, they had different perceptions of how the hearts affected their experience with the performance. Some of them reported feeling closer to the dancer when holding the heart. Others, on the contrary, felt distracted by this extra layer of information, vibrating in their

<sup>1</sup> It is important to note that this disturbance also holds a creative potential, which has been explored further in a different context.

hands. They explained that it took away focus from the dancer's movements. Furthermore, the audiences wanted to pass on the hearts after holding them for a moment. It was therefore, on a more technical note, important that the hearts were made wireless.

The different hearts seemed to add an interesting layer to the experience, but they were not 'absorbed' by the performance – so to speak. The hearts didn't completely merge with the artistic experience. This lab therefore points at a necessary but difficult balance when working with technology within this field. A balance between adding something extra to the experience and potentially taking something away from an intimate art performance like this one.

Another more general insight we got from the lab is an aspect that we see almost every time we reach out and engage with audiences: The group really appreciated the opportunity to talk about art and art experiences with each other – even though most of them had never met before. These meetings around art experiences seem to add an extra dimension to the individual experience. They create a social space, and the conversations are a meaningful way of engaging with other people through art.



Foto: Mads Høbye

## The workshop

In December 2017, we wanted to further explore the question of how this heart may establish connection between the audience and the artists on stage. After our experiences with the lab, we wanted to avoid the heart becoming a distraction or an alien-like object potentially disturbing the audience's immersion in the art experience. This time we therefore took a different approach to the exploration of the potential of the vibrating heart: We asked the contemporary, experimenting dance company [Corpus](#) to do a workshop with the heart in order to see how it could be incorporated into the artistic, creative process.



Foto: Mads Høbye

The framing of the workshop was very open because we wanted to avoid affecting the creative process too much. The dancers were asked to explore how holding the heart while their colleagues danced made them feel, and (later on in the process) to explore how holding the heart while dancing would make them communicate through movement.

Watch the video of the workshop [here](#).

## Our learnings

Again, we heard from the dancers holding the heart that it was intense and interesting but only for a couple of moments. When they held it for too long the heart became a distraction from experiencing dancer's artistic expression.

Aside from this insight, three learnings from the workshop seemed to be the most pervasive:

### The importance of framing

Every time we work on a project, the question of framing seems to be important one way or another. This time we saw it in regards to the *relation* between the individuals in the workshop – i.e. between the personalities that came together in this space of exploration. The Suitcase often takes an open approach to the exploratory processes, because we want to observe what is naturally unfolding. Being open in this way, however, may give rise to resistance or complications, and as we go along, we often observe a need for clear definitions of the assignments and of the expectations of everyone involved.

So once again, it is a question of a difficult balance. In this case, we need to balance between providing enough information and set boundaries within which the artists can feel comfortable enough to explore freely and be creative. On the other hand, we must be aware not to give the artists a complete manual on how to interact with this artefact and what kind of product or insight they should end up with. It is a complex task to balance the level of information because it varies according to the individuals involved in the workshop. Some artists (as well as some audiences in our lab) need quite a lot of specific information, whereas others feel safe to enter an unknown space of creativity and exploration. We have learned, however, that if we insist on keeping the space somewhat undefined, we need to communicate this extremely clearly to the artists and audiences. We need to explicate (and repeat) that we have no specific expectations and what we need from every participant is to be aware of what is going on and what we are experiencing as we explore.<sup>2</sup>

### The moment of anticipation

Our second primary insight regards the power that lies in the moment of anticipation. In our first setup, ballet dancer Alexander (previously part of the large traditional ballet corps at The Royal Danish Theatre) were to perform a ballet choreography in front of his contemporary dance colleagues. He was wearing the heart rate monitor. The other dancers sitting in front of him on the floor were holding the hearts in their hands. Alexander was given a moment to decide what to dance, and as he stood there in the middle of the floor, completely still and somewhat nervous, going over the steps in his mind, his pulse was raising. The hearts were 'beating', vibrating

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<sup>2</sup> For general perspectives on the impact of framing creative processes, see for instance: Amabile, T. M. (1996). *Creativity in context*. Boulder, CO: Westview and Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York: Harper Perennial. For a psychological take on the effect of framing see for instance Giuca, Katherine M. (2012): *Framing for Creativity. The impact of framing a task for gains and losses on risk perceptions and creative performance*. Thesis. Michigan State University.

and lighting up, but there was no movement on the dancefloor. There was only anticipation and emotion. Right before he started dancing the pulse slowed down again. He was calm and ready.

It was an interesting and strong moment and a meaningful experience for both Alexander and everyone else in the room. In this setup, the audience got access to a level of information we usually know nothing about – the internal, emotional process of the performer. The heart thus helped to tell an interesting intimate story of exactly what the students at Medea requested: The personal journey towards the excellent presentation of a 'product'.

This experience made us wonder if the potential of the heart primarily lies in the moments where the artists are not on stage or at least are not in character. Right before they go on stage, when they take applause, etc. A sort of 'art *in* anticipation'. This heart could thus be another way of giving audience behind the scenes access and insight into the process of creating excellent art, as we have written about before in [this report](#).



Foto: Mads Høbye

### The heart crossing boundaries

An aesthetic, pulsating object and the wish to learn more about connection in performance situations brought together people from different professional backgrounds. From this encounter, we got new insights about the different cultures and positions that were involved in this exploration. Differences we thought would be insignificant for the process but turned out to be important.

The Suitcase is placed in the department for Strategic analytics, and with the heart in our hands, we wanted to enter the creative space and quietly observe what unfolded in the meeting between the artists and the heart. This was not that simple, however. The dancers were very focussed in their exploration and we had interesting discussions and reflections about the effects of the heart on the dancers and the audience. Nevertheless, we (the observing Suitcase members) still felt, that our presence as 'outsiders' and non-participating bodies in this *physical* exploration was somewhat disturbing. During the workshop, we sensed that the creative process would have been freer if we, as observers, had not been in the room or if we (in one way or another) were moving or participating more actively on the floor. We are not sure what this participation would look like, but it is obvious that the idea of the silent and non-influential observer is a utopia.<sup>3</sup>



Foto: Mads Høbye

<sup>3</sup> This fact is in popular terms often referred to as *The observer effect*, which dates back to scientist Werner Heisenberg's studies of quantum mechanics. He discovered how simple observation of objects change their 'behaviour'. For more on boundaries and boundary-crossing in

One way of redeeming this could be to work with the artists over a longer period of time or using them in the initial reflections on what perspectives could be interesting to explore.

### Summing up...

A project like this is extensive and the Suitcase is well aware that not everyone has the means to carry out a similar exploration. However, it turns out that many insights from this project are in line with learnings from our previous (more simple and low budget) surveys. This indicates that even small initiatives provide relevant insight and show tendencies that may be worth pursuing and exploring further.

For one it is interesting to rediscover the power of different types of 'behind the scene'-insights. In this specific project, we saw how the experience was particularly relevant when we (as audience) gained insight into the hard work of the dancer and into the artists' emotional process before going on stage. These are moments where there is a lot at stake and where we see a very relatable side of both the artists and of performance art in general. However, going behind the scenes in any way, shape, or form is only interesting if what is happening *on* stage is of a certain quality. It seems to be the contrast between the beautiful, seemingly effortless dance and the personal ambitions, struggles and nerves that is perceived as real, engaging, and relevant.

Furthermore, we saw (again) that our presence in a room always matters. A quiet observation is also a way of bringing something to the space and the process. This is also true when we engage with audiences through conversations or simply observe them after a performance. The key is to be aware of this impact and work to design and control the energy and effect we have on the process and on the people involved. Sometimes we need to be very visible and engaging in order to 'fit in', and other times we can be more resigned and give room for the audience's reflections. A ground rule could be that we need to match the energy and engagement level of the artists/audience in order to support the natural development of the process.

We will take all of these learnings with us in our next project. The next step for this technology focussed exploration is still unknown, but our activities so far leave us wanting to further explore this perspective – perhaps on another art form. Until then, the heart is making guest appearances in various other projects and it has been part of different exhibitions. In addition to this, our work with the heart will serve as a basis for multiple academic papers spearheaded by Mads Høbye and Maja Fagerberg from Roskilde University.

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anthropological work, see Wegener, Charlotte (2013): "Would you like a cup of coffee? Using the researcher's insider and outsider positions as a sensitising concept" in *Ethnography and Education* vol.9 no.4 pp. 153-166.