Twenty-third Biennial Congress of the International Association of Empirical Aesthetics

August 22-24, 2014
New York, NY, USA

CONGRESS PROGRAM

International Association of Empirical Aesthetics

Association Internationale d'Esthétique Empirique

Internationale Gesellschaft für Empirische Ästhetik

Associazione Internazionale di Estetica Empirica

國際實證美學協會

A Note from the Organizers

Welcome to the 23rd Biennial Congress of the International Association of Empirical Aesthetics (IAEA), at Hunter College of the City University of New York. We are delighted to bring together well over 100 researchers, scholars, and artists representing a total of at least 24 countries to this year's Congress. We have approximately 160 contributions to the Congress, taking the form of Plenary Talks (including the Presidential address, keynote and award addresses, and symposia), Spoken Papers, Poster Presentations, and Art Exhibition. We look forward to a rich and enjoyable scientific exchange.

This program includes important information on the overall Congress schedule, particularly the rooms and times of each session. The Congress will feature three parallel sessions. To help navigate these, program entries on individual talks include title, author(s) and affiliation(s), and a brief abstract. Full proceedings of the Congress are archived on the CD included in your welcome packet and will be posted on the IAEA website, http://science-of-aesthetics.org, soon. Information on the overall schedule and venue is included next, followed by entries on each contribution, organized by session.

Thank you for attending!

Aaron Kozbelt
Pablo P. L. Tinio
Paul J. Locher

GENERAL VENUE AND SCHEDULE INFO

All of the IAEA events at Hunter College will take place in the **West Building** (including the 7th floor walkway bridge connecting the West and East Buildings). Specifics:

- Registration at the start of each day will take place in the **West Building Lobby**, just as you enter the building at street level. You will receive your folder of welcome materials (including this Program) and a name tag. **Please wear your name tag**, especially when going through the security checkpoint, which is next to the Lobby. Security personnel have a list of all Congress attendees, and name tags will facilitate entry into the building. Once in the building, use the escalators, elevators, or steps to get to the 6th, 7th, and 8th floors, where all Congress events will be held. On each day, once the sessions begin, registration will be moved to the 6th floor. (You need only stop by the registration table once during the Congress; then just bring your name tag on subsequent days.)
- All plenary talks and symposia, and many spoken paper and poster presentation talk sessions, will be held in a large lecture hall, **Room 615**.
- Other spoken paper and poster presentation talk sessions (including art exhibition talks) will be held in **Rooms 603 and 605**.
- Posters will be displayed on the **7th floor walkway bridge connecting the West and East Buildings** on Friday and Sunday mid-day.
- Works in the art exhibition will be displayed in the **8th floor Faculty Dining room** and in **Room 623** on Saturday throughout the day.
- A catered lunch, free of charge to Congress participants, will be available on Friday and Saturday in the **8th floor Faculty Dining Room**. (The Faculty Dining Room is accessible by steps or elevator from the 7th floor.) Participants will also have access to the outdoor terrace surrounding the Faculty Dining Room. Sunday lunch is on your own; a list of local dining options is included in your welcome packet.
- Free coffee will be available in the **7th floor lounge** at various times throughout the day (see Schedule).
- At all times throughout the Congress, several student volunteers are available to handle registration and answer questions. A tech person is also available at all times to assist with computers and projectors. If they cannot answer your questions, please speak with one of the co-organizers.

GENERAL SCHEDULE

Friday August 22

Time	Event	People
8:00 – 9:00	1st Floor Lobby: Registration 7th Floor Lounge: Coffee	
9:00 – 9:15	Room 615: Welcome	Kozbelt, Tinio, Locher
9:15 – 10:00	Room 615: Presidential Address	Chatterjee
10:00 – 10:45	Room 615: Fechner Award Address	Smith
10:45 – 11:00	7th Floor Lounge: Coffee	
11:00 – 12:00	Rooms 615, 603, 605: Poster Talks	(See Next Page)
12:00 – 1:30	8th Floor Faculty Dining Room: Catered Lunch 7th Floor Walkway Bridge: Poster Hangout Session	
1:30 – 2:30	Room 615: Keynote Address	Carroll
2:30 – 2:45	7th Floor Lounge: Coffee	
2:45 – 4:15	Room 615: Symposium on Neuroaesthetics	Shimamura, Kranjec, Jacobsen, Vessel
2:45 – 4:15	Room 603: Spoken Presentations	Thurgood et al, Tyagi & Whitfield, Blijlevens & Hekkert, Davies & McManus
2:45 – 4:15	Room 605: Spoken Presentations	Cary, van Enschot, Fitch & Fitch, Galetta
4:15 – 5:00	Room 615: Baumgarten Award Addresses	Nadal, Tröndle
4:15 – 5:00	Room 603: Spoken Presentations	Lindell, Clarke et al, Ota
4:15 – 5:00	Room 605: Spoken Presentations	Knoop et al, Kraxenberger, Crozier
5:00 – 6:00	Room 605: Executive Meeting	

Saturday August 23

Time	Event	People
8:00 – 9:00	1st Floor Lobby: Registration, 7th Floor Lounge: Coffee	
9:00 – 10:45	Room 615: Spoken Presentations	Pegors et al, Pelowski, Gerger & Leder, Schubert & Mombaur, Seeley, Fingerhut
9:00 – 10:45	Room 603: Spoken Presentations	Gabias & Heckel, Kantrowitz, Ostrofsky, Bowden et al, Kozbelt et al, Perillo
9:00 – 10:45	Room 605: Art Exhibition Presentations	Bonaiuto, Biasi, d'Aloise, Antignani, Gibson
10:45 – 11:00	7th Floor Lounge: Coffee	
11:00 – 12:00	Room 615: Keynote Address	Freedberg
12:00 – 1:30	8th Floor Faculty Dining Room: Catered Lunch	
1:30 – 3:00	Room 615: Symposium on Current Issues & Debates	Nadal & Tinio, Konečni, Kozbelt
1:30 – 3:00	Room 603: Spoken Presentations	Hekkert, Blijlevens et al, van Enschot & van Mulken, Graf & Landwehr
1:30 – 3:00	Room 605: Art Exhibition Presentations	Shortess, Cook, Chen, Perillo, Search
3:00 – 3:15	7th Floor Lounge: Coffee	
3:15 – 5:15	Room 615: Spoken Presentations	Steffens & Guastavino, Diotaiuti et al, Friedman & Taylor, Korsakova-Kreyn, Neuhoff et al, Greb et al
3:15 – 5:15	Room 603: Spoken Presentations	Brieber et al, Kuuva & Maksimainen, Mastandrea et al, Dufresne-Tassé, Chen, Nadal et al, Petrov & Mazhul
3:15 – 5:15	Room 605: Art Exhibition Presentations	Kozbelt, Kantrowitz, Shimamura, Goldsmith, Cary
6:00 – 10:00	Banquet Event at The Modern: Bar and Restaurant 9 W. 53rd St. New York, NY 10019	(Reservation Required)

Sunday August 24

Time	Event	People
8:30 – 9:00	1st Floor Lobby: Registration 7th Floor Lounge: Coffee	
9:00 – 9:45	Room 615: Spoken Presentations	Smith et al, López-Juan, Leder
9:00 – 9:45	Room 603: Spoken Presentations	Pugach et al, Göksun et al, Zelichov-Lasry & Geva
9:00 – 9:45	Room 605: Spoken Presentations	Forster et al, Alfonso, Kalus
9:45 – 10:00	7th Floor Lounge: Coffee	
10:00 – 10:45	Room 615: Spoken Presentations	Munar et al, Palumbo et al, Chen & Chen
10:00 – 10:45	Room 603: Spoken Presentations	Wald-Fuhrmann et al, Vukadinović, Calvo-Merino et al
10:00 – 10:45	Room 605: Spoken Presentations	Dolese et al, Humphrey et al, Carbert et al
10:45 – 11:45	Rooms 615, 603: Poster Talks	(See Below)
11:45 – 2:00	7th Floor Walkway Bridge: Poster Hangout Session Lunch Break (On your own)	
2:00 – 3:45	Room 615: Symposium on Architecture	Vartanian et al, Zanjani et al, Ostwald et al, Weber & Brucks
2:00 – 3:45	Room 603: Spoken Presentations	Antignani, Li & Wang, Weingarden, Katz, Drikker
2:00 – 3:45	Room 605: Spoken Presentations	Brinkmann et al, Kapoula et al, Seernani et al, Commare et al, Krupinski & Locher
3:45 – 4:30	Room 615: Spoken Presentations	Post et al, da Silva et al, Berghman et al
3:45 – 4:30	Room 603: Spoken Presentations	Drake et al, Kwiatkowski, Goldstein
3:45 – 4:30	Room 605: Spoken Presentations	Barbot et al, Kapoula et al, Dorfman & Butakova
4:30 –	Room 615: IAEA Business Meeting, followed by Informal Gathering and Farewell	

POSTER PRESENTATION ROOMS:

Friday, Room 615	Friedenberg et al, Friedman & Taylor, Isaacs et al, Tessarolo & Bordon, Biasi et al, Domenici et al, Musa, Mullennix, Friedenberg et al
Friday, Room 603	Tumminia et al, Weir & Mandes, Gómez-Puerto, Tomassoni & Treglia, Thömmes & Hübner, Ruccius, McQuire et al, Vaid, Lauring et al, Takahashi & Kitagami
Friday, Room 605	Vroegh, Rampone et al, Yu-Hsiang Chen, Galeotti, Ruta et al, Thai et al, Shin & Yoon, Drozdovskyi & Pavlyuk, Korsakova-Kreyn
Sunday, Room 603	Smith, Meredith & Kozbelt, Vukadinović , Lundy et al, Jakesch & Leder, Dalca & Pearce, Cho & Haraguchi, Rosa-Leyra et al, Yu et al
Sunday, Room 605	Chen & Lin, Morita, Maurer et al, Stahl et al, Masucci et al, Bär, Okpara, Okpara, Inagami

NOTES:

The authors listed for each session represents the order of presentations within that session. All spoken presentations and art talks are slated for 15 minutes. Time blocks for many sessions are somewhat longer than strictly necessary, to allow for transitions between speakers and questions, or to align with parallel sessions. Session chairs will be contacted in advance and should keep sessions on schedule, especially the overall start times.

Poster presentations will include a 5-minute oral presentation in one of the meeting rooms (615, 603, and 605), as well as time for more informal interactions in the poster display area on the 7th floor walkway bridge during the lunch breaks.

Friday, August 22, 2014

8:00 – 9:00 am
1st Floor Lobby: Registration
7th Floor Lounge: Coffee

Friday August 22, 9:00 – 9:15 am. Room 615: Welcome to the 23rd Biennial Congress of the International Association of Empirical Aesthetics

Friday August 22, 9:15 – 10:00 am. Room 615: Presidential Address

Characterizing Neuroaesthetics and its Critiques

Anjan Chatterjee
University of Pennsylvania, USA

Neuroaesthetics is poised to enter the scientific mainstream as evidenced by international meetings, special issues in journals, and the creation of dedicated specialized centers. The full force of neuroscience is probably not appreciated in so far as scientists working in perception, emotion, attention, semantics, and decision-making, are conducting research that could easily be considered neuroaesthetics but this work is not recognized as such. By contrast, aesthetics has long been a topic of scholarship within the humanities. Given the depth, richness and history of aesthetics inquiry in the humanities, it behooves neuroscientists entering this new field to converse with scholars in the humanities. Some prominent commentators from the humanities are critical of neuroaesthetics, but their critiques often treat neuroaesthetics as monolithic, underestimate the range of neuroscience, and take aim at wrong targets. For dialog across disciplines to be meaningful, we need to be clear about the topic under discussion. I propose that neuroaesthetics can take different forms: it can be depictive, descriptive, or experimental. Depictive neuroesthetics refers to the visual depiction of neuroscience. Descriptive neuroasthetics refers to observational and anecdotal studies. Experimental neuroaesthetics refers to experiments designed with controlled manipulation of variables of interest. Depictive neuroaesthetics communicates neuroscience information while being sensitive to the aesthetics of depiction. For example, Ramon y Cajal's beautiful drawings of nerve cells as he developed the neuron doctrine are examples of aesthetic sensibilities harnessed in the service of understanding the brain. By contrast, depictions of neurons are being used currently as artwork. In this case, neuroscience is being used to create aesthetic experiences. Despite the surface similarity of both endeavors, nobody in the sciences or the humanities conflates one activity with the other. This distinction between neuroscience serving aesthetics and aesthetics serving neuroscience is also present in descriptive and experimental neuroaesthetics, but is typically not appreciated by humanitarians and neuroscientists. Many humanitarian critics of neuroaesthetics confuse studies designed to understand the brain with studies designed to understand aesthetics and many neuroscientists do not appreciate when their studies do not necessarily advance an understanding of aesthetics, per se.

Friday August 22, 10:00 – 10:45 am. Room 615: Fechner Award Address

Aesthetics in Action: Applied Research in Museums, Education, and Astronomy

Lisa F. Smith
University of Otago, College of Education, New Zealand

I am honoured to be the recipient of the 2014 Gustav Fechner Award for lifetime contribution to the field of empirical aesthetics. My presentation briefly describes my research in empirical aesthetics in three areas: Aesthetics in Museums, Aesthetics in Education, and Aesthetics in Astronomy. I will describe some empirical designs and scales that were developed in my research, such as a variation of a crossover design and the Aesthetic Fluency scale; provide selected findings on how museum visitors look at art and how to vary museum labels both for accessibility and engagement; describe some expert/non-expert differences in viewing and perceiving works of art and deep space images; offer some results from research on creative teaching and assessment in the arts; and, discuss some perceptions and misperceptions of aesthetics in astronomy. Much of this research has been done in collaboration with my colleagues, and to them I am most appreciative.

10:45 – 11:00 am. Coffee

Friday August 22, 11:00 am – 12:00 pm. Room 615: Poster Presentations (5 minute talks)

Contour Variation and Perceived Beauty of Polygon Shape

Jay Friedenberg, Jacqueline Tomczyk, & Gerard D'Aversa
Manhattan College, USA

Observers rated the attractiveness of octagonal polygons that varied in contour length but with constant area. Shapes with partial symmetry were judged to be more attractive as were those with greater total contour length. In a second experiment participants judged polygons with different numbers of concavities but with constant perimeter length. Shapes with more concavities were considered more attractive. The data demonstrate a preference for greater articulation and variety – both quantitatively in terms of contour length and qualitatively as measured by changes in contour polarity. However, the results provide evidence against two other factors that have been discussed in the literature: compactness and angularity.

Exploring Emotional Responses to Computationally-Created Music

Ronald S. Friedman & Christa L. Taylor
University at Albany, USA

We explored whether individuals could be induced to believe that musical works written by human composers were computer-created and whether this perception would in turn influence their emotional and evaluative responses to the music. Results revealed that a clear majority of participants could be convinced that classical music selections that were actually written by expert human composers and performed by a computer were instead entirely computer-generated. Additionally, whereas there were reliable differences in participants' affective responses to expressively happy versus sad songs, these responses were not reliably influenced by whether they believed the music selections presented had been composed and/or performed by the computer rather than by a human being. This held true even for individuals assessed as higher in music empathy as well as those with more extensive musical training. Results suggest that emotional responses to music do not require, nor are they necessarily moderated in their valence or intensity, by empathy with a perceived human agent.

The Role of Imagery and Indeterminacy in Aesthetic Experiences of Literature

Alison N. Isaacs, Edward A. Vessel, & G. Gabrielle Starr
New York University, USA

Both mental imagery and the level of detail of literary passages have been hypothesized to play a role in people's aesthetic experiences; however, it is unclear how these concepts are related. Rich detail prescribes a specific way a stimulus can be imagined while lack of detail, or indeterminacy, allows a participant to fill in missing information with self-generated detail. Literature is a unique way to study aesthetics because the imagery it evokes is of a different form than the stimulus itself (text) unlike, for example, visual imagery evoked while looking at artwork. This dissociation allows the role of imagery in aesthetic experience to be studied independently of confounding sensory input. To study the relationship between imagery, indeterminacy, and aesthetic response, we asked participants to read literary passages and rate each of these measures. We found that the degree of vivid imagery primarily affects aesthetic response.

Meeting Between Cultures in the Vision of Two of Kurosawa's Short Films

Mariselda Tessarolo & Eleonora Bordon
Padua University, Italy

Aim-Cinema is an art located in a space in which narration, music and photography coalesce and which creates an evocative space which accompany the user in a process of co-creativity by means of intrasubjective cognitive-emotional elaboration of the narration. The inquiry has an explorative study goal about the perception and re-elaboration of young Italians that approach Japanese cinematography. Method- The proposed study analyses the impressions and the memories of 461 university students (last year of Psychology) who assisted the projection of the first two 'Kurosawa's Dreams' which distinguish for being among the most oneiric films from this director. Both films are imbued of Japanese culture which augments the magic of the telling of the two films' endings. After the vision the students have been asked to write a brief text about what they had just seen. The texts have been analyzed by means of the SPAD software, useful in qualitative and quantitative researches on textual data. The article analyzes the dictionary composition, the specificity of the dictionary according to the variables 'film' and 'gender' and then proceeds with the factorial analysis. The results suggest the narrative representations and the specific emotional and cognitive meaning dimensions with which Italian youths re-elaborate experience with art. A fruition scheme is thus noticeable, which identifies the interpretative matrix in the structuralization of the aesthetic perception criteria.

Teacher Motivations, Flow Experience and Aesthetic Appreciation in Teaching

Valeria Biasi, Nazarena Patrizi, & Gaetano Domenici
Roma Tre University, Italy

Our hypothesis concerns the relevance of teacher motivations, including aesthetic experience and flow experience, in facilitating perception of self-efficacy in teaching. These variables can influence coping strategies for educational problems. 53 primary and secondary school teachers filled Self-Report Scales (Biasi & Bonaiuto, 2014) on motivation and quality of teaching experience. A Teacher Self-efficacy Scale (Italian adaptation by Biasi, Domenici & Patrizi, 2013) was also administered. The analysis showed that teachers with high teaching motivation declared they had flow experience and aesthetic experience more easily in their work along with high levels of professional self-efficacy. The results confirm the hypothesis that good job motivation (facilitating flow experience and aesthetic experience) is related to the ability to cope with the typical stresses of educational work.

Development of Creativity for the E-Learning Training of Teachers

Gaetano Domenici, Valeria Biasi, & Anna Maria Ciraci
Roma Tre University, Italy

This study aimed to assess the teachers' specific didactic, evaluation and relational competences after e-learning degree courses compared to those who had not had any university training. To survey these effects, we prepared a specific tool, the CDVR Questionnaire. Participants of the experimental group (n=287), composed of teachers who had graduated in Education Sciences in e-learning mode, showed an increase in their didactic-evaluation competences, greater relational skills, increased confidence in their own professionalism and an enhanced perception of the growth in their own professional skills, compared to the control group (n=88) who had not had any in-service training. The e-learning degree course, geared to promoting specific methodological, didactic and psychological knowledge concerning educational processes and learning dynamics, in turn also produced a change in teachers' relational styles by developing a perception of the *ability to understand others and a mental flexibility, that is, creativity*.

Relationship Between Music and Painting: Replication of Emotional Response

Samuel A. Musa
Haymarket, VA, USA

The purpose of this paper is to determine how the degree of emotional response one experiences in music might be replicated in a painting. The goal is to identify critical factors that generate an emotional response in a painting. The process of recognition of an art form is defined and results of experiments by neuroscientists are outlined. The personality profiles of artists and the general viewing public are identified and common elements are highlighted. The author assessed the emotional response of forty-two individuals to two of his paintings. The results show that the emotional response was high and dependent on many factors. Subject matter was critical and effective use of light can have as much of an impact as color.

Automaticity, Cognitive Effort, and Preference for Visual Art

John W. Mullennix
University of Pittsburgh at Johnstown, USA

A series of studies are summarized that examine the cognitive processes involved in aesthetic appreciation of art. Cognitive processing is approached from a dual-processing perspective of automatic and controlled processes. The findings suggest that naïve viewers of art use an automatic processing mode when making preference judgments for artistic photographs. The degree of cognitive flexibility possessed by the viewer has little effect on their judgments. However, when instructions and facial expression are manipulated during the judgment task, a switch to controlled processing begins to occur. The results are discussed within the context of naïve viewers of art versus those with experience or training with art.

Perceived Beauty of Random Density Patterns

Jay Friedenberg, Emily Umile, & Amber Bailey
Manhattan College, USA

We report two experiments on the perceived aesthetic quality of random patterns. In each experiment a square grid was filled with a progressively larger number of elements. Participants rated the beauty of the patterns. Average judgments across all observers showed an inverted U-shaped function that peaked near the middle of the range. Across each study the number of elements and global pattern size increased while element size was held constant. Peak attractiveness functions for each experiment occurred at different numbers of absolute elements, suggesting unit-number invariance in which observers scale their responding to the range of stimuli experienced.

Friday August 22, 11:00 am – 12:00 pm. Room 603: Poster Presentations (5 minute talks)

Why Do Non-Artists Draw the Eyes Too Far Up the Face? Investigation of Knowledge and Attention-Based Factors Related to Eye-Drawing Errors

Michael Tumminia, Matthew Cipriano, & Justin Ostrofsky
The Richard Stockton College of New Jersey, USA

When observationally drawing a face, most adult non-artists draw the eyes too far up the head. The current study investigates the relationship this eye-drawing bias has with knowledge and altitudinal pseudoneglect. Before drawing a face from observation, participants were assigned into one of two knowledge conditions: (1) one group was instructed that eyes are positioned approximately half-way down the head; and (2) one group was not provided such instruction. Participants also completed a vertical-line bisection task to measure pseudoneglect. Participants in both groups were systematically biased to draw the eyes too far up the face, although subjects in the knowledge condition produced smaller errors than subjects in the non-knowledge condition. Further, participants experienced altitudinal pseudoneglect as reflected by biases to bisect a vertical line above the mid-point. Vertical eye-drawing and line bisection errors were positively correlated for subjects in the Knowledge condition, but not for subjects in the Non-Knowledge Condition. Results suggest that knowledge influences vertical eye-drawing errors, and that the mechanisms producing pseudoneglect is related to the mechanism that produces eye-drawing errors when one is aware that the eyes are positioned half-way down the head.

Capturing Competent, Creative Students to Perform Future Research in Empirical Aesthetics

Catherine Weir
Colorado College, USA
Evans Mandes
George Mason University, USA

The courseware used in introductory courses about Cognitive Psychology of Visual Art can capture the interest of promising students and increase comprehension of subject matter. Activities including portfolio projects, demonstrations, and lab studies were used in three classes at two university settings. Portfolio projects were especially valuable for learning. When choosing portfolio projects, students most often selected applications of psychology principles to a self-chosen artwork (e.g., Mark depth cues onto a copy of an artwork) and selected projects based on aesthetic philosophy least often (e.g., Challenge Kant's definition of beauty as "disinterested pleasure"). Most class demonstrations of perceptual and cognitive effects successfully replicated those in the literature (e.g., the size of an illusion varies with context). However, we had only mixed success in replicating aesthetic research findings (e.g., most pleasing rectangle). These pedagogical activities engaged students contributing to positive attitudes toward applications of cognitive neuroscience to art.

Curved Contours are Preferred over Sharp Ones Even in the Absence of Semantic Meaning

Gerardo Gómez-Puerto, Yusef Chaib, Gabriel Frontera-Luna, & Enric Munar
University of the Balearic Islands, Spain

It has been claimed that humans prefer curved contoured objects (Bar & Neta, 2006). Said preference has been hypothesized to result from a primitive perception of sharp transitions in contour as conveying a sense of threat. Following an approach-avoidance framework, we devised a two alternative forced choice experiment (2AFC) that sought to minimize the semantic content of the task. Two conditions were tested with this design: one in which images depicting real objects were presented, and another in which meaningless patterns were. In both cases, participants showed a significant tendency to prefer the curved version of the stimuli. These findings are consistent with previous research and show this design to be a promising tool for investigating preference for curvature.

Creativity, Hemispheric Lateralization and Academic Achievement

Rosella Tomassoni & Eugenia Treglia
University of Cassino, Italy

Aim of this study was to explore the relationship between Creative Thinking, Academic Achievement and left-handedness in a sample of Secondary School Students. The sample was composed of 240 Italian students (aged 18), randomly chosen. Partecipants completed the TCD (Test of creativity and divergent thinking, Williams, 1994) which measures a combination of verbal skills (which depend on the left hemisphere of the brain), visual- perceptual ability and non-verbal (which depend on the other hand by the right hemisphere) in direct relationship with creativity. Partecipants also completed a questionnaire to obtain data concerning the hemispheric dominance. Educational achievement was measured on the basis of the last mid-year school report. Pearson Correlation, one-way ANOVA and Cramér's index were used to verify the hypothesis.

A Picture is Worth a Word: The Effect of Titles on Aesthetic Judgments

Katja Thömmes & Ronald Hübner
University of Konstanz, Germany

In the present study we examined the effect of titles on aesthetic perception of artistic photographs. Based on the model of aesthetic appreciation and judgment (Leder et al., 2004) the process of aesthetic perception was divided into two components: an emotional and a cognitive dimension. It was hypothesized that the aesthetic judgment varies with both the intensity of emotional experience and the depth of cognitive processing. We further wanted to find out, whether it is possible to manipulate these two components independently. In an experiment with artistic black-and-white photos and single-word titles these assumptions could be confirmed. The present study demonstrates that one word beneath a picture can increase the depth of cognitive processing and the aesthetic judgment of an artwork.

Empirical Studies including Noise of Two Leading Journals in Music Research: A Review

Alexis Ruccius
Max-Planck-Institute for Empirical Aesthetics, Germany

From the beginning of the 20th century, noise became increasingly recognized as a musical phenomenon in itself. Particularly with Luigi Russolo's manifesto *L'arte dei rumori* (1913) noise became a part of the musical sphere. This paper systematically reviews the empirical studies on noise in two leading journals in music research – *Psychology of Music* and *Music Perception*. Importantly, actually opposing definitions of what noise is, appear. While in most studies, noise is treated like a disturbing 'anti-music' phenomenon or simply as the control condition for music, in musical contexts the same physical stimulus is treated as a genuine musical phenomenon. In this paper I therefore propose that the original works of noise-music should be used as the basis of stimuli, in order to conduct studies that better help understand what music can be and how it is mentally constructed as music.

Automaticity, Cognitive Effort, and Preference for Visual Art Aesthetics of Metaphor: Aptness and Beauty Considered

Marguerite McQuire, Lauren McCollum, & Anjan Chatterjee
University of Pennsylvania, USA

What makes a "good" metaphor? Is it its inherent aptness? What makes a metaphor beautiful? Previous research has suggested that aptness and beauty of a metaphor are one and the same (Katz, 1989). We tested this hypothesis in 2 studies. Native English speakers rated metaphors on aptness (Study 1; N=20) and subjective beauty (Study 2; N=20). Results revealed that beauty and aptness are not correlated (Pearson r=0.056, p=0.336). Moreover, aptness and beauty ratings were predicted by different sentence-level variables. Aptness rating was mediated by familiarity, or previous exposure to the metaphor. Beauty ratings were related to valence and figurativeness of the metaphor. These findings are not consistent with the hypothesis that beauty and aptness are interrelated.

"Absence makes the heart grow fonder, but also makes the eye wander" – Optimal innovations in proverb rejoinders

Jyotsna Vaid
Texas A&M University, USA

Studying how proverbs are interpreted has provided insight into how people think and view the world (Gibbs & Beitel, 1995). As prescriptive commentary, they represent the established views associated with the cultural norms of a community. Yet their succinct form and memorable content has also invited deliberate alterations, or "anti-proverbs," which are often creative and humorous. With the aim of extending previous explorations of anti-proverbs that have taken a largely descriptive approach to the topic (Litovkina & Vargha, 2012), the present research developed an experimental approach to study aesthetically pleasing elicited proverb rejoinders. Following the optimal innovation hypothesis developed by Giora et al. (2004) based on aesthetic judgments of variants of common phrases, it was hypothesized that proverb rejoinders judged to be humorous would be significantly more likely than those judged non-humorous to be parallel in form but different in meaning from the original proverb. It was further predicted that rejoinders beginning with "but" would more likely to be judged humorous than those beginning with "and". Both these hypotheses received support.

The Art of Framing Art

Jon O. Lauring
University of Copenhagen, Denmark
Maurice Ptito
University of Copenhagen, Denmark, and Université de Montréal, Canada
Ron Kupers
University of Copenhagen, Denmark

Contextual information can influence appreciation of artworks. We assessed the impact of social and monetary primes in a large cohort of art-naïve university students. Our results show that paintings with high monetary primes are rated as more attractive compared to non-primed paintings. As expected, paintings with high ratings by peers and art experts lead to higher ratings. Interestingly, participants also gave higher ratings for paintings that received a low rating by an undesirable social comparison group. This may be explained by a need from participants to distance themselves from this social category. Our findings underscore the complex interplay between art appreciation and social and monetary primes.

Exploring the Mechanism of the Aesthetic-Usability Effect

Tomoyo Takahashi & Shinji Kitagami
Nagoya University, Japan

The aesthetic-usability effect is a phenomenon whereby people perceive more aesthetically pleasing designs as easier to use than less aesthetically pleasing ones, regardless of whether they are actually so. Fluency is defined as the subjective experience of ease associated with completing a mental task. It is a factor that influences a wide array of judgments including aesthetic appeal, and it may also affect the judgment of usability. We investigated the connection between fluency and the aesthetic-usability effect. The result showed that fluency has a direct effect on usability, and its effect on usability was mediated by aesthetics. Therefore, our study suggests that fluency cannot be ignored while explaining the aesthetic-usability effect.

Friday August 22, 11:00 am – 12:00 pm. Room 605: Poster Presentations (5 minute talks)

Aesthetic Absorption in Music: Exploring Subjective Experiences

Thijs Vroegh
Max-Planck-Institute for Empirical Aesthetics, Music Department, Germany

This paper presents findings from my on-going study on musical experiences occurring in 'aesthetic contexts'. Ideally, these contexts oppose everyday-life occurrences of casual and inattentive forms of listening to music. The primary aim of this qualitative study is to investigate feelings of absorption where attentive listening is considered to be the norm rather than the exception, as actual listeners report it directly after listening to a piece of music. It intends to (1) examine the intensity and varieties of absorptions characterizing the musical experience, accounting for possible differences across musical genres, (2) identify participant-perceived musical causes of absorptions, and (3) clarify its relationship with appreciation.

Exogenous Attention Influences Aesthetic Evaluation

Giulia Rampone, Alexis Makin, & Marco Bertamini
University of Liverpool, UK

This study investigated the influence of exogenous attention on aesthetic judgments. We observed that abstract patterns are evaluated as more beautiful when presented at the same location as an exogenous cue. This was the case even when the target (a circle) was different from the pattern to be evaluated, but only when this pattern was presented at the attended location. This *validity effect* is linked to an overt shift of attention, and it disappears with longer intervals between cue offset and pattern appearance. In particular, results suggest that the invalid cue condition leads to more negative evaluation of a pattern.

Reflection on the Development of Globalized City Space and Community-Based Art Education

Yu-Hsiang Chen
Taipei Municipal Datong High School, Taiwan

The globalized cultural and economic form of space has been considered a crucial issue in the past decades, and the concept of "creative city," therefore, has gradually become hotly discussed. For such an issue, the author, from Taipei Municipal Datong High School, conducted an experiment on art education by integrating emerging technology in the curricular module with an attempt to build the linkage between global and local culture. The reflection on the curriculum is also given after the course conduction.

Verbal Interferences in the Visualization of Mental Contents

Roberto Galeotti
Brera Academy of Fine Arts, Italy

Language and thought are tightly connected. Synesthetic perception and some rhetorical figures are examples of that "connection" - an excerpt of the sensory perception is "superposed" to a linguistic sign or to a part of it. What happens though when a perception does not "match" with any sign and viceversa? I asked eight students from the Brera Academy of Fine Arts to graphically represent three concepts: 'myself', 'the person I love', and 'self-portrait'. The concepts that affect the private sphere of interest (myself, the person I love) are much more similar to each other than with respect to the stimulus control (self-portrait). The former appear more complex and morphologically articulated, without a center, as if they were not yet framed in an unique way.

Comparing Angular and Smoothed Polygons. Exploring the Link Between Preference, Response Time and Contour Integration

Nicole Ruta
La Sapienza University of Rome, Italy, and University of Liverpool, UK
Letizia Palumbo & Marco Bertamini
University of Liverpool, UK

Our two experiments aimed to understand the nature of preference for curvature over angularity. In Experiment 1 we investigated whether polygons are processed more fluently when they are changed into a smoothed version. This was a symmetry detection task where curvature was task-irrelevant. In Experiment 2 we tested whether the preference for curvature is present at a global configuration level or if it could be extended at a local level. We used shapes with local oriented Gabor patches and asked for preference rating. Results suggest that smooth contours made a shape easier to be processed (curved polygons were processed faster) and preferred as compared to angular contours. When contours had local oriented Gabors, global shape was the most important factor.

Neuroaesthetics of the Mundane

Carolyn Thai, David White, & T.W. Allan Whitfield
Swinburne University of Technology, Australia

Aesthetics has had a long and contested history. Research in aesthetics has usually relied on feedback from participants, in the form of questionnaires, surveys, or interviews. Recently, there is much interest in obtaining physiological responses to aesthetics. This project probes for aesthetic responses – the simplest being 'liking' or 'disliking'. The stimuli that are used for this experiment are images of chairs. These responses to the chairs were recorded using EEG and will be analysed for these differences and correlated with stated ratings. It is hypothesised that there will be a difference for the positive (like) and negative (dislike) responses; an observed hemispheric difference between the positive and negative responses; and that there will be an association between the ERP and the stated ratings of the image.

The Escher Illusion: An Interdisciplinary Analysis of Neuroaesthetics and the Information Theory

Jongcheon Shin & Joonsung Yoon
Graduate School of Soongsil University, Korea

This study is to relate Maurits Cornelis Eshcer's works to the channel capacity theorem of Claude Shannon and the art principles of Vilayanur Ramachandran. Escher is an insightful artist whose works contain his keen observation of the world and the expressions of his own fantasies. The electroencephalogram (EEG) experiment has detected the brain waves of our twelve participants when they viewed Escher's original works, *Balcony(1945)*, *Encounter(1944)*, *Relativity(1953)*, and their modified ones. The results show that the features of Ramachandran's peak shift effect can be epitomized to the notion of Shannon's channel capacity theorem.

Neuro-aesthetic Outlines of the Post-postmodernism: Between Sciences and Humanities in I. McEwan's "Saturday"

Dmytro Drozdovskyi & Ihor Pavlyuk
Shevchenko Institute of Literature of the National Academy of Sciences of Ukraine, Ukraine

Saturday portrays new forms of time and space and their perception by a human being. It demonstrates new understanding of the issue which can be theoretically marked as "a mental being in time and space." For McEwan, it is highly important to analyze the inner forms of the human consciousness which is portrayed as a natural phenomenon with physical limitations and which exists according to the physical rules. Henry Perowne's discourse reveals a philosophical and also a medical discussion about the nature of consciousness — whether it can be described as a *ghost in the machine* or as a net created by the human neuroactivity, or as an independent phenomenon which controls human emotions (*psyche*).

Bach, Escher, and Mental Rotation: An Empirical Study in the Perception of Visual and Melodic Congruency

Marina Korsakova-Kreyn
Touro College, Lander College for Women, USA

Among the most fascinating aspects of music are the quasispatial properties of tonal space and structures. For instance, any conventional melody can be visualized as a contour—as a combination of ups and downs. A melodic contour can be "bent" by tonal forces, and all its melodic intervals can be "mirrored." In addition, a contour can be augmented and diminished in duration, which is conceptually similar to a proportional enlargement and diminution of a visual object. Certain musical compositions, specifically Baroque fugues, resemble divisions of the plane, such as in M. C. Escher' tessellations and M. K. Čiurlionis' paintings. When the tonal space of music is visualized as phenomenal gravity (Scruton, 1997), tonal melodies can be explained as melodic objects shaped by the tonal force field. We hypothesized that the cognitive processing of these transformations may draw on spatial abilities developed for visuospatial reasoning and that the perception of melodic transforms involves the same neural substrate in the parietal cortex (specifically BA 7), which is engaged in visuospatial processing. We conducted a behavioral study that compared the perception of congruency of 3D geometrical figures and congruency of tonal melodies. The visuospatial task used a set of stimuli from a study in mental rotation (Shepard and Metzler, 1971), whereas the melodic rotation task used a set of melodies selected from the clavier compositions of J. S. Bach. The same melodies were used for a control task on timbre judgment. Performance was positively correlated for visual and melodic spatial tasks (r = .40), but the pattern of correlations overall differed between sexes. Males performed better than females on all three tasks. The obtained results converge with previous investigations that found gender effect in the visuospatial mental rotation task, and offer new information about gender effect in music perception. The discovery of a positive correlation between melodic and visual spatial tasks provides supporting evidence for the hypothesis of supramodal processing in music perception and inspires new directions for discussing the aesthetic experience.

Friday August 22, 12:00 – 1:30 pm.
8th Floor Faculty Dining Room: Catered Lunch
7th Floor Walkway Bridge (between West and East buildings): Poster Hangout

Friday August 22, 1:30 – 2:30 pm. Room 615: Keynote Address: Noël Carroll

Art, Emotion, and Evolution

Noël Carroll
The Graduate Center of the City University of New York, USA

As Tolstoy pointed out, art is a very expensive affair socially. What could possibly justify the sacrifice of the sometimes vast social and economic resources that have been dedicated to the production of art historically. Taking seriously the recurring association of art with the arousal of emotion, I try to argue that art's capacity to engender affective contagion provided a lever for fellow feeling and bonding among our ancestors enabling them to form larger and larger groups not based only on blood ties. Thus, art contributed to the group advantage of our forebears and, arguably, especially in the form of mass art, continues to do so into the present.

2:30 – 2:45 pm. Coffee

Friday August 22, 2:45 – 4:15 pm. Room 615: Symposium on Neuroaesthetics

The Role of the Orbitofrontal Cortex in Aesthetics and Affective Processes

Arthur P. Shimamura
University of California, Berkeley, USA

The orbitofrontal cortex (OFC) has been linked to a variety of affective processes, including emotional evaluation, reward processing, and emotional regulation. With respect to neuroaesthetics, this brain region is particularly active when individuals rate artworks as beautiful. One way to view these various findings is to consider a common mechanism associated with OFC processing. Alternatively, it may be that different regions within the OFC serve qualitatively different functions. In this presentation, I review findings from neurological patients and neuroimaging studies as a way to characterize the role of the OFC region in aesthetic experiences.

What Can Conceptual Art Teach Neuroaesthetics?

Alexander Kranjec
Duquesne University & Center for the Neural Basis of Cognition, Carnegie Mellon University, USA

Both conceptual art and cognitive neuroscience are engaged in describing and visualizing facts about basic categories of mind (e.g., space, objects, language). While neuroaesthetics is by definition broadly concerned with the brain's role in how we think about art, it has typically focused on perceptual preferences ("what is beauty?"). To cut deeper ontologically the field might consider exploring questions posed by the work of conceptual artists ("what is art?"). I discuss parallels in practice between conceptual art and cognitive neuroscience using artist Mel Bochner as a case study. Providing a point of entry for empirically dissociating the *conceptual* from the *beautiful*, a general methodology is described where participants judge objects for higher-order qualities beyond beauty, including function, and art-objecthood.

Neurocognitive Psychology of Aesthetics: A Hamburg View

Thomas Jacobsen
Helmut Schmidt University/University of the Federal Armed Forces Hamburg, Germany

In my presentation, I will report a number of our studies in Neuroaesthetics, the neuro-cognitive psychology of aesthetics, which focuses on the neurobiological underpinnings of aesthetic processing. Other vantage points on the aesthetic episode, situational, personal, evolutionary, historical etc., will be mentioned (Jacobsen, 2006). It is the perspectives of mind and body, following the Fechnerian tradition of the

pragmatic dualism of Psychophysics, that will mainly be taken. In particular, I will present a neurocognitve model of the aesthetice appreciation of music, recently proposed by Brattico, Bogert and Jacobsen (2013), and a number of studies recently documented, e.g. work on musical taste (Istók et al., 2013).

Aesthetic Experience as an Integrative Brain State

Edward Vessel
New York University, USA

Understanding the cognitive and psychological processes that comprise aesthetic experience can be aided by studying its neural basis. Here, we propose that aesthetic experience is an integrative mode of processing that connects sensory experiences with internally directed thought processes, and that serves to facilitate knowledge acquisition. In contrast to reinforcement learning mechanisms that produce pleasure in response to specific associations, pleasure from many sensory experiences are tied to the extraction of meaning, and represent instances of "unsupervised" reward signals in the absence of association with primary reinforcers. Aesthetic appreciation reflects a subset of such experiences and involves integration of signals across multiple brain systems. In particular, rare instances of coactivation of sensory pathways and the default-mode network, which supports aspects of internally relevant mentation, may be a hallmark of aesthetic appreciation

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Friday August 22, 2:45 – 4:15 pm. Room 603: Spoken Papers

The Joint Effect of Typicality and Novelty on Aesthetic Pleasure for Product Designs: Influences of Safety and Risk

Clementine Thurgood
Swinburne University of Technology, Australia
Paul Hekkert
Delft University of Technology, The Netherlands
Janneke Blijlevens
Swinburne University of Technology, Australia

While some studies have shown that people prefer typical product designs, others have shown that people also like product designs that are new. To reconcile these contradictory findings, the design principle, 'Most Advanced, Yet Acceptable' proposes that people prefer a balance of both typicality and novelty in product designs. As an explanation, we propose that typicality and novelty fulfil basic evolutionary needs for safety and exploration that still drive behaviour today, and that products are most preferred when they satisfy both of these needs simultaneously. We further propose that conditions of safety and risk will drive product preferences towards novelty and typicality, respectively. Overall, this research will provide insights into when and why aesthetic preferences for typicality or novelty occur.

Unravelling Typicality in Mundane Aesthetics

Shivani Tyagi & T.W. Allan Whitfield
Swinburne University of Technology, Australia

Novelty and typicality play important roles in aesthetic preference. Typicality; strongly linked with the cognitive process of categorization, posits that familiar stimuli will be most preferred. Novelty, a fundamental construct of Berlyne's *Collative Motivation Model*, sits in opposition to this, proposing that increased arousal levels produced by unfamiliar stimuli drive positive affect. Within the domain of designed objects, novelty is considered a key for product differentiation and to drive market success. This paper discusses the relationship of novelty to typicality, hypothesizing the existence of two types of novelty, congruent and incongruent, based on category knowledge. It outlines the theoretical underpinnings of the method used to test the hypothesis, 'multi-level measures'.

Influence of Social Connectedness and Autonomy on Aesthetic Pleasure for Product Designs

Janneke Blijlevens
Swinburne University of Technology, Australia
Paul Hekkert
Delft University of Technology, The Netherlands

In previous research, we found that people use product designs to feel connected to and autonomous from their 'type of people' and when product designs do they are aesthetically pleasing. From an evolutionary perspective, product designs provide aesthetic pleasure because they help direct beneficial behavior. We argue that people can fulfill their evolutionary need for safety through product designs that make them feel connected, and the need for accomplishment through product designs that help them feel autonomous. Accordingly, we assessed whether conditions of safety and accomplishment influence the relationships of connectedness and autonomy with aesthetic pleasure. In two studies, we show that regulatory focus and risk manipulation moderate the effects of connectedness and autonomy on aesthetic pleasure for product designs.

How Our Desire for Social Information Affects Tastes in Paintings and Belief Systems

Jim Davies
Carleton University, Canada
Meaghan McManus
University of Edinburgh, UK

Psychology has found a many explanations for what makes art compelling. People can also find that belief systems, such as religions or health ideas, resonate with them. We know that how much people feel positive about ideas influences their actual endorsement of those ideas. We show that the depiction of human beings positively affects both art and belief. Experiment 1 shows that in paintings around the world, depictions of people dominate. Experiment 2 shows that for alien abduction theory, the look of the bald "grey" alien has features that we use to indicate intelligence in human beings: being tall, and having a small nose. This supports the theory that we find art and belief systems compelling for the same reasons.

Friday August 22, 2:45 – 4:15 pm. Room 605: Spoken Papers

The Effects of Stimulus Type in Aesthetic Preference Research: A Meta-Analysis

Richard Cary
Mars Hill University, USA

A meta-analysis investigated effects of stimulus types in aesthetic preference studies. Analytic stimuli are artworks; synthetic are non-art. If the two stimuli were equivalent, outcomes as effect sizes (ES) would be homogeneous and inference-sufficient. The study derived 1266 ESs, 166 ESs from experimental and 1100 from correlational designs. ESs grouped on stimulus type were heterogeneous in both. For experimental studies using analytic stimuli, mean ES = 0.774; for those using synthetic stimuli, mean ES = 0.520. For correlational studies using analytic stimuli, mean ES = 0.420; for those using synthetic, mean ES = 0.340. No substantive or methodological variables accounted for heterogeneity. The stimulus types elicited different responses, with analytic eliciting higher measures overall and in a majority of subsets.

Reliability of Quantitative Content Analyses

Renske van Enschot
Radboud University Nijmegen, The Netherlands

Reliable coding of stimuli is a daunting task that often yields unsatisfactory results. This paper discusses a case study in which tropes (e.g., metaphors, puns) in TV commercials were analyzed as well the extent and location of verbal and visual anchoring (i.e., explanation) of these tropes. After a first coding round, low interrater agreement scores were found. Examples are presented which demonstrate the reliability issues. The paper concludes with an overview of options to deal with reliability problems as described here. Low interrater agreement scores may reflect the richness of the data and their inherent ambiguity and need not necessarily be disapproved of.

FlexTiles: A Software for Studying Geometrical Pattern Production and Preference

Gesche Westphal-Fitch & W. Tecumseh Fitch
University of Vienna, Austria

Abstract visual patterns are ideal candidates for studying creative process empirically. The processes by which pleasing visual structures such as geometrical patterns are produced remain poorly understood. We present data on the production of visual geometric patterns that we gathered using FlexTiles, a software package that allows the empirical study of both the creation and appreciation of visual patterns under controlled laboratory conditions or in web-based research.

An Introduction to Aesthetic Precognition

Giuseppe Galetta
University of Cassino and Southern Latio (Uniclam), Italy

The paper presents some results of an experiment conducted in an innovative way through the use of the most popular social network: Facebook. Exploiting the system of "like" and "share" on which this platform is based, thousands of artwork images were submitted to a sample of over 10,000 users worldwide. Through the metrics analysis of users choices, it was observed that specific compositional elements inside the artworks are able to drive the aesthetic preferences of the viewers towards some artworks rather than others. The knowledge of the "responsive" items, that activate the Beauty recognition, allows to predict the possible aesthetic choices of the public. We have defined this phenomenon as *Aesthetic Precognition*.

Friday August 22, 4:15 – 5:00 pm. Room 615: Baumgarten Award Addresses

A Search for the Biological Origins of Art

Marcos Nadal
University of Vienna, Austria

The conviction that a comprehensive psychology of art requires an understanding of its biological origins was a fundamental pillar in Berlyne's (1971) psychobiological aesthetics. Our knowledge of the neural and evolutionary foundations of art has increased substantially in the last decade, with dozens of neuroimaging studies, and many new archaeological findings. Here I review some of these advances, and examine their implications for the psychological study of art

On the 2014 Baumgarten Award Talk

Martin Tröndle
Zeppelin University, Friedrichshafen/Berlin, Germany

On the occasion of happily receiving the 2014 Baumgarten Award I want to give a quick overview of my research in the last years. The research project: "eMotion – mapping museum experience" will be introduced where some of the key results will be sketched out. Additionally, the methodological forces behind the project will be reflected upon, as they drove a rich process yielding more fruitful and numerous results than we could have ever anticipated. These factors shall be discussed in the light of the development of empirical aesthetics.

Friday August 22, 4:15 – 5:00 pm. Room 603: Spoken Papers

Asymmetries in Art: Putting Your Best Cheek Forward

Annukka Kim Lindell
La Trobe University, Australia

When posing for a portrait, people tend to adopt a classic three-quarter view, offering more of one side of the face to the artist. Though you might expect a 50:50 split between left and right cheek poses, research shows that people favor the left cheek. Why? This paper explores the reasons underlying this posing asymmetry, arguing that the left cheek bias results from hemispheric asymmetries in emotional expression. Because the left side of the face is predominantly controlled by the right side of the brain (dominant for emotion processing), expressions are more pronounced on the left side of the face. Consequently, people intuitively offer the left cheek to express emotion and perceive models adopting left cheek poses as more emotive.

The Golden Section Hypothesis: Cropping Abstract Artworks

J. Craig Clarke, Jessica Kehl, & Fallon Migliorini
Salisbury University, USA

A modification of the Fechner's *method of production* was used to investigate the golden section hypothesis (GSH). Previous research with the *method of production* has typically yielded simple, outline rectangular shapes that seem to share little with either the types of elaborate stimuli, such as paintings, sculptures and buildings, normally referenced in discussions of the GSH or with the types of stimuli traditionally studied with Fechner's *method of use.* To draw Fechner's two methods of investigation closer together, twenty-three undergraduates were asked to crop a series of 15 abstract artworks as if they were planning to frame the works for wall displays. Results showed that the mean short side/long side ratios for the 15 artworks (M = 1: 1.59) and 15 blank stimuli (M = 1: 2.62) were significantly different ($F(1, 45) = 8.89$, $p = .005$), with only the mean ratio for the artworks being close to the golden ratio. Further, examination of the mean areas of the cropped artworks and cropped blank stimuli ($F(1, 45) = 21.279$, $p < .001$) supports the conclusion that the participants responded very differently to the two types of stimuli. The areas of the artworks were on average 1.45 times larger than those of the blank stimuli.

Exploring Causes of Disagreement on Status of the Golden Section Hypothesis: A Methodological and Theoretical Consideration

Akira Ota
Nagoya University, Japan

This paper critically reviews psychological studies on the golden section hypothesis in experimental aesthetics and explores some causes of disagreement on the status of the hypothesis. In the history of experimental aesthetics since Fechner, the golden section hypothesis, according to which forms containing the golden section are most preferred, has been tested many times by various experiments. However, despite the long history of investigations (over 130 years), the results still contradict each other, and the hypothesis has not yet been conclusively confirmed or rejected. This paper reviews several examples of experiments on the hypothesis and identifies some methodological and theoretical problems concerning (1) the difference of stimuli, (2) the difference of tasks, and (3) the participants' level of art expertise.

Friday August 22, 4:15 – 5:00 pm. Room 605: Spoken Papers

Aesthetic Evaluations of Literary Genres: An Exploratory Study

Christine A. Knoop, Valentin Wagner, & Winfried Menninghaus
Max Planck Institute for Empirical Aesthetics, Germany
Thomas Jacobsen
Helmut Schmidt University, University of the Federal Armed Forces, Germany

How do readers verbally capture aesthetic properties of literature? Our study investigated the conceptual structure of the perceived aesthetics of literary texts, using an approach introduced by Jacobsen et al. (2004). 1544 students were asked to write down adjectives labeling aesthetic properties of either literature in general or one of five sub-samples (novels, short stories, poems, plays, comedies). According to our analyses of frequencies, mean list ranks and the Cognitive Salience Index, 'beautiful' and 'suspenseful' ranked highest overall. Sample-specific terms included select emotion words for plays/ comedies, cognitive-affective terms for novels/ short stories, and music-related terms for poetry. A comparison of our results with similar studies for visual aesthetics and music revealed several overlaps, most notably regarding descriptions of poetry and music.

Affective Tones: Emotional Classification and Aesthetic Appreciation

Maria Kraxenberger
Freie Universität Berlin, Germany

In my talk I will consider the phenomenon of phonological (hypo-) iconicity, often defined as "an inmost, natural form of association" (Jakobson, Waugh 2002: 182). 128 participants rated a content-controlled corpus of 48 German poems on emotional and aesthetic scales. Additionally, phonological analyses were conducted. The participants confirmed a phenomenological-based classification of the poems as either happy or sad, and showed preference for negative content in regard to aesthetic judgments. Also, participants perceived the happy poems as sounding significantly brighter and the sad poems as sounding significantly darker. However, this cannot be explained by the wide spread assumption that there is a higher frequency of front vowels in happy poems and a higher frequency of back vowels in sad poems.

The Blush in Fiction and Psychological Research

W. Raymond Crozier
Cardiff University, UK

My paper compares how the fleeting blush is thought of and used in art and science. The focus is on literary fiction not only because the transient, involuntary and uncontrollable nature of the blush presents difficulties for the visual arts and for drama but also because it features so frequently in fiction and has been the subject of critical discussion. I identify themes in this discussion, summarize findings from content analysis of episodes from works of fiction, and compare these themes with accounts in the psychology of blushing.

Friday August 22, 5:00 – 6:00 pm. Room 605: Executive Meeting of IAEA Officers

Saturday, August 23, 2014

8:00 – 9:00 am
1st Floor Lobby: Registration
7th Floor Lounge: Coffee

Saturday August 23, 9:00 – 10:45 am. Room 615: Spoken Papers

Category-specific Encoding of Face and Place Attractiveness in the Brain
Teresa K. Pegors, Joe W. Kable, Anjan Chatterjee, & Russell A. Epstein
University of Pennsylvania, USA

Previous studies have identified regions in human prefrontal cortex whose neural response correlates with the beauty of perceived stimuli. We sought to determine whether some of these beauty-related responses were category-specific. Subjects were scanned with functional magnetic resonance imaging (fMRI) while making attractiveness ratings of faces and places. Ventromedial prefrontal cortex (vmPFC) responded to both face and place attractiveness, but there were distinct *patterns* of response in a ventral subregion for each. Activity in lateral orbitofrontal cortex (latOFC), on the other hand, was only sensitive to face attractiveness. These results go beyond previous findings indicating prefrontal response to beauty across a variety of stimulus categories by showing that there is some category-specific attractiveness response in vmPFC and latOFC.

Understand *After* Like, Viewer's Delight: A fNIRS Study of Order Effect in Combined Hedonic and Cognitive Appraisal of Art
Matthew Pelowski
University of Copenhagen, Denmark

Thirty-two subjects evaluated paintings in a two-part task in which half first evaluated for understanding followed by liking and the other half had question order reversed. Brain activity was recorded via functional Near Infrared Spectroscopy. Artwork appraisal showed no judgment interrelation or order effect, with first appraisals having no impact on subsequent judgment. However, subjects who began first with evaluation for liking followed by understanding, and who came to incongruent combinations of assessments, showed higher activation in left medial prefrontal cortex, functionally associated with attention/self-related assessment and integration of hedonic and informational elements. Findings provide tentative support for a hedonic-driven order effect, raise important implications regarding biological connection between liking/understanding and suggest need for further such consideration in appraisal-related research.

Empathy and the Aesthetic Experience:
How "Einfühlung - Feeling Into" Changes Aesthetic Experiences of Representational and Abstract Art
Gernot Gerger & Helmut Leder
University of Vienna, Austria

Dating back to Theodor Lipps it is hypothesized that empathic processes through "Einfühlung – feeling into" are essential to aesthetic experiences. Here we tested how the ability of feeling into emotional aspects changes aesthetic experiences. Participants differing in emotional contagion (EC) – the ability to pick up and mirror emotions – evaluated abstract and representational artworks on several aesthetic dimensions (liking, moving, valence, interest) while their bodily reactions indicative of emotional processes (facial electromyography - EMG, and skin conductance responses - SC) were recorded. High compared to low EC participants showed more intense bodily reactions (EMG, SC) and stronger aesthetic evaluations (moving, valence, interest) when exposed to art. Eventually, they also liked art more. Thus, "Einfühlung" can contribute to more positive aesthetic experiences.

Understanding Action-Art by Looking at Motion Dynamics

Alexander Schubert & Katja Mombaur
Interdisciplinary Center for Scientific Computing, Germany

There are several studies from psychology and neuroscience that support a strong link between action perception, action generation and action simulation by the concept of a shared motor representation. Observing an action involuntarily and unconsciously evokes a simulation within the observer's motor system. It has been proposed that this effect is also present in processing abstract art, particularly action art. We present a mathematically inspired methodology that can be used to analyze the role of dynamic motions both during the painting process and the perceiving process of action art paintings. Data for analysis and model validation is collected by motion capture experiments and online perception studies of action art paintings. We present first results that support the validity of this approach.

Artworks Are Attentional Engines: Normative Conventions and Evaluative Perception in the Arts

William P. Seeley
Bates College, USA

There is a standard skeptical concern within philosophy of art that causal explanations in psychology and neuroscience apply equally to our engagement with art that is done well and art that is done poorly and so do not contribute to our understanding of the normative dimension of artistic appreciation. This skeptical concern is often used to challenge the relevance of psychology and neuroscience to our understanding of art. I sketch a crossmodal model for perception which demonstrates that those affective processes responsible for encoding the biological and instrumental value of a stimulus play a critical productive role in perceptual processing. I argue that the ensuing model for affective perception dissolves these skeptical philosophical concerns.

Axiological Approaches to Aesthetic Experience in Neuroaesthetics

Joerg Fingerhut
Institute of Philosophy, Germany

Recent approaches in neuroaesthetics appeal to reward and pleasure mediating systems to explain the distinct character of aesthetic experience. In this paper I review studies that (a) claim that in aesthetic experience we employ a liking system without a wanting system (Chatterjee 2014); (b) propose a separation of early and late aesthetic systems related to different values (Cela-Conde et al. 2013); and (c) show how intense aesthetic liking involves exteroceptively driven self-evaluation (Vessel et al. 2013). I argue that these studies support a theory that can provide an alternative to more traditional axiologically-oriented approaches in philosophical aesthetics that claim that aesthetic experience is essentially valued for its own sake (Carroll 2002).

Saturday August 23, 9:00 – 10:45 am. Room 603: Spoken Papers

Perspective Involves Understanding of Direction From a Point, Not Just Visual Projection to a Point

Paul M. Gabias & Christopher R. Heckel
University of British Columbia, Canada

Twelve blind participants were presented with side and top views within the same drawings of 4 tables. They were shown as drawn from the front left and front right. 9/12, judged the polar perspective table drawn from the left side as having been drawn from the left side. 10/12, judged the polar perspective table drawn from the right side as having been drawn from the right side. 11/12, judged the polar perspective table drawn from the left side as having been drawn from the left side, even with the cubes resting on the table. 11/12, judged the polar perspective table drawn from the right side as having been drawn from the right side, even with cubes resting on the table.

A Cognitive Ethnographic Study of Improvisational Drawing by Eight Contemporary Artists

Andrea Kantrowitz
Teachers College, Columbia University, USA

This interdisciplinary study brought together methods and theories from both art education and cognitive psychology to study the cognitive interactions underlying drawing within a specific contemporary context. Improvisational drawing was defined as an open-ended process, rather than the rendering of a predetermined image or scene. A cognitive ethnographic methodology was used to document and analyze eight artists' improvisational drawing practices, in their own studios, through video recording and retrospective reports. Common structural components and dynamics as well as differences between participants were found.

Drawing Faces Upside-Down Selectively Impairs the Ability to Draw the Vertical, but not Horizontal, Spatial Relationships between Facial Features

Justin Ostrofsky
The Richard Stockton College of New Jersey, USA

Although art-educators advocate for the practice of drawing models upside down to improve accuracy, research has demonstrated that viewing face models upside-down causes impairments in the ability to perceive vertical, but not horizontal, spatial relationships between features. The present study assessed whether drawing upside-down faces causes a similar impairment in drawing accuracy. Non-artists drew a model face in both the upright and upside-down orientations. Congruent with patterns of perceptual impairment, the vertical spatial relationships were drawn less accurately in upside-down faces than upright faces. Accuracy of drawing the horizontal spatial relationships was not affected by model orientation. In contrast to assumptions guiding art-education practices, our results suggest drawing a model upside-down either has no effect or an impairing effect on drawing accuracy.

Drawing Energy: Exploring the Aesthetics of the Invisible

Flora Bowden, Daniel Lockton, Rama Gheerawo, & Clare Brass
Royal College of Art, London, UK

What Does Energy Look Like? was a two-part empirical study conducted within a European energy research project, which invited people to visualise (through pen on paper), their ideas, mental models, experiences and notions of energy. What emerged was a collection of over sixty *Energy Drawings* that presents a diverse and multifaceted picture of this often intangible and amorphous subject; and which suggests a broad and sometimes contrasting range of personal definitions and conceptualisations of energy. In this paper we will discuss our findings from our drawing study. We will consider what they tell us about our samples' aesthetic perception and judgement of energy, the different responses across the samples; and the nature of the categorisations, characterisations and associations that emerged.

Pixel Drawing: A Novel Signal Detection-Based Approach to Measuring Drawing Skill

Aaron Kozbelt
Brooklyn College and the Graduate Center of the City University of New York, USA
Emma Snodgrass
Hunter College of the City University of New York, USA
Justin Ostrofsky
The Richard Stockton College of New Jersey, USA

Psychological studies of skilled artistic drawing have traditionally relied on subjective Likert-scale ratings to assess drawing accuracy, a significant methodological limitation. Here we used a novel and objectively scorable 'pixel' drawing task to explore psychological accounts and expertise effects in drawing. A total of 18 artist and 27 non-artist participants created drawings by placing 225 small squares of black tape within a 28 × 32 grid superimposed on a photograph of a face. A signal detection analysis comparing square placement in each drawing with that of a computer-generated version of the image revealed a very large artist advantage in sensitivity to placing the squares appropriately. Subjective accuracy ratings by 8 artist and 25 non-artist judges yielded a pattern whereby artists' ratings of other artists' renderings were rated as considerably higher than any of the other three drawer-rater combinations. This method provides a means for further integrating bottom-up and top-down explanations of drawing skill.

Unsuccessful Learning of the Acknowledged Effectiveness of Form Complication

Gianni Perillo
Scuole sec. di I grado "G. S. Poli" e "C. Giaquinto", Italy

We have assigned the task of tracing some non-figurative and non-symbolic closed shapes to some subjects, in order to draw interesting shapes. The same subjects have then expressed a *preference* for the shapes which they perceived as being more interesting. They were then asked to carry out a task which was similar to the first and we asked ourselves whether it would have been possible to detect, in their new drawing, some influences of the shape which they considered to be the most interesting, in particular in those cases in which such *preference* had been assigned to a drawing which differed from the one the subject had produced. The attempt was that of trying to detect a possible hiatus between production and choice, or a possible incoherence between action and judgment.

Saturday August 23, 9:00 – 10:45 am. Room 605: Art Exhibition Talks

Four Lithographs Based On Illusory Contours, Colours, and Meaning Differences

Paolo Bonaiuto
Sapienza University of Rome, Italy

In the history of arts there are examples of the use of shadows to obtain aesthetic effects. In the tradition of experiments on illusory contours, we know the efficacy of depicted *own shadows (chiaroscuro)* in order to obtain the appearance of letters, numbers and other bodies (Jastrow, 1989; Metzger, 1953; Bonaiuto, Giannini & Bonaiuto, 1988, 1991). Moreover, illusory contours, surfaces and volumes have been obtained by using *cast shadows* (Bonaiuto, 2004) in relationships with their apparent causal agents. My drawings are first outlined in pencil on paper, and then the boards are completed by using China ink and photostatic reproduction, with addition of colours. In addition, I depicted the effect of meaning attribution of phenomenal importance of the represented object

Aesthetic Photographic Pictures Based on Assimilation *vs*. Contrast Phenomena

Valeria Biasi
Roma Tre University, Italy

We try to valorise two formal components favourable to aesthetic experience in the interaction between the beholder and the images, and we are dealing with the process of "Amodal Completion" (Michotte, Thinés & Crabbé, 1967; Bonaiuto 1988), which has frequently been proposed in visual art works, as already noted by Kanizsa (1988). This perceptual effect is opposite to, but sometimes integrates, the opposite illusions called masking effect. It creates a figure-ground process that can highlight object identity or, in different cases, reduce object identity. The series of "texture effects" are based on "screen effects" and produce a masking effect of single elements that are partially assimilated to the background. These perceptual effects of *ambiguity* enhance aesthetic experience.

Contrasts

Daria D'Aloise
Sapienza University of Rome, Italy

I selected six photographic color pictures illustrating several examples of contrasts by means of a Sony digital camera. Some of these contrasts are colour contrasts, for example, between white and grey or green; other examples are centered on contrasts between the character of a living organism and hard inanimate objects. I present examples of contrasts between architectural elements and human beings or animals, or the case of dimensional contrast, or the contrast between different natural elements, or the contrast between movement and the static condition. In conclusion, we find that the many contrasts assure multiplicity while the repetition of the concept of contrast assures unity, that is, we have unity in variety, which is one of the conditions of aesthetic experience.

Gravitational Attraction of Fragments

M.Teresa Antignani
Brera Academy of Fine Arts, Italy

All the work, from the very beginning, adopts elements of breakthrough.The transience and the ephemeral, the fiction of the preciousness in the illusory abundance and in the fictitious choice are nothing more than the explanation of the condition of the individual.The image wants to live, like searching in a concretist craze to make real the false show .In this obscene comparison, the observer is the only true model of his images, that serving as a place of action and object, in addition to the dynamic apperceptive experiences, focuses on existing relationships,between what you want to believe as art its production processes, its inherently authoritarian dynamics.In this pandemic social domain, it arises a moment of crisis, in which there is no imposed point of view but just accumulation of sensations commodified and non-commodifiedable.An all-encompassing anarchic utopia could be defined this claim to the integrity of to image with life and there is not necessarily present a relationship of continuity revealed to the retinas.

The Tautology of Virtual Reality - Becoming the Third Person Perspective

Myvanwy Gibson
Brera Academy of Fine Arts, Italy

It would normally be considered that 'virtual reality' is an oxymoron. If however we look at this from a completely different angle, we could consider that they, the virtual and the real, are different aspects of the one thing, that one cannot exist without the other, and that they are complementary, rather than opposing concepts. Therefore 'virtual reality' could be described as a tautology, a grammatical figure often used to reinforce the noun described by the adjective - and so it is here because as completely opposing concepts, they create each other by being. These artworks propose that it is the synthesis of diametrically opposed views that enables an evolutionary perspective, and paradoxically, that it takes this perspective to synthesize these views.

10:45 – 11:00 am. Coffee

Saturday August 23, 11:00 am – 12:00 pm. Room 615: Keynote Address: David Freedberg

Empathy, Inhibition, and Judgement

David Freedberg
Columbia University, USA

As empathy has become one of the growth areas in cognitive science, so too it has become fashionable in esthetics again. In this paper I discuss the relationship between empathy and detachment in judging a work of art. I give a number of striking examples of empathetic engagement with works of art, propose that the notion of empathy be narrowed down more carefully than it usually is, and suggest some of the networks of inhibition that play a central role in the detachment of the self from its absorption into the represented other — or even into an abstract work. The basic problem will be that of understanding how such processes offer the necessary potential beyond empathy for self-awareness, contemplation and judgement.

Saturday August 23, 12:00 – 1:30 pm.
8th Floor Faculty Dining Room: Catered Lunch

Saturday August 23, 1:30 – 3:00 pm. Room 615: Symposium on Current Issues and Debates

Forty Years After Berlyne: How Far Have We Come and Where Are We Going?

Marcos Nadal
University of Vienna, Austria
Pablo P.L. Tinio
Montclair State University, USA

Forty years have passed since Berlyne's S*tudies in the New Experimental Aesthetics: Steps Toward an Objective Psychology of Aesthetic Appreciation* (1974), a landmark work in the field of Empirical Aesthetics. How far has the field come since then? It has undoubtedly grown and consolidated, and the clearest evidence of our field's health is the success of our two specialized journals: *Empirical Studies of the Arts* and *Psychology of Aesthetics, Creativity, and the Arts*. It is also true, however, that our field is still small in comparison to others, such as empathy or decision-making. Furthermore, our field draws heavily from other fields of psychology. For instance, our models reference theories, concepts, and empirical findings from the psychology of memory, or the psychology of emotion, among many other areas. Our methods and paradigms are also sometimes borrowed from other domains. What, then, is it that provides Empirical Aesthetics with its identity? Is it just transversal to other domains of knowledge (psychology, neuroscience, aesthetics), or can it be regarded as an entity in itself? What is its relevance today within, and what is it contributing to, the larger domain of psychology of aesthetics and the arts?

Paintings and Emotion: A Nonemotivist Reevaluation

Vladimir J. Konečni
University of California, San Diego, USA

Arguments are presented that paintings are unable to induce basic psychobiological emotions because they do not powerfully engage with spectators' intimate associative-memory systems. However, it is suggested that art installations containing properties subsumable under the classical concept of the *sublime* (physical grandeur, rarity, novelty, an association with beauty and with biologically significant outcomes), are capable of producing a memorable, though non-basic, emotional response, *aesthetic awe* – the peak aesthetic response as defined in Aesthetic Trinity Theory (Konečni, 2005, 2011). A skeptical view is presented of *emotivism*, defined as a proclivity for excessive insertion of "emotion" into scientific and lay accounts of behavior, especially regarding the arts: The *loci* in the domain of paintings are specified in which emotion has often been unjustifiably implicated. Psychobiological and contrasting viewpoints on emotion are outlined. Several possible routes from paintings' attributes to viewers' emotions are found to be analytically indefensible and psychologically improbable. Implications for empirical aesthetics are examined.

Prospects for a Literally Universal Science of Aesthetics and Creativity

Aaron Kozbelt
Brooklyn College and the Graduate Center of the City University of New York, USA

Taking a personal view of contemporary research on aesthetics and creativity, I explore prospects for how contemporary themes in the scientific study of aesthetics and creativity may play out in the most universal contexts. I begin by considering aesthetics via analogy to another non-mainstream intellectual enterprise, the study of communication with extraterrestrial intelligence (exemplified by the *Pioneer* spacecraft plaque), and attempt to determine how comprehensible human aesthetic and creative products might be to other intelligent species (and vice-versa). This thought experiment highlights what aspects of the study of aesthetics might be considered the most legitimately scientific. Emphasizing sensory and cognitive parameters and their pragmatic evolutionary basis, I argue that at least some aspects of aesthetics and creativity are likely to be universal – particularly those arising out of basic adaptations to evolutionary pressures to process information effectively. The Berlyne/Martindale psychobiological theory highlights many of these issues. I argue that resolving details of the theory and its relation to other frameworks, using objective metrics when possible, should be a priority for studies in empirical aesthetics

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Saturday August 23, 1:30 – 3:00 pm. Room 603: Spoken Papers

What I Talk About When I Talk About Aesthetics

Paul Hekkert
Delft University of Technology, The Netherlands

In this paper I will argue that scholars of aesthetics rarely define what they mean when they talk about aesthetics. I will describe three of the most common conceptualizations and argue that only one of them allows us to speak of aesthetics or aesthetic pleasure for product designs and other non-artistic artifacts. I will further propose three sources of aesthetic pleasure that apply to all human artifacts: formal, relative, and intentional aesthetics. Together these sources define a unified model of aesthetics.

The Development of a Reliable and Valid Scale to Measure Aesthetic Pleasure in Design

Janneke Blijlevens & Clementine Thurgood
Swinburne University of Technology, Australia
Paul Hekkert
Delft University of Technology, The Netherlands
Helmut Leder
University of Vienna, Austria
T.W. Allan Whitfield
Swinburne University of Technology, Australia

There is a lack of consistency regarding the scales used to measure aesthetic pleasure. They are often chosen ad hoc or derived from other research fields but never validated for design. Moreover, those scales often do not measure aesthetic pleasure in isolation, but instead include its determinants (e.g., novelty). Therefore, we developed a scale to measure aesthetic pleasure. We also included scales to measure determinants known to influence aesthetic pleasure for discriminant validity purposes. In the exploratory phase, we identified highly reliable items representative of aesthetic pleasure and its determinants across product categories. In the validation phase, we confirmed these findings across different countries (Australia, Netherlands). Apart from the theoretical contribution, this research has practical implications for guiding designers.

Visual Aesthetics in Advertising

Renske van Enschot & Margot van Mulken
Radboud University Nijmegen, The Netherlands

According to the processing fluency theory (Reber et al., 2004), fluently processed stimuli are preferred to more challenging stimuli. This contradicts Giora et al.'s (2004) Optimal Innovation Hypothesis, that predicts a preference for more challenging, optimally innovative stimuli. Hekkert et al.'s dual process model would explain both theories: Familiar stimuli would be preferred after short exposure, whereas optimally innovative stimuli would be preferred after longer exposure. An experiment was done to examine the effect of exposure time (20ms vs. 1000ms) on the aesthetic response to either familiar or optimally innovative advertising images. The results showed a higher aesthetic response to optimally innovative images regardless of exposure time. This study therefore did not support Reber et al.'s fluency theory nor Hekkert et al.'s assumption that two opposing mechanisms are at work at different exposure times.

Aesthetic Pleasure versus Aesthetic Interest:
A Differentiation Based on Processing Dynamics and Processing Style

Laura K. M. Graf & Jan R. Landwehr
Goethe University Frankfurt, Germany

Existing research has well-established that pleasure and interest are distinct positive aesthetic responses. Yet, much empirical research employs only generic measures of positive aesthetic responses, causing some fundamental contradictions in the literature. We address these

contradictions by providing a theoretical integration of the formation of pleasure and interest. Specifically, by taking a dual-process perspective on fluency theory, we differentiate the two responses based on processing dynamics and processing style. Using abstract art pictures as stimuli, we find that pleasure is triggered by a perceiver's initial fluency experience from automatically processing a stimulus. Regarding interest, we give empirical indication that a process of disfluency reduction elicits interest, and that disfluency reduction is a function of processing motivation and stimulus-based processing affordance.

Saturday August 23, 1:30 – 3:00 pm. Room 605: Art Exhibition Talks

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The Development of Neural Art: An Outline

George K. Shortess
Bethlehem, PA, USA

In the mid 1970's, I decided to develop some of my art work using the nervous system as the subject. In this way I could combine my scientific understanding of the nervous system based on my training in cognitive neuroscience of vision with my more intuitive and emotional approach grounded in my visual art training. Since I have always tried to have my work be thoughtful rather than spectacular, this idea was an intriguing possibility. This article is a review of the project which has been a significant part of my work since then and is the basis of the work in the Art Exhibition.

Woven Faces Project

Lia Cook
California College of the Arts, USA

In my work I explore the sensuality of the woven image and the embodied emotional connection to memories of touch and cloth. I use a digital hand loom to weave images (of faces) that are embedded in the structure of cloth. The digital pixel becomes a thread that when interlaced with another becomes both cloth and image at the same time. What does the discovery of the tactile woven structure and the intense desire to touch the work add to our emotional response to seeing a face? My most recent work investigates the nature of this emotional response to woven faces in collaboration with neuroscientists using both the process and tools of the laboratory as well as direct behavioral studies.

Gender Development

Jo Chiung Hua Chen
National Taiwan Normal University, Taiwan

This work uses Chinese cultural codes like "left side for man, and right side for woman", "stereotype of gender colors", and "general code of arrows" to create the concept of "gender development". The author manipulates her teaching document records and photos to express the power and importance of teaching gender equality. The form of the artwork is a process of documentation. The power of the students' works represents the bullets trying to destroy the traditional system of inequality. The action is effective and is hard to ignore.

Stochastic Combined Painting

Gianni Perillo
Scuole sec. di I grado "G. S. Poli" e "C. Giaquinto", Italy

Peirce called "the play of musement" what Sebeok defined as *language*, i.e. the modeling procedure specific to human beings as a species, through which it is possible to organize our experience and the surrounding reality spatially and temporally, and through which we can give meaning to the construction of a world. Similarly, *Stochastic combined painting* uses pieces which can be combined in an infinity of ways, creating an undetermined number of models which could be unassembled and combined again in new models. However, only some combinations of colored elements can cause interpretative conflicts which are unforeseeable, spontaneous, original, and which can therefore be hypothesized and verified experimentally. The aim of this research is to invent a stimulus which can provoke heterogeneous, nonconformist interpretations.

***Beyond Time*: The Aesthetics of Interactive Multimedia Art and Design**

Patricia Search
Rensselaer Polytechnic Institute, USA

Beyond Time is an interactive, multimedia art installation that integrates images, words, and sounds, inspired by indigenous cultures, with visualizations of scientific data. The installation juxtaposes spatial and temporal relationships, defined by intuitive, sensory responses to the environment, with mathematical representations of space and time. The fluid integration of these different conceptual models is symbolized by continuous shapes, animations, rhythmic sounds, and the movements of the viewers as they interact with the programs. The artwork creates a visual and conceptual framework for understanding how we interpret physical and virtual spaces.

3:00 – 3:15 pm. Coffee

Saturday August 23, 3:15 – 5:15 pm. Room 615: Spoken Papers

Looking Back by Looking Into the Future –
The Role of Anticipation and Trend Effects in Retrospective Judgments of Musical Excitement

Jochen Steffens & Catherine Guastavino
McGill University, Canada

When we judge experiences retrospectively, we need to temporally integrate the single elements into an overall evaluation. In our study, we compared momentary and retrospective excitement judgments of seven musical pieces. Results reveal that the mean momentary judgments together with the linear trend of the latter half of the pieces were found to be significant predictors of retrospective judgments. It could also be shown, that the trend effect reinforces anticipation measured by a decreased response time of the momentary judgments. It therefore can be stated that retrospective judgments of musical excitement are not only the sum of the single elements of an actual experience but are also supposed to depend on "remembered future" – anticipated future states of an experience.

Flow Experience and Self-Regulation in Music Performers After a Procedure of Emotion Induction

Pierluigi Diotaiuti, Angelo Marco Zona, & Luigi Rea
University of Cassino and South Latium, Italy

Two hundred musicians were administered after a public exhibition a mood induction procedure, the *Flow State Scale* and a *Self-regulation Scale*, collecting also information on the use of mental strategies to withstand negative emotions. Results have shown that flow experience varied depending on the type of instrument used and self-regulatory characteristics of the subjects involved. Self-regulation and flow are strongly correlated among pianists and vocal performers. The emotional induction affects the self-evaluative judgments on own performance. Past experience in practice of music, while results in better performance levels, does not constitute an advantage in emotional management. The use of mental strategies is associated with the formulation of more realistic judgments, with a better protection and management of interfering emotions.

Revisiting the Effects of Sad Emotion on Music Preference

Ronald S. Friedman & Christa L. Taylor
University at Albany, USA

Recent findings regarding the influence of sad mood on music preference have been inconsistent, with some research suggesting that sadness promotes selective exposure to happy music and other work suggesting the very opposite. In two experiments, we investigated whether this discrepancy may have resulted from differences in the extent to which sadness was elicited by having participants think about personally-relevant versus personally-irrelevant negative events. To this end, we manipulated sad mood via a guided visualization technique in which participants were led to imagine experiencing a loss that was relevant either to their own or to an unfamiliar individual's concerns. Results revealed that irrespective of the self-relevance of the mood induction, individuals in sad, relative to happy or neutral, moods preferred to avoid expressively happy music. This aversion was partially mediated by beliefs that choosing happy music while sad would be inappropriate and thereby ineffectual in mood repair. Together, these findings contribute to resolving discrepancies in the literature and help advance understanding of the influence of mood on music choice.

Emotional Processing in Music

Marina Korsakova-Kreyn
Touro College, Lander College for Women, USA

Music is able to communicate emotions and general ideas in a non-symbolic way. Music can be explained as motion in tonal space that is defined by a tonal system of reference—musical scale. One of the main expressive aspects in European musical tradition is reorientation of a scale on different tonal centers or tonal modulation. We conducted two experiments to investigate affective response to modulation by using semantic differential related to valence, synesthesia, potency, and tension. The results revealed the affective influence of degree of modulation, of the major and minor modes, and melodic direction. We also found refined sensitivity of non-musicians to musical styles. The results offer support to Susanne Langer's idea that music recreates the "logic of emotion."

Aesthetic Evaluation of Metric Timing Patterns in Malian Jembe-Music

Hans Neuhoff & Rainer Polak
Cologne University of Music and Dance, Germany
Justin London
Carleton College, USA
Timo Fischinger
Max Planck Institute for Empirical Aesthetics, Germany

We report on two experiments conducted in Mali and Germany. A piece of Malian jembe-music called *Manjanin* (four beats, ternary subdivision) was used to explore (1) whether the timing of subdivisions is constitutive for the aesthetic value of the rhythm, and (2) if enculturation impacts preference judgments on timings (24 professional musicians from Bamako versus 32 music students from Cologne). Participants were asked to rate timing-manipulated versions of ensemble phrases in a pairwise comparison design. Results show that experts from Mali prefer a non-isochronous short-long-long metric timing pattern, and the group comparison reveals a strong influence of culture specific musical standards on preference judgments.

Trends in Empirical Aesthetics: A Review of the Journal of Empirical Studies of the Arts with Emphasis on Music-Related Papers

Fabian Greb, Paul Elvers, & Timo Fischinger
Max Planck Institute for Empirical Aesthetics, Germany

This paper discusses trends in empirical aesthetics by systematically reviewing the journal of *Empirical Studies of the Arts* from the first issue in 1983 to 2013. In order to grasp the distribution of art divisions, the diverse approaches, and methods involved in empirical aesthetics, 382 articles were examined in the following three categories: Art Domains, Topics, and Methods. In a second step all 34 music-related papers were reviewed in terms of study design, subjects, stimuli, analytical methods, results, and their relation to the field of empirical aesthetics. Based on this, distributions and trends within the journal were identified and judgments about their relation to empirical aesthetics with special emphasis on music were made.

Saturday August 23, 3:15 – 5:15 pm. Room 603: Spoken Papers

Art Experience in the Museum

David Brieber, Marcos Nadal, & Helmut Leder
University of Vienna, Austria

While a museum is a context where art is commonly appreciated, the laboratory is the context where empirical aesthetic research is commonly conducted. We compared aesthetic experiences and viewing behavior in the museum and laboratory to examine the effect of context on art experience. In a series of studies, participants viewed artworks in the museum and/or the laboratory while aesthetic experience and viewing behavior were measured via self-reports and mobile eye tracking. Our results show that art in the museum is liked more, found more arousing, positive, and interesting, and it is remembered better than in the laboratory. Art experience was related with viewing time, and this relation was modulated by context.

Between Indifference, Devotion and Sexual Arousal: Emotional Experience of Art Audience Reflected Through Appraisal Theory

Sari Kuuva & Johanna Maksimainen
University of Jyväskylä, Finland

This study examines the audience's emotional experience of art through interviews conducted at the Munch Museum, Oslo. In the interviews, the participants reflect their emotions in the context of the iconic works of Edvard Munch. In a qualitative analysis of the interviews, attention is paid to the individual and cultural variations in the respondent's emotional experiences, and the results are interpreted through appraisal-theory. The visual properties of the artworks are also discussed, for example, by making comparisons between the painted and lithographic versions of Munch's *Madonna* and the audience's experiences of these works. The results indicate how complicated the relationship between the work of art and the experiencing audience actually is. Both the personal experiences of the beholders and their cultural background interact with the visual properties of the artworks.

An International Perspective of Art Experience: Attitudes, Motivations, Emotions, and Learning Processes as Predictors of Museum Visits for Young People

Stefano Mastandrea, Fridanna Maricchiolo, & Giuseppe Carrus
University of Rome Tre, Italy

The aim of this research was to conduct a survey to investigate which psychological factors, amongst attitudes, motivations, emotions, and learning processes predict museum visits of young adults. The study comprises data from 8 countries: Austria, France, Hungary, Italy, New Zealand, Portugal, Taiwan, and the USA. A questionnaire was administered to 2,247 participants from all over the Countries. Findings show differences among Countries in terms of museum visits attendance and typology of museums. To consider all the variables, three structural equation models were run. In sum, museum visitation was predicted by previous museum visits in autonomous way and with one's own family. Intrinsic motivations and positive attitudes to museum are related to intention to future visit.

Major Ways Visitors of the General Public Type Use Their Imagination in a Fine Arts Museum. Results and Meaning

Colette Dufresne-Tassé, Dominique Marin, & Anne-Marie Émond
Université de Montréal, Canada

In a fine arts permanent exhibition, it has been observed that the imaginative functioning of visitors of the general public type accompanies one third of what they think or feel. This functioning is expressed through three types of strategies: escaping, integration and reintegration, integration being the most frequently used. Unfortunately, the end result of these strategies leaves visitors unsatisfied. Most of the time, their disappointment is due to the paucity of the information offered by the exhibition.

Taiwanese Young Adults' Attitudes Toward Museum Visiting

Jo Chiung Hua Chen
National Taiwan Normal University, Taiwan

This study uses "past conditioned experience" as a stimulus to understand young Taiwanese adults' attitudes toward museum visiting regarding their habits, feelings and values about museums. A total of 348 university students were investigated by a structured questionnaire. 62.6% were female and 37.4% were male. The findings indicate how attitude formation is related to conditioned experiences. Taiwanese young adults' attitudes toward museum visiting show a positively circulating cycle between self-identity, habits, and values. On the other hand, we also find there is a discrepancy between the values of the museum experience itself and the experience in the context of teacher education. Meaningful information were uncovered for museum education to be enhanced in Taiwan.

The Human Contribution to the Experience of Art in the Museum

Marcos Nadal & Helmut Leder
University of Vienna, Austria
Pablo P. L. Tinio
Montclair State University, USA
David Brieber
University of Vienna, Austria

In the common psychological laboratory setting, artworks are treated as stimuli, the experience of art as a reactive task, and participants as passive responders. Thus, psychological research on the experience of art actually runs the risk of excluding many of the features that contribute to the experience. The appreciation of art is not a passive response to a series of works, but an active construction that relies heavily on what Dewey called "the human contribution". In this study we examined the impact of the expectations, motives and education of spontaneous museum visitors on their experience of art. Our results suggest that people's expectations about an art exhibition and motivations to attend, together with their education, contribute to shape their experience of art in the museum.

Visual Harmony and Illusion-Based Test for Subject's "Happiness"

Vladimir M. Petrov & Lidia A. Mazhul
State Institute for Art Studies, Russia

Out of methods to measure the degree of person's happiness, well-being, and related phenomena, those ones should be singled out which use non-verbal stimuli and simple procedures. Such method was derived based on visual illusions treated as a result of a person's tendency to increase his/her 'harmony of perception.' A set of 12 stimuli is proposed to a participant, each stimulus depicting two "stubs": thin and thick, the 'point of harmony' being fixed when both lengths are perceived as equal. After the experiment, an interview with each participant took place, concerning three parameters: (a) his/her health, (b) family life, and (c) social status. Then the participants were divided into groups responding to different degrees of well-being. The members of such groups showed different 'points of harmony,' this effect being capable of practical application in mass investigations, including cross-cultural ones.

Saturday August 23, 3:15 – 5:15 pm. Room 605: Art Exhibition Talks

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St. Sebastian

Aaron Kozbelt
Brooklyn College and the Graduate Center of the City University of New York, USA

In this art exhibition, I show and discuss one large mixed-media work, *St. Sebastian*, which I have worked on intermittently since May 1, 2000, and which remains unfinished. The work reflects my interest in visual complexity

A Cognitive Ethnographic Study of Improvisational Drawing by Eight Contemporary Artists

Andrea Kantrowitz
Teachers College, Columbia University, USA

This interdisciplinary study brought together methods and theories from both art education and cognitive psychology to study the cognitive interactions underlying drawing within a specific contemporary context. Improvisational drawing was defined as an open-ended process, rather than the rendering of a predetermined image or scene. A cognitive ethnographic methodology was used to document and analyze eight artists' improvisational drawing practices, in their own studios, through video recording and retrospective reports. Common structural components and dynamics as well as differences between participants were found.

Art Exhibition -- Art Shimamura

Arthur P. Shimamura
University of California Berkeley, USA

Photographic art offers a point of view intended to elicit an aesthetic experience. Of course the exact nature of such experiences has been bandied about by philosophers, scientists, and artists. For me, photography offers an opportunity to participate in the creative process as well as providing a means of examining how viewers respond to art. The images presented here are intended to elicit an integrated experience, drawing on perceptual, conceptual, and emotional processes. They adhere to my scholarly analysis of the I-SKE model, a simple framework for empirical analyses of aesthetics which considers the *intention* of the artist and three primary components of the beholder's experience: *sensation*, *knowledge*, and *emotion*.

How Abstract is Abstract Art? A Personal Encounter

Marcella Tarozzi Goldsmith
New York, NY, USA

Abstract art is rarely so abstract as to completely hide shapes and details that could be recognized as being similar to a familiar object. These are cases of particular perception that bring to mind—consciously or unconsciously—past experiences. With my own watercolors I hope to produce works that demand a double view: the first being the abstract; the second, the "representational," which, however, should not dominate the overall impression of the painting. Both coloristic and linearistic, my watercolors express my subjectivity and also my desire to attain luminosity. Moreover, I look for harmony between form and color; that is, for an overall "togetherness" inclusive of the different components of a painting.

Credo: Documentary Photographs of Signs Following Believers

Richard Cary
Mars Hill University, USA

Credo, is a simple declaration of faith unqualified and the title for photographs that explore the experiences of two small congregations who call themselves Signs Followers. Signs Followers base their practices on Mark 16: 17-18 (KJV):
And these signs shall follow them that believe: In my name shall they cast out devils; they shall speak with new tongues; they shall take up serpents; and if they drink any deadly thing it shall not hurt them; they shall lay hands on the sick, and they shall recover.
Worship is characterized by passionate intensity, expressionistic preaching, ecstatic singing, dancing, and the practices described in Mark 16, including healing by "laying on hands," handling fire, drinking poison, and most distinctively, handling poisonous serpents.

Saturday August 23, 6:00 – 10:00 pm. Social Event: The Modern at the MoMA.

Sunday, August 24, 2014

8:30 – 9:00 am. Registration and Coffee

Sunday August 24, 9:00 – 9:45 am. Room 615: Spoken Papers

How Big Is That Supernova In the Window?

Lisa F. Smith
University of Otago, New Zealand
Kimberly K. Arcand
Harvard-Smithsonian Center for Astrophysics, USA
Jeffrey K. Smith
University of Otago College of Education, New Zealand
Randall K. Smith, Jay Bookbinder, & Megan Watzke
Harvard-Smithsonian Center for Astrophysics, USA

More than ever before, people have become consumers of data. How this shift in the way information is communicated and received affects perception, enjoyment, and comprehension of images is still an open question. This study examined one aspect of this digital age: perceptions of astronomical images and their labels, on mobile platforms. Participants were n = 2183 respondents to an online survey, and two focus groups (n = 12 astrophysicists; n = 11 lay public). Results indicated that the size and quality of the images on the mobile devices affected label comprehension and engagement. A label format question using a leading question was significantly preferred to a format written around a fun fact. Results inform how the size and the quality of the images on mobile platforms, and their accompanying text, need to be considered for astronomical images.

Information Modulates Appreciation of New Media Art

Antonio López-Juan
Universitat Ramon Llull (Blanquerna), Spain
Marcos Nadal
University of Vienna, Austria

The present study aimed to ascertain the extent to which information influenced laypeople's liking of Video Art. Fifty participants viewed 12 Video Art clips with or without information, and were asked to rate their liking for each of them. Our results show that when participants viewed the artworks with information, their liking ratings were higher than when they saw them without information. We also found that the liking for the video works was modulated by participants' general interest in art. Our work shows that some of the results found in similar studies, which have usually focused on the aesthetic appreciation of pictorial works, extend to the domain of the New Media Art.

How Context Works! Different Ways to Study the Effects of Context on Aesthetic Experience

Helmut Leder
University of Vienna, Austria

Context is an important variable in aesthetic experiences. In this contribution the main lines of research that study the role of context in art appreciation in the museum - or the laboratory - are discussed.

Sunday August 24, 9:00 – 9:45 am. Room 603: Spoken Papers

Aesthetic Stability in Development

Cameron Pugach & Emma Daley
Hobart & William Smith Colleges, USA
Helmut Leder
University of Vienna, Austria
Daniel J. Graham
Hobart & William Smith Colleges, USA

The stability of human aesthetic preferences has been little studied. Even basic parameters such as the typical level of stability of healthy adults are unknown. This cross-sectional study focuses on stability in early child development utilizing aesthetic preference for paintings and photographs as a means of measurement. Our results show that while stability does not differ for paintings versus photographs, older children (7-9 years) are significantly more stable than younger children (3-6 years). In addition, older children perform significantly better on an explicit memory task though memory is a weak predictor of stability compared to age. Our results suggest that aesthetic stability appears to emerge surprisingly early in development, a finding that is in line with the AD patient results (Graham et al. 2013, Halpern et al. 2008) in that it confirms the robustness of aesthetic stability. It remains to be seen how other stages of development—or indeed how the panoply of relevant psychological factors—influence aesthetic stability.

The Development of Visual Art Preferences

Tilbe Göksun
Koç University, Turkey
Alexander Kranjec
Duquesne University & Center for the Neural Basis of Cognition, Carnegie Mellon University, USA
Anjan Chatterjee
University of Pennsylvania, USA

The development of visual art preferences is an understudied area in aesthetics research. Yet, it is necessary to understand how our aesthetic appreciation emerges and what factors influence this process during development. A good framework to study early art appreciation with infants and young children requires an examination of the interactions among different components of aesthetic experience (sensation, knowledge, and emotion). This line of research can help identify general perceptual primitives in visual art preferences and how they diverge across development and culture. This review will propose a model to study early development of art preferences.

Can Infants Express Sensitivity to Musical Aesthetics Similarly to Adults? Insights from Beatles and Beethoven

Roni Zelichov-Lasry & Ronny Geva
Bar Ilan University, Israel

Little is known about the development of enjoying aesthetics and the ability to perceive it in music. The aim of the study was to examine human neonates, their mothers and adults' sensitivity to musical aesthetic patterns. We hypothesized that participant's sensitivity to musical aesthetic patterns will be expressed through distinct behavioral responses as a function of aesthetic features, maturation and exposure to musical genres. All participants were sensitive to differences between aesthetic and non-aesthetic patterns in music, with heightened sensitivity to aesthetic patterns as a function of musical genre. Cultural exposure, even at infancy, elicited a stronger response to aesthetic patterns within the classical genre. This study deepens our understanding of how we perceive aesthetics in the world around us.

Sunday August 24, 9:00 – 9:45 am. Room 605: Spoken Papers

The Pleasure of Ambiguity

Michael Forster, Martina Jakesch, Jürgen Goller, & Helmut Leder
University of Vienna, Austria

In art theory, it is claimed that a main component of arts is ambiguity. But why is ambiguity appreciated in the arts when it is mostly disliked in everyday life? One explanation is that while in our everyday life an ambiguous situation might cause harm, the safe context of an aesthetic episode allows for indulging in such challenges. Nonetheless, the “processing-fluency-account” suggests that we prefer stimuli, which are easy to process. Thus, we tested whether ambiguous pictures receive higher aesthetic evaluations in an explicit rating task, but also implicitly evoke more positive emotions. Our results show that in the arts ambiguity can be appreciated, but it takes some time for the pleasure to unfold. Furthermore, individual differences modulate this appreciation.

Grasping This Nettle: Possible Effects of Eielson's Zen-Taoist Nudos on the Audience

Alethia Alfonso
Universidad Iberoamericana, México

Jorge Eduardo Eielson (1924-2006) has Taoism, Zen Buddhism and the quipu (knot) as his major influences. His series of knots comprehend poems, paintings, installations, assemblages, and performances. Zen and Taoist influences have an effect on his quipus series, and on the audience and readers' experiences, because they bring into being an intersubjective experience—a momentary union of the work of art, audience and author—whose consequences might be evident outside the artistic phenomena. Eielson's work defies what we understand as art. This challenging characteristic joined to the consequences for the audience are appealing to my research. After explaining how Zen, Tao, and the quipu allow audience and author the achievement of an intersubjective experience, I will an applied-research proposal.

Rerouting Facial Perception – The Role of Prosopagnosia in Chuck Close's Portrait Art

Oren Kalus
Kingston, NY, USA

The contradiction of the contemporary portrait painter Chuck Close having developmental prosopagnosia (DP) presents an unusual opportunity for a neuroaesthetic examination of an artist whose chosen subject matter centers on his deficit. While some interpretations have stressed Close's strategies at mitigating his face blindness - they fail to explain how key aspects of his art, such as their enormous scale, featureless backgrounds and absence of expression serve, if anything, to make face recognition harder. Could a deficit in holistic processing, (impaired in some prosopagnosics) – explain Close's signature "ripping back and forth" between realistic image from afar to abstract patterns up close? But precocious drawing skills (implying intact perception) suggests a more nuanced interpretation where implied deficits (such as absence of facial expression) represent aesthetic choices, rather than biological constraints. The use of people snapshots as face recognition aides in his day-to-day life on the one hand with the fragmented photographic forms in his portraits on the other – suggest developmentally divergent trajectories in his personal vs. artistic lives. That the actual lesion maybe memory rather than perceptually based is suggested by his difficulty in identifying the invariant features of familiar faces (or prosoamnesia) and suggests a different neuroaesthetic model. A model that entails both an embrace and even exaggeration of those 'deficits' encouraging the viewer to become prosopagnosic themselves and a re-routing of facial perception via embodied neural pathways that Close likened to the Lilliputian's enacted mode of perceiving the gargantuan Gulliver. By frustrating conventional facial perception in favor of modes more typically associated neurally with maps, landscapes and even up-side down faces - he creates images more aesthetically complex, ambiguous and novel.

9:45 – 10:00 am. Coffee

Sunday August 24, 10:00 – 10:45 am. Room 615: Spoken Papers

Visual Preference for Curvature as a Potential Aesthetic Primitive

Enric Munar, Gerardo Gómez-Puerto, & Emilio López-Navarro
University of the Balearic Islands, Spain
Marcos Nadal
University of Vienna, Austria

From an evolutionary perspective, aesthetics has been understood as a human-derived trait. Aesthetics could be seen as an evolutionary consequence of a series of old forms of complex problem solving (Johnson, 2012). Preference for curvature could be interpreted as part of some of these forms and considered as an "aesthetic primitive". We designed an experimental procedure with the assumption of responses of approaching or avoiding the stimulus. The objective was to test the effect in a wide variety of cases: different exposure times, non-Western populations, using real objects and silhouettes, and other primates. The preliminary data as a whole indicated that the effect is present in all these groups and that the exposure time is critical.

Do Observers Like Curvature or do They Dislike Angularity?

Letizia Palumbo & Marco Bertamini
University of Liverpool, UK
Tamara Nicoleta Gheorghes
Sheffield Hallam University, UK
Mai Galatsidas
University of Liverpool, UK

Humans prefer curvy objects. Four experiments clarified whether curvature is liked or whether angularity is disliked, or both. In Experiment 1 a preference for curved shapes over angular ones was confirmed, but not a link with perceived complexity. Experiment 2 and 3 examined preference for curved lines as compared to straight lines that have no angles. When the lines presented several orientations, the curved ones were liked more than either angular or straight lines. Finally, the manikin task in Experiment 4 showed a pattern of approach for curved shapes rather than a pattern of avoidance for angular ones. In sum, the curvature effect is not a by-product of a dislike for angularity, but curved shapes are, per se, visually pleasant.

The Role of Facial Features in the Identification of Comics Characters

Ming-Hung Chen & I-Ping Chen
National Chiao Tung University, Taiwan

Humans are great at face discrimination. However, such proficiency does not seem to apply to pictorial faces. In this study we are interested in comparing our perception of cartoon faces to that of real faces. The results show that: (1) Similar to the condition for recognizing real faces, hair, eyes and mouth are the most critical features for comics face identification. (2) The absence of eyebrows doesn't affect response accuracy and reaction time for face identification. (3) The absence of nose reduces the reaction time for comics face identification. Overall, there are similarities and differences between identification of real and cartoon faces. Some of the differences might be attributed to information loss by the schematic rendering of comics facial features.

Sunday August 24, 10:00 – 10:45 am. Room 603: Spoken Papers

„Touch when you're singing"? On The Possible Effects of Body Contact in Ensemble Singing

Melanie Wald-Fuhrmann, Christoph Seibert, Timo Fischinger, Fabian Greb, & Elke Lange
Max Planck Institute for Empirical Aesthetics, Germany

The current paper describes a musical experiment inspired by historical sources. An a-capella-ensemble of six singers performed Renaissance compositions while carrying out several forms of body contact as depicted in period miniatures. Qualitative, quantitative as well as audio-visual data were collected to explore whether body contact may have served as a functional factor in choir performances. Findings and hypotheses pointing towards two different effects (improvement of performance and deepened communcal feeling) were analyzed in the framework of physiological interaction and social psychology. Finally the experiment is interpreted as a first step towards adapting methods of experimental archeology and historical re-enactment for use in the field of empirical aesthetics.

The Beautiful in Choreographies of Contemporary Dance: The Relationship of Dancers' and Spectators' Experience

Maja S. Vukadinović
Novi Sad Business School & Novi Sad Center for Dance Research and Art of Flamenco, Serbia

This paper deals with the relationship of subjective experience of dance according to the criterion of the beautiful among dancers and spectators. The research was conducted in two parts. The first part involved six dancers of contemporary dance, who are students at The School of Ballet in Novi Sad. Each dancer performed three different choreographies of contemporary dance in front of spectators. Then, these dancers evaluated their subjective experience of dance according to the criterion of the beautiful on a seven-point scale. The choreography was used as a "live" stimulus, i.e., the participants performed the dance choreography. The performances the live choreography was recorded. Two weeks later, the participants watched their audio-visual recording of performed choreographies and then they made evaluations again. In the second part, there were 30 participants who were students of the Novi Sad University and they had the role of spectators. They observed the performance of three dance choreographies of contemporary dance, the same as in the previous part of the research, performed by six different dancers, so there were 18 choreographies in total. Having observed the choreographies live, the spectators evaluated their subjective experience of the dance according to the criterion of beautiful on the seven-point scale. After two weeks, the spectators watched the same choreographies on the recording and they made their evaluations again. The results show that between dancers and spectators, there are no significant differences in the assessment of subjective experience according to the criterion of beautiful neither when the dancers perform choreography and the spectators watch them nor when both groups of participants observe the performance on the recording. Although the assessments were based on two different mediums through which subjective experience of the dance according to the criterion of beautiful is perceived, there is a similarity between dancer's and spectator's experience of the dance, both when the dance is performed and watched live, as well as when it is perceived only through the visual sense. The implications of the obtained results are discussed within the context of two different mediums through which dance experience is perceived.

Embodied Aesthetics is Organized in a Somatotopic Manner: Direct Evidence from Somatosensory ERPs

Beatriz Calvo-Merino & Bettina Forster
City University London, UK
Alexander Jones
Middlesex University, UK
Helge Gillmeister
Essex University, UK

The term 'embodied aesthetics' has recently been coined to describe internal processes relating our own body and the observation of art. Here we present an EEG study using somatosensory evoked potentials (SEPs) to investigate two important questions regarding aesthetic embodiment on performing arts (dance body postures): (1) Are embodiment mechanisms specific to aesthetic perception, or general to body perception? (2) Does aesthetic embodiment follow a somatotopic organization as the one existing of our own body in the human brain? We registered SEPs after tactile stimulation in hands and feet (SEPs) during an aesthetic and perceptual discrimination task of pairs of whole body displays. We show early (P45-N80) modulation of task in the primary somatosensory cortices (SCx). Importantly, a significant interaction suggests that this effect is sensitive to a somatotopic organization, whereby we observed a different modulation when making aesthetic decisions on body dance postures, as opposed to merely perceptual decisions on the same stimuli. These results suggest embodiment mechanisms occurring in a somatotopic manner during aesthetic evaluation of bodily artworks.

Sunday August 24, 10:00 – 10:45 am. Room 605: Spoken Papers

Applying the Gricean Maxims to Communication in Visual Art

Melissa J. Dolese, Aaron Kozbelt, & Curtis D. Hardin
Brooklyn College and the Graduate Center of the City University of New York, USA

A positive aesthetic experience arguably concerns the ability of viewers to construct meaning. But why is art viewing an arena for meaning making? We propose meaning construction happens because art viewing is seen as entering into a kind of conversation with the artist through the work of art itself. We apply a model of verbal communication, the Gricean "cooperative principle" and its four maxims, to visual art. We argue that this model may explain common, qualitatively different, responses to art via assumptions that the artist is either adhering, intentionally violating, or purposefully opting out of the conversation with the viewer. This perspective explains the differential experiences art-trained and non-art-trained individuals have of abstract and conceptual art.

Picasso's Expressive Use of Color in Paintings

Diane Humphrey, Bryanna Lucyk, & Christie Purchase
King's University College at Western University, Canada

Four raters untrained in art observed a corpus of images of Picasso's paintings on a website and gave emotional descriptions for 261 images of paintings. The frequency of emotion words used to describe paintings in each decade between 1895 and 1972 was correlated with the frequency of the use of color in each decade of paintings. There were a few commonalities among raters' correlations between color and emotion, but there were many individual variations in the associations. Color-emotion associations did not show the same pattern as previous findings with drawing and coloring tasks. It is suggested that viewing art works involves conceptual processes beyond those seen in basic color-emotion associations.

Cognitive States of Potentiality in Art-making

Nicole Carbert, Liane Gabora, Jasmine Schwartz, & Apara Ranjan
University of British Columbia, Canada

Creativity is thought to involve searching and selecting amongst multiple discrete idea candidates. Honing theory predicts that it involves actualizing the potentiality of as few as a single ill-defined idea by viewing it from different contexts. This paper reports on a study that tests between these theories. Participants were invited to "Create a painting that expresses yourself in any style that appeals to you," and asked "Were all of your ideas for your painting distinct and separate ideas?" Naïve judges were provided with descriptions of the two theories of creativity, sample answers, and practice responses to classify. The judges were significantly more likely to classify the artists' responses as 'H', indicative of honing theory rather than 'S' indicative of a search/select view of creativity

Sunday August 24, 10:45 – 11:45 am. Room 603: Poster Presentations (5 minute talks)

Personal Connoisseurship: A Research Agenda

Jeffrey K. Smith
University of Otago, New Zealand

Using aesthetic interaction models recently developed as a springboard, Smith (2014) has developed the notion of "the museum effect" which examines how the interaction of individuals with works of art leads people to think about issues related to their lives, their interactions with others, and how they view society. The Museum Effect essentially takes the perspective of how museums affect individuals. Turning this around to the individual as the unit of analysis, the concept of "personal connoisseurship" is presented. Personal connoisseurship is defined as the ability of the individual to effectively and meaningfully bring their constellation of personal history, aesthetic fluency, and dispositions to their interactions with works of art.

Ascending/Descending Melodic Interval Asymmetry in Arnold Schoenberg's Vocal Music: Implications for Trans-historical Creativity

Aaron Kozbelt & Daniel Meredith
Brooklyn College and the Graduate Center of the City University of New York, USA

Archival studies of tonal music have revealed an asymmetry whereby ascending melodic intervals tend to be larger than descending intervals. The cross-cultural pervasiveness of this asymmetry begs the question of the extent to which this tendency may operate as an implicit constraint on composers. To examine the generality of this tendency even in the face of overt rebellion against musical tradition, here we coded 13,705 melodic intervals in 97 vocal works by iconoclastic modernist composer Arnold Schoenberg, whose music departs strongly from traditional Western tonality. Results indicate that, despite Schoenberg's many innovations, his vocal music preserves (and moreover, exaggerates) the usual asymmetrical pattern of ascending leaps and descending steps. Results are discussed in the context of psychological theories of trans-historical change in the arts.

Subjective Experience of the Beautiful in Flamenco Dance

Maja S. Vukadinović
Novi Sad Business School & Novi Sad Center for Dance Research and Art of Flamenco, Serbia

The starting point of this paper, the aim of which is to examine the subjective experience of dance from the spectator's perspective, is the cognitive model of aesthetic decision making. The participants were tested for differences in evaluation according to the criterion of the beautiful in choreographies of varied aesthetic modes, presented in two styles of flamenco dancing. Each one of the 6 choreographies shown was presented in three aesthetic modes: a harmonious (H) auditory visual presentation in which the choreography is simplified, a redundant (R) presentation in which the basis of the choreography is ornamented, and an original (D) choreography, work of a flamenco choreographer. The results showed that the choreographies differed in beauty depending on the aesthetic mode, and that there was a predominant preference among the participants for the R type of choreographies. Such a preference may be influenced by the way of presenting the stimulus as well as the participants' level of general knowledge, but it also confirms the basic idea of the art of flamenco.

Aesthetic Appraisal among Nonprofessionals

Duane Lundy, Cheltsi Hinners, Lori Stephens, & Jesse Whitton
Indiana University East, USA

We investigated justifications that 125 nonprofessionals gave for appraisals of aesthetic products. Narratives used to explain music and film preferences were gathered and coded. We found that while the majority of comments were aesthetic, one-third of coded statements were nonaesthetically biased. In addition, 97.6% of the participants used a nonaesthetic comment at least once. Observed biases fell into ten categories, with the most common biases being personal idiosyncrasies and genre preferences. Measured background variables did not predict the level of bias exhibited, except that people more passionate about music and film dimensions of aesthetics (as measured by *the Desire for Aesthetics Scale*) were less biased in their positive appraisals. People also tended to be more biased about musicians than films.

The 'Weight' of Semantics! Complexity Beyond the Number of Elements

Martina Jakesch & Helmut Leder
University of Vienna, Austria

Past research identified complexity as an important variable in the aesthetic appreciation of artworks. Here, we study qualitative aspects of complexity on the level of meaning by using original and altered Magritte paintings. For the latter, semantically or syntactically incoherent objects were moved or replaced to eliminate the incoherence. The quantitative complexity was held constant in both conditions, confirmed by three different image statistic measures (jpeg/gif compression and perimeter detection measure). However, when we asked twenty-two participants to rate the complexity on a 7-point scale, the ambiguous pictures were perceived significantly more complex than the less ambiguous pictures. The 'complexity of meaning' might be a reason why ambiguous stimuli are appreciated and ambiguous art is so appealing!

The Structure of Subjective Indeterminateness in Aesthetic Responses to Film

Ioana M. Dalca & Marcus Pearce
Queen Mary University of London, UK

The temporal dynamics of aesthetic responses is indispensable in understanding the underlying cognitive-affective processes. Previous work has emphasized the role of anticipation in processing uncertainty in the psychological experience of several art media. The present study set out to elucidate the cognitive structure of resolving subjective indeterminateness in narrative art. In a within-subjects design, the study consists in ten adult fluent English speakers presented with 4 film clips, with 2 successive narrative events/clips in each film. At the end of each stimulus presentation, participants provided ratings on: the set size of resolution alternatives, their likelihood and likelihood loading, and the extent to which each scene is subjectively ambiguous overall. A stepwise linear regression model was run on these predictors to account for subjective ambivalence. This first exploration established a significant role for the number of alternatives generated by participants in relation to one central character in the film segments.

Order in Paintings and Aesthetic Evaluations

Kiyoe Cho
Kyushu University, Japan
Masahiro Haraguchi
Kurume University, Japan

This study examines order in paintings and how it relates to aesthetic evaluations. First, we analyzed the components of visual order in paintings. The result suggested that order in paintings is composed of regularity and complexity. Second, we examined the relationship between order in paintings and aesthetic evaluations. The association of aesthetic evaluation with regularity exhibited an inverse U-shape. Complexity was not found to be associated with aesthetic evaluation. Finally, we found a predictive equation calculated for the aesthetic evaluation of paintings (y) was: $y = 5.03 - [0.22 \times (\text{regularity principal component score})^2 + 0.08 \times (\text{complexity principal component score})^2]$. In conclusion, aesthetic evaluations being the highest when order in the painting was moderate.

Attractive Faces Move Us

Diana Rosa-Leyra, Marguerite McQuire, Steven A. Jax, & Anjan Chatterjee
University of Pennsylvania, USA

Beautiful objects move us emotionally. We hypothesized that attractive faces move our bodies literally and tested this hypothesis by recording eye and hand movements. In two experiments, participants chose the narrow face of a pair of faces while we tracked their eye movements (Experiment 1) and their arm movements (Experiment 2). For half the pairs, the expected choice was the attractive face (congruent trial) and for the other half it was the unattractive face (incongruent trials). Results showed that participants fixated more on attractive faces in both types of trials and that their hands deviated towards attractive faces when this wasn't the final choice. Our results suggest that the implicit effects of beauty are ingrained even in our motor systems.

Looking at Abstract and Representational Art

Jonathan Yu, Devi Majeske, & Sonali Mehta
University of Pennsylvania, USA
Matthew Lehet
Center for Neural Basis of Cognition, Carnegie Mellon University, USA
Melissa Beswick & Anjan Chatterjee
University of Pennsylvania, USA

Eye movements often reflect the way attention is deployed across visual stimuli. People with expertise in visual art experience art differently than naïve participants. We tested the hypothesis that some knowledge of art changes how people look at art and produce different gaze patterns. We further investigated the possibility that gaze patterns vary depending on whether the art is representational or abstract. Finally, we tested the hypothesis that 'an aesthetic gaze' might be different than other ways of looking at art.

Sunday August 24, 10:45 – 11:45 am. Room 605: Poster Presentations (5 minute talks)

A Possibility to Develop "SSM-School Sky Museum"

Jo Chiung Hua Chen
National Taiwan Normal University, Taiwan
Chih Feng Lin
Da-Yeh University, Taiwan

This paper examines and critiques websites from both national and international higher education arts related disciplines, and develops the possibility of Taiwan's"school sky museum." By case studying DYU's design and arts college's skymuseum, this paper will discuss the arts, aesthetic and educational value of a "schoolsky museum."

Navigation System Generates Story of Nagasaki City

Hitoshi Morita
University of Nagasaki, Japan

Nagasaki LRT Navigation Promotion Council provides the Service named DOKONE. It distributes the position information of the low-floor vehicle operated by Nagasaki Electric Tramway to the mobile terminal. This system detects tram and user's positions by GPS, and transmits data via mobile network. Users can determine the position of the tram by the map displayed on the mobile phone. In addition, they can reserve getting on from a specific stop. This service started 2011, and reached 40,000 by the number of accesses. We developed a new navigation system for sightseeing that used GPS, Bluetooth and the NFC tag based on DOKONE in 2012. This article reports on the process of the evolution of the navigator and text of city.

Higher Agreement of Preferences for Natural Landscapes Versus for Architecture Suggests that Evaluations of "Environmental Fitness" May Influence Preference

Natalia Maurer
New York University, USA
Alexander H. Denker
National Institute of Mental Health, USA
G. Gabrielle Starr & Edward A. Vessel
New York University, USA

People are moved by natural scenes and prefer looking at some scenes more than others. Despite a long history of investigation of scene preferences in the landscape assessment literature, the factors driving preferences are not well understood. This study examined *agreement* across observers for a set of images of natural landscapes and for images of exterior architecture. Natural scenes contain semantic information that carries functional significance, while variations in individual features of a building carry little functional importance to non-expert viewers. As a result, we hypothesized that observers would form preferences for landscape images based on fitness-related considerations and more consistent preferences should exist for landscapes than for architecture. Results showed that agreement was indeed higher (approaching significance) for natural landscapes than images of exterior architecture.

Gender Differences in Perceptions of Facial Beauty

Jonathan L. Stahl, Edward A. Vessel, & G. Gabrielle Starr
New York University, USA

In order to understand the effects of both rater and stimulus gender on standards of beauty, we explored aesthetic judgment and reward valuation for male and female faces and measured the degree to which heterosexual participants of both genders found the same faces to be attractive or rewarding. The results suggest that while neither participant nor stimulus gender has an effect on ratings of attractiveness, both show an effect on value judgments. Stimulus and participant gender were also shown to have an effect on across observer agreement for both aesthetic and value judgments.

Clinical Symptomatology and Reward Responsiveness Influence Preferences for Aesthetic Images

Michael Masucci, Stefani Corsi-Travali, Alexander Neumeister, & Edward A. Vessel
New York University, USA

To what degree is the aesthetic response to an artwork related to its cognitive reward value? Participants from clinical and non-clinical populations were given a rating task and a scheduleless keypress task to assess their hedonic response to and motivation to view a wide array of visual art. Participants also completed self-report measures assessing clinical symptomatology and deficits in reward function, including the MADRS, BIS-BAS, TEPS & STAI. Factor analysis uncovered 4 main factors from the self-report measures, and multiple regression revealed two significant relationships: one between clinical symptomatology and between-subject agreement in image viewing time, the other between reward seeking and observer's variability of responses in the preference rating task. Implications for models of reward are explored.

Verbalization of Music and Sound Between Poeticity and Aesthetic Evaluation

Christian Bär
Max Planck Institute for Empirical Aesthetics, Germany

This paper explores how noun phrases in written discourse about popular music may be used as communicative strategies to describe musical impressions while encoding aesthetic evaluation to an audience. The study reported here concentrates on music reviews in German music magazines, adopting an exploratory qualitative corpus-based approach. 814 music-related quotations were obtained from 215 music reviews. Subsequently, a content-based descriptive linguistic analysis of the findings was carried out, taking into account lexical, structural and semantic aspects. This showed a remarkable trend: namely, the use of language in popular music reviews is creative and innovative rather than conventional and stereotype.

Cultural Aesthetics in the Omabe Masquerade Tradition: An Exploration Of A Culture In Transition

Chukwuemeka Vincent Okpara
University of Nigeria, Nigeria

The *Omabe* masquerade festival is among the numerous masking traditions of the Igbo people of southeastern Nigeria still performed till date. Ecstatic colors, unrivalled energy and cultural aesthetics herald the appearance of every *Omabe* masquerade. Today, like many African indigenous traditions and cultural activities, it is threatened by transmogrifications detrimental to the preservation of its rich cultural heritage. The paper is intended to investigate if this gradually fading masquerade tradition and cultural heritage still provides any level of enthusiasm and aesthetic satisfaction, or plays any significant role within the contemporary Igbo society. It also identifies ways through which the O*mabe* masquerade tradition can be developed into a global cultural attraction and incorporated into tourism development program of the Igbo ethnicity.

Content and Context of African Indeginous Textile Production: A Study in Visual Aesthetics

Felicia Okpara
University of Nigeria, Nigeria

Indigenous African textiles are usually enriched with very fascinating patterns and color aesthetics and often riddled with conceptualism in their diverse themes and designs. However, the study of these indigenous textile forms, ideas and materials, except for very few related scholarly works, appears to have been relegated to the background. This paper focuses on the aesthetic inclinations of indigenous African textiles in terms of their symbolic forms and rhythms, examining the place of their production in regards to the psychological satisfactions and the creative sensibilities of the individuals and ethnic communities that produce them. Finally, it reveals the extent and purpose to which these indigenous textile motifs, design patterns, and other artistic ideas is transformed into new artistic metaphor.

Relationships Between Spatial and Aesthetic Feelings in Japanese Zen Gardens

Makoto Inagami
Kyushu Sangyo University & Tokyo Institute of Technology, Japan

The overall purpose of our study is to scientifically elucidate the aesthetics of Japanese Zen gardens. This article reports on an experiment that examined the relationships between the spatial and aesthetic feelings caused by the environment of different gardens. A virtual-reality device presented 18 gardens located in traditional temples in Kyoto. Participants rated each environment with respect to spatial feelings (complexity, naturalness, spaciousness, and enclosure) and aesthetic feelings (interestingness, calmness, and beauty). Our analyses show that all aesthetic feelings are either positively or negatively correlated with complexity and naturalness, and that calmness is also associated with enclosure. We discuss these results in relation to theories on aesthetics that were developed by Daniel Berlyne, James Russell, and Jay Appleton.

Sunday August 24, 11:45 am – 2:00 pm.
7th Floor Walkway Bridge (between West and East buildings): Poster Hangout
Lunch (on your own; see welcome packet for a list of local dining options)

Sunday August 24, 2:00 – 3:45 pm. Room 615: Symposium on Architecture

Revered Today, Loved Tomorrow: Expert Creativity Ratings Predict Popularity of Architects 50 Years Later

Oshin Vartanian
University of Toronto Scarborough, Canada
Alenoush Vartanian
School of Pharmacy, Temple University, USA
Roger E. Beaty, Emily C. Nusbaum, & Paul J. Silvia
Department of Psychology, University of North Carolina at Greensboro, USA
Kristen Blackler, Quan Lam, & Elizabeth Peele
University of California Berkeley, USA

Beginning in the 1950s, the Institute of Personality Assessment and Research (IPAR) began a program to study the psychology of effectively functioning persons. Amongst the most influential studies conducted by IPAR were the assessments of 40 highly creative architects in 1957-1961, a sample that included some of the most eminent architects of the 20th century such as Eero Saarinen, Louis I. Kahn, Philip C. Johnson, and I. M. Pei. In turn, in 2006-2007 the American Institute of Architects conducted a survey to identify America's favorite architecture, first amongst its 2,448 members and subsequently amongst 2,214 members of the general public. Architectural creativity ratings of the architects by journal editors, expert judges, and the architects themselves predicted the popularity of their work 50 years later. In contrast, psychometric indices of divergent thinking and creativity in drawing were uncorrelated with eminence or popularity. Our results suggest that in the domain of architecture, self and expert assessments predict future popularity.

Perception of Virtual Residential Walkthroughs

Anosha Zanjani, Gerald C. Cupchik, & Michelle C. Hilscher
University of Toronto Scarborough, Canada

Real estate firms use virtual residential spaces (virtual walkthroughs) in a video format as a supplement in the advertising of their properties. Societies' emotional and evaluative reactions to walkthroughs are unknown and something this study seeks to address. This experiment looks at two types of walkthrough designs: warm (personal adornment - stimulating) and cool (austere and modern). Forty-eight participants were presented with 8 virtual residential walkthroughs (4 warm, 4 cool) in randomized order in a two-part experiment. In Part 1, participants rated each of the walkthroughs on 13 rating scales appraising essential qualities previously found to be desired in homes and an estimation of duration for the walkthrough videos. In Part 1 participants wrote short story outlines set in 4 video walkthroughs (2 warm and 2 cool) in either the first person (Self) or the third person (Other) perspective. Participants responded to warm and cool virtual walkthroughs in different ways. A relationship was found between the quantitative and qualitative data; the emotional responses evoked in Part 1 was related to how participants wrote, rated and projected themselves and others onto their narrative in Part 2.

A Computational Analysis of Pareidolia-Derived Emotional Messages in Architecture

Michael J. Ostwald, Kenny Hong, & Stephan Chalup
The University of Newcastle, Australia

The psychological phenomenon wherein the human mind recognizes particular images in otherwise unrelated visual stimuli is called the pareidolia effect. The most common type of pareidolia is the identification of illusory face-like forms that, through their geometric configuration, are able to suggest emotions. While the majority of examples of facial pareidolia are identified in landscapes, clouds or other natural forms, an architectural façade can also trigger the pareidolia effect. The present paper demonstrates a way of investigating facial pareidolia in architecture. The research employs software that has been trained using a database of human faces to identify the presence of face-like forms in a building façade and then classify these forms by their emotional expressions. In the paper this method is demonstrated in an analysis of the emotions expressed by facial pareidolia detected in the southern façades of two famous twentieth century houses; the *Robie House* and the *Villa Savoye.*

Aesthetic Qualities of Urban Spaces

Ralf Weber & Martin Brucks
Dresden University of Technology, Germany

This paper outlines a research project in planning that will attempt to address issues of the aesthetic experience of urban space from the user's perspective through a number of empirical studies intended to result in a set of principles applicable to regaining spatiality and human scale in the practice of urban design. The initial question is which role the perception of selected spatial qualities, which make an urban space a perceptual gestalt in its own right, play in the formation of aesthetic judgements of such spaces. Starting with a collection of urban spaces that are commonly considered aesthetically successful in the history of architectural theory we intend **to** find commonalities in spatial organization and Gestalt characteristics, investigate their formal qualities, correlate a selection of these with aesthetic judgements in various empirical studies, and finally investigate which role size-dimensions play in the judgement of these spaces.

Sunday August 24, 2:00 – 3:45 pm. Room 603: Spoken Papers

Some Aesthetics Results of a Personological Inquiry into the Italy's Mezzogiorno

M.Teresa Antignani
Brera Academy of Fine Arts, Italy

The research it consists in a survey conducted by the means of social psychology, which examines the tendency to authoritarianism in the human personality. Subjects were submitted a questionnaire, composed of three scales concerning ethnocentrism political and economic, conservatism and fascism. Hence the distinction between high-scoring subjects and low-scoring subjects less keen on authoritarianism. An interview and a series of projective questions constitute the "qualitative" part of the study, who is an attempt to verify the themes emerged from the quantitative study. The subjects were submitted to the vision of a single image, consisting in one of my products. A grouping of the views expressed allows us to classify subjects who tend to perceive the image as disturbing , not accepting it (subjects with a high score) subjects who perceive it as pleasant (subject with a low score). Subjects who perceive exclusively to the ideological aspect of the image (subjects who often belong to the extreme peaks)

Do Cognitive Modules Determine Beauty and Aesthetic Perception?
Interdisciplinary Research on Cognitive Neuroaesthetics and Humanistic Aesthetics

Zhihong Li &Yanhui Wang
Jilin Jianzhu University, China

Cognitive Modules Hypothesis suggests that everything is the unity of inherent value and appearances. Things that arouse positive emotional responses is beneficial for man. Through this process as a medium, the appearances of them can arouse positive emotional responses. In this way, those things create Cognitive Modules associated with positive emotional responses in the cognitive structure in human brains. Under the precondition of the established Cognitive Modules, when man sees the appearances of things matching the Cognitive Modules, the aesthetic perception will be generated spontaneously. The reason why things can arouse aesthetic perception is that they match the Cognitive Modules.

Installation Art and Experiential Aesthetics: Mediating Art History and Neuroscience Research

Lauren S. Weingarden
Florida State University, USA

In this paper I interrogate neuroaesthetics and its focus on traditional art forms and standards of beauty as the conduits for aesthetic engagement and reward responses. What neuroaesthetics has not explored is the transformational experience encountered in contemporary Installation art. However, as scholars of Installation art have argued, Installation art's viewer is immersed within an embodied sensorial experience. What these scholars do not address is how cognitive and neural effects mediate transformative aesthetic experience. Focusing on Brazil's outdoor museum, Inhotim (Brumadinho, MG), and its collection of Installation art displayed in its botanical gardens, I propose a revision of neuroaesthetics, what I call "experiential neuroaesthetics." To this end, I have integrated models from both humanities and science which address a wider spectrum of aesthetic and affective responses, namely, defamiliarization, rupture, confusion, and anger. This approach raises an interesting question for future scientific experiments: Can we map the brain's response to aesthetic rupture and the coincident spatio-temporal dynamics of transformative aesthetic experience?

Sentient Experience and Aesthetic Experience

Bruce F. Katz
Wayne, PA, USA

What would we be leaving out if consciousness were removed from an agent for a given type of processing? If the processing were pattern recognition, problem solving, etc., the answer would be almost nothing, as complex and presumably non-sentient algorithms currently reach close to human performance. The claim of this paper, however, is that almost everything of interest would be lost in the case of aesthetics. This suggests that models of aesthetic processing and especially aesthetic experience should be informed by models of consciousness. An integration of consciousness theory and aesthetic theory along these lines this is proposed. The resulting theory is a natural extension of the idea that conscious systems are ones in which causal interaction is relatively large. This theory is then applied to humor, in order to predict the hedonic boost that typically accompanies the processing of this stimulus type.

Technological Decline of the Art

Alexander Drikker
Institute of Philosophy of State St. Petersburg University, Russia

Result of the modern global technological democratization is the triumph of civilization, which leads to redundancy and exhaustion of the art. Analysis of the most important processes, currents of contemporary artistic culture allows to detect some sort of evolutionary algorithm, which characterizes the present stage as massive reproduction-replication. Redundancy of culture, the exhaustion of art, the triumph of civilization are a direct consequence of universal technological progress. Juvenalism of contemporary culture, simplification against the background of amazing scientific and technological progress are organic features of the evolutionary process. The hypothesis was not

predicted End of the world. Innate cognitive need as a guiding line in the objectives, closed on man and his supernatural mission, is actively seeking new forms of implementation.

Sunday August 24, 2:00 – 3:45 pm. Room 605: Spoken Papers

Seeking for a Universal Visual Language The Perception of Abstract Art - Claim and Reality

Hanna Brinkmann, Laura Commare, Helmut Leder, & Raphael Rosenberg
University of Vienna, Austria

In the post-war era and especially after the documenta II in 1959, abstract art was claimed to be a "world language", universally comprehensible, independent of cultural, historical or political contexts. If these assumptions were true, abstract art should elicit a more universal perception- and evaluation-process compared to representational art. To test this hypothesis empirically, we conducted an eye-tracking study and tested 38 participants (Brinkmann et al. 2014). In a second experiment with the same study-design but different stimuli another 40 participants were recorded. Additionally to the eye-movements information on their cognitive and emotional evaluations was collected. Our results suggest that the concept of abstract art as a universal language was not confirmed and needs to be revised.

Saccades, Fixations and Body Sway with Op Art

Zoï Kapoula & Alexandre Lang
University Paris Descartes, France
Paul Locher
Montclair State University, USA

This study examined the effect of oculomotor condition (fixation versus free exploration) on the sensation of motion as well as the body sway of subjects viewing Op Art paintings.

Expertise and Memory for Art: An EEG study

Divya Seernani
Bangor University, UK
Marcos Nadal
University of Vienna, Austria
Christoph Klein
Bangor University, UK

Experimental aesthetics has shown significant differences in aesthetic appreciation as a function of people's experience and knowledge of art. In this study we aimed to identify specific ERP patterns related to encoding and retrieval of art information, and to ascertain how such patterns are modulated by art expertise. Our results revealed differences between participants as a function of art knowledge in the C1-P1 component during a recognition task. This component has been linked to modulation of attention by attentional or cognitive load, which suggests that participants in the high knowledge group were retrieving more information from memory in order to decide whether they recognized the artworks or not.

More Than the Sum of Its Parts: Perceiving Complexity in the Visual Arts

Laura Commare. Helmut Leder, & Raphael Rosenberg
University of Vienna, Austria

In our study we address two central questions: First, to what extent is perceived complexity dependent on conceptual aspects of the painting? And second, how do lays and experts differ in their complexity ratings? We asked ten art historians with a minimum of two years working experience (either in art historical research or art education) and 20 lays with minimum or no knowledge about art to rate 90 artworks on different scales referring to formal and content related complexity. Our results show that content related factors of an artwork indeed significantly predict complexity ratings for art experts as well as for lays. Moreover, we find that perception time matters. While spontaneous complexity ratings mostly depend on formal criteria, the importance of content raises if the examination time is extended. Regarding the effect of expertise on the perceived complexity our results show that experts differ significantly from lays only in spontaneous evaluations.

The Influence of Assignment of Authenticity on the Perception and Evaluation of Works of Art: An Eye-Movement Analysis

Elizabeth Krupinski
University of Arizona, USA
Paul Locher
Montclair State University, USA

We examined the influence of experimentally manipulated assigned authenticity of paintings on viewers' eye-movement scanning patterns and evaluative judgments of artworks by renowned artists.

Sunday August 24, 3:45 – 4:30 pm. Room 615: Spoken Papers

Aesthetic Appreciation of Tactile Unity-in-Variety in Product Designs

R.A.G. Post
Delft University of Technology, The Netherlands
Janneke Blijlevens
Swinburne University of Technology, Australia
Paul Hekkert
Delft University of Technology, The Netherlands

The principle of unity-in-variety has recently been shown to affect visual aesthetic appreciation of product designs. We investigated whether this principle can also account for tactile aesthetic appreciation of products. Design students rated nine car keys on unity, variety and aesthetic appreciation through tactile exploration only. Results revealed that unity and variety, while negatively correlated with each other, both positively influence aesthetic appreciation. This implies that there is an optimal balance between tactile unity and variety that is aesthetically preferred. These results replicate results found in the visual domain and provide evidence for unity-in-variety as a multisensory aesthetic design principle.

Intentions and the Aesthetics of Artifacts

Odette da Silva
Delft University of Technology, The Netherlands
Nathan Crilly
University of Cambridge, UK
Paul Hekkert
Delft University of Technology, The Netherlands

Although there is evidence that people's response to an artistic or literary work can be affected by information about the work, there is still much to learn about the way people judge artifacts aesthetically when they know the intentions by which the artifacts have been designed. In this paper, we share the insights that we have gained into this topic by conducting research in the design field. By combining conceptual and experimental approaches to research, we have explored the appreciation of designers' intentions, and have also examined the appreciation of designed products as means to fulfill these intentions. Our insights provide a basis to gain a deeper understanding of people's aesthetic appreciation of artifacts.

The Combined Effect of Perceptual and Conceptual Dimensions on Product Design Aesthetics

Michaël Berghman, Nazli Cila, & Paul Hekkert
Delft University of Technology, The Netherlands

In design research perceptual features of a design such as unity-in-variety as well as conceptual properties (whether the design is a good instantiation of designer's intentions) have been found to affect the aesthetic experience independently. In the course of a research design using systematic manipulations of USB stick designs in three subsequent phases, we have been able to formally relate these distinct dimensions, after having assessed optimal levels for them separately. We have found that both conceptual and perceptual features impact on aesthetic liking, but the perceptual dimension is more decisive. We also encountered a positive interaction, indicating that effects of dimensions are interdependent to an extent.

Sunday August 24, 3:45 – 4:30 pm. Room 603: Spoken Papers

The Value of Making It By Hand

Jennifer E. Drake
Brooklyn College of the City University of New York, USA
Molly Ahern, Erin Roche, & Ellen Winner
Boston College, USA

We compared 71 8-12 year olds' experience of making a drawing by hand vs. on the computer. After inducing a sad mood, we randomly assigned children to: Draw Something Important, Draw a Design, or Play Solitaire. Each activity was completed once by hand and once on the computer. Children rated their mood before and after the activity and rated their enjoyment and perceived competence. After completing both activities, they were asked which one they preferred, and, for the two drawing conditions, which picture they valued more. Enjoyment was rated higher for the Important condition when drawing by hand and for the Design condition when drawing on the computer. Children preferred drawing by hand when drawing something important to them.

Dr. Bob's SoundSchool: Using Music and Creativity to Enhance Science Learning for Grade School Children

Jonna Kwiatkowski
Mars Hill University, USA

This validation study was conducted to evaluate the effectiveness of Dr. Bob's SoundSchool (DBSS), a second grade science curriculum designed to engage students through creative and inquiry-based lessons that teach the physics of sound with musical instruments and interactive exploration. Pre-tests and post-tests were compared between students learning with DBSS and the standard curriculum for the school district. Students who learned with DBSS showed greater gains in their divergent thinking skills, suggesting that DBSS supports deeper understanding and stronger ability to apply learning to new problems

I'm Not a Doctor, but I Play One on TV: Children and Adult's Understanding of Acting

Thalia R. Goldstein
Pace University, USA

Realistic acting surrounds us on television, movies and on stages. It is the dominant form of play seen in Western culture, and yet we do not have a psychology of how children and adults understand the dual nature of acting—the actor and his/her character. In a two studies, we investigated how adults and children understand the personality, skills, emotional states and physical characteristics of actors while they portray characters, and if they confuse actors with their characters. We explored when children develop the capacity to distinguish actors from the characteristics they portray and how and when adults continue to confuse actors and characters. Children do not seem to understand acting until at least five years old, when they begin to distinguish how and when traits transfer. Adults too judge that states and traits transfer, but distinguish between different kinds of characteristics in their judgments.

Sunday August 24, 3:45 – 4:30 pm. Room 605: Spoken Papers

Creative Potential, Self-Esteem, and Self-Concept Clarity: Domains Matter

Baptiste Barbot
Pace University & Yale University, USA
Alyson M. Curtis & Alana F. Miller
Pace University, USA

The literature on the relation between creativity and self-esteem is controversial. Some research results establish this relationship, while other results indicate limited association between both constructs. This lack of replication may be due to important differences across studies with regard to (1) the domains of creative potential investigated, (2) the main creative-thinking processes involved in the tasks used (e.g., divergent as opposed to synthetic-integrative thinking), as well as (3) the sub-domains of self-esteem represented in the self-esteem measures administered. We present a study that sought to investigate this hypothesis by taking into account simultaneously, multiple domains of creative potential and multiple sub-domains of self-esteem among 42 adolescents who were administered creative potential tasks in three domains (graphic, verbal and musical) and a multidimensional scale of self-esteem in five domains (e.g., academic, emotional) and a scale for self-concept clarity. Results indicated that (1) creative potential is highly domain-specific, (2) creative potential in music and verbal-literacy is moderately and negatively associated to self-concept clarity, while (3) "creative self-esteem" is only related to creative potential in the figural-graphic domain but not to the other domains of creative potential under investigation. Hence, the relationship between creative potential and self-esteem seems to depend on (1) the domain of creative expression (2) the sub-domain of self-esteem, but also (3) experts' (used for the evaluation of the creative production) features that were not accounted for in this study. Implications of this pilot work for creativity research and interventions are discussed.

Creativity in dyslexia

Zoï Kapoula, Sarah Ruiz, Lisa Spector, Marion Mocorovi, & Chrystal Gaertner
University Paris Descartes, France

This study compared the performance of dyslexics and non-dyslexics on the Torrance Test of Creative Thinking. Dyslexics achieved significantly higher scores of creativity in the TTCT than non-dyslexics from the same school in Belgium, particularly in terms of originality and elaboration.

Personality Intuition Type and Divergent Thinking

Leonid Dorfman & Anna Butakova
Perm State Academy of Art and Culture, Russia

We hypothesized that at the level of observed variables the Intuition, Extraversion, Feeling, and Perceiving personality dimensions positively correlate with divergent thinking. At the level of latent variables Extraversion, Feeling, and Perceiving mediate paths from Intuition to divergent thinking. Raw data were gathered from a sample of 260 participants recruited from Perm Universities (Russia). The personality dimensions were assessed by the Myers-Briggs Type Indicator and divergent thinking the Alternate Uses Test. Correlation analysis revealed that participants who score higher in intuition and lower in extraversion facilitate divergent thinking. Using a structural equations methodology a chain was found consisting of latent variables with paths from Intuition to Extraversion to divergent thinking.

Sunday August 24, 4:30 – 5:30 pm. Room 615: IAEA Business Meeting, followed by Informal Gathering and Farewell.

All Congress participants are encouraged to attend.