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# Visualising the Invisible': Arts and Science Collaboration

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**Claiming Creativity: Art Education in Cultural Transition  
Columbia College Chicago**

**Initial notes for Visualising the Invisible: Arts and Science Collaboration**

**Theme**

Art, Science & Technology: Unlikely Cohorts

**Submission**

Oral presentation

**Title of Paper**

‘Visualising the Invisible’: Arts and Science Collaboration

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**Institutes:**

Leeds Metropolitan University & University of Salford, UK, Glyndwr University, UK, Bangor University, UK, Wrexham Maelor Academic Unit, UK,

**Brief intro - collaborative presentation from arts / science – Karen, Susan Richard Rob**

**Karen Heald**

- Practise based artist and researcher - ‘Description of Time and Cultures of Sleep’ Contemporary Art and Graphic Design at Leeds Metropolitan University.
- Research at University of Salford within the Contemporary Fine Art Practice & Critical Theory Group focussed on narrative and sensory intelligences - kinaesthetic learning through creative frameworks.
- Media - video and performance, installation works, photography

**Dr Susan Liggett**

- Practicing painter and part time lecturer in Fine Art at Glyndwr University North Wales.
- Sue studied at the Royal Academy of Arts in London and Nottingham Trent University.
- She has an interest in research and completed a PhD with University of Wales in 2008.

**Dr Richard Tranter**

- Dr Richard Tranter, Consultant Psychiatrist and Senior Clinical Lecturer of Medical Sciences at Bangor University and the research department at the Betsi Cadwaladr University Hospital. (Discuss research later when talk about proposed project).

**Prof Rob Poole**

- Professor Rob Poole worked as a clinical psychiatrist for 28 years before taking up his post as Professor of Mental Health at Glyndwr University Wrexham in 2009. (Discuss research later when talk about proposed project).

**Background**

Karen Heald and Susan Liggett are developing concepts of ‘space’ an ‘in-between-ness’ and ‘cyclical time’ from an art and science perspective.

This research explores:

- Julia Kristeva's concept that female subjectivity seems linked to both cyclical time (menstruation/pregnancy/repetition) and monumental time in sense of eternity (motherhood/reproduction/genetic chain)
- 'Psychological resonance,' a particular part of the creative process that conjures up the idea of movement between something experienced (object) and its impact on the individual (subject).

#### **'In-between-ness' and 'cyclical time' from an art/science perspective.**

Karen began exploring Kristeva's notion of the semiotic *chora* as a preverbal space that relates to rhythms, colours and trace, the preverbal infant, the depressive and the psychotic. She became interested in the aspect of the unconscious/subconscious, through working with the patients, exploring maternal/cyclical/monumental time, poetics and the *chora*. Through 'dream films' she creates ambient environments, where the audience is unsure as to whether one is asleep/awake, or even in a state of 'in-between-ness'.

Susan found 'in-between-ness' relates to the stage in the creative process where the artists in her research could not articulate in words exactly what they were intending in their work. The dream state described as occupying 'in-between-ness' could also be akin to 'psychological resonance', the movement between 'sites' or 'states of being', that exists, but are intangible and difficult to articulate. Exploring Winnicott (1994) and Witkin (1974) Liggett suggests that there are three areas of related experience, the subjective, the objective and what Winnicott calls 'potential space'. This 'potential space' Susan sees as having similarities to 'in-between-ness'.

Karen and Susan's work at the Ablett Unit, Betswi Cadwaladr University Health Board only enabled the artist's access to patients who are on/adjusting to medication.

Significant influences include works such as Kristeva's *Revolution in Poetic Language* (1974) and *Women's Time* (1979).

- Karen is exploring the notions of maternal, cyclical, monumental time, poetics and the semiotic *chora*, as defined in her earlier writings.
- One of Kristeva's most important propositions is her idea of the *semiotic*<sup>1</sup> or pre-Oedipal, stage. For Kristeva, the semiotic is closely related to the infantile (pre-mirror) state in both Lacan and Freud.
- It is an emotional force, tied to our instincts, which exists in the fractures and intonations of language rather than in the denotative meanings of words.
- In this sense, the semiotic is opposed to the *symbolic*, or post-Oedipal, stage, which refers to a more denotative mathematical correspondence of words to meaning.
- Kristeva's version of Plato's Chora is taken to mean the feminine *chora*, 'which is roughly the unrepresented place of the mother... like the feminine in general the *chora* is on the side of the material/poetic dimension of language'.
- Kristeva frequently associates the terms *chora* and semiotic reminding us that the *chora* is the space in which the meaning that is produced is semiotic
- A preverbal space that relates to rhythms colours and trace 'of an infant who does not yet know how to use language to refer to objects or of a psychotic who has lost the ability to use language in a properly meaningful way.
- Karen has been interested in this notion and the aspect of the unconscious/subconscious, through her work with the patients at the Ablett Unit.

#### **Poetic and Visual language**

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<sup>1</sup> Kristeva's use of the term *semiotic* here should not be confused with the discipline of semiotics suggested by Ferdinand de Saussure.

Karen has evolved her own poetic visual language that engages with the differences and similarities between painting and film. She creates a language of “painterly video” that communicates difficult and personal issues with subtle, oblique visual stanzas. The work she produces has a real empathy with patients she has worked with.

An example of Karen’s film and photographic work that conveys this is her piece *Tumultuous Whisper* (2004). Here the work deals with the following:

- Artist/director - performing to both sides of the camera
- Relationship - art history, video, photography and painting present in work.
- Initially conceptual, the work explores art/theory yet is also concerned with the graphics of line, colour and form.
- Videos/photographs presented as films, performances and on or through objects - sculptural qualities to the artworks.

Another example of Karen’s video work is *Bird Cage* (2002)

### **Politics of location / Response to site**

Karen’s artwork has evolved out of working both site-specifically and on residencies nationally / internationally. It includes diverse locations – former psychiatric hospital, Germany, Sleep Research Centre, Belgium / Buddhist temple and Capsule hotels in Japan. It also includes staged ephemeral events, recorded and evidenced by documentation and responds to site via sound and the visual.

Karen had a residency at Charleroi University Hospital CHU (2004). Here she:

- Worked collaboratively with a variety of professionals.
- Developed her interdisciplinary practice over the past few years.
- Instigated collaborations with diverse practitioners such as glass artist Chris Bird-Jones and installation artist Elizia Volkmann
- Also worked with non-arts professionals, for example scientists and medical doctors such as Dr Myriam Kerkoffs, sociologist Dr Jenny Hislop and a variety of other academics.
- A significant part of her research for the last seven years has explored and included Arts and Science collaboration.

Karen work explores the theme of women’s sleep, time and location and a good example of where this can be seen is in her installation of *Takeko/Mobium* (2007). Her practice-based research adds to the discourse of women’s sleep, time and location. She responds to the unforeseen, placing herself, and the camera, in different places. Within her work, the interweaving of eclectic concepts, is the basis of her practice

### **Sleep diaries**

For Kristeva - the speaking being becomes a crucial assemblage for comprehending, oral/written literature, politics/national identity, sexuality, culture and nature. The complexity of Kristeva’s theories, in particular, the *chora*<sup>2</sup> challenges the work because ‘it is not, strictly speaking, representable’.<sup>3</sup> Constituting imagery and imagination, it is surreal, being barely imagined. This is one reason why much of Kristeva’s work focuses on the ‘borderline’ patients who frequent psychoanalysis’ couches.

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<sup>2</sup> A kind of place, or receptacle.

<sup>3</sup>What may be represented, conceptualized, thought of, imagined, made clear and explicit, and is above all a product of regimentation and order, is part of the symbolic order or simply, the symbolic. The ego and its narcissism are part of the symbolic’. John Lechte *Julia Kristeva* Routledge, 1990 p.128.

#### Quote

*the speaking being is a 'strange fold' between them all – a place where inner drives are discharged into language, where sexuality interplays with thought, where the body and culture meet<sup>4</sup>.*

#### **Stiwdio Safle Award and The Ablett Unit**

Karen was Artist in Residence at the Ablett Unit, Betswi Cadwaladr University Health Board as part of Stiwdio Safle's nine-month programme funded by Safle and the NHS from March 2009 until Jan 2010.

She initially devised a diverse six-week rolling workshop programme, which included, drawing, painting, creative writing, pinhole photography, video/sound and film screenings.

As part of the Stiwdio Safle award she invited Dr Susan Liggett<sup>5</sup>, Artist and Senior Lecturer in Fine Art at Glyndwr University, Wrexham, to take part and co-facilitate the painting workshops at the Ablett. Jaime Kelly also helped out as an art student and mentee and provided support throughout the project.

#### **Psychological Resonance**

Susan has researched in some depth her own creative process and that of 4 other contemporary British painters. Used the term 'psychological resonance' in relationship to the creative processes she has explored and is keen to apply it now to research in other contexts. Working with Karen at the Ablett Unit gave her this opportunity. The term 'psychological resonance' suggests a sensation, a resonance, or an echo in the mind, that cannot easily be described verbally, on seeing and experiencing a particular place. Thoughts and feelings are generated in the mind, which are sometimes difficult to articulate. The problems arising from recognizing, defining and categorizing these emotions and feelings and how are they explored by artists and patients in their artwork are of interest Susan.

- 'Psychological resonance' is the metaphoric vibration resulting from an inner dialogue between 'subject' and 'object' in a 'ceaseless exchange' between the artist or in this case the patient, inspiration and the audience for the art work.
- 'psychological resonance' as a notion oscillates between the objective and the subjective world, it is intangible and difficult to articulate and relates to my ideas regarding the preverbal and Kristeva's concept of the *Chora*.
- Through her exploration of the term psychological resonance Sue has devised a conceptual framework for the creative process that we used to initiate the painting workshops with the patients at the Ablett Unit.

#### **Conceptual framework for Creativity used when initiating the workshops**

- The creative process begins with a stimulus. This is something causing a creative psychological or physiological response.
- The stimulus was important when initiating the painting workshops so we needed to find something that excited the patients and activated their imagination.

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<sup>4</sup> McAfee N *Julia Kristeva* Critical Thinkers, Routledge, London, UK, 2004.

<sup>5</sup> Susan's paintings are idiosyncratic and highly intuitive with the texture, transparency, and opacity of the paint surface carefully considered. She has in her work a ritualised and highly emotional engagement with the physicality of paint, based on an interest in the notion of 'psychological resonance' and its relation to creativity. Through her PhD research she has explored the creative processes of 5 contemporary British painters and identified a dynamic interaction or 'psychological resonance' between various elements of their creative processes which was at its height when the artists were engaged in immersive painting systems. She has taken findings from this research to explore new territory with the patient's work at the Ablett Unit and working collaboratively with me.

- We decided to provide them with a huge range of pure raw pigments that are incredibly intense in colour so that they could choose from them and then we showed them how to make egg tempera paint. We provided small boards primed with gesso for the patients so they could work quickly and on many board in one session if they wanted to.
- An impulse which is an ‘energy’, which is generated by an experience of the stimulus. It can be an urge to pick up a paint brush or do something creative.
- Patients benefit from an increase in physical activity generated by this impulse to create something. It gave them the opportunity to express themselves which in turn increased their self esteem. Focussing their mind on something else also helped alleviate stress and anxiety for them.
- Exploration of media is the part of the creative process that involves playing around with materials
- The patients grappled with paint and worked impulsively to produce some fascinating paintings that they often dismissed and felt frustrated with. This is no different from the experience of a professional artist making paintings.
- The Production of artworks involves giving an idea, or concept, a material presence or physical being.
- Patients became lost, or ‘immersed’ in their work, they usually lost all sense of time, and, in some instances, sight of their original intentions. This happened only when they were enjoying themselves.
- Psychological resonance’ reverberates between the ‘subject’ and ‘object’ in a ‘ceaseless exchange’ between the artist, inspiration and the viewer.

### **The Poetic**

Susan and Karen are interested in the poetic. The poetic has a resonance, it awakens something within us that has lain dormant.

“Creativity is the result of inner listening, a dialogue between self and other, ‘subject’ and ‘object’. Therefore knowledge of reality or meaning does not lie in the ‘subject’ or the ‘object’, but the dynamic flow between them.”<sup>6</sup>

The first collaborative artwork Karen and Susan made was a short film piece *The Artists Creation (II)* 2008.

### **The Patients work**

During the residency Karen and Susan have worked with both patients and staff at the hospital as well as pursuing our own research. In addition to delivering the workshop sessions we also invited interested patients and staff to keep written, audio and visual diaries to explore ideas of time, dreams and sleep. The workshops included drawing, painting, pinhole camera work, creative writing, film making and film screening. Drawing workshops included drawing in response to sound and trips for example the local church and the painting workshops used discussions of dreams and creative writing as a starting point. Working with the patient’s experiences we have observed within their work, rhythms, colours and trace, found predominantly within their drawings, paintings and pinhole camera work.

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<sup>6</sup> Bohm, D. (1987) *Science, Order and Creativity*, Bantam

- The current funded project at BCU HB has allowed Karen the time and opportunity to meet and converse with various patients, artists and staff
- The patients suffer from a variety of illnesses such as depression, postnatal depression, bi-polar and psychosis.
- This residency has allowed Karen to explore art and science collaborations and notions of in-between-ness.
- In Karen's case, the idea of in-between-ness is derived from both the patient's experiences of depression and the simultaneous states of mind often featured in psychosis.
- There were both therapeutic and collaborative elements in the production and editing of these art works.

For the patients what they have been unable to articulate in the spoken word they have expressed through their use of colour and within their sleep diaries, where the use of creative writing has played a part.

### **The patient's paintings**

- When painting the patients 'face and overcome' their fears as they confront problems, or difficulties in their artwork.
- To be creative is to reconcile emotional disturbances brought about by the conflict between our subjective experiences, how we feel about things and how things really are in the cold light of day, in the outside world of objective experiences.
- Ultimately if engaging in making art can for a even a second help the patients to see the world afresh, and perhaps change their judgement on the world momentarily then it has in my mind succeeded.

Quote:

"an inner state that is so unlike any other, that the daydream transports the dreamer outside the immediate world to a world that bears the mark of infinity...."

...One might say that immensity is a philosophical category of daydream. Daydream undoubtedly feeds on all kinds of sights, but through a sort of natural inclination, it contemplates grandeur. And this contemplation produces an attitude that is so special, an inner state that is so unlike any other, that the daydream transports the dreamer outside the immediate world to a world that bears the mark of infinity"<sup>7</sup>.

### **Working with patient's dreams**

The development of the dream element alludes to another 'space' and this was something Karen and Susan encouraged the patients to explore in their artwork.

- Dreams are experienced during sleep and remembered upon waking. These dreaming/waking states alternate and mingle. There are also moments during the night when we are awake or in semi-conscious states such as during insomnia.
- Through 'dream films' Karen creates ambient environments, where the audience is unsure as to whether one is asleep, awake, or even in a state of 'in-between-ness'.
- Susan found 'in-between-ness' relates to the stage in the creative process where the artists in her research could not articulate in words exactly what they were intending in their work.

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<sup>7</sup> Gaston Bachelard *The Poetics of Space* (1958)

- The dream state described as occupying 'in-between-ness' could also be akin to 'psychological resonance', the movement between 'sites' or 'states of being', that exists, but are intangible and difficult to articulate.
- Exploring Winnicott (1994) and Witkin (1974) Sue suggests that there are three areas of related experience, the subjective, the objective and what Winnicott calls 'potential space'. This 'potential space' Sue sees as having similarities to 'in-between-ness'.

### ***The White Film (2009)***

*The White Film* (2009) is a collaborative work that Karen and Susan worked on at the start of the Ablett Residency in response to their experience of working with mental health patients.

- Karen is engaged with the visual form of the triptych in both video and photography.
- The slowing down of the videos, besides referencing time, also draws out its poetics, a technique that, Karen, along with artists such as Pipilotti Rist in *Sip My Ocean* (1996) and Bill Viola's, *Hatsu-Yume: First Dream* (1981), have repeatedly been drawn to.
- This dream like quality invites the audience to enter simultaneous time zones.

### **Further Collaborative work Karen has made with patients**

The image of the yellow truck is the view from Karen's studio at the Ablett unit was a stationary small yellow electric truck that was used to transport the hospital laundry. Karen made a video piece in response to one of the patients experiences called *She couldn't recollect so we filled her with memories* (2010). Karen was moved to make the film whilst talking to a patient who had no memories since the age of 0 – 20 years because of the ECT treatment she had received. She used the yellow truck as a metaphor for this patient and during a performance ritualistically carefully folds many white sheets and fills the truck with them.

The image of the ballet shoes is from a short film called *She dreamed of...*(2010) of a performance by a patient in the Ablett Unit. The patient dreamt of becoming well enough to dance again. This film is going to be exhibited alongside other films in which we aim create an installations space to display the work. This film will be screened on a medial screen like the ones used to screen the beds on a hospital ward. The plastic fabric of the screens allows the images to be viewed simultaneously from both sides.

### **Dissemination of Work**

Karen and Susan are exhibiting the work created by themselves and the patient at the Ablett Unit as part of the Science Festival at the Durber Gallery, Glyndwr University in July 2010. Karen is also constructing a web site to creatively display the work and the research that has arisen from her work with the patients.

- At some stage in the creative process an artwork must be evaluated objectively through critical reflection
- Self-reflection also happens here and the patients were given the opportunity for supportive social contact when discussing their work.
- A true critical reflection can only be made through the experience of exhibiting artworks and this is why we feel it is important to have an exhibition of the patients work.

- The outcomes of our current work at the Ablett has resulted in two research papers, one of which was delivered at the European Sociological Association (ESA) conference in Lisbon<sup>8</sup> in September 2009.

### **Introduction to the new project with Dr Richard Tranter and Prof. Rob Poole**

Karen's work at the Ablett Unit included inspiring dialogues with Dr Tranter which excited her to the potential of a new collaboration. In September 2009, building upon the work being completed at the Ablett Karen applied for a Research and Development fund from Safle to collaborate with Dr Tranter. The nine-month residency at the Ablett, concluded in December 2009 and she would relish the opportunity to develop this unique research further. She is excited about the potential and energy for this collaboration and would like to capitalise on this to drive the research forward.

Our innovative collaboration would push the boundaries associated with mental health issues. The opportunity would enable Karen and Susan to creatively respond Richard and Rob's ground-breaking research and will build on the success of the residency. The proposal to Safle was successful, and, we have now been joined by Susan and Professor Rob Poole, in applying for match funding.

The match funding bid is entitled '*In-between-ness*'. It aims to use art to capture changes to the self during antidepressant treatment', as collaborators we are proposing new perspectives into the effects of anti-depressant medications. Building upon the work being completed at the psychiatric unit and in collaboration with Dr Richard Tranter, consultant psychiatrist, Prof. Rob Poole, Professor of Mental Health and GP surgeries, Heald and Liggett are proposing new perspectives into the effects of anti-depressant medication

### Background to new research

- Scientists know that antidepressants subtly alter the way people perceive emotional stimuli around them, altering people's social behavior's, on a level that people are not consciously aware of.
- Through arts/science research the collaborators are interested to explore if patient changes are reflected in the way people express themselves and respond to their environment, prior, during and post antidepressant medication.
- Dr Richard Tranter is currently principal investigator on a HTA funded clinical trial examining folic acid augmentation of antidepressant treatment.
- He is linked into various large scale research projects in the field of affective disorders and psychosis, and is keen to extend his PhD work on the psychological and social effects of antidepressants through questioning how processes of constructions, experience and reality, of ourselves, can be influenced through medication.
- Prof Rob Poole is a social psychiatrist who is interested in disadvantaged populations and the relationship between social inequality and severe mental illness, and the relationship between mental illness and creativity.
- Scientists know that antidepressants subtly alter the way people perceive emotional stimuli around them, altering people's social behavior's, on a level that people are not consciously aware of<sup>9</sup>.
- We are therefore discussing using this approach to be incorporated into some of the before and after medication type studies that Betsi Cadwaladr University Health

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<sup>8</sup> The title of the paper was *Artist Residency: Psychiatric Unit*, authors Karen Heald and Dr Susan Liggett

<sup>9</sup> Dr Tranter's PhD research examined responses to antidepressant treatment. One outcome from this research was replicating findings from healthy volunteer studies conducted by Catherine Harmer's group in Oxford that antidepressants alter emotional processing, in this case how people recognise facial expressions of emotion. *Journal of Affective Disorders, The effect of serotonergic and noradrenergic antidepressants on face emotion processing in depressed patients* - Richard Tranter, Diana Bell, Petra Gutting, Catherine Harmer, David Healy, Ian M. Anderson

Board have previously completed, and which could make for a really interesting project.

- Along similar lines, Ilina Singh from the London School of Economics did some work in the past around how taking drugs for ADHD affected children's sense of their own identity and authenticity...i.e. who was their authentic self, the medicated person or the non-medicated person.
- These are ideas that would also be very applicable to antidepressant study. Through arts and science research we are therefore interested to explore if patient changes are reflected in the way people express themselves and respond to their environment, prior, during and post antidepressant medication.

The collaborative arts/science practice will explore these interests through creative, patient lead, artistic expressions of change alongside conventional, reductionist measures of changing depressive symptoms (Beck Depression Inventory) producing sophisticated fusions of art/science.

### **The difference between this research and the current project at the Ablett**

Work at the Ablett has only allowed us access to patients who are on or adjusting to medication. This proposal will build upon and add to the work being completed at the Ablett. This research and development will ultimately produce a more complex and sophisticated set of artworks, which will sensitively address complicated issues of 'truth', self and identity. In considering how to develop the residency Karen and Susan will amalgamate imagery and text, incorporating live performances consisting of projected films and self-composed recited text.

### **Possible statements/questions for discussion?**

- How does creativity relate to mental health and how does a search for the poetic help mental health patients?
- What are the benefits of art/science research projects and how can artists make a difference to social science qualitative research projects?
- How do we construct our reality? Can this process be manipulated through medications? If so, what are the implications for the authenticity of self for someone who has had such treatment?