The Visual Image and the Future of the Medical Humanities
Open Gates Conference Center, University of Texas Medical Branch
Galveston, Texas
May 9 & 10, 2014
On the cover:

Read Line 1. Linoleum block print. 2014.

The artist's and clinician's craft begins with the eye. For The Visual Image and the Future of the Medical Humanities conference, I wanted to make a print that begins with the eye and ends with the practice of the medical humanities.

The Visual Image:

To read line one in this print, like reading a Snellen chart in the doctor's office, the brain turns the eye image into a word "I", in the context of U Me We. This simple flip involves a vast neural network that moves the image from retina through the brain to the occipital cortex where it is interpreted. While the back of the brain is processing the visual information, the frontal brain is searching memory for what these images and words might mean. How this all works, has been the subject of research and controversy in philosophy, psychology, cognitive science and neuroscience.

The Medical Humanities:

At the IMH in Galveston, the medical humanities are practiced in a reflective way, moving beyond the self, the patient, the ethical dilemma, into the larger context of human values which are embedded in a historical, cultural and medical context. I tried to represent this reflective practice in this print. "I" look at your two eyes "U", while my eyes "ME", look back out through the pupil to the many "WE". The clinical encounter often follows this reflective form - I U ME WE.

Eric Avery, MD
www.docart.com

Back cover:

Line art collage and drawing

This is a mock up of the idea for Read Line 1. It was turned over and traced in reverse, onto a piece of linoleum. The traced image was redrawn in black ink. Using a V gouge, the black lines were cut away on the linoleum. Black ink was rolled onto the linoleum block and hand made Japanese Hosho paper was placed on the inked cut block. Using a wooden spoon, the paper is rubbed to make the white line linoleum block print shown on the front cover. The final printing returns the image to read right.
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- Transportation to Airport 18
Welcome, Acknowledgements & Background:

Welcome to Texas, welcome to Galveston, welcome to UTMB and most of all, welcome to the Visual Image Conference! We are very glad that you are here and expect that over the next couple of days we will share a number of significant moments thinking, discussing and sharing our ideas about the future role of images in the Medical Humanities.

We would not be here this weekend without the support of the faculty, staff, and graduate students in The Institute for the Medical Humanities at UTMB. Particularly we thank the Director, Dr. Howard Brody for his enthusiasm for the project throughout the process. Beverly Claussen has been instrumental in the planning, development and organization of nearly all aspects of the conference, her skills and attention to detail have been invaluable! A special salutation to the IMH Visiting Scholars, past and present, who have contributed their ideas and talents at various levels over the past couple of years, to bring this meeting into focus. We want to especially welcome and thank Karen Fleming, Director of The Research Institute for Art and Design at the University of Ulster, Belfast, Northern Ireland for her support of Dr. Wright’s contributions as well as the talents of her colleagues who designed the Conference Catalog. Without the internet, a similar international collaboration would have been impossible; we are indebted to your group’s creativity and production standards for helping to create a memorable publication and meeting. Our regional colleagues at The Honors College, University of Houston, have played a fundamental role in developing the conference concept and providing a variety of talent to the mix. Thank you Dr. William Monroe, Dean of the Honors College at the University of Houston, for lending such extraordinary resources to make this conference possible.

Initially the concept for this conference was born after long conversations among Visiting Scholars Dr. Paula Summerly and Dr. Terry Wright, with various IMH faculty and colleagues about situating visuals within a discipline that has been principally text driven. We wanted to find a way to highlight the role images play, as a singular expression of humanness, as well as compliment and supplement to textual definitions. Doing so challenges our thinking about how images impact what it means to be human, (e.g. as the analog self becomes digitized or post-human), and we continue to see ourselves in them, no matter the media in which they are made.

With that in mind we developed a call for papers, and not knowing what to expect, sent it out for comment and response. Initially, we received countless inquiries, and then nearly 50 abstracts arrived from around the world, which underwent a blind review selection process. The breadth and scope of these abstracts can be found in the Visual Image Catalog, which commemorates this meeting, and further highlights an outstanding group of ideas, rarely brought together. We wish to thank all who submitted, for taking a chance on this unknown meeting and offering your perspectives about what the future holds for images in the Medical Humanities. We feel the presentations made over these two days represent the diversity of relevant work that is taking place across disciplines, and furthermore recognize that more than anything else, these projects are to spur our thinking about new ideas, directions and collaborations.

Jerome Crowder, PhD (IMH)

Terence Wright, PhD (RIAD)

Daniel Price, PhD (HC-UH)
The Visual Image and The Future of the Medical Humanities
Conference Program

Thursday, May 8, 2014

Welcome Reception
6:00p – 8:00p  Tremont Hotel — Samuel May Williams Room
(Following lecture by Dr. Richard Fish in Ann Milligan Gray Rm)

Friday, May 9, 2014

7:30a – 8:30a  Registration / Breakfast
Open Gates Conference Center, 25th & Broadway

8:30a – 9:00a  Conference Opens / Welcome
Comments by Drs. Jerome Crowder, Terence Wright & Dan Price
Comments by Dr. David Niesel, Dean, The Graduate School of Biomedical Sciences, UTMB

9:00a  PANEL ONE: PHYSICIANS — ARTS & PATIENTS

9:00a – 9:40a  Mia Djulbegovic, MSIII & Amanda Holup, MA
Reflections on Medical School: Visual and Verbal Insights
School of Medicine, University of South Florida

9:40a – 10:20a  Eric Avery, MD
Among Other Things, Art
Associate Professor Emeritus, The Institute for the Medical Humanities, UTMB

10:20a – 10:30a  Coffee Break

10:30a – 11:10a  Kirsten Ostherr, PhD, MPH
Co-Creation for Doctors and Patients: Celluloid Lessons for the Digital Age
Department of English, Rice University

11:10a – 11:50a  Sandra Bertman, PhD, FT
Aging, Alzheimer’s & the Human Spirit: Images, Insights & Interventions
from the Arts
National Center for Death Education

11:50a – 12:00p  PANEL DISCUSSION
Led by Richard Armstrong, PhD
Honors College, University of Houston

12:00p – 1:00p  L U N C H
1:00p   PANEL TWO: IMAGING — TECHNOLOGY & THE BODY

1:00p – 1:40p   Leonard Grant, MA
Dialogic Possibilities of fMRI
Rhetoric & Writing Program, Virginia Tech

1:40p – 2:20p   Valerie Gray Hardcastle, PhD
Brain Images in the Court Room: Pretty Pictures of the Guilty or the Innocent?
Departments of Philosophy, Psychology, and Psychiatry & Behavioral Neuroscience
University of Cincinnati

2:20p – 2:30p   Coffee Break

2:30p – 3:10p   Fionagh Thomson, PhD & John McGhee, PhD
The Claude Glass: The Role of the Transparent Body During the Consultation
School of Geography & Sustainable Development
University of St. Andrews, Scotland

3:10p – 3:50p   Nina Samuel, PhD
Biological Knowledge at the Threshold of a Media Shift
Center for Literary and Cultural Research, Berlin

3:50p – 4:00p   PANEL DISCUSSION
Led by Frances Rapport, PhD. Patient, Population, Health & Informatics,
College of Medicine, Swansea University, Wales, UK

4:00p – 5:00p   SUMMARY SESSION: REFLECTIONS, COLLABORATIONS & the FUTURE

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SATURDAY, MAY 10, 2014

8:00a – 9:00a   Breakfast
Open Gates Conference Center, 25th & Broadway

9:00a   PANEL THREE: THE SELF — MEDIA & OTHERS

9:00a – 9:40a   José Alaniz, PhD
Patient Agonistes: Nancy Andrews’ Transmedial ‘Delirium’ of Form
Department of Slavic Languages and Literatures, University of Washington

9:40a – 10:20a   Sally B. Shigley, PhD & Lauren Fowler, PhD
Visualization and the Empathic Response: The Use of Movies and Literature
to Foster Empathy
Weber State University

10:20a – 10:30a   Coffee Break
10:30 – 11:10  **Olivia Banner, PhD**  
*Visualizing the Face of Mastectomies*
Rice University & Medical Futures Lab

11:10a – 11:50a  **Margaret MacDonald, PhD**  
*Visual Imagery in Global Campaigns to Reduce Maternal Mortality*
Department of Anthropology, York University, Toronto, CA

11:50a – 12:00p  **PANEL DISCUSSION**  
Led by, **Karen Fleming**.
Director of Research Institute of Art and Design
University of Ulster, Belfast, Northern Ireland.

12:00p – 1:00p  **LUNCH**

1:00p  **PANEL FOUR: VISUALIZATION – PRESENT & FUTURE**

1:00p – 1:30p  Introduction of the **Image Guidance** Project in the Image, *Knowledge Gestaltung*  
Lab Cluster of Excellence, Humbolt Universität zu Berlin

1:30p – 2:10p  **Moritz Queisner, PhD**  
*The Medical Image between Vision and Visualization*  
Image Knowledge Gestaltung, Cluster of Excellence, Humboldt-Universität zu Berlin

2:10p – 2:50p  **Kathrin Friedrich, PhD**  
*The Future is Now: The ‘Sightcraft’ and Digital Materiality of Radiation Oncology*  
Image Knowledge Gestaltung, Cluster of Excellence, Humboldt-Universität zu Berlin

2:50p – 3:30p  **Anna Roethe, MD, MA**  
*Talking Images: Visual Epistemic and Epistemic Shifts in 20th-Century Medical Imaging*  
Image Knowledge Gestaltung, Cluster of Excellence, Humboldt-Universität zu Berlin

3:30p – 3:45p  **PANEL DISCUSSION**  
Led by **Susan McCammon, MFA, MD**  
Department of Otolaryngology – Head and Neck Surgery, UTMB

3:45p – 4:45p  **OVERVIEW of CONFERENCE, SUMMARY THOUGHTS, PLANNING for 2015**

6:00p – 8:30p  **DINNER** at Fisherman’s Wharf (registration required)
José Alaniz, PhD
Patient Agonistes: Nancy Andrews’ Transmedial ‘Delirium’ of Form

In 2005, the artist and filmmaker Nancy Andrews underwent a complicated surgical procedure. She then spent two weeks in the ICU, suffering drug-induced delirium and, after her discharge, post-traumatic stress disorder, cognitive issues, depression and other problems. A number of her experimental film and comics works, such as Delirious (2012) and On a Phantom Limb (2009), address her difficult recovery and mind-altering after-effects of the operation. The proposed paper examines Andrews’ representation (and struggles to represent) the experience and its lingering psychological traces for how her work reflects current discourses on neurodiversity and cognitive difference and how it pushes transmedial artistic form to extremes. I argue that Andrews’ experiments with conventional comics/film form resonate with her own altered consciousness after the trauma of her ICU delirium, as well as her efforts to come to terms with a new mental reality. Combining Comics Studies, Film Studies and Disability Studies, the proposed paper (part of a longer study on disability in alternative comics) resonates with the conference theme “The Patient’s Self-image.”

Eric Avery, MD
Among Other Things, Art

In the 1970s, The Institute for Human Values funded five "dialogues between the disciplines" designed to examine the intersections of the humanities and medicine and medical education. The Visual Arts and Medicine Dialogue Group began meeting in 1976. I was one of two artist physicians invited to participate.

At the time, there was growing concern that medicine would become "the paradigm of a technocratic anti-humanism, in which man himself becomes an abstraction". The turn to the humanities might counter this dehumanization. Visual art was the least charted of the new medical humanities. I will ground my presentation in this history and review our discussions about the instrumental and intrinsic values of visual art to medical education. As part of my dialogue with the group, I began to make images in the liminal space between art and medicine.

Thirty eight years later, sitting in front of the Electronic Medical Record, or utilizing imaging technologies which make patient narratives almost superfluous, one might ask if the visual medical narrative has become the doppelgänger of medical dehumanization?

As we ask again about the visual image and the future of the medical humanities, the use of art and art making by medical students is increasingly used to develop the intelligent eye, and as a reflective interpretative project believed to foster reflection, creativity, and humanistic values in medicine. This move of art into medicine is accepted pedagogical practice.

My research project within the medical humanities is related but in the mirror direction. I moved my medical practice into the protected aesthetic spaces of art museums and galleries, trying to fuse horizons and use the subversive potential of art to educate, change culture, and nurture a community of understanding.
For my presentation, I will show two of my art medicine actions: "Healing Before Art: Public HIV Blood Testing" at the Contemporary Art Museum, Houston and Mary Ryan Gallery, New York City in 1994; and LIVER DIE A Print Action for Health - Hepatitis C at the Corcoran Gallery of Art, Washington DC in 1995. Negative curatorial response to my art/medicine actions was a déja vu of medicine's early barriers to the medical humanities. In the increasingly visual practice of medicine, fluidity between disciplinary boundaries will be needed to define the new visual medical humanities.

Olivia Banner, PhD

*Visualizing the Face of Mastectomies*

This paper examines recent breast cancer art in order to consider the politics inscribed in the standard practice of illustrating the breast cancer case through the close-up on the chest. Two of these artworks are explicitly resistant: one, a body-painting project, went viral on the Internet and was banned on Facebook, which led to heated controversy; the other, an art installation by two cancer patients, one lesbian and the other transgender, challenges the heteronormativity of medicine’s treatment of the breast cancer patient. I contrast these resistant visualizations to the presentation of breasts within oncology journals, which typically mark out only the chest as a relevant space for the gaze. Although the absence of the face is framed in medical discourse as an issue of patient privacy, in resistant artwork such practice is seen to implicitly construct the breast as an object, supporting a broader structuring of the gaze as heteronormative and objectifying. The artworks and the controversies they have provoked suggest that such a gaze is supported by visualization and narrative practices that divorce the breast from the face and the person from the broader social context. Finally, I examine what a seminal text for medical humanities, Audre Lorde’s *Cancer Journals*, and the readings it has generated in medical humanities might suggest for medical humanities methods and visual culture.

Sandra Bertman, PhD, FT

*Ageing, Alzheimer’s & the Human Spirit: Images, Insights & Interventions from the Arts*

The arts wash from the soul the dust of everyday life. Each of us needs periodic re-inspiration to invigorate our imaginations and spirits. A painting, poem, lyric, cartoon may be just the prod to shake us out of the ruts of ordinary perception to approach suffering and the unbearable in fresh and strangely bracing ways. Synthesizing visual, literary, [fine] and creative arts, this presentation illuminates traditional and contemporary images—serious and humorous—of the joys and strains of aging, and more specifically, the fears and hopes regarding Alzheimer’s disease, end-of-life and bereavement. A variety of techniques and resources readily accessible and easily adaptable to engage areas of the brain that help reawaken identity, dignity, connection and hope for people with Alzheimer’s, chronic, serious or life-limiting illness and for those who care for them will be demonstrated. “See one. Do one. USE ONE.” Participants will be armed with insight, resources and techniques immediately adaptable to their own clinical and educational settings, and hopefully, with reconnection to the creativity, renewal and joy in their chosen work. A seven-minute multimedia epilogue, “Reflections on Wholeness” invites us to be in community: to reflect on and honor our own vulnerabilities and foibles as well as the suffering and humanity of those we serve in both our professional and personal lives.
Mia Djulbegovic, MSIII & Amanda Holup, MA
Reflections on Medical School: Visual and Verbal Insights


From the perspective of most of us attending this conference, the above statement provides a strong critique of the not-too-distant past; it makes us glad that we are in medical school NOW.

Although medical students are still required to study and memorize information presented in lecture/traditional texts, most are not assigned required humanities courses that parallel the basic sciences. The inclusion of stories via poetry, literature, and various forms of art allows students to move beyond the absolutes in search of ambiguities, complexities, and nuances found in patients, families, and themselves. Our e-book project illustrates the story of medical students as they progress through four years of study. Using a collection of visual and verbal responses from medical students over the last 20 years, this e-book explores themes that complement and enhance the traditional medical curriculum. Topics range from subjects commonly discussed in anatomy and cadaver lab (i.e., the foot or heart) to a student’s emotional response on the first day of school, the anxiety of preparing for the board exam, and his or her response to death after reading The Death of Ivan Ilyich. The artwork, whether simple or sophisticated, reveals subjective perspectives about relationships, challenges, interests, and fear during the four years of training. Ultimately, the e-book is a story of the medical student’s unending journey, one that begins with medical school.

Kathrin Friedrich, PhD
Image Knowledge Gestaltung: An Interdisciplinary Laboratory

The future is now: the ‘sightcraft’ and digital materiality of radiation oncology creating and using digital visualizations is a sine qua non of radiation cancer therapy. Tumor detection is for the most part effected solely by applying imaging techniques because histological samples cannot be assayed. Additionally, digital visualizations become the keyhole for treating patients with radiation, since the overlay of pre- and intra-operative images guides the beam of the linear accelerator. Hence, visualizations acquired by diagnostic imaging technologies guide the process of detecting tumors, planning treatments and finally carrying out radiation. This need to rely on digital images to diagnose, plan and provide treatment challenges the visual expertise of physicians and technical staff. Understanding the epistemic and pragmatic impact of images as well as the different instances of visual knowing requires a theoretical concept that focuses on the relations between visual expertise, the patient, multiple imaging techniques, aesthetics, and interactional visual operations. This paper will propose the theoretical notion of ‘sightcraft’ to grasp the fact that physicians’ visual operations extend to the materiality of the patient’s body. As visualizations operate, e.g. robotic systems, they transfer the thought and sight of physicians into actions, and finally affect materiality. One needs to ask how digital images actually matter in radiation oncology without assuming linearity between sight and skills or preplanning conceptions and final treatment. By drawing on Ludwik Fleck’s notions of thought collective and thought style, sightcraft captures the multilayered digital entanglements of expertise, technology, operations, and materiality by means of (implicit) knowing and aesthetics. It thereby further exemplifies how fundamental interdisciplinary theoretical reflections are for image-guided medical interventions.
Leonard Grant, MA

Dialogic Possibilities of fMRI

Historically, images in medical atlases have been displayed as authoritative ideals, to which human bodies must be compared, thus creating a dialog centered upon disparity between the real and the ideal. However, the launch of The Big Brain Project at McGill University demonstrates both the rhetorical nature of medical images and the possibilities for images of patients’ brains to be placed in a more equitable and salutary dialog. More than a 3D model or a “reference brain,” the Big Brain is comprised of high-resolution visual reconstructions of 7404 histological sections of a brain. It also houses a database of information from these neuroimages that permits researchers and medical professionals to incorporate fMRI data from their patients into the database to create new brain images that can be used for prognosis rather than diagnosis. This presentation examines fMRI as the product of a complex rhetorical ecology, a site of interdisciplinary discourses, deliberations, and dialog. This theoretical ecology is constructed from interviews with applied mathematicians, biophysicists, and neuropsychologists who develop and employ this technology. Applying Flusser’s and Bakhtin’s notions of dialogism to their relationships with fMRI demonstrates that these medical images are themselves rhetorical because of the deliberations that have brought them into being. Lastly, I build on the work of neurorhetoricians like Jack and Gruber to make the case for teaching professionals that medical images are rhetorical objects that are best understood in interdisciplinary dialog.

Valerie Gray Hardcastle, PhD

Brain Images in the Court Room: Pretty Pictures of the Guilty or the Innocent?

The use of neuroscientific evidence in the courtroom has increased almost exponentially over the past five years. Part of the appeal of these data is the images of brain scans that lawyers can use to help explain their clients’ mental states and functional deficits. However, there are also considerable dangers using this type of visualization in discussions of responsibility, competence, and mitigation. In particular, these images conflate individual brain parameters with group tendencies, and – more importantly – ignore the difficult question of how to understand the notion of responsibility in a purely material and reductionistic world. Taking neurobiological markers for addiction as my stalking horse, I will discuss how brain images are being used in a variety of legal settings today, comment upon their scientific limitations, and analyze their value in deciding responsibility. For example, the verdict of Not Guilty by Reason of Insanity requires that defendants either have delusions so severe they literally cannot comprehend what they are doing or that they cannot distinguish right from wrong at the time of the act. These criteria would still hold, even if we understand what is happening biologically in an individual at the time. How does the fact that we can illustrate why addicts reason and then act as they do connect with their putative responsibility for their actions?

Margaret MacDonald, PhD

Visual Imagery in Global Campaigns to Reduce Maternal Mortality

Does humanitarianism still need a suffering body? (Fassin 2011; Malkki 1996; cf Laqueur 1989). In the image world of maternal mortality today – the visual images that are produced and circulated in global campaigns to reduce maternal mortality – the themes of hope and aspiration are emerging as part of a new humanitarian logic. In this paper, I reflect on the aesthetic and narrative conventions of the image world of maternal mortality at a time when the importance of images has been scaled up in the countdown to the Millennium Development Goals end date in 2015. (Reducing maternal mortality is MDG
5). I argue that “humanitarian reason” (Fassin 2012) may be fomented not solely through images of suffering which stir our sense of shared humanity and urge us to act, but by the depiction of hope and aspiration for ‘developing’ or ‘suffering’ others. For example, the poster child for reducing maternal mortality is now a pre-adolescent schoolgirl who, if the story unfolds as we hope, will stay in school, avoid early marriage, delay childbearing, and seek prenatal and delivery care at a biomedical facility. As humanitarianism emerges as a powerful force of globalization, this paper attends to the role of visual images in shaping how we understand distant others and our relationships to them, and the biopolitical work of depicting futures to which we hope they will aspire.

Kirsten Ostherr, PhD, MPH

*Co-creation for Doctors and Patients: Celluloid Lessons for the Digital Age*

This talk will explain how doctors and patients have used moving images to tell stories about health and disease throughout the twentieth century. I will focus on instances of collaborative co-creation between doctors and patients and explore how these cases offer opportunities for new forms of communication and new ways of understanding patient engagement. My case studies will be two films from the 1950s: *Window Water Baby Moving* (Brakhage, 1959) and *All My Babies* (Stoney, 1953). The former is an avant-garde experimental film and the latter is a documentary-style educational film. Despite their differences in style, form, and mode of address, the films were both used extensively for health education and were also screened together frequently in art cinema settings. Both films were critically acclaimed and were also considered obscene. By analyzing how these films came to be made and how they were used in the celluloid era, I will provide a framework for considering current opportunities and practices in collaborative co-creation between doctors and patients in the digital age.

Moritz Queisner, PhD

*The Medical Image between Vision and Visualization*

How is Augmented Reality going to change the surgeon’s point of view? The trend towards minimally invasive and robot-assisted surgical procedures confronts medical treatment with a dilemma: on the one hand, there are possible benefits for the patient, such as less trauma, shorter hospitalization, and an improved recovery process. On the other, these procedures involve fundamental difficulties for the surgeon, whose ability to access the operation field and to navigate the instruments is diminished in comparison with traditional open surgery. This increased surgical complexity results from the fact that in image-guided surgical interventions the patient’s body needs to be accessed remotely with special instruments that have to be guided by visualization techniques instead of interventions executed within the range of the physician’s hands and eyes.

Performing surgery via visual interfaces such as screens or optical devices introduces a layer of iconicity between physician and patient that presents new challenges to iconic knowledge, clinical practices and technical solutions. Major visualization deficits of image-guided interventions include the limitation of the surgeon’s field of vision, the lack of immersive hand-eye coordination, and the gap between three-dimensional perception and two-dimensional images. Despite the introduction of flexible camera angles, force feedback systems or stereo video endoscopy in response to those deficits, minimally invasive surgery is still far from achieving the direct visualization advantage of open surgery.

In order to tackle that problem the paper will present and evaluate current approaches from medical augmented reality and computer vision research that promise to close this visual gap by displaying the operating field from the surgeon’s perspective. It will address the methods and discuss the problems
that go along with the goal to eliminate the disparity between vision and visualization by augmenting
the point of view with visual images. The paper argues that the implementation of augmented reality
into medical therapy corresponds to a form of iconic knowledge that represents a key task for the
medical humanities.

Anna Roethe, MD, MA
_Talking Images: Visual Epistemic and Epistemic Shifts in 20th Century Medical Imaging_

Rooted in visual cultures of anatomy and pathology, the epistemic complexity and capacity of medical
images in clinical practice nowadays postulate a profound understanding of the multidimensionality to
which medical visualizations implicitly- and often invisibly- refer. Having been significantly expanded
during the past 100 years’ evolution in medical imaging technologies into new research areas (such as
physics, nuclear medicine, radiosurgery, computer graphics, and design), current scientific approaches
require decidedly interdisciplinary methods that are able to include both historiographical structures of
medical science and technology on the one hand and visual culture’s evolution towards a complex, image-centered and digitally manipulable, this ephermic, epistemic practice on the other. The paper
therefore starts by exploring, the basic epistemic dimensions of the visual medical image, including its
specific cultural impact. It goes on to consider epistemic key determinants in clinical diagnostic routine,
and concludes by focusing on recent epistemic shifts in image-guided therapeutic interventions. Examples of sectional imaging techniques (conventional and computed radiography, computed tomography,
magnetic resonance imaging) will be used to trace development in image evolution and interpretation,
with reference to observation that tend to consider medical images not only as ‘epistemic things’ (Rheinberger) but also, progressively, as clinical instructions and epistemic actions themselves. Thus, by defining noticeable paradigm shifts in medical image usage, an appropriate rethinking towards a more image-based research approach in commonly text-based medical humanities will be outlined.

Nina Samuel, PhD
_Biological Knowledge at the Threshold of a Media Shift_

Contemporary visual epistemic practices in the biological sciences raise new questions of how to trans-
form aniconic data measurements into images, and how the process of an imaging technique may
change the material it is ‘depicting.’ This talk investigates microscopic imagery, which is used by medical
scientists and biologists alike. The core argument is developed around the analysis of two recent meth-
ods, developed between 2003 and 2006, indicating a major media shift: localization microscopy and
photo-induced cell death. Far from functioning merely as illustrations of work done by other means,
images can be determined as tools for discovery in their own right and as objects of investigation. Both
methods deploy different constellations of intended and unintended interactions between visual ap-
pearance and underlying biological materiality. To characterize these new ways of interaction, the talk
introduces a new notion of ‘operational images’ and ‘operational agency.’ Despite all their novelty, oper-
arional images are still subject to traditional conventions of seeing and depicting. To enable the mi-
gration between different cultures of seeing, scientific images become an aesthetic and epistemic battleground between data, imagination, and the psychology of perception. Grappling with theoretical
considerations by Gaston Bachelard, Ian Hacking, and Sybille Krämer, the talk attempts to give a new
answer to one of the key questions of visualization in the medical humanities: as to whether images
have the capacity to intrinsically change the depicted subject matter itself.
Sally B. Shigley, PhD & Lauren Fowler, PhD
Visualization and the Empathic Response: The Use of Movies and Literature to Foster Empathy
Weber State University

Visual cues can be an important part of feeling empathy. Literature is also a good vehicle for eliciting empathy. This study was designed to assess the ability of literature to elicit empathic responses in pre-health professional (PHP) students and to determine if seeing a visual image of an emotional experience affects people differently than reading about the same experience. Margaret Edson’s play *W;t* was used to attempt to foster an empathic response in PHPs who either read the play or watched the HBO movie production of the play. Participants were assessed on self-report of empathy, including their own perceptions of how to define empathy, both prior to and immediately following reading *W;t* or watching the movie. Because self-report is susceptible to bias, participants were also assessed on physiological measures of empathy, including facial electromyography and galvanic skin response. Results demonstrated that exposure to both formats of the play increased empathic response in PHP students. However, seeing the movie had a much stronger effect on both self-report and physiological expressions of empathy. This study supports the idea that we can help train those in the medical professions to express empathy, and that using a visual representation of literature can be an effective means to accomplish this.

Fionagh Thomson, PhD & John McGhee, PhD
The Claude Glass: The Role of the Transparent Body During the Consultation
School of Geography & Sustainable Development, University of St. Andrews, Scotland

Historically, a patient’s body ‘belonged’ to the doctor and the medical consultation was a one-way communication, where the patient offered up information on the ‘body’ only on request from the doctor. Today, in a shift towards patient-centred care, individuals are increasingly involved in their healthcare, which relies on an understanding of what is happening to their physical body, in order to make informed decisions with their health professional to develop care plans. Visual images, such as Magnetic Resonance Images (MRI), are proposed to be a useful communication tool in bridging the gap in knowledge between patient and health professionals. However, the purpose of the MRI has only been diagnostic since the early 1980s and their interpretation is restricted to the trained eye of the medical practitioner.
The Interdisciplinary Laboratory *Image Knowledge Gestaltung* is a union of social, natural and technological sciences, medicine and – for the first time in basic research – the disciplines of design and architecture as well. In this interdisciplinary laboratory, more than 25 different disciplines come together to investigate the fundamental Gestaltung processes of the sciences. The Interdisciplinary Laboratory is motivated by the importance of understanding the Gestaltung processes in our technically upgraded scientific community as a genuine research goal. Furthermore, it intends formally to treat research in itself as a Gestaltung process. The Cluster takes this basis of examination of Gestaltung as the materialisation and realisation of knowledge and combines it with basic research and the application thereof.

*Image Guidance* is one of the currently 21 research units - the so-called base projects - within the Interdisciplinary Laboratory, its team including researchers from culture and media studies, art history and medicine. *Image Guidance* is a medical, image-critical project that focuses on all of the visualization practices that serve as an interface between physician and patient and thereby intervene in the surgical process in a guideline function. The project pursues the overriding objective of investigating the scientific and cultural history formation, specific design and application-oriented logic of image-guided surgery in greater detail, determining the implicit and imperative visual knowledge that it involves and arriving at consequences for medical training.
1. Tremont House – 2300 Ship’s Mechanic Row (Mechanic Street)

2. Yaga’s Café and Bar – 2314 Strand

3. Black Pearl – 327 23rd Street

4. Crow’s Southwest Cantina Bar and Grill – 2408 Strand

5. Fuddruckers – 111 23rd Street

6. Joe’s Crab Shack – 1924 Harborside Drive

7. Jimmy John’s – 102 Kempner (Harborside and 22nd Street)

8. Little Daddy’s Gumbo Bar – 2107 Post Office Street

9. Mediterranean Chef – 2402 Strand

10. Nonno Tony’s World Kitchen – 2100 Harborside Drive

11. Olympia The Grill at Pier 21 – 100 21st Street

12. Rudy & Paco – 2028 Post Office Street


14. Sky Bar Steak and Sushi Bar – 2105 Post Office Street

15. Willie G’s – 2100 Harborside Drive

16. Zack’s Mac Shack – 2219 Postoffice Street

17. Fisherman’s Wharf – 2200 Harborside Drive (Saturday evenings dinner)

18. Open Gates Conference Center – 25th and Broadway
Transportation Options from Galveston to Houston Airports

**Galveston Limousine Service**
http://www.galvestonlimousineservice.com/
1-800-640-4826
409-744-5466
Hobby Airport Schedule and Rates http://galvestonlimousineservice.com/hobby.html
IAH Schedule and Rates http://galvestonlimousineservice.com/iah.html

**Action Limousine**
http://www.actionlimo.com/
713-781-5466
Rates from airports to Galveston at bottom of page

**Jeff’s Cab & Shuttle Services**
409-621-5333
866-533-3222
http://www.jeffscabs.com/
Jeff@JeffsCabs.com
Jade@JeffsCabs.com
Rates are not listed on website

**Elite Limousines**
http://www.elitelimohouston.com/
281-955-5450
1-866-955-5450
Rates http://www.elitelimohouston.com/airportrates.htm

**SuperShuttle**
800-258-3826
http://www.supershuttle.com/
The Institute for the Medical Humanities is committed to moral inquiry, research, teaching, and professional service in medicine and health care. In today's often bewildering world of scientific, technological, cultural, and political changes, medicine faces human problems and possibilities that transcend traditional academic disciplines. Members of the Institute engage in research on ethical and legal problems in clinical practice and biomedical research; and on philosophical, historical, visual, literary, and religious dimensions of medicine and health care. This broad-gauged inquiry provides the foundation for the activities of the Institute faculty in medical and graduate teaching, clinical ethics consultation, and health policy analysis locally and in state, national, and international academic and public forums.

The Honors College provides the advantages of a small community amid the rich and diverse settings of a large, urban university. Our students are part of an elite group of university intellectuals whose enthusiasm for materials covered within our coursework can be felt throughout The Honors College’s hallways and Commons. Our Medicine and Society Program has introduced hundreds of students on their way to careers in health to the critical practice of the humanities and medicine.

The Research Institute for Art and Design, RIAD, represents the research and advanced scholarship of art, design and architecture carried out by over 60 academic and research staff at the University of Ulster. The majority of researchers are based on the Belfast campus with another sizeable group on the Magee Campus.

Ulster is also recognised as a leading university in knowledge exchange with industry and in academic enterprise arising from research.

The active artists, designers and researchers in RIAD are also engaged in teaching, ensuring all important relevance and innovation in taught undergraduate and masters programmes. There is vibrant research student community with about 40 students researching for art and design PhD at any one time. Several decades of experience in groundbreaking research carried out through art practice methodologies complements historical, theoretical, philosophical and design research approaches.

RIAD research activity is undertaken in the areas of Applied Art, Design and Fine Art. The Research Institute Art and Design has established cross-disciplinary and cross-institution scope alongside specialist and thematic research through 6 overlapping clusters of research activity: Art and Conflict, Art and Context, Creative Ecologies, Design for Living, Future and Virtual Worlds, Space and Place.

The shared research concerns expressed in the research cluster themes ensure dynamic hubs for project generation, external grant development, event organisation with critical debate and peer review. Research Students are also engaged in these clusters.
The Visual Image and the Future of the Medical Humanities
Open Gates Conference Center, University of Texas Medical Branch
Galveston, Texas
May 9 & 10