

   *AffeXity: Passages & Tunnels Invitation for the Re-New Digital Arts Festival, Copenhagen* (2013)

***Temporal Scaffolding:* a collaborative, relational and networked infrastructure of technology, screendance, AR, affect, audiences and smart mobile devices in the project *AffeXity.* By****Jeannette Ginslov, 2017.**

**Abstract**

This paper describes the collaborative process that shaped the creation of the Screendance and AR (Augmented Reality) project *AffeXity.* The main artistic collaborators are Susan Kozel, professor of New Media at MEDEA, Malmö University, as artistic director and myself, the Screendance maker and editor, with a team of academics, Computer Science master students, interaction designers, dancers, choreographers, composers and software developers [1].

It describes a process of collaboration that philosopher Félix Guattari refers to as a “temporal scaffolding,” (Bourriaud, 2002, p. 96), an infrastructure or an operator of temporal junctions and attractors [2]. Collaboration and creativity expert Keith Sawyer (2006, p. 1) maintains that this interaction should be collaborative for it to be effective and the support both “adjustable and temporal”. As a metaphor and verb, it will help me describe the agency and temporal relations of artists, academics, art disciplines, software, internet, smart mobile apps, and audiences that met up at different times to collaborate on the project *AffeXity*.  The project’sevolutionary nature of temporal formations is a good example of a project using a performative relational aesthetic not only in its outcomes, but also in its stages of development. Furthermore, the AR used in the project extends the notion of relational temporality as it invites an audience to move from place to place, connecting with the project, using networked smartphones and tablets.

The project commenced in 2010, when Jay Bolter, Professor of Media and Technology at Georgia Tech, whilst developing the open-source AR app, Argon, invited Kozel, to experiment with the app. in an interdisciplinary digital art project at MEDEA, A Research Lab for Collaborative Media, Design, and Public Engagement at Malmö University. Realizing that AR and Screendance have the potential capture affect in city spaces, Kozel contacted me to collaborate on the project as a Screendance videographer. My task was to research, digitally capture, direct, choreograph and edit affective movement in the cities of Copenhagen and Malmö. Since then, there have been several outcomes using the AR apps Argon and Aurasma: *AffeXity Phases 01 & 02, DansAR 01 & 02* and *AffeXity Passages & Tunnels.* Approximately fifteen collaborators have joined the "scaffolding" and another mini residency is planned for November 2015 [3].

I will discuss the *AffeXity* project, in relation to the notion of affect, the capturing and performance of affect, how it informed the development of *AffeXity,* guided and developed our research, collaborations, choreography, improvisation, video capture, editing and interaction designs. This allowed audiences with networked mobile devices to experience affective Screendance choreographies tagged to images or locations in a city.

By working on the project *AffeXity,* it has become clear to me that it is the search for and the capturation of affect that drives the project forward and holds the “temporal scaffolding” together. Ironically this temporality reflects the elusive nature of affect, and as Kozel notes it is a doing, a verb, a "how to affect" rather than a noun, a thing (Kozel, 2012, p. 92). Affect she claims is all around us, within us, as a presence, a force, and a "passage of forces or intensities, between bodies that may be organic, inorganic, animal, digital or fictional" (Kozel, 2012, p. 75). This description epitomises our collaborations. Despite affects slipperiness, its refusal to be defined, our “temporal scaffoldings” or collaborations were about capturing the non-representational elusive qualities of affect with all our techne and technological savvy. The project led us on a long journey, with many twists and turns, meetups, research teams, tests, failures, experiments, designs, questions, frustrations, and successes. Before describing this journey, I would like to define a few artistic modalities and theories that guided us.

**Screendance**

Screendance, is a genre, spanning dance film, dance video or dance video dance. It is an interdisciplinary art form made for the camera where movement is the primary expressive element in the work rather than dialogue, as found in conventional narrative films or music, for example, in music videos. It explores the crossover of the following arts disciplines: cinematic techniques, video art, choreography, and dance. Dance filmmaker Douglas Rosenberg claims that Screendance is a “recorporealization of dance and technology”, a reinscription of “the body on the corpus of technology” (Rosenberg, 2006, p. 59). This digital body or the “SCREENDANCING (sic) body is a body created by mechanical reproduction, the repetition of physical activity performed while engaged with the camera (-) where the choreographer’s eye and that of the filmmaker” meet (Ibid). This then is a synergy, a co-operation and complements the notion of a “temporal scaffolding”.

**AR - Augmented Reality**

This is an internet and mobile app technology that allows one to superimpose digital media over the real-time view on one’s smartphone camera, thereby augmenting the view with video, animation, or graphics. The AR app uses a tagging system to connect and trigger digital media, archived on the app’s server, tagged to an analogue image or GPS (Global Positioning System) coordinate or geospatial tagging.  The app uses image based or location recognition software and recognises the analogue image or location that you have tagged. It then triggers the digital media previously tagged or connected to that image or location. The looped video overlays are usually around forty to sixty seconds in length.

The viewer needs to download the app Aurasma from the App Store if using iOS or from Google Play if using Android smart devices [4]. Argon is not yet available online for download. The viewer then opens and follows the Channel, in this case, *AffeXity*, and holds their smart mobile device over the tagged image or GPS location. This activates or triggers the layer of media connected to that image or location, and it plays as a layer of media over the real environment also seen on the screen. Here the internet, smart mobile device, app, media and viewer connect for a brief period of time. The media only springs to life when these disparate elements connect, extending the notion of a “temporal scaffolding”, allowing the audience to in a way co-create, to connect and play the tagged augmented media.

***AffeXity***

The word *AffeXity,* is a play on the words *affect* and *a-fixity* in urban spaces. It highlights movement of bodies in cities, affect and urban spaces.

***A-fixity***

This is about the notion of temporality, not fixed; non-permanent. It is movement as encounter, motion as a language and temporality as a constant. In artistic practice it engages, exposes and invites a temporal aesthetic, dialogical encounters within a temporal scaffolding of ideas, techniques, technical skills and outcomes. Its strength lies in interdependence, rhizomatic formation and the evolving agency of co-creators. Kozel explains that *AffeXity* examines the “patterns of relations between people, technologies, and architectures…ebbs and flows of affect…created and sensed by bodies in motion” (AffeXity Blog, accessed 27 June 2015).

***Affect***

Kozel (2013) states that affect is about change and vibrations and is located beyond the domains of logic and reason. It is about intensities in shape, colour and form:

*This passage of intensities is like a vibration or a shimmering, in the sense that shimmering is based on change and is not a static state. Viewed this way, affect might travel through familiar states, but it may also participate in the creation of something that did not exist previously, in what I am somewhat reductively calling ‘change’* (Kozel, 2013, p. 6).

She goes on to say:

*Affective forces need not be forceful, they can be barely detectable shifts in relationality between ourselves and our built environments, or between bodies in urban spaces mediated by technologies exploring a body’s ongoing "immersion in the world’s obstinacies and rhythms"* (Gregg & Seigworth, 2010, cited in Kozel, 2012, p. 76).

**Haptics**

Laura U Marks (2000) states that the hapticis about tactility, the visceral, texture, proximity, contact, touch. They may be extreme close-ups, disturbing the mastery of reading the image, engaging the viewer with the moving image rather than narrative or character.  However, in her book *Carnal Resonances* (1975), media theorist Susanna Paasonen addresses experiences of online porn largely through the notion of affect as intensities of experience, resonances, and ambiguous feelings. According to Paasonen (2011), affect is about carnal responses, immediate and direct bodily sensations, tactility, texture, proximity, touch, and gut responses by viewers. Affects are forces that cut across and connect different bodies when watching online porn and are associated with authentic reactions to amateur video production. The more “homemade” the video is, the more authentic and affective, carnal, and erotic. Special effects and slick production values cause a distancing effect. Both points of view resonated with me and I kept this in mind when capturing and editing the video footage.

**First Research Residency**

In November 2010, I conducted the first residency for the project at the *Laboratorium*, a space for dance research at the Dansehallerne, Copenhagen: the largest centre for contemporary dance in Northern Europe. Here I set about researching the differences and similarities of affect and the haptic, how I would direct, choreograph and capture these in a digital format. This inspired me to experiment with a GoPro, a high-definition action camera, that is strapped to the body, affording a subjective point of view. I danced with it strapped to my body, walked with it on my head, in my hands, swinging it, at Hellerup Beach in Copenhagen, people staring at me as I rolled, stretched, kicking and swiping the cool sand. No, I was not attention seeking, just wanting to find haptic moving images as described by Marks (2000) and Paasonen (2011). I looked at the rushes and found that they were haptic and disorientating and not the affect imagery that I had been looking for. Mostly I was unsatisfied with the subjective point of view that the camera gave me. It was not connected to my centre, was very impressionistic and visceral, concerned with movement rather than affect.

Frustrated, I started using my own handycam and smartphone camera, capturing still images of places and things that I thought resonated with affect. Whilst cycling or walking through the ice-cold November landscape of Copenhagen, I captured stills of frozen leaves shimmering in the snow, my reflection in glass, people walking behind trees in the heavy snow seeming to disappear. Using these reflections, layerings and disappearances, as a means to visually capture what affect may look or feel like, I came to understand that affect is more about intensities and subtleties, than sensations and emotions.

**Early stages: AR app frustrations and migrations, from Argon to Aurasma**

In the early stages we used the open-source AR app Argon, created at Georgia Tech, permitting geospatial tagging of animated figures to appear on iPhones, or iPads, as a layer over the screen of the smart device. Kozel and I wanted this digital layer to be transparent with blurred edges, to create affective experiences for the viewer. We also wanted sliding bars on the app, to effect changes to the transparency of the videos, giving the viewer another sense of agency and co-creation. However, at that point Argon did not cater for digital video material and we quickly realised that this would have to wait for the beta version. The app was also unstable and kept crashing, and even did so when I demonstrated it at *The Art on Wires* Residency in Oslo, 2012.

As the project developed, we hoped that Argon would become more stable, creating opportunities for people around the world to craft their own choreographies and embed their own localities with Screendance, making it a more social choreographic project. We also explored 3D panoramas created by Georgia Tech with “dancing sprites” or animations of dancing female figures, pinned into the 3D space. However, this too kept crashing and the “dancing sprites” did not give us the affective imagery we were looking for. The sprites were far too representational and belonged more to a manga gaming platform. Kozel and I also became increasingly frustrated with the students at Georgia Tech as they were mostly unavailable to make any changes we needed and wanted fees to investigate the use of video in the app.

The other limitation of working with Argon was that Kozel and I wanted a layer of Screendance without the hard edges of the video frame. We needed the edges to be soft, melding into the background so that the dancer would seemingly appear to arise up out of the environment. However, despite our experimentations with a green screen studio shoot and chroma keying, to create this transparent background, the dancer still looked like a "dancing sprite". The footage was also unusable as the choreography and dance movements had not been generated in the city scape itself. We needed to shoot the dancer in the location we were mining for affective experiences. Hence, the movements we captured during the green screen shoot were dislocated and de-contextualised. See video link below: *AffeXity Green Screen Mixed 02.*

By mid 2011, I started researching other AR apps that were freely available but not open source: Layar, Metaio and Aurasma. The latter is the most stable, fast and carries digital video. It also features an online Studio for users to develop channels, providing more control over the media, and so we started using this early 2012. By late 2012 more challenges presented themselves. We had by then, narrowed our focus and concentrated on using Aurasma, yet encountered more problems. We once spent an entire day figuring out what types of trigger images Aurasma "liked" for example. It also became apparent that our idea of creating spaces and affordances for the audience to negotiate to reach tagged locations, was not going to work either, as we quickly learned that the GPS coordinates had a radius range of 50 metres at that time and only one video could be tagged to one GPS coordinate. We then decided to drop the location-based media option in favour of image-based media, tagging images that we had created in relation to the location, or theme of the interaction design.

**Performing affect**

How does one go about performing affect? What do you think, feel, how do you move? I reviewed my MSc Media Arts and Imaging research where I explored the ideas of social theorist writer and philosopher Brian Massumi (2002) and his claim that when we are in motion, we undergo intuitive experiences and interactions with the environment. Here we forego the linguistic models of coding and try to find a “semiotics willing to engage with continuity” (Massumi, 2002, p. 4). It is in this ever-present kinesis, movement and change that we experience things. The body unfolds in its own transition, its own variation supporting philosopher Merleau-Ponty’s idea that this is how we anchor our bodies to the world, expressing and functioning in spaces of ‘muddy, unmediated relatedness’(Gregg and Seigworth, 2010, cited in Kozel, 2012, p. 91). Film theorist Rudolph Arnheim (1957) furthers the idea, claiming that our eyes constantly work in cooperation and connect with the rest of the moving body. A person is always relating to the environment in a state of presence, synthesising, perceiving the experience of objects with the mind and the body or an embodied mind. This approach is dynamic and enactive according to philosopher Alva Noë (2004). Consciousness becomes a combination of “mind with a body, a being which can only get to the truth of things because its body is, as it were, embedded in those things” (Merleau-Ponty, 2005, p. 56).

So, with this knowledge, how does one perform and make this embedded experience conscious, how can one capture in a haptic manner and can one consciously perform affect? How ironic. It’s as if one needs two states of consciousness - one that is intuitively engaging and the other observing this, asking, am I now in it? Am I affecting yet? Am I performing affect? Then suddenly you "feel" it and you feel the flow and it is very liberating. It's as if you breathe with and through the environment.

As a choreographer or director, one needs to call for inner somatic states, sensations, kinaesthetic experiences, memories, speeds, intensities, nuances, submersions, presences, shimmers, unfolding manifestations, synthesis, and interpretations. As an observer and director, one quickly identifies affect, one suddenly also feels it as it passes into you, a sort of hiatus, or a zone**.** Armed with all these notions I had to find a way to elicit somatic or implicit movement or flow from a performer rather than direct it.

**Directing affect**

There are no methods of directing affect, nor formulas. The minute there are, we close "the affective window" of the experiential (Kozel, 2012, p. 82). This applies not only to the performer but also to the one who “directs” and films. It's a state of experiencing that one is trying to achieve without a script, a narrative, or a character reacting. It is not a performance that needs directing, it's an allowing, an invitation, a persuasion. Furthermore, in designing and devising the performances that make up *AffeXity*, Kozel and I felt that we were “less concerned about the physical forms of bodies in urban spaces than the play of intensities radiating from and through people with their devices” (Kozel, 2012, p. 76). Kozelwrote after our first experimental shoot at the Lighthouse in Malmö, in *Phase 02*, where I was learning how to direct and capture effective choreographies: she was trying to feel affect and resonance in the space and asked:

*What is the affective window? It is a combination of impulses from inside and outside: I bend my knees and fall over the railing wanting to dissolve into particles at the same time as turn to water on the stones. There are emotional overtones, but the affective state is more than feeling tired or a little anxious or happy to be outside in the air as the seasons change. I can’t quite capture it, or seem to slide in and out of different affective currents* (Kozel, 2012, p. 82).

I was struggling to direct her as she seemed not to move much (see video link below: *AffeXity: Phase 02 Lighthouse 01*). I was looking through the viewfinder, perhaps directing her experience instead of waiting for it to arrive, to be felt. I quickly learned that this type of performance requires patience. My suggestions for movement based on the choreographic did not fit with the notion of Kozel’s "the affective window" and the more silent I became, the more I let go of any preconceived ideas of what I needed to see in my viewfinder. I let go of the “colouring book method” of making video, drawing the lines first and then colouring them in. With the other method you call for the colours, not the borders, not the lines, just transitions, shades and intensities. Perhaps the movements that appeared here are more about affect. See video link below: *AffeXity Phase 02 Lighthouse 02*.

**Using choreographic scores as direction**

I decided to look at the use of choreographic scores as a means of eliciting movement from a performer as,

“*(s)cores are according to choreographer, Joe Moran, energy forms with multifarious possibilities, non-linear, a means to integrate experience, a reference that is a non- representational carrier of an idea and its realization.* (Cauchet & Invartsen, 2012. p. 10).

Choreographic scores are an interface between ideas and movement, both complete and incomplete simultaneously: they flicker. They compose rather than set movement into action and are ideas for movement that call for the mover to express without producing a clearly “expressed”, represented or signified gesture (Cauchet & Invartsen, 2012). The moving body is invited to express and be understood as something outside a linguistic system, outside of concrete readability.

I tried using affective choreographic scores with dancer Wubkje Kuindersma during the Laboratorium Residency such as “Perform the building, you are the building, the mortar, the lift, the sky.” This elicited affective performances that can be clearly seen in the video clip listed below: *AffeXity Phase 01 #1 Carlsberg.* Here Kuindersma seems to melt into the sky, in the experience of being in the lift. I also think my edit and layered transparency effects amplified the notion of affect. We later shot a series of videos in various locations in Copenhagen and by using more scores I let her "perform" the spaces. Her movements are not exactly minimal, but she understood that she was not “dancing” as such. This is seen in the video clips listed below: *AffeXity Phase 01 #6 Red Wall Dreaming* and *AffeXity Phase 01 #3 Delicate Passage.*

During the green screen studio shoot, Kozel and I worked with dancer Niya Lulcheva, looking to create transparent affective videos. We asked ourselves how to initiate affective flows from her, to find that “window of affect”. This proved difficult in an extremely cold room with a cement floor, and two directors anxiously trying to elicit affective flowing performance in a room that was hired for two hours. I wrote about this experience:

***JG:*** *I am very aware of the task at hand: the desire to capture the affective gestures that the dancer is performing far outweighs the capture of movements or choreographies. I relax, breathe, but I am alert to all the subtle nuances. I try not to think too much or direct too much. This direction is a gentle persuasion. The dancer needs to sniff and tease these out by exploring her somatic connection to the space she is performing in. We do not think of dance, steps, counts, but enchaïnements of affect. There may be a score that is decided upon, something to work on. The dancer and I enter that resonant space. When I feel it is there, I hit the record button* (Ginslov, 2012 cited in Kozel, 2012, p. 81).

*The merging with the environment, spaces or buildings one can imagine oneself occupying, became the central and most evocative means to find the scores within which Niya had to work. She was not in a location but working in a studio in front of a Green Screen. We tasked her to dance as if in a space, a location, a building.*

*At first, she performed and danced from an exteriorized perspective. Her dance was large, projected and danced as if performing on a stage. We needed to guide her into interiority, a subjective presence, in order to get the affect we were looking for.*

*The interiorization of the space she was imagining herself to be in only became obvious and affective when we asked her to blend into the building: not just move in the passageways, the negative spaces, the passageways that we normally occupy and move around in. We asked her rather to move in its echoes, its mortar, its bricks and in its cement.*

*With that, her focus became inward, her dance became affective gestures, traces of memory and echoes of her internal vision. She was “in the zone” in the “vibe” of the place. She no longer had to project outwards, but allowed herself to transpire in the journey, her gestures became the echoes, the mortar became liquid and the building she was in, was in her* (Ibid. pp. 87-88).

See video links in endnote: *AffeXity Green Screen no chroma key 03* and *AffeXity Green Screen Mixed Version*.

**Capturing affect**

My strategy as a Screendance maker has always been to redeploy Rosenberg’s “carnivorous camera” that in the 1980s according to Rosenberg, sexualised the body of the dancer, rendering it as spectacle for mainstream consumption (Rosenberg, 2006, p. 59). My redeployment invites moments and exchanges of affect with the “carnivorous camera 2.0” sniffing, nudging and teasing out the life forces of the moving body just in front of the camera lens. This strategy amplifies what Paasonen calls “carnal resonances” (1975) or Deleuze’s affect images, that “dizzy disappearance of fixed points” (Deleuze, 2005, p. 77). Consequently, the images become liquid, less stable and visceral - what Deleuze (2005) would call melting, boiling and coagulating. The camera needs to tease, sniff and nudge out the haptic and affect. It is here that the Screendance maker needs to be awake, alive, to capture, connect viscerally with the affect being delivered. More often than not the “performance” is improvised. So is the camera work as there is no narrative, just intuition and spontaneous gesture and camera work. It is at this juncture of liminality, between the techne and the live body, that the capturation and amplification of affect takes place. Rosenberg sites this as a ritual, the space between the lens and the dancer becomes alive and intense. The camera then becomes an extension of the filmmaker’s eye, capturing the haptic in an attempt disrupt a viewer’s hegemonic power over objects and closure, allowing the haptic to loosen the reigns of logic most usually found in mainstream linear narrative dance production. Mainly it is about capturing the spontaneous body with a spontaneous camera.

***JG:*** *I remain calm and breathe. I shoot from my centre as if in a contact improvisation with the dancer and the affective gesture. I try not to direct too much, but rather express an allowance to the dancer, an open space in which to explore affect. I can sense it immediately when it is there. All the wires, plastic, glass and metal of the technology melts away* (Ginslov, 2012 cited in Kozel: 2012, 84).

*The shoot becomes very subjective and I am patient. I wait if the affect leaves the dancer or the resonance is not there. I try again to find a somatic connection with what is being captured by the lens. My eye, the lens and my body’s centre always trying to connect with the affective resonances before me. My legs are the tripod. My lens is my eye. My centre is alert and all three are connecting* (Ibid, p. 84).

*This connection is a space that is very particular, a condensed vision of what I really see before me, that is the dancer in the environment. I have to ‘zone in’ on the resonances and ‘zone out’ the environment trying to capture the same intensities and resonances the dancer is sensing. I use my Screendance and choreographic techne subconsciously, allowing it to guide these short moments of intensities. These subjectivities were never discussed but rather moved out in affective gestures and movements, leaving trails, suggestions and a semiotics of ineffability that can only be traced in affective gestures* (Ibid, p. 85).

During these shoots I remembered the *Dogme 95 Rules* set out by Lars von Trier (1995) [5] and his rule of films not being an illusion, capturing reality in a real location. I needed to shoot with the idea of ‘what you see is what you get’ and added ‘what you feel is what you get’ (Kozel, 2012, p. 85). The Screendance genre may then become the perfect medium to capture states of affective poesis. By using a few Dogme rules of shooting, with hand-held shots, extensive use of close-up, disrupting audience expectations of the scenic body, it transcends reality to become “other”. I also use my notion of creating a “hotspot” my own term for a place on the body that resonates with affect. I connect with the movement of the dancer to my centre of gravity, through and with the extension of my eye – the lens of the camera, trying to engage in this relational semiotic of movement rather than the choreographic, narrative or character. It is a somatic experience that engages my sensorial presence. I think of pulling affect through all the layers plastic and metal as well as the physical, location, the intellectual, practice, research, down through the tube of the camera onto the timeline and finally onto Aurasma ready to be geo-tagged, embedded in a location or image and engaged with by a viewer who is also in motion.

**Editing**

The editing process, for me, is about losing the notion of narrative. Rather, layering and repetition is used to amplify the viewer’s responses to changes of feeling, time, and place. The transparency of image, pace and rhythm of the edit needs to match the resonances and affect of the location.

***JG:*** *I need to shape the affect. I need to amplify the affect. I use layers and shots of the dancer in a moving lift, dancing in a stairwell and outside against a building. I layer these takes and make the moving images transparent. I amplify the dancer’s face, her looking sublimely upwards, her hands trying to reach for spaces and moments that are escaping. She seems ethereal, in a dream state. The edit needs to reveal this in a non-linear montage, as if she were in a loop, in a lift forever reaching and moving skyward. She is in the lift, the building, the stairwell, the area outside – the lift, the building, the stairwell and area outside are in her. They merge* (Ginslov, 2102 cited in Kozel, 2012, p. 86).

**Dialogic relational aesthetic vs the utopic object**

AR has the ability to shape choreographic and theatrical formations that have not yet been fully explored. This may challenge the current perception and framing of theatre, dance and choreography. For Laura Kriefman from *Guerilla Dance Project,* augmented dance and theatre “is a specialised and evolving form - where the choreographic language is interrogated not for form or content sake, but in response to the changing stimuli and physical liberties of the technology itself" (Kriefman, 2014). These experiential encounters consequently liberate the choreographic language from more traditional vocabularies and settings as we partake rather than consume. The production and reception of this mediated dance form is dialogical, relational, inter-human and temporal. I feel that *AffeXity* utilizes these ideas and has formed temporal rendez-vous, rather than the viewer gazing upon a utopic or auratic object such as a Henry Moore statue for example.

I was very keen to explore this as were the teams of dance students involved in the project during *DansAR 02*. One of the teams, *The Swedish Meatballs*, decided to hold cardboard tags or wear tags on their bodies and clothes instead of tagging images in various locations.  In this way the tagged images became mobile, coercing the viewer to move along with them as they tried to keep the connection between AR app and image going. This felt and looked like a contact improvisation, a connection between fleshy, digital and augmented technologies. The dancer, tag and viewer moving together to keep the internet and AR connection going. See video links below: *DansAR 02* *Mobile AR Choreographies in STPLN Skate Park*.

Similarly, during the *DansAR 02* collaboration in 2013, Master Computer Science student Ali Arafati created a transparent overlay using the interactive software Kinect. The room itself is tagged and when the video appears in the overlay of the held device, people in the real space may still move within the augmented media. If researched further augmented and live dance may be performed and choreographed in relation to each other. See video link below: *DansAR 02 Kinect AR Overlays*

In *AffeXity: Passages and Tunnels* (2013), audiences were invited to meet at the Nikolais Kunsthal, Copenhagen, early evening when it was dark. Kuindersma performed live within the interaction design created by professor of Media at Medea, Daniel Spikol with special effects rendered by PhD Camilla Ryd. The AR videos seemed almost 3D or holographic, leaping out from the mortar and bricks, the audience huddling in small groups, holding their devices up to the tags with camera torch lights on, creating small bubbles of light in the dark. The scene was very atmospheric, quiet and naive, and the audience gazed at the videos much like children who gaze at the lights during Christmas - in awe. The air seemed thick with affect and resonance. See video link below: *AffeXity: Passages & Tunnels* (2013) at the Re-New Digital Arts Festival, Copenhagen.

**Conclusion**

*AffeXity*'s evolving nature of temporal formations and collaborative scaffoldings, like affect, is an open-ended project. Kozel and I are collaborating again, in November 2015. We hope to migrate back to the Argon app, to explore more possibilities in its beta version. It seems we are not yet done with exploring *affect* and the notion of *a-fixity*. This is why it is so captivating. It invites non-closure, discursive, interhuman and temporal meetings between place, time and people. We will continue exploring the temporal nature of augmented realities and how affect may be captured, digitised and transmitted, creating affective fleshy exchanges across platforms, networks, objects, protocols, bodies, practitioners and technologies - all connecting and belonging to a temporal scaffolding to enable an augmented affective materiality.

**ENDNOTES**

**[1] Collaborators:**

Susan Kozel, Professor of New Media Malmö University responsible for artistic direction, Jeannette Ginslov, the videographer and editor, Professor Jay David Bolter creator of the AR app Argon, Daniel Spikol who works with interaction design, Maria Engberg assistant professor at Malmö University and AR researcher at Georgia Tech, freelance dancers from Copenhagen Wubkje Kuindersma and Niya Lulcheva, dancers from Skånes Dance Theatre, MA & PhD Computer Science Students from Malmö University and Georgia Tech, USA. Organisations have supported the project: MEDEA Collaborative Media Initiative, Skånesdansteater, Det Kongelige Teater, Royal Danish Ballet, Svenska Filminstitutet, Vetenskapsrådet, Dansehallerne and the Danish Arts Council.

**[2] Scaffolding:**

“Scaffolding is widely used during construction and renovation activities. In its simplest form, a scaffold is any temporary elevated or suspended work surface used to support workers and/or materials.”

 [https://ehs.princeton.edu/workplace-construction/construction-safety/scaffolding](%20https%3A//ehs.princeton.edu/workplace-construction/construction-safety/scaffolding) (accessed 27 June 2015)

**[3] *AffeXity* Timeline:**

**20 March 2010** Initialmeeting: Ginslov and Kozel at a café in Copenhagen.

**02 July 2011** Meeting of Kozel and Ginslov, The Royal Café Copenhagen.

**21-27 November 2011 Dance Residency at the Laboratorium: *AffeXity Phase 01***

Dansehallerne, Copenhagen with Kuindersma and Ginslov.

**16 December 2011** ***AffeXity* Phase 01** Premier Event at MEDEA.

**15 Dec 2011 - 21 Jan 2012: *AffeXity* Phase 01** Installation of Videos from the Laboratorium Residency, Dansehallerne Foyer, Copenhagen.

**17 Feb 2012 *AffeXity* Phase 02** Green Screen Shoot and Chroma Key edit at MEDEA, Collaborative Media Initiative, Malmö University, with Ginslov, Kozel & Lulcheva.

**01 Feb-31 March 2012** **Ginslov: Artist in Residence** MEDEA Collaborative Media Initiative, Spring Residency at Malmö University, Sweden.

**14 May 2012** ***MEDEA talks #19*** MEDEA Collaborative Media Initiative, Malmö University, Ginslov presented "Capturing affect with a handful of techne".

**18 February - 01 March 2013 *DansAR 01*** 18-22 Feb with disabled dancers at Skånes Dance Theatre.***DansAR 02*** 25 Feb - 01 March with twenty students from Lund High School, at Skånes Dance Theatre.

**29 October - 03 November 2013 *AffeXity Passages & Tunnels***at the Re-New Digital Arts Festival in Copenhagen. Included Kongelige Teater, Svenska Filminstitutet, Vetenskapsrådet, at Nikolaj Konsthal in Copenhagen.

**03-08 October 2015 *AffeXity Passages & Tunnels*** artistic residency and migration to Argon Beta version in MEDEA Collaborative Media Initiative, at Malmö University, Sweden.

**[4] Aurasma:** <https://www.aurasma.com/>   <https://www.aurasma.com/help-support/>

**[5] Dogme 95** <http://pov.imv.au.dk/Issue_10/section_1/artc1A.html#i1> (accessed 15 September 2015)

1. Shooting must be done on location. Props and sets must not be brought in (if a particular prop is necessary for the story, a location must be chosen where this prop is to be found).
2. The sound must never be produced apart from the images or vice versa. (Music must not be used unless it occurs where the scene is being shot.)
3. The camera must be hand-held. Any movement or immobility attainable in the hand is permitted.
4. The film must be in color. Special lighting is not acceptable. (If there is too little light for exposure the scene must be cut or a single lamp be attached to the camera.)
5. Optical work and filters are forbidden.
6. The film must not contain superficial action. (Murders, weapons, etc. must not occur.)
7. Temporal and geographical alienation are forbidden. (That is to say that the film takes place here and now.)
8. Genre movies are not acceptable.
9. The film format must be Academy 35 mm.
10. The director must not be credited.

**REFERENCES**

Arnheim, R. (a) (1957). *Film as Art.* London: University of California Press.

Bourriaud, N. (2002). English Edition. Relational Aesthetics. Trans. Pleasence, S. & Woods, F. <https://www.lespressesdureel.com/>

Deleuze, G. (2005). 3rd ed. (a) Cinema 1: the movement-image. Trans. by Hugh Tomlinson and Barbara Habberjam. London: The Athlone Press.

Deleuze, G. (2005). 3rd ed. (b) Cinema 2: the time image. Translated by Hugh Tomlinson and Robert Galeta. London: Continuum.

Gregg, M. and Seigworth, G.J. (2010). *The Affect Theory Reader.* Durham & London: Duke University Press.

Marks, L.U. (2000). *The Skin of the Film, Intercultural Cinema, Embodiment, and the Senses.* London: Duke UniversityPress.

Massumi, B. (ed.) (a) (2002). *A shock to thought: expression after Deleuze and Guattari.* London: Routledge.

Massumi, B. (b) (2002). *Parables for the Virtual, Movement, Affect, Sensation.* London: Duke University Press.

Merleau-Ponty, M. (2005). *The World of Perception.* Trans. Davis O., London: Routledge

Noë, A. (2005). *Action in Perception (Representation and Mind).* Cambridge: MIT Press

Paasonen, S. (2011). *Carnal resonances: affect and online pornography.* Cambridge: MIT Press

**Online Documents**

*AffeXity* Blog: <http://affexity.tumblr.com/page/3>

Cauchet, A. and Ingvartsen, M. et al. (eds.) (2012). *everybody’s performance scores.*[www.everybodystoolbox.net](http://www.everybodystoolbox.net/) [Accessed 13 September 2015]

Kozel, S. (2013) *Somatic Materialism or “Is it Possible to do a Phenomenology of Affect?”* Original paper 2013 pp. 01-14. Published in *Site* issue on senses, no.33, 2013. 153-167. [Accessed 13 September 2015]

Kozel, S. (2012) AffeXity: Performing Affect with Augmented Reality(pp.72-97). <http://twentyone.fibreculturejournal.org/fcj-150-affexity-performing-affect-with-augmented-reality/#stha> in:Fritsch, J & Markussen, T. (eds) *Exploring affect in interaction design, interaction-based art and digital art* in. Fibreculture Journal 150 Issue 21, *Exploring Affective Interactions.* Open Humanities Press: <http://twentyone.fibreculturejournal.org/> [Accessed 13 September 2015]

Kriefman, L. (2014) *Augmented Dance.*<http://www.microethology.net/augmented-dance/> (accessed 10 January 2015)

Rosenberg, D. (2006) (a) *Opensource {Videodance} symposium.* Findhorn, Scotland, June 2006. [http://www.videodance.org.uk/](http://www.videodance.org.uk/%20)  [Accessed 02 July 2009]

Rosenberg, D. (2006) (b) Proposing a Theory of Screendance. Cited in *Screendance: The State of the Art Proceedings.* American Dance Festival. Duke University, Durham, Voukon, N.C. (ed.)<http://www.dvpg.net/screendance2006.pdf> (Accessed 01 November 2008)

Sawyer, K. (2006) Instructional Scaffolding <http://pagelous.com/en/pages/5113ee6aa8fe20161d035983> (Accessed 22 September 2015)

**Video Links**

1. P09 *AffeXity Green Screen Mixed 02*<https://youtu.be/0hNKga4d8iw>
2. P12 *AffeXity Phase 02 Lighthouse 01*<https://youtu.be/2Gf7ohn5SY8>
3. P13 *AffeXity Phase 02 Lighthouse 02* [https://youtu.be/RK\_JSKTuFfI.](https://youtu.be/RK_JSKTuFfI)
4. P13 *AffeXity Phase 01 #1 Carlsberg* [https://youtu.be/umlCMJ7Numg](https://youtu.be/umlCMJ7Numg%20%20) .
5. P14 *AffeXity Phase 01 #6 Red Wall Dreaming*:<https://youtu.be/oh5l1r1FEd0>
6. P14 *AffeXity Phase 01 #3 Delicate Passage*<https://youtu.be/aE0fWBuXfoI>
7. P15 *AffeXity Green Screen no chroma key 03*<https://youtu.be/WNKfed8pECQ>
8. P15 *AffeXity Green Screen Mixed Version*<https://youtu.be/NzAJfqthy9U>
9. P18 *DansAR 02* *Mobile AR Choreographies in STPLN Skate Park*: <https://youtu.be/cC-IfbYf0b0>
10. P19 *DansAR 02 Kinect AR Overlays*<https://youtu.be/ZxGW8hMQBvM>.
11. P19 *AffeXity: Passages & Tunnels* <https://youtu.be/41gB7exGZGo>

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