



**International Society for Research on Emotion**

**Biennial Conference  
July 26-29**

**St. Louis, Missouri  
Chase Park Plaza Hotel**

**212 N. Kingshighway Blvd.  
St. Louis, MO 63108**

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# CONFERENCE SCHEDULE AT A GLANCE

Wednesday, July 26, 2017			
All day	Conference Registration, <i>Chase Park Plaza Lobby</i>		
8:30-9:00	Registration for Meet the Editors Preconference, <i>Lindell Ballroom Salon C/D</i>		
9:00-2:00	Meet the Editors Preconference, <i>Lindell Ballroom Salon C/D</i>		
2:00-15:00	Break for lunch and registration		
15:00-15:30	Plenary Session—Conference opening, <i>Lindel Salon C/D</i>		
15:30-16:30	Plenary Session—The Promise and Peril of Emotionally Intelligent Machines, <i>Lindell Salon C/D</i>		
16:30-18:30	Reception with light dinner, <i>Khorassan Ballroom</i>		
Thursday, July 27, 2017			
All day	Conference Registration, <i>Lindell Ballroom foyer</i>		
8:30-9:30	Plenary Session—Outside-In: Mirror Neurons and the Social Performance of Empathy, <i>Lindell Ballroom Salon C/D</i>		
9:30-9:50	Coffee break, <i>Lindell Ballroom foyer</i>		
9:50-11:30	Symposia 1		
	Affect and Identity in Dynamic Contexts  <i>Lindell Ballroom Salon A</i>	New Perspectives on Smiling, Nose-scrunching, and Gasping Faces  <i>Lindell Ballroom Salon C</i>	Romantic Love and Cognition  <i>Lindell Ballroom Salon D</i>
11:30-12:30	Poster Session 1, <i>Lindell Ballroom Salon B</i>		
12:30-14:00	Break for lunch, <i>on one's own</i>		
14:00-15:20	Paper Session 1		
	Emotions in the Workplace and Education  <i>Lindell Ballroom Salon A</i>	Affective Computing and Information Processing  <i>Lindell Ballroom Salon C</i>	Psychological Theory and Research  <i>Lindell Ballroom Salon D</i>
15:20-15:40	Coffee break, <i>Lindell Ballroom foyer</i>		
15:40-17:00	Paper Session 2		
	Emotion and Cognition  <i>Lindell Ballroom Salon A</i>	Appraisal  <i>Lindell Ballroom Salon C</i>	Depression  <i>Lindell Ballroom Salon D</i>
17:00-18:00	Executive Committee meeting, <i>Lindell Ballroom Salon A</i>		
17:00-18:00	Roundtable on Emotional Tears, <i>Lindell Ballroom Salon C</i>		
18:00-23:00	Conference Banquet, <i>Starlight Ballroom (11<sup>th</sup> floor)</i>		
Friday, July 28, 2017			
8:30-9:30	Plenary Session—Identities, Selves, and Mixed Emotions, <i>Lindell Ballroom Salon C/D</i>		
9:30-10:30	Plenary Business Meeting, <i>Lindell Ballroom Salon C/D</i>		
10:30-10:50	Coffee break, <i>Lindell Ballroom foyer</i>		
10:50-12:30	Symposia 2		
	Emotional Roots of Political Populism  <i>Lindell Ballroom</i>	Challenges to Emotion Theories, Exemplified by Specific Emotions (Jealousy, Shame, Schadenfreude, and Hate)  <i>Lindell Ballroom</i>	Emotional Expressions and Language Evolution  <i>Lindell Ballroom</i>

	Salon A	Salon B	Salon C/D	
12:30-14:00	Break for lunch, <i>ISRE-sponsored lunch, Khorassan Ballroom</i>			
14:00-15:40	Paper Session 3			
	History of Emotion	Intentionality	Emotion and Morality	Recent Advances in Crying Research
	<i>Lindell Ballroom Salon A</i>	<i>Lindell Ballroom Salon B</i>	<i>Lindell Ballroom Salon C</i>	<i>Lindell Ballroom Salon C/D</i>
15:40-16:00	Coffee break, <i>Lindell Ballroom foyer</i>			
16:00-17:40	Paper Session 4			
	Emotional Development	Research on Specific Emotions	Emotion Regulation	The Face in Context
	<i>Lindell Ballroom Salon A</i>	<i>Lindell Ballroom Salon B</i>	<i>Lindell Ballroom Salon C</i>	<i>Lindell Ballroom Salon D</i>
Saturday, July 29, 2017				
8:30-10:10	Symposia 3			
	Perspectives on Affective Empathy	Naturalistic Assessments of Affective Evaluations and Emotion Regulation Strategy Preferences	The Power and Perils of Contempt: Advances in Understanding	
	<i>Lindell Ballroom Salon A</i>	<i>Lindell Ballroom Salon B</i>	<i>Lindell Ballroom Salon C</i>	
10:10-10:30	Coffee break, <i>Lindell Ballroom foyer</i>			
10:30-12:10	Paper Session 5			
	Social Exclusion	Facial Expression	Cultural Studies	Emotion and Communication
	<i>Lindell Ballroom Salon A</i>	<i>Lindell Ballroom Salon B</i>	<i>Lindell Ballroom Salon C</i>	<i>Lindell Ballroom Salon D</i>
12:10-13:40	Break for lunch, <i>on one’s own</i>			
13:40-14:40	Plenary Session—President’s Symposium, “Crisis? What crisis? In the face of replication failures and methodological challenges, what is the role of empirical evidence for theories of emotion?”, <i>Lindell Ballroom Salon C/D</i>			
14:40-15:40	Poster Session 2, <i>Khorassan Ballroom</i>			
15:40-16:00	Coffee break, <i>Lindell Ballroom foyer</i>			
16:00-17:30	Late-Breaking Research Session, <i>Lindell Ballroom Salon C/D</i>			
17:30-19:00	Closing reception with light dinner, <i>Khorassan Ballroom West</i>			

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### Plenary Session—The Promise and Peril of Emotionally Intelligent Machines

Jonathan Gratch, USC Institute for Creative Technologies

Wednesday, July 26, 15:30-16:30, Lindell Ballroom Salon C/D

Affective Computing is the field of research directed at creating technology that recognizes, interprets, simulates and shapes human emotion. This technology holds great promise. In terms of emotion research, it affords new opportunities to experimentally manipulate and quantify human emotional responses. In terms of applications, it provides new ways to address human well-being. For example, I will discuss an empathetic agent that conducts mental health interviews with patients, elicits more honest disclosure of symptoms than other screening methods, and recognizes nonverbal correlates of depression. In contrast, this technology also affords new opportunities to manipulate human emotional responses towards more Machiavellian ends. For example, I will discuss agents that can reason about and strategically shape human emotion to maximize profits. After reviewing these examples, I will place this research in a broader context and discuss the practical and ethical implications of such technology for people, organizations and society.

## Thursday, July 27, 2017

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### Plenary Session—Outside-In: Mirror Neurons and the Social Performance of Empathy

Ruth Leys, Johns Hopkins Krieger School of Arts & Sciences

Thursday, July 27, 8:30-9:30, Lindell Ballroom Salon C/D

A discussion of how psychologists, neuroscientists, and cultural theorists are attempting to solve the problem of social empathy by appealing to the mirror neuron system, with comments on some of the problems raised by those attempts.

### Symposia 1: Affect and Identity in Dynamic Contexts

Thursday, July 27, 9:50-11:30, Lindell Ballroom Salon A

#### Affect as a Social Relational Quality

Christian von Scheve, Jens Ambrasat  
Freie Universität Berlin

A central tenet of relational theorizing in sociology and social psychology is that identities are constituted in relation to other entities, for instance symbols and other identities. Although the concept of identity already involves an affective dimension, the relational entanglement of identities is predominantly conceptualized in terms of cultural meanings and narratives or interaction patterns, as measured by social network analysis. We argue that this emphasis on language as a window into culture unduly neglects the relational nature of non-conceptual affective meanings that are essential to identities, both in view of individual and cultural meanings. We use Affect Control Theory to argue that the entirety of affective meanings that individuals assign to social concepts is constitutive for their identities and that these meanings can be measured on the dimensions of evaluation (E), potency (P), and activity (A). We further suggest that these affective meanings constitute the relations between different identities and that these relations are contingent upon culture. Using data from a quasi-representative survey of the German population (N=2484) and measures of the affective meanings of a multitude of words denoting identities, we show, first, that the affective relations between (population mean) identities in an EPA space mirror the cultural meanings of their social relatedness (e.g., between occupational identities and role identities), and second that interindividual variance in identity meanings reflects subjects' idiosyncratic positionings vis-à-vis the dominant culture.

### **Sentimental Double Consciousness: EPA Ratings by Sub-Cultural Identity and Context**

Connor Powelson

University of Maryland

Affect control theory generally treats individual variation in cultural sentiments as idiosyncratic error. What results is a model of dominant culture. While dominant culture empirically exists, patterned variation in individual sentiment demonstrates subcultural departures from dominant sentiments (Boyle and Walker 2015). Subcultures manifest, not in opposition, but in co-presence with the dominant culture (Sewell and Heise 2009). Given this multilevel co-presence of subordinate and dominant cultures, how do individuals bring varying sentiments into interaction? Drawing upon double consciousness and token literature, I hypothesize that minority individuals simultaneously maintain subcultural and dominant sentiments for a single object and code switch by context, while members of the majority maintain a single set of sentiments. This process is demonstrated in an experiment that measures and compares the sentiments of males and females of like race in gender-homogenous and token settings. In each of the four conditions (male-homogenous, female-homogenous, tokenized-male, tokenized-female) groups of seven participants (following Kanter's 1977 15% threshold for tokenism) are asked to independently complete a survey measuring their sentiments for a series of terms with the knowledge that these sentiments will be shared and discussed with their condition group. The survey includes terms that vary significantly in EPA ratings by gender in the INTERACT dictionary. If the hypothesis is correct, females under tokenized conditions code-switch, and share sentiments that more closely correlate with male than female INTERACT definitions, while male participants under tokenized conditions do not code-switch. Such a demonstration bridges insights from double consciousness and tokenism to advance affect control theory. Ultimately, this study confronts the challenge posed by multileveled cultural co-presence and offers a double consciousness model of affective sentiment.

### **Simulating Violence: Mass Killings and Suicide in Response to Threatened Masculinity**

Christopher D. Moore<sup>1</sup>, Christabel L. Rogalin<sup>2</sup>, Bryan Cannon<sup>3</sup>

<sup>1</sup>Kings College, <sup>2</sup>Purdue University Northwest, <sup>3</sup>University of Georgia

While there is growing attention to focus on the construction of masculinity to help understand violent behavior, particularly school mass killings (Bridges 2014; Bridges and Tober 2015; Kennedy-Kollar and Charles 2013), murder-suicide (Olfie et al. 2016, 2015), and suicide (Bryant 2015; Scourfield et al. 2012; Owens et al. 2008), researchers have yet to offer a systematic investigation into the sociological processes that drive some individuals to commit public acts of mass violence in response to perceived threats to their masculinity. Using affect control theory (Heise 2007; MacKinnon and Heise 2010; Robinson and MacKinnon 2014), we offer computer-simulated situational outcomes for when individuals with threatened masculine identities may overcompensate using violent behavior to restore them. These simulations provide a more systematic approach to understanding the interactive process by which mass shooters' perceived threats to their masculinity manifest into violence against others and often themselves and provides clues as to how to avoid violent masculine overcompensation. Various institutional policy implications relating to schools and the military are discussed.

### **Congruence vs. Discrepancy in Emotion Norms Within the Family Identity**

Jessica A. Leveto

Kent State University at Ashtabula

Sociological control theories of emotion recognize affect as a cognitive appraisal of an internal signal generated in some social or cultural context. Control theories place emphasis on the processes that shape behavior, emotion, mental health and sense of self from the perception of feedback and cultural meanings within interaction. Building upon control theories of emotion (Burke 1991, Heise 1979, 2012, MacKinnon (1994) Stets and Serpe 2013, Stryker 1980) I examine the congruence (and discrepancy) in emotion norms within the family identity. Specifically, I measure the internal reflective evaluation of the emotional performance of the expression of particular emotions within the family identity. My focus is on the emotional expression within the identity and the secondary assessment of the emotional experience. The greater the congruence to emotion norms related to happiness and pride, the greater commitment, salience and satisfaction related to the family identity. I evaluate how this process varies by emotion and discuss some theoretical implications for specific emotions. Using a convenient sample of 1100 college student, I analyze the data through a series of structural equation models (SEM) examining how the congruence of emotional norms related to the emotional expression impacts commitment, salience and satisfaction to an identity. I examine the evaluation of the emotional expression related to emotions; happiness, pride, sadness, fear, shame and anger across the family identity identify similarities and differences in the processes by emotion. Preliminary results support my hypotheses that congruence in emotion norms related to happiness and pride leads to increased salience, commitment and satisfaction within the identity. I discuss similarities and differences by emotion and directions for future research.

### **Amalgamated Affective Impressions: How Consumer Products Modify Identities**

Daniel B. Shank<sup>1</sup>, Rohan Lulham<sup>2</sup>

<sup>1</sup>Missouri University of Science and Technology, <sup>2</sup>University of Technology Sydney

Research in affect control theory has shown that people's affective impressions of an identity are systematically modified by emotions and traits associated with that identity: an angry salesclerk is more powerful and lively, but less noble, than a salesclerk without that emotion modifier. Specifically, this research has produced equations that show how the evaluation (goodness), potency, and activity of the identity and the modifier combine to form a new levels of evaluation, potency, and activity for the amalgamated identity (e.g., angry salesclerk). We build on this research to examine whether the affective impressions of consumer products as modifiers amalgamate with identities in a similar or different way than emotions and traits. Study

1 (n=249) shows a proof-of-concept using affective meanings for 12 technology products, 6 business identities, and the combined 72 amalgamated identities (e.g., salesclerk with a Ferrari). The results indicate that affect control theory's modifier equations for emotions and traits predict amalgamated identities with technology products. For Study 2a (n=245), participants rated the affective impressions of 209 consumer products and from those ratings, we were able to select products that displayed a range of affective impressions for Study 2b. Study 2b (n=825) includes 52 of those consumer products and 58 general identities selected to be evenly distributed across the eight positive and negative evaluation, potency, and activity permutations. Additionally, Study 2b included 212 amalgamated identities made from select combinations of the products and general identities. Using this data we create a new set of modifier equations which represent the general process by which people's affective impressions of an identity are modified by consumer products associated with that identity. These equations, which add a new component to affect control theory, are compared to the emotion and trait modifier equations.

## **Symposia 1: New Perspectives on Smiling, Nose-scrunching, and Gasping Faces**

Thursday, July 27, 9:50-11:30, Lindell Ballroom Salon C

### **Smiles: Don't Ask for the Meaning, Ask for the Use**

José-Miguel Fernández-Dols  
Universidad Autónoma de Madrid

A widespread view in psychology is that smiling faces pan-culturally serve as, and are recognized as, indicators of happiness. Although observational studies have shown that sociality predicts smiling better than reports of enjoyment, the belief in a necessary and sufficient relationship between smiles and enjoyment has withstood this ample evidence. We present data on how smiles are interpreted in an indigenous population of Papua New Guinea (the Trobriand Islands). We sampled children, adolescents, and adults in different villages and islands using forced-choice and free-labeling methods. First, using forced-choice methods, although participants showed moderate levels of matching of smiles with happiness labels, they also showed an ability to interpret smiling faces as Western participants do through core-affect attributions. Second, using free labeling, Trobrianders freely produced a wide range of unpredicted labels, categorizing smiles as social tools aimed at managing friendly interactions, while rarely linking the smiling face to feeling happiness. Third, our findings were robust across Duchenne and non-Duchenne smiles posed by local people. We suggest that smiles do not mean "happiness" across societies. Instead, they are rather flexible tools that prompt, on the receiver side, important inferences about the context, the sender, and the course of the interaction between sender and receiver.

### **Is the Nose Scrunch a Signal of Disgust?**

James A. Russell  
Boston College

We present evidence from studies carried out in two indigenous societies, the Trobrianders of Papua New Guinea and the Mwani of Mozambique, as well as two Western societies, the US and Spain. As obtained from a variety of methods (free labeling of faces, choice from an array of faces, and matching to stories), our findings on children and



adolescents challenge the thesis that the nose scrunch is a signal of disgust. An alternative account is presented: the concept of disgust lexicalized in English is heterogeneous and partially overlaps with feeling angry, nauseous, and “grossed-out.” Similarly, a variety of different facial expressions conveys disgust. In the U.S. and Spain, the nose scrunch is matched with disgust, except when the sick face (someone about to vomit) is an alternative. In indigenous societies, we found even less support for the “nose scrunch = disgust” theory: all negative faces are associated with all negative emotions in unpredicted ways. Valence (although not arousal) emerged as pancultural, suggesting minimal universality: humans make sense of facial displays in terms of core affect plus context.

### **The Gasping Face: Signaling Fear or Threat?**

Carlos Vrvelli

De Montfort University

Does the gasping face indicate fear across societies? Although advocates of Basic Emotions Theory and many applied scientists assume so, ethological and anthropological evidence suggest that this assumption is ethnocentric. We present several studies conducted in a Melanesian indigenous society, the Trobrianders of Papua New Guinea, with children, adolescents, and adults using different methods: free labeling, choice-from-an-array, and matching stories. Our results converge in interpreting the gasping face as indicating threat, and being robust across age groups, gender, the method used, and the geographical location of the sampled population. We conclude that gasping faces are powerful attention-grabbing signals perceived negatively, but without a uniform emotional meaning across societies.

### **Perceptions of Emotions and Mind in Two Small Scale Societies**

Maria Gendron<sup>1</sup>, Lisa F. Barrett<sup>1,2</sup>

<sup>1</sup>Northeastern University, <sup>2</sup>Massachusetts General Hospital/Martino’s Center for Biomedical Imaging

An intense debate continues over whether people around the world can recognize particular facial configurations such as smiles, gasps and scrunched noses as “expressions” of emotion. Surprisingly little is known about the spontaneous inferences perceivers make when faced with these same facial cues. This is particularly true in small-scale societies, where Western cultural exposure is minimal, due to uniformity in task constraints in the prior literature (providing perceivers with words and stories that constrain interpretations). We present data from two such societies, the Himba of Namibia and the Hadza of Tanzania. Our data reveal, first, that Western-style facial configurations (smiles, gasps, and scrunched noses) are rarely meaningful as the predicted emotional expressions in these societies. This is particularly evident when task constraints are lessened. Instead, our data suggest that these cultures may be less mind-centric, such that the social predictions based on non-verbal behavior are often not about mental states. We suggest that these findings fit well with the Theory of Constructed Emotion (Barrett, 2017), which hypothesizes that concepts (which are inherently predictions) function to construct experiences and perceptions of emotion in a culturally variable manner.

### **Getting Real about Faces**

Alan J. Fridlund

University of California-Santa Barbara

As made clear by the recent debate commissioned by Andrea Scarantino for the Emotion Researcher (August, 2015), the effort to explain what we do with our faces by recourse to Basic Emotions has become a deepening morass of shifting propositions and slipclauses, propped up by foundational experiments with Procrustean methods and unreported vitiating

conditions. Nonetheless, the findings reported in this symposium, the latest and most compelling of a long line of recent evidence, pose the biggest challenge to Basic Emotions Theory: that its two-factor, uniformitarian instinct/culture framework is too constrained to appreciate the diversity expected with both natural selection and cultural phylogeny and therefore in human facial expression. How we use our faces in everyday life is better explained by examining the aims of interactants and the context of their interaction. This externalist, functionalist “Behavioral Ecology View” does not deny emotion but has no use for it in its causal chain, and it reconnects human facial expression with modern ethological models of animal signaling and negotiation.

## **Symposia 1: Romantic Love and Cognition**

Thursday, July 27, 9:50-11:30, Lindell Ballroom Salon D

### **The Power of Love within the Mirror Neuron System**

Stephanie Cacioppo

The University of Chicago

Romantic love has been the source for some of the greatest achievements of mankind throughout the ages. Debates remain, however, about the nature and function of love. Here I will show recent neuroscientific evidence that love is not only a basic emotion, but also calls for higher-order cognitive mechanisms with predictable facilitation effects on social cognition and behavior. For instance, I will present data showing that the implicit presentation of a beloved's name or picture significantly improves performance in participants in love, compared to participants “out-of-love”). These neurobehavioral facilitation effects are in line with cognitive top-down processes within the mirror neuron system and beyond.

### **Preferential Processing of Beloved-Related Information and Task Performance: Two Event-Related Potential Studies**

Sandra Langeslag<sup>1</sup>, Jan Van Strien<sup>2</sup>

<sup>1</sup>University of Missouri-St. Louis, <sup>2</sup>Erasmus University Rotterdam

Infatuated individuals have better attention for beloved-related information, but report having trouble focusing on other tasks, such as school or work. So, romantic love can both improve and hurt cognition. Emotional information is preferentially processed, which improves task performance when the information is task-relevant, but hurts task performance when it is task-irrelevant. Because beloved-related information is highly emotional to the infatuated individual, the effects of romantic love on cognition may resemble these effects of emotion on cognition. We examined whether beloved-related information is preferentially processed even when it is task-irrelevant and whether this hurts task performance. In two event-related potential studies, infatuated participants performed a visuospatial short-term memory task. Task-irrelevant pictures of beloved, friend, and stranger faces were presented during maintenance (Study 1), or encoding (Study 2). The Early Posterior Negativity (EPN) reflecting early automatic attentional capturing and the Late Positive Potential (LPP) reflecting sustained motivated attention were largest for beloved pictures. Thus, beloved pictures are preferentially processed even when they are task-irrelevant. Task performance and reaction times did not differ between beloved, friend, and stranger conditions. Nevertheless, self-reported obsessive thinking about the beloved tended to correlate negatively with task performance, and positively with reaction times, across conditions (Study 2). So, although task-irrelevant beloved-related information does not impact task performance, more obsessive thinking about the beloved might relate to

poorer and slower overall task performance. More research is needed to clarify why infatuated individuals have trouble focusing on beloved-unrelated tasks and how this negative effect of love on cognition could be reduced.

### **Don't You Want Me, Baby? Cardiac and Electrocardiac Concomitants of Romantic Interest and Rejection**

Frederik Van der Veen<sup>1</sup>, Anastasiya Burdzina<sup>1</sup>, Sandra Langeslag<sup>2</sup>

<sup>1</sup>Erasmus University Rotterdam, <sup>2</sup>University of Missouri-St. Louis

With the rise of internet, online dating has become a popular way to find a romantic partner. Receiving online evaluations in terms of 'dateability' can be very stressful and a negative evaluation might even be a possible trigger for lowered self-esteem and associated psychopathologies. Therefore it is interesting to examine the central and autonomic nervous system responses to both romantic rejection and acceptance in such a setting. For this purpose a database was created, similar to a dating website, where the participants' personal information and photos were placed. Heterosexual, single participants evaluated the profiles of opposite-sex potential romantic partners and decided whether they would like to date this person or not. Subsequently, participants passively viewed the pictures of the potential partners together with their own judgment about the 'dateability' of the person, and the other person's judgment of the 'dateability' of themselves. After viewing the pictures participants received the email addresses to contact their matches. Electro-cortical and cardiac responses to these 'match or 'non-match' judgments were measured. Romantic interest, especially when there was a match between the judge and judged participant, led to the largest P3 response. This suggests that the match condition was the most rewarding condition. Romantic rejection led to the largest cardiac deceleration. This suggests that this condition was associated with social pain. Enhanced cardiac slowing is interpreted in terms of activation of the dorsal part of the anterior cingulate cortex (ACC) and the enhanced P3 in terms of activation of the ventral part of the ACC.

### **Inhibitory Control Mechanisms Implicated in the Perpetration and Processing of Interpersonal Betrayal**

Erin Burdwood, Robert Simons

University of Delaware

Interpersonal betrayals are highly prevalent in romantic relationships and are among the primary reasons that couples seek counseling. However, little is known about real-time forgiveness of these betrayals or the factors that may contribute to their perpetration. The purpose of this set of experiments was to examine inhibitory control as a factor that may be associated with both the commission and processing of interpersonal betrayal. In the first study, college males with and without a history of cheating on romantic partners completed a stop-signal reaction time (SSRT) task in which they were asked to inhibit a prepotent behavioral response to images containing neutral, positive non-sexual, and sexually explicit content while electroencephalography (EEG) data were recorded. Results indicated that men with a history of infidelity, as well as those who endorsed greater desire to engage in casual sexual activity with multiple partners, exhibited deficits in neural activity associated with signaling the need for inhibitory control in response to sexually explicit stimuli. In the second study, females whose romantic partners had recently committed an act of serious betrayal against them completed a similar SSRT task in which they attempted to inhibit responses to neutral or negatively valenced images. Findings revealed that women who were able to recruit more cognitive resources in order to signal the need for inhibitory control in response to negatively valenced stimuli had made more progress in forgiving their betrayer at a 3-month follow-up. Taken together, results

implicate alterations in neural mechanisms associated with signaling the need for inhibitory control in both the perpetration and processing of interpersonal betrayal.

### **Love Regulation Strategies Modulate Romantic Heartbreak**

Michelle Sanchez, Sandra Langeslag  
University of Missouri-St. Louis

Romantic love has a nearly 100% prevalence rate and is central in almost everyone's life. The quality of romantic relationships has been linked to life satisfaction and psychological well-being. Poor relationships have been shown to compromise both physical and mental health. Heartbreak is a risk factor for depression and is the leading cause of adolescent depression. Also, the medical condition takotsubo cardiomyopathy, better known as "broken heart syndrome", is sudden, intense chest pain caused by an emotionally stressful event such as a breakup. Decreasing love feelings would be very useful during heartbreak. The current research subjectively and objectively evaluated which of three regulation strategies worked best to decrease love feelings and to make people feel better when heartbroken. Twenty-four heartbroken participants, age 20-37, completed a regulation task while we measured their brainwaves using EEG. The strategies used were 1] negative reappraisal of the ex (e.g. "What is something mean your ex said to you?") 2] active, positive distraction (e.g. "What is your favorite food? Why?") and 3] love reappraisal (e.g. "I'm still in love with my ex and that's ok."). Regulation instructions were given to participants preceding a photograph of their ex-partner. Participants first thought about the answer to the regulation prompt for five seconds, then passively viewed the picture of their ex-partner for one second, and then rated how in love and positive and negative they felt. For an objective measurement of regulation success, we evaluated an ERP component, the late positive potential (LPP), in response to the photograph. The LPP has been shown to be a measure of motivated attention and regulation success. Ratings data showed that negative reappraisal decreased love feelings but made people feel more negative. Active, positive distraction did not change love ratings but did make people feel more positive. Love reappraisal did not change love feelings or how positive or negative people felt. In conclusion, subjective data showed negative reappraisal is the best strategy for decreasing love feelings but makes people feel bad, and active, positive distraction is the best strategy for making people feel better. LPP data showed that all three strategies decreased motivated attention for the beloved. Overall, these results show love regulation strategies can decrease love feelings and can change how positive or negative people feel in the context of heartbreak.

## **Poster Session 1**

Thursday, July 27, 11:30-12:30, Lindell Ballroom Salon B

### **Low Cognitive Load Causes Ruminative Thought: Experimental Study of Thought Sampling Method**

Hitomi O'I, Satoshi Mochizuki  
University of Tsukuba

### **Feeling Connected to Nature and Feelings of Disgust**

Alexander Skolnick  
Saint Joseph's University

### **Postural Communication of Emotion: Validation of Distinct Poses for Five Discrete Emotions**

Lukas D. Lopez, Peter J. Reschke, Jennifer M. Knothe, Eric A. Walle  
University of California, Merced

### **Social-Emotional Fluency: Associations Between Self Report and Ratings of Naïve Observers**

Marcus Wild, Jo-Anne Bachorowski  
Vanderbilt University

### **Mood Induction with Unfamiliar Emotional Videos**

Kylee T. Ramdeen<sup>1,2</sup>, Viviane Ta<sup>1</sup>, Pascal Hot<sup>2</sup>, Patrick S. R. Davidson<sup>1</sup>  
<sup>1</sup>University of Ottawa, <sup>2</sup>Université Savoie Mont Blanc

### **Intranasal Oxytocin and Response Inhibition in Young and Older Adults**

Diana Cortes<sup>1</sup>, Petri Laukka<sup>1</sup>, Martin Asperholm<sup>2</sup>, William Fredborg<sup>1</sup>, Lillian Döllinger<sup>1</sup>, Shanshao Xiao<sup>1</sup>, Lennart Högman<sup>1</sup>, Junhua Dang<sup>3</sup>, Håkan Fischer<sup>1</sup>  
<sup>1</sup>Stockholm University, <sup>2</sup>Karolinska Institute, <sup>3</sup>Lund University

### **Threat vs. Threat: Attention to Fear-Related Animals and Faces**

Elisa Berdica, Antje Gerdes, Andrew White, Georg Alpers  
University of Mannheim

### **Sensorimotor Appraisal Allows Self-Assessment and Attention Modulation: A Robotic Application**

Marwen Belkaid, Nicolas Cuperlier, Gaussier Philippe  
ETIS

### **Silent Reading Technique Modulate Cardiovascular Responses at the Baseline Measurement**

Yosuke Tezuka<sup>1</sup>, Tsukasa Morishita<sup>2</sup>, Yuya Hiromitsu<sup>1</sup>  
<sup>1</sup>Osaka University of Health and Sport Sciences, <sup>2</sup>Hiroshima University

### **Attentional Bias for Taboo Words**

Tatiana Pryakhina  
Russian Academic University for the Humanities

### **SONATA: A System of Measuring Positiveness for Spoken Sentences Using Voice and Sentence Analysis**

Akira Yoneoka, Haru Okazaki, Junji Takahashi, Yoshito Tobe  
Aoyama Gakun University

### **High Ruminators Have Better Goal-Maintenance Ability: A Modified Stroop Study**

Haruki Nishimura, Satoshi Mochizuki  
University of Tsukuba

### **Does Face Muscle Feedback Affect Facial Emotion Recognition?**

Tanja Wingenbach<sup>1</sup>, Chris Ashwin<sup>2</sup>, Monique Pfaltz<sup>1</sup>, Michael Plichta<sup>1</sup>, Mark Brosnan<sup>2</sup>  
<sup>1</sup>University Hospital Zurich, <sup>2</sup>University of Bath

**The Initiating Ability of Facial Components and Their Combinations: Testing the Facial Feedback Hypothesis with Prior Feeling States**

Shushi Namba, Russell Kabir, Nao Fukuda, Ryota Kobayashi, Makoto Miyatani, Takashi Nakao  
Hiroshima University

**Positive Emotional Traits Predict Positive Spontaneous Thought: A Month-Long Study**

Daichi Sugawara, Masashi Sugie  
University of Tsukuba

**On the Malleability of the Meaning of Contexts: The Influence of Another Person's Emotion Expressions on Situation Perception**

Shlomo Hareli<sup>1</sup>, Ursula Hess<sup>2</sup>  
<sup>1</sup>University of Haifa, <sup>2</sup>Humboldt-University, Berlin

**Individual Differences in Romantic Rejection: Psychophysiology and Psychopathology of the Broken Heart**

Anastasiya Burdzina<sup>1</sup>, Frederik M. van der Veen<sup>1</sup>, Sandra J. E. Langeslag<sup>2</sup>  
<sup>1</sup>Erasmus Universiteit Rotterdam, <sup>2</sup>University of Missouri-St. Louis

**Sensory Perception, Scent Sensitivity, and Emotional Intensity**

Usha Pappu, Neal Ashkanasy, Alastair Tombs  
UQ Business School, The University of Queensland

**Self-Relevance and Recollection Memory: Interaction Between Gaze Direction and Emotional Expression in Faces**

Sylwia Hyniewska<sup>1</sup>, Aleksandra Bala<sup>2</sup>, Marcela Dziekan<sup>2</sup>, Lukasz Okruszek<sup>3</sup>  
<sup>1</sup>Institute of Physiology and Pathology of Hearing, World Hearing Center, <sup>2</sup>University of Warsaw, <sup>3</sup>Institute of Psychology, Polish Academy of Science

**Exploring Consistency in Right Hemisphere and Valence Hypothesis**

Deeksha Sharma<sup>1</sup>, Indiwar Mishra<sup>2</sup>  
<sup>1</sup>IIT Roorkee, <sup>2</sup>Delhi University

**The Role of Perceptual and Conceptual Stimulus Properties in Habituation of Emotional Response**

Oksana Itkes, Assaf Kron  
University of Haifa

**Grounding the Rationality of Emotion: Intentionality in Neuroscience**

Cecilea Mun  
University of Nevada, Las Vegas

# **Paper Session 1: Emotions in the Workplace and Education**

Thursday, July 27, 14:00-15:20, Lindell Ballroom Salon A

## **Embodying Emotions: Investigating Yoga Teachers' Performances of Identity and Emotions During Teaching**

Jennifer Sonne, Ingrid Erickson  
Syracuse University

Within the United States, the practice of yoga has grown exponentially in the past 20 years creating a new demand for yoga teachers. Seen as the embodiment of physical, mental, and spiritual discipline, these individuals are expected to exhibit both physical agility and philosophical acuity. Their role in front of their students, among their peers, and within their larger communities is often as an exemplar of serenity and thoughtfulness, focused on little other than their commitment to higher level goals. Upon closer inspection, it becomes clear that the achievement of this seemingly tranquil exterior is a highly strenuous, emotional act. Building on Shields' theory of performing emotions as performing gender (2002), this research suggests that yoga teachers 'perform' their embodied identities with substantive emotional effort and management.

I draw on a mixed methodology, including twelve hours of participant observation with four teachers (two women, two men) as well as nine hours of interviews and twenty-four surveys, to explore three dimensions of yoga teachers' emotional performances. First, yoga teachers potentially engage in surface acting (Hochschild, 1979) while teaching yoga to amplify their fit to social norms and expectations. This emotion work is evidenced by contradictory findings: teachers report lower positive affective states post-teaching except for joy, which curiously goes up. These mixed data suggest a complex relationship between teachers and the performance of teaching itself: teaching is experienced as affirming, but also something onerous to get through. Second, individual teachers perform their identities when they share introductory comments (often known as 'Dharma Talks') at the beginning of their classes. These performances allow teachers to emotionally reconcile their internal beliefs with the business at hand. Third, teachers perform differently in different environments. The culture of a yoga studio--in particular the relationship between the studio owner and the yoga teacher--is elemental in shaping a teacher's emotional boundaries. For example, teachers describe feeling more open and authentic in yoga studios where studio owners support flexibility and autonomy, whereas they describe feeling more limited and uncomfortable in yoga studios where studio owners enact higher levels of control with specific restrictions.

Yoga teachers' emotions and emotional management act as a foundation upon which they build their performed identities as yoga teachers and as members of the yoga community. This empirical work thus contributes new insights into the emotional engagement of yoga teachers and adds nuance to this practice as a form of emotional performance.

## **Validation of the Emotional Competence Test (EMCO) to Measure Emotional Intelligence in the Workplace and Its Applications**

Marcello Mortillaro, Katja Schlegel  
Swiss Center for Affective Sciences-University of Geneva

Emotional intelligence (EI) is a set of abilities that can vary over time. Despite this general acknowledgement, most instruments designed to assess EI are self-report measures that are in many respects confounded with personality questionnaires. Adopting an ability EI

model, conversely, implies that EI measures should be designed as performance-based tests in which the actual emotional competence of the person is assessed. This approach to EI resulted in very few tests so far – for example, the Situational Test of Emotion Understanding (STEU), and the Situational test of Emotion Management (STEM), - and only one considers several branches of EI, the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT). This test has been widely adopted by researchers in many different contexts but some authors criticized the MSCEIT for being largely a-theoretical, using a scoring rubric based on consensus, and in some parts merely assessing knowledge about emotions. In this contribution we will present three reliability and validation studies of a recently developed EI test that is performance-based, theoretically driven, and targets different facets of EI: the Emotional Competence Test (EMCO). The EMCO test differs from the MSCEIT also because is specifically designed to measure EI in the context of work activities. We collected real workplace scenarios through interviews with employees and managers and we used them to design the items and the respective response options, which were further validated with emotion experts. The three studies included different groups of respondents – students and practitioners – and were conducted in the French and German parts of Switzerland and in the United States. Across the three studies results showed that the internal consistency was good, all subtests were unidimensional, and had high measurement precision (as assessed with Item Response Theory). In addition, construct validity was established through meaningful correlations with other standardized tests of emotional competences, measures of intelligence and personality, demographic variables, well-being, and observational data from assessment center tasks. Current and potential applications of the test and future developments will be discussed.

### **Movement and Emotions in Higher Education**

Ofra Walter

Tel hai Academic College

This study presents a mixed measurement that assesses and identifies the contribution of movement activities to the development of Emotional Intelligence amongst students. A semester course, grounded in the SDM (Sherborne Developmental Movement) theory was integrated in the curriculum of the Education Dept. in Tel-Hai Academic College in Northern Israel. It focuses on students' awareness to the significance of movement in education, and aims to provide a basic frame for developing theoretical concepts in teaching movement in Early Childhood Education. The main teaching methods are experiential, based on theory review and research, as well as practical experiencing in movement with young children. Participants are first and second year students in the Dept. of Education, which are completing a BA degree in Education. Based on previous studies (Tilstone, 1998, Weis & Arnesen, 2007), we assumed that experiencing SDM will contribute to the modification of Emotional Intelligence amongst participants, and by that contribute to student's learning and teaching processes. Research findings indicated that SDM activities contributed to the development of emotional intelligence competencies. Qualitative results suggest that the experience of movement contributed to student's perception and expression of self-emotional states, self-emotional integration and facilitation, emotional understanding and reasoning, and self- emotional management. Quantitative data had indicated a change in the correlations from pre to post program between the emotional Intelligence scales, highlighting the significant correlations between Regulation and Management of emotions in post- phase. Finally, a parallel process was identified between SDM stages and Emotional Intelligence competencies.

### **Emotion Management and the Professional Culture of Administrative Social Workers in Russia: The Common Standards of Emotion Work and the Moral Mission of Social Care**



Olga Simonova

National Research University-Higher School of Economics

I examine emotion work among administrative social workers in Russia, an activity vital to the on-going emergence of their professional culture. This examination focuses on administrative social workers, a particular group within the occupation who are, in the main, office-bound social workers who help people process the required documents needed to receive social assistance and benefits. Firstly, I offer an overview of existing research on the sociology of emotions and professions, with a special focus on those studies exploring emotion management. The conclusion emerging from this review is that analysing emotion work in the field of social work can lead to a deeper and more complete understanding of its specific character and the ethical rules operating within it. Secondly, transcript analysis of administrative social worker interviews was conducted as part of a larger research project on the professional culture of this occupation. This analysis was completed with help of NVivo software and reveals that interviewees are not only clearly aware of emotion work, but also seek to reduce emotional expenditure in their communication with clients and strive to standardize how they work with their emotions. Carrying out emotion work has a key function in supporting a professional identity among administrative social workers and the furthering the development of a professional culture. On the other hand, the emotional expenditures involved and the challenge of 'making the profession worth it' are alleviated by the sense that one's work fulfils an important 'moral mission' in providing social care and assistance.

## **Paper Session 1: Affective Computing and Information Processing**

Thursday, July 27, 14:00-15:20, Lindell Ballroom Salon C

### **RoundTable Discussion/Debate: Can we/should we build WestWorld?**

Jonathan Gratch<sup>1</sup>, Arvid Kappas<sup>2</sup>, Craig Smith<sup>3</sup>

<sup>1</sup>Institute for Creative Technologies, University of Southern California, <sup>2</sup>Jacobs University Bremen, <sup>3</sup>Vanderbilt University

In a social context in which digital assistants, such as Alexa and Siri are becoming commonplace, the popularity of the current HBO series WestWorld, itself a much more sophisticated reboot of a fairly popular movie from 1973, indicates considerable lay interest in the progress, prospects, and limits of artificial intelligence (AI). It seems fitting then, to take stock of where we have come, and where we might be headed, since the time of the original WestWorld. In the 70's and 80's philosophers like Hubert Dreyfus and John Searle argued strongly that digital computers would always be algorithmic, syntactic devices that could never truly understand anything and/or could never perform higher-order human cognitive processes, and speech recognition was viewed as a highly elusive puzzle that would be very difficult to solve. Clearly, great strides have been made on the puzzle of speech recognition, but where are we, and where might we go, in terms of machine understanding, and what role does a consideration of emotion and emotion-like mechanisms play in addressing these issues. For instance, are we at the point where, beyond being able to pass the Turing test, some systems appear to truly understand certain concepts in a meaningful way? Is it the case, as Herb Simon argued in the 60s, that for AI devices to become truly autonomous (i.e., able to serve multiple goals in uncertain environments) they will need endowed with something that functions like the human emotion system? Issues such as these will be discussed and debated by the three

presenters, two of whom (Gratch and Kappas) have contributed much, in fairly different ways, to the field of affective computing, and one of whom (Smith) has been deeply interested in the functions served by emotion, as viewed through the lens of appraisal theory. The presenters will demonstrate and discuss the current cognitive and affective capabilities of current artificially intelligent systems, and will consider what will likely be required to further advance those capabilities. One issue that will receive particular attention is whether and why mechanisms that parallel the functions served by emotions in humans will be required for future advances in artificial systems. Finally, the presenters will also explicitly consider the ethical implications of creating sentient, feeling artificial entities that are created solely to do the bidding of their human owners.

### **Towards a Computational Transdiagnostic Model of Anxiety Disorders: Contributions from Artificial Intelligence and Affective Computing**

Eva Hudlicka

Psychometrix, University of Massachusetts-Amherst

Emotions play a central role in psychopathology. The recent shift from a descriptive to a process-based framework for classifying affective disorders, exemplified by the transdiagnostic model, emphasizes the underlying cognitive-affective mechanisms that mediate a broad range of affective and anxiety disorders. Specific assessment and treatment approaches are being developed that emphasize intervention at the level of these underlying mechanisms; e.g., Cognitive Bias Modification therapies.

These mechanism-based approaches to understanding psychopathology, and mechanisms of therapeutic action, are increasingly being explored via empirical studies. This talk will discuss a complementary approach, based on computational techniques from artificial intelligence and affective computing.

The approach uses a computational model that models affective biases on cognition via parametric manipulations of the cognitive processes mediating decision-making and emotion generation via cognitive appraisal. The architecture represents hypothesized mechanisms of several affective biases (e.g., anxiety-linked attentional and interpretive threat biases), and can produce a broad range of alternative observable behaviors, by manipulating the structures and processes within the individual architecture modules. Specific biases are modeled by controlling the magnitude of attentional and interpretive biases, and a wide range of behaviors can be produced through these parameter-based manipulations, using the same underlying mechanism and varying the magnitude of the biasing effects. For example, the model can generate a spectrum of distinct behaviors resulting from attentional and interpretive threat biases, ranging from adaptive vigilance, through anxiety to a paralyzing panic attack.

The model has been implemented in several domains, including a search-and-rescue game task. I will describe this approach in more detail and will discuss how alternative hypothesized mechanisms of specific observed behaviors can be represented. I will also discuss how the model can be augmented with additional processes and parameters to enable it to represent hypothesized mechanisms of therapeutic action.

An ability to model mechanisms mediating affective disorders would provide a means of operationalizing high-level theories regarding their etiology and maintenance, and would provide a basis for more accurate, mechanism-based assessment, treatment and outcome tracking. The talk will conclude with a discussion of the potential contributions of computational affective modeling to elucidating the mechanisms of psychopathology and therapeutic action, within the broader context of the transdiagnostic model, and will outline the structure of a coupled empirical-computational iterative refinement approach, whereby empirical studies would be used to produce data for computational models, which would then generate alternative

hypotheses of mechanisms, that could then be further evaluated via subsequent empirical studies.

### **Towards an Affective Information-Processing Theory of Sleep Onset and Insomnia**

Luc Beaudoin<sup>1</sup>, Sylwia Hyniewska<sup>2</sup>, Célyne Bastien<sup>3</sup>

<sup>1</sup>Simon Fraser University, <sup>2</sup>University of Bath, <sup>3</sup>Université Laval

We develop a cognitive-affective theory of sleep onset and insomnia (Beaudoin, 2013, 2014). This somnolent information-processing theory is design-based (inspired by Artificial Intelligence). We argue that the two-process model of sleep (Borbély, 1982, 2016) is necessary, but insufficient because it ignores pro-somnolent and insomnolent factors, including affective ones. We argue that the phylogenesis of the human sleep-onset control system (SOCS) faced the design challenge of integrating information from deliberative and reflective (executive) processes and various types of emotion. The core SOCS being evolutionarily ancient and modular, it cannot decode executive information; and executive processes couldn't fully control lower sleep onset mechanisms. Yet some mutual indirect interactions were required.

Our theory extends and applies the H-CogAff theory of emotions (Sloman, 2003, 2008), while adding sleep onset control mechanisms. We propose that the human SOCS is coarsely sensitive to primary emotions (based on alarms), secondary emotions (involving deliberative, motive management processes), tertiary emotions (perturbance, involving reflective, meta-management processes), moods (Thayer, 2001), interrupt filtering, attributes of motivators currently being managed or suppressed (Beaudoin, 1994), sense-making, and other processes, all of which operate in parallel with each other. Insomnia often involves perturbation, a loss of control of attention.

We will use limerence (Tennov, 1979) and grief (Wright, Sloman, Beaudoin, 1996) as examples of perturbant emotions and other affect that can disrupt sleep. We will discuss how new information processing treatments for insomnia that can be supported by mobile apps like mySleepButton®, such as serial diverse imagining (a form of cognitive shuffling, Beaudoin, Digdon, O'Neill, & Racour, 2016), personalized body scans, massage and other treatments might differentially affect the somnolent mechanisms we propose. We will present some of the new questions, from empirical and designer perspectives, that our theory raises about affect, mental architecture, sleep-onset and insomnia.

## **Paper Session 1: Psychological Theory and Research**

Thursday, July 27, 14:00-15:20, Lindell Ballroom Salon D

### **Communicating Affective Stance Through Tone of Voice**

Nikos Vergis, Marc Pell

McGill University

Im/polite attitudes are extremely important for maintaining, enhancing or challenging interpersonal relations; for example, when making a request, these attitudes reflect a positive (polite) or negative (impolite) stance of the speaker towards the listener. Although linguistic politeness has been studied and theorized about extensively, the role of vocal affect, and specifically prosody (or tone of voice), in the perception of im/polite attitudes has been largely neglected. In the present study, we used experimental methods to investigate the interaction of linguistic form and prosody in the perception of im/polite requests. A written task (n=22) established a baseline for the level of im/politeness associated with certain linguistic structures

(e.g. Direct request: Lend me a nickel., Direct request with please: Please lend me a nickel. and Conventionally Indirect Request: Can you lend me a nickel?). Then we invited four speakers (2 females) to record 38 token sets in two speaking conditions: with a polite and with a rude prosody. In an auditory study, these items were presented to 48 participants, who judged them for the degree of politeness they convey on a scale of 1-5. Results showed that, although both linguistic structure and prosody had a significant effect on politeness ratings, the effect of prosody was much more robust. These findings have important implications for models of im/politeness and more generally for theories of affective speech.

### **Gender Differences in the Recognition of Vocal Emotions—A Validation Study**

Adi Lausen, Annekathrin Schacht

Institute of Psychology, University of Goettingen

Gender differences in the recognition of vocal expressions of emotion have gained increased attention over the past decades. However, conflicting findings have left the exact nature of these differences unclear. Thus, a number of investigators have argued that a comprehensive understanding of gender differences in vocal emotion recognition and more accurate results can only be achieved by replicating these studies while accounting for influential factors such as stimulus type, gender-balanced samples, language or culture. The present study aimed at filling this gap by validating a large set of emotional prosodic stimuli selected from established databases. As non-verbal vocalisations are unconstrained by linguistic barriers a secondary aim was to test whether participants would be more accurate at spotting emotions from affect bursts than from pseudo-speech. Finally, we investigated whether emotion recognition from vocal expressions differs as a function of both decoders' and encoders' gender. A total of 290 participants (143 females, 147 males) were randomly and equally allocated to two groups. One group listened to words and pseudo-words stimuli only, while the other group listened to stimuli featuring sentences and affect bursts. Participants were asked to categorize the stimuli with respect to their nonverbal emotional content (anger, disgust, fear, happiness, sadness, surprise, neutral) in a fixed-choice response format. Results showed that participants were significantly better at recognizing emotions in non-speech than speech-embedded stimuli. Quasi-binomial logistic regression models showed significant interactions between emotion category and gender of participant for pseudo-words and semantic negative nouns. In addition, significant main effects of gender were found for pseudo-words, semantic positive nouns, semantic neutral nouns, and pseudo-sentences. However, no gender effects were found for lexical sentences, affect bursts, semantically neutral sentences and single words. To sum up, findings provide evidence that discrete emotions are more accurately identified through non-speech than speech-embedded stimuli. While some gender differences were found for certain types of stimuli, there was no clear indication that women significantly outperformed men when decoding emotions from vocal or non-vocal stimuli. It is concluded that if these sex differences indeed exist, they are overall small in magnitude.

### **Understanding Subjective Affect: The Orchestral Molecules of Mood**

Ross Buck

University of Connecticut

This position paper by a neuroscientist and social psychologist uses the analogy of an internally generated neurochemical "symphony" to understand subjective affect. Over the past century, there have been heated debates on whether emotions are natural kinds or psychological constructions, which collectively have been characterized by constructionists as a hundred-year emotion war (Lindquist et al., 2013). In this controversy, a significant source of empirical evidence relevant to understanding the nature of emotion has been commonly ignored

or minimized by constructionists: largely subcortical neurochemical systems underlying subjective emotional feelings and desires, or affects, as worked out in cross-species affective neuroscience. These diverse neurochemical systems are of great evolutionary age, and their organization in mammalian evolution is well known. They critically involve neuropeptides: various neuropsychological studies demonstrate distinct mood effects of neuropeptides in humans. These large molecule neurotransmitters are direct genetic products in that they are generated by DNA in the nuclei of diverse sub-neocortical neurons. In this sense, subjective feelings and desires constitute ancestral voices of the genes, shared by all vertebrates, constituting a virtual internal symphony: usually whispering and murmuring in pianissimo, creating indistinct background moods; but occasionally screaming and shouting in fortissimo crescendo, creating distinct emotional states that dominate consciousness. This symphony fills every waking moment and even invades our dreams. With mindfulness, we can be conscious of (and regulate) how we feel—how happy, sad, anxious, annoyed we are—although like the feel of our shoes on our feet, these feelings are commonly inhibited and ignored in favor of attention to ongoing events. Also, we are often conscious of how we feel relative to other persons with diverse social emotions, including selfish social emotions involving dominance relationships—pride, guilt, shame, envy, jealousy, pity—as well as communal social emotions underlying egalitarian relationships—gratitude, respect, and trust. Emotions are natural kinds at two levels: they are experienced subjectively as readouts of symphonic neurochemical “orchestras” structured as biological systems filling functions of self-organization; and they are simultaneously broadcast to the world in nuanced nonverbal emotion displays, that help affectively structure our social interactions. Thus, diverse neurobiological systems structure our cognitive-emotional interactions through sustained animal-feelings and mood states; as well as diverse facial, bodily, and vocal displays. Developments in human brain imaging and in capturing the nuances of nonverbal display; in combination with direct affective measures; enable the objective study of these systems in humans, illuminating distinct levels of emotional-affective functioning.

### **Physiological Correlates of Emotions “in the Wild”: A Case Study with Mountain Bikers**

Damien Dupre<sup>1</sup>, Gawain Morrison<sup>2</sup>, Gary McKeown<sup>1</sup>

<sup>1</sup>Queen’s University Belfast, <sup>2</sup>SensumCo Ltd.

With the development of wearable sensors, it is now possible to assess the dynamic progression of physiological rhythms such as heart rate, breathing rate or galvanic skin response in ways and places and during certain activities that were previously prohibitive in terms of cost and reliability. This paper assesses a study of the physiology of four experienced mountain bikers, analysed during their performance of two different mountain bike trails. Despite the advances, the statistical analysis of such signals remains a challenge for data analysts. This talk presents a workflow encompassing the whole process with the goal of obtaining a range of best fitting models to analyse the patterns given by these measurements “in the wild”. The recording set up used to measure and synchronize multiple biometric physiological sensors is called HAN for Human Area Network of individual measurements. For this experiment the riders wore an Equivital EQ02 sensor belt, a GoPro Hero 4 camera and a Sennheiser lavalier microphone. They were also wearing an iPhone on their right arm (for recording audio from Apogee app & lavalier mics) and an One Plus X Android smartphone on their left arm (for Sensum app to control sensors) in order to record the signals given by the wearable devices. The GPS coordinates of the riders were also recorded with the iPhone. By monitoring the physical activity, it is now possible to analyse the optimal patterns in order to increase athletes’ emotion. The provided data are not restricted by a lab environment but close to the “ground truth” of the physiological rhythm changes. It allowed for giving accurate feedback to athletes

about their emotion such as an unexpected increase or an expected decrease of the physiological activity. Moreover wearable technologies have the advantage to be small and unobtrusive which is particularly important to not make the athletes uncomfortable and limit their performance.

## **Paper Session 2: Emotion and Cognition**

Thursday, July 27, 15:40-17:00, Lindell Ballroom Salon A

### **Who, What Where: Differential Processing of Discrete Emotion Contexts**

Eric A. Walle, Jennifer M. Knothe  
University of California, Merced

A fundamental aspect of observing another's emotion is appreciating its "aboutness" (see Gordon, 1974; Hobson, 1998). For example, an adaptive response to another individual's fear display may be to identify and attend to the source (i.e., the referent) of fear rather than the fearful individual (i.e., the emoter). Conversely, anger contexts may motivate allocation of attention to the angry emoter who could potentially harm the observer rather than to the referent of the individuals' anger. Examining such differences in attentional focus to discrete emotional contexts was the focus of the present study.

Eight-four participants (44 female) completed 2 tasks. First, participants described 10 emotion images that appeared in random order for 30sec each on a computer monitor. Images contained a single individual (emoter) displaying one of five emotions (joy, fear, anger, sadness, disgust) toward an object (referent). Next, participants recalled and described for 60sec a recent experience in which they had experienced each of the five emotions.

Participant responses were transcribed and coded for frequency of mentioning the emoter, referent, and emotion label. We hypothesized individuals would mention the emoter more in sadness and anger contexts and the referent more in disgust and fear contexts. No a priori predictions for joy contexts were made. Words indicating the emoter, referent, and emotion label were analyzed separately using repeated measures mixed linear modeling controlling for trial and total words. A Bonferroni correction was applied to all pairwise comparisons.

Picture Task: Significant main effects of emotion were found for the mentioning of the emoter,  $F(76)=41.65$ ,  $p<.001$ , the referent,  $F(76)=49.27$ ,  $p<.001$ , and emotion labels,  $F(76)=19.96$ ,  $p<.001$ , in descriptions of emotional contexts. Pair-wise comparisons revealed that participants referenced the emoter significantly more in joy, anger, and sadness contexts, whereas they mentioned the referent significantly more in disgust and fear contexts. Participants labeled the emotion significantly more in anger and fear than sadness and disgust.

Emotion Recall Task: Significant main effects of emotion were found for the mentioning of the emoter,  $F(71)=4.15$ ,  $p=.003$ , and the referent,  $F(71)=10.11$ ,  $p<.001$ , but not emotion labels. Participants mentioned the emoter most when recalling anger events, whereas the referent was mentioned most for disgust events.

These findings suggest that individuals differentially emphasize aspects of emotional contexts as a function of the discrete emotion. Additional research examining individuals' visual attention (e.g., eye tracking) and memory of aspects of emotional contexts, as well as likely cross-cultural differences, will be discussed.

## **Emotional Norms for Russian Nouns: The Database ENRuN**

Tatiana Sysoeva<sup>1</sup>, Dmitry Lyusin<sup>2</sup>

<sup>1</sup>Russian Academy of Education, <sup>2</sup>Higher School of Economics

Normative ratings of the affective meanings of words are necessary for research on emotions, moods, affective information processing, and text-based sentiment analysis. Such ratings do not exist in Russian although they are in great demand not only for Russian-based studies but also for cross-cultural comparisons.

The aim of this study was to develop a database with normative affective ratings of emotional and nonemotional Russian nouns. We selected 378 nouns with supposedly various emotional meanings and obtained ratings for them using both categorical and dimensional approaches. Participants (Russian native speakers, university students, mean age 19.2) rated relatedness of each word to five emotional categories – happiness, sadness, anger, fear, and disgust (N = 100) – and two affective dimensions – valence and arousal (N = 190). Cronbach's alphas for the seven analyzed parameters vary from .973 to .996. To assess reliability in a different way, 14 nouns were repeated twice in the noun lists given to the participants. Correlations between their first and second ratings are in the range from .829 to .987. Taken as a whole, reliability of the data is quite high.

The obtained data was organized into the database ENRuN (Emotional Norms for Russian Nouns). Means, standard deviations, and minimum and maximum values are provided for each of the five emotional categories and two dimensions. These data are available for the entire sample as well as for the male and female subsamples separately. The database ENRuN also includes information about such linguistic characteristics as word frequency and word length measured by number of letters and syllables.

Relations among all the seven parameters have been analyzed. Ratings for the four negative categories (sadness, anger, fear, and disgust) positively correlate with each other (.39 - .74) and negatively correlate with the happiness ratings (.53 - .61). The relation between valence and arousal yields the typical V shape if arousal is taken as a function of valence.

For quite a few words, sex differences in emotional ratings were found. They are shown in the database because this result is important for designing studies with the use of emotional words.

The database ENRuN can be used free by researchers and is available online (DOI: 10.13140/RG.2.2.33177.62566).

## **Dissociating Affective and Semantic Valence**

Assaf Kron, Oksana Itkes, Ruth Kimchi, Hadeel Haj Ali, Avia Shapiro

University of Haifa

We examined the possible dissociation between two modes of valence: affective valence - valence of the emotional response, and semantic valence - stored knowledge about valence of an object or event. In Experiment 1, fifty participants viewed affective pictures that were repeatedly presented while their facial EMG activation and heart rate response were continuously recorded. Half of the participants provided self-report ratings about the valence of their feelings, and half about the valence of the stimulus. Next, all participants performed an affective Simon task. In Experiment 2, thirty new participants performed the affective Simon task with the repeated exposure embedded within the task. The results showed that measures related to affective valence, i.e., feelings-focused self-reports, heart rate, and facial EMG activations, attenuated with repeated exposure to pleasant and unpleasant pictures, whereas measures related to semantic valence, i.e., knowledge-focused self-reports and congruency effect of affective Simon task, did not. These findings strongly suggest that affective and semantic valence represent two distinct psychological constructs.

## **Affect Integration: How Various Sources of Affective Input is Integrated**

Erkin Asutay, Daniel Västfjäll

Linköping University

Affect is one of the most fundamental ingredients of human mind. It is a basic building stone of many psychological phenomena. An object or an event with a strong ability to influence an organism's body state and mind produces a stronger affective reaction, and in turn has a greater capacity to influence other ongoing processes such as emotions, judgments, decisions. In a certain context, there can be a number of affect inducing stimuli in our surroundings that can potentially influence our behavior and judgments. Nevertheless, research on how various sources of affective input into an overall affective reaction is scant. Here, we present a research program and three experiments that aim to study the integration strategies used by the affect system. Given the lack of previous work, we used a very basic paradigm. In three separate studies (N=44, 45, and 49), participants viewed a number of emotional pictures in sequence and assessed their momentary core-affect on scales of valence and arousal. In each trial, participants viewed four (studies 1 and 2) or six pictures (study 3), and each picture was shown for 2 (studies 1 and 3) or 4 seconds (study 2). Positive and negative images were presented in separate blocks. We attempted to predict measured momentary positive and negative arousal for each picture sequence using picture arousal in each sequence. We tested and compared a number of information integration models: peak, end, primacy, time-weighted average, salience-weighted average. As a result, averaging models were the best to predict both negative and positive arousal. We found no difference between 2 and 4-second exposures. Within salience-weighted models, more emotional items were weighted significantly heavier than less emotional ones. Also, during four picture sequences the beta weights for the pictures did not differ from one another, while during six picture sequences later items were weighted heavier than earlier items. Hence, it seems that within the tested time-frame the affect system is not sensitive to actual time units but to a limited number of discrete items. With the presented experimental strategy, our aim is to study how integration mechanisms are affected by different parameters such as behavioral relevance, selective attention, and cognitive load. Understanding how various sources of affective input is integrated into an overall affective reaction is, in our view, central to explain real world phenomena, which will help researchers to understand and explain human behavior and judgment.

## **Paper Session 2: Appraisal**

Thursday, July 27, 15:40-17:00, Lindell Ballroom Salon C

### **Emotions, Emotional Display, and Coordination**

Gina Eickers

Berlin School of Mind and Brain, Humboldt-Universitaet zu Berlin

Social Interaction is not just two or more people acting together with a common intention and goal (joint action, cf. Butterfill, Knoblich, Sebanz), but can involve coordinated activities with an implicit abstract goal of successfully navigating social space. Traditionally, it has been assumed that such interactions rely on mental-state attribution or simulation ("mentalizing"), but recent theoretical and empirical work places pressure on that picture. Extending that work, this presentation explores ways in which social interactions involving emotions can succeed without mentalizing, on the basis of regular and predictable patterns. Emotions play a major role in the



predictability of social interactions. Emotions are sometimes portrayed as eruptive and erratic episodes, but they actually involve relatively stereotyped and automatic responses, which reliably influence behavior. Emotional displays can therefore serve as cues that guide and coordinate social behavior. Mentalizing accounts embrace the claim that the face reliably reveals the inner emotional state. This widespread assumption faces difficulties. Many social interactions involve ambiguities that simulation or theory of mind accounts cannot make sense of. To be able to act together, coordination is needed. Some researchers have recently argued that we can interact without mentalizing, but emotions have been neglected in this discussion (cf. Butterfill, 2016 ; Bermúdez 2003, 2005). Here an account is proposed that can explain emotion-guided interactions. Unlike some mentalizing theories, this account can explain both routine and novel situations. That is exactly what the ambiguity of many situations that involve emotional display seems to ask for. Consider for example a situation in which someone blushes. This can signal embarrassment, but it can also indicate pride (De Jong & Dijk, 2013). The proposed account shows how we can predict what she will do and to decide how to respond without mental-state attribution. These claims are related to emotional transaction theory. That theory helps to explain how emotions and emotional displays contribute to guiding coordination of people's actions and behaviors (cf. Fridlund, Feldman Barrett, Fernandez-Dols, Russell). Griffiths and Scarantino (2005) present emotional transaction theory as an alternative to cognitivist, non-cognitivist, and neo-Jamesian account of emotions. The present account integrates these ideas with non-mentalizing accounts of social interactions, and shows how transaction theories can be deployed in a robust alternative to prevailing theories of how we comprehend social behavior.

### **Jealousy Goes Beyond Relationships and is Different from Envy**

Yochi Cohen-Charash<sup>1</sup>, Elliott Larson<sup>1</sup>, Gerben van Kleef<sup>2</sup>

<sup>1</sup>Baruch College and the Graduate Center, CUNY, <sup>2</sup>University of Amsterdam

Jealousy has traditionally been studied in relationship contexts (e.g., romantic relationships) and is often used interchangeably with envy. We aim to show (a) that jealousy is not limited to relationships and can emerge in any context in which important, self-relevant advantages (e.g., superior positions, material possessions) are feared of being lost to another person or entity, and (b) that envy and jealousy are distinct and arise from different causes. We conceptualize jealousy broadly as the fear of losing an existing self-relevant advantage to someone else, whereas envy is the pain involved in wanting something another person has (for reviews see Ben-Ze'ev, 2000; Parrott & Smith, 1993). Jealousy is often accompanied by envy, because the threatening rival can have characteristics the person does not have, but wants (e.g., when one's romantic partner is attracted to a younger rival). However, envy does not need to be accompanied by jealousy. Therefore, we hypothesize that jealousy can be experienced in non-relationship contexts (Hypothesis 1), that a threat to one's existing advantageous position will lead to jealousy (Hypothesis 2a) and to envy (Hypothesis 2b), and that an upward social comparison will lead to envy, but not to jealousy (Hypothesis 2c). In a scenario depicting a sports team context (n = 189), we manipulated whether a protagonist met another player that either had a better (upward comparison) or similar (lateral comparison) job as the protagonist, and whether the other player either threatened (high threat) or did not threaten (low threat) the protagonist's central position on the team. Participants completed measures of envy (Cohen-Charash, 2009) and jealousy (based on Parrott & Smith, 1993) from the protagonist's perspective. As expected, threat led to increased envy, but to even higher jealousy, supporting Hypotheses 1 and 2a and partially supporting Hypothesis 2b. Further, upward social comparisons led to jealousy, but to significantly more envy, partially supporting Hypothesis 2c. A three-way interaction qualified these results, showing that threat significantly increased both

envy and jealousy in both lateral and upward comparisons, but, in upward social comparisons it influenced jealousy more than envy. Thus, (a) jealousy is experienced in non-relationship contexts and (b) jealousy and envy are different emotions that are elicited by different conditions.

### **Exploring Appraisals Associated with Complex Emotional Blends**

Weiqliang Qian, Craig Smith, Leslie Kirby  
Vanderbilt University

Traditional research examining relations between appraisal and emotion have focused on the appraisals associated with individual emotions, even though the experiences examined almost always involve complex blends of multiple emotions. Here we report on our efforts to examine the appraisals associated with these ecologically valid emotional blends, using an aggregated data set (N = 1700 experiences) combining data from 18 different studies in which participants rated their appraisals and emotions across a broad range of remembered, hypothetical, and live experiences. Grounded in the appraisal model of Smith and Lazarus, across studies, participants rated their experiences in terms of the same set of seven appraisal variables and 21 emotions. We first used latent profile analysis (LPA) to classify the participants into 6 different emotion classes that approximate the common profiles of multi-modal emotional response represented in the aggregated sample: 1) An other-oriented negative emotion class characterized by high levels of anger and sadness (26.8% of the sample); 2) a self-oriented negative emotion class characterized by high levels of emotions like guilt and shame (12.8% of sample); 3) a generally positive emotion class characterized by high levels of nearly all positive emotions (15.6% of sample); 4) a challenge-oriented class characterized by relatively high levels of challenge, hope, and interest but low levels of other positive emotions (15.7% of sample); 5) A generally negative class characterized by high levels for both self and other oriented negative emotions (23.7% of sample); and 6) a small non-descript class (5.4% of sample) that lacks high levels of any emotions. We then used conditional LPA to examine the differences in specific appraisals that predict membership in one emotion class versus another. The appraisal predictors enter the model simultaneously to show the unique contribution of each appraisal while controlling for other appraisals. To illustrate, we compare the self-oriented negative class to the other-oriented negative class. With odds ratios that significantly differ from 1, we observe that increases in appraisals of relevance, other-accountability, and future expectancy predict membership in the other-oriented class rather than the self-oriented class, whereas increases in self-accountability predicts membership in the self-oriented class. We further examine the odds ratios and appraisal patterns differentiating additional pairs of emotion classes to demonstrate the differences in appraisals associated with very different multi-modal profiles of emotional response. Finally, we discuss the implications for understanding appraisal-emotion relations by going beyond the study of appraisals associated with individual emotions.

### **Hurt Feelings are a Distinct Emotion According to Lazarus' Theory on Emotion—Integrating Ideas and Findings**

David Hardecker  
Leipzig Research Centre for Early Child Development

What are hurt feelings? Are they a distinct emotion? In this talk I will systematically review and integrate theories and findings on hurt feelings using Lazarus' theory on emotion (Lazarus, 1991). Thus, hurt feelings are constituted by a primary appraisal of an unjust or illegitimate devaluation and by a secondary appraisal of low coping potential, that leads to the action tendency of withdrawal, that is constrained by a desire that justice is restored (e.g. receiving an apology). Hurt feelings as an emotion are distinguished from an hurtful event (hurt

feelings in a broad sense) and from an emotional episode of hurt, that may comprise other emotion-like states (cp Frijda, 2007). Those distinctions allow a careful analysis of the phenomenon of hurt feelings and help to explain why hurt feelings have often been mixed up with other emotions and not been acknowledged by the emotion researchers' community so far. I systematically compare the appraisal profile of hurt feelings with those of anger, sadness, shame, guilt, disappointment and humiliation and point out specific conceptual differences as well as overlaps. A short argument on the interdependence on human cooperative relationships helps to illustrate why hurt feelings presumably evolved in the context of cultural forms of learning and information transmission as well as partner choice. I conclude that hurt feelings should indeed be conceived of as a distinct emotion, thus allowing for a new opportunity for emotion theories to be tested. Several voids together with hypotheses that need to be tested (facial and bodily expression, autonomic changes, and long-term development of hurt feelings) are pointed out.

## **Paper Session 2: Depression**

Thursday, July 27, 15:40-17:00, Lindell Ballroom Salon D

### **Two-Session Cognitive Bias Modification Training; Exercise Interpretation Bias**

Charlotte Clarke, Bundy Mackintosh  
University of Essex

Computerized Cognitive Bias Modification (CBM) training programs are vastly evolving in the field of experimental medicine. Interpretation bias exercise training was used, as well as traditional CBM training, to see whether it had the impetus to decrease symptoms of anxiety, depression and stress, in two sessions of the Cognitive Bias Modification-Interpretation (CBM-I) training. Whilst previous studies have been used in conjunction with other pharmaceutical treatments (Amir & Taylor, C., 2012), exercise (Barnes, Coombes, Armstrong, Higgins, & Janelle, 2010; Tian & Smith, 2011) and Cognitive Behavioral Therapy (CBT) (Mobini, Mackintosh, Illingworth, Gega, Landon & Hoppitt, 2014). Forty-eight participants recruited from a general population sample, that underwent the CBM-I Training and Pseudo Training Group (PG) showed a steady decrease in self-reported Trait Anxiety over the two training sessions. The CBM-I showed more decline in Trait Anxiety than the PG, this effect was statistically significant. The CBM-I and PG had an effect on measures of depression and state anxiety, the effect on Time (Session 1 to Session 2) was significant, the effect on group was not. However there was no effect on perceived stress. The Scrambled Sentences Test (SST) which measures whether the sentences are resolved under positive or negative solutions, pre- and post-training, under moderate cognitive load (remembering a 6 digit number throughout the task) and under no cognitive load. When the SST was examined with load and no load together, it is significant when the two groups were taken together. But not when the CBM-I or the PG were taken on their own, or when the load and no load were taken separately. From the results found, one can suggest that CBM-I Training effectively trains individuals to interpret scenarios in a more positive manner and this positively influences mental state; in turn decreasing trait anxiety. This suggests that a multi-session study will alter individuals cognitive interpretation biases; causing them to interpret and evaluate situations more positively, improving mood state. Which in turn will alleviate symptoms of anxiety, and depression and reduce perceived levels of stress. The implications of research within the cognitive bias modification paradigm is that it holds promise for an innovative new treatment for anxiety, depression and specific stress disorders (Colin

MacLeod & Mathews, 2012). Wider implications of this research and future directions are discussed.

### **Anticipatory and Consummatory Pleasure and Displeasure in Major Depressive Disorder: An Experience Sampling Study**

Haijing Wu<sup>1</sup>, Jutta Mata<sup>2</sup>, Daniella Furman<sup>3</sup>, Anson Whitmer<sup>4</sup>, Ian Gotlib<sup>5</sup>, Renee Thompson<sup>1</sup>

<sup>1</sup>Washington University in St. Louis, <sup>2</sup>University of Mannheim, <sup>3</sup>University of California at Berkeley, <sup>4</sup>Heartcoins, <sup>5</sup>Stanford University

The experience of pleasure and displeasure can be parsed into two phases: anticipatory (i.e., the anticipation of future pleasure/displeasure) and consummatory (i.e., the in-the-moment experience of pleasure/displeasure). However, research examining pleasure and displeasure in Major Depressive Disorder (MDD), which is characterized by anhedonia, has focused on deficits in the consummatory phase. Moreover, most studies in this area have been laboratory-based; thus, we know little about how individuals with MDD experience pleasure and displeasure in their daily lives. We hypothesized that, for activities in daily life, MDD would be associated with blunted pleasure and elevated displeasure during both anticipatory and consummatory phases. Furthermore, given preliminary evidence in the literature of blunted pleasure and elevated displeasure for social- and goal-oriented activities in MDD, we explored whether MDD was associated with disturbances in pleasure and displeasure for specific activities during anticipatory and consummatory phases.

We used experience sampling to compare anticipatory and consummatory pleasure and displeasure for daily activities in adults with current MDD (n=41) or without psychopathology (CTL; n=39). At each survey (eight per day for one week), participants indicated which activities they were most and least looking forward to over the next 1-2 hours and rated the extent to which they thought the activity would be pleasant or unpleasant (i.e., anticipatory pleasure and displeasure). At subsequent surveys, participants rated the extent to which any completed activity was pleasant or unpleasant (i.e., consummatory pleasure and displeasure).

Using multilevel modeling, we found that, consistent with our hypotheses, the MDD group reported lower anticipatory and consummatory pleasure and higher anticipatory and consummatory displeasure for daily activities than did the CTL group ( $p < .05$ ). Specifically, the anticipatory findings were driven by group differences in both pleasure and displeasure for socializing and for completing errands/chores ( $p < .006$ ); the consummatory findings were not driven by group differences in pleasure or displeasure for specific activities ( $p > .006$ ).

This study was the first to demonstrate that MDD is associated with blunted pleasure and elevated displeasure during both anticipatory and consummatory phases for activities in daily life. During the anticipatory phase, these disturbances were driven by social- and goal-oriented activities; for the consummatory phase, our analyses on specific activities may not have been sufficiently powered to detect differences due to fewer activities completed than anticipated. Gaining a better understanding of how individuals with MDD anticipate and react to daily activities could lead to advances in treatment that help increase pleasure and decrease displeasure.

### **Selection and Implementation of Emotion Regulation Strategies in Major Depressive Disorder: An Integrative Review**

Daphne Y. Liu, Renee J. Thompson

Washington University in St. Louis

Two cardinal symptoms of major depressive disorder (MDD) are related to aberrations in affect—elevated and prolonged negative affect and diminished positive affect. Some researchers have theorized that these symptoms of MDD might be due to difficulties with

emotion regulation (ER), including inabilities to select and implement appropriate ER strategies. These early speculations have spurred investigations concerning the use of ER strategies among individuals with MDD. Considering recent progress in this research area, we systematically reviewed empirical studies examining selection and implementation of ER strategies in adults with current or past MDD. We reviewed the eight most commonly researched ER strategies (rumination, distraction, cognitive reappraisal, suppression, acceptance, savoring, positive rumination, and dampening) and organized our review by types of research design: (a) self-reported habitual use of (i.e., trait) ER strategies, (b) spontaneous use of ER strategies in laboratory settings, (c) mood effects of implementing experimentally instructed ER strategies, and (d) use of ER strategies in naturalistic settings. Overall, the reviewed findings suggest that MDD is associated with unskillful selection of ER strategies but not impaired abilities to implement them. In particular, global self-report evidence suggests that, on a trait level, those with current or past MDD are more likely to ruminate on negative affect and depressive symptoms, more likely to dampen experienced positive affect, and less likely to use cognitive reappraisal to repair negative affect compared to those with no history of MDD. However, relative to those with no history of MDD, those with current or past MDD show intact abilities to implement ER strategies when instructed to do so, which is indexed by similar changes of mood following the use of ER strategies. This suggests that training people with MDD to select appropriate ER strategies and providing them with clear guidance on effective implementation of helpful strategies may be beneficial. Additionally, our review reveals that the vast majority of research examines trait ER, while there is a dearth of laboratory and naturalistic studies using MDD samples. There are also discrepant findings on selection of ER strategies assessed by self-reports and in the lab. Finally, we discuss the limitations of the current literature and set the path for future research to advance our understanding of emotion dysregulation in MDD.

## Friday, July 28, 2017

8:30-9:30	Plenary Session—Identities, Selves, and Mixed Emotions, <i>Lindell Ballroom Salon C/D</i>			
9:30-10:30	Plenary Business Meeting, <i>Lindell Ballroom Salon C/D</i>			
10:30-10:50	Coffee break, <i>Lindell Ballroom foyer</i>			
10:50-12:30	Symposia 2			
	Emotional Roots of Political Populism  <i>Lindell Ballroom Salon A</i>	Challenges to Emotion Theories, Exemplified by Specific Emotions (Jealousy, Shame, Schadenfreude, and Hate)  <i>Lindell Ballroom Salon B</i>	Emotional Expressions and Language Evolution  <i>Lindell Ballroom Salon C/D</i>	
12:30-14:00	Break for lunch, <i>ISRE-sponsored lunch, Khorassan Ballroom</i>			
14:00-15:40	Paper Session 3			
	History of Emotion  <i>Lindell Ballroom Salon A</i>	Intentionality  <i>Lindell Ballroom Salon B</i>	Emotion and Morality  <i>Lindell Ballroom Salon C</i>	Recent Advances in Crying Research  <i>Lindell Ballroom Salon C/D</i>
15:40-16:00	Coffee break, <i>Lindell Ballroom foyer</i>			
16:00-17:40	Paper Session 4			
	Emotional Development  <i>Lindell Ballroom Salon A</i>	Research on Specific Emotions  <i>Lindell Ballroom Salon B</i>	Emotion Regulation  <i>Lindell Ballroom Salon C</i>	The Face in Context  <i>Lindell Ballroom Salon D</i>

## Plenary Session—Identities, Selves, and Mixed Emotions

Lynn Smith-Lovin, Trinity College of Arts and Sciences at Duke University

Friday, July 28, 8:30-9:30, Lindell Ballroom Salon C/D

In this talk, I contrast the theoretical models that sociologists typically use to understand emotion with the research questions that scholars from other disciplines are debating in the "second wave" of work on mixed emotions (nicely summarized in the April 2017 special issue of *Emotion Review*). Sociologists focus primarily on the ways in which institutionalized social interactions shape our emotional lives. I describe affect control theory's view of how emotions are a function of our identities and how well social interactions are maintaining their cultural affective meanings. New ways of looking at self-structures, both within interactions and across a life course, show how emotional reactions help shape our sense of who we are and how we feel about it. Integrating measures and conceptions of mixed emotions developed in multiple disciplines can help guide our exploration of these theoretical models.

# **Symposia 2: Emotional Roots of Political Populism**

Friday, July 28, 10:50-12:30, Lindell Ballroom Salon A

## **Emotion and Ideology**

John Protevi

Louisiana State University

The most common means of accounting for right wing populism is to invoke the concept of ideology. Many of the most popular theories of ideology however, by focusing on beliefs, give short shrift to the emotional component of political allegiance. On the other hand, while we do find a focus on emotion and politics in the work of Gilles Deleuze and Félix Guattari, they are unsparing in their scorn for the concept of ideology. In this presentation I will first present Deleuze and Guattari's critique of the under-playing of emotion in Wilhelm Reich's ideological analysis of fascism. With this background, I then lay out my own reformed notion of "emotional ideology" which brings together Deleuze and Guattari with Gabriel Tarde's microsociology to account for the propagation of waves of emotion (we can think of this as slow-moving and low-intensity emotional contagion) in a social field. As a case study to illustrate this model, I will present examples of the way in which the emotional content of discourse and images drawn from the Trump campaign have spread throughout various sectors of American society.

## **The Contrasting Emotional Bases of Political Populism: Comparing Brazil's 2013 Protests and the United Kingdom's 2016 Brexit Vote**

Gavin Sullivan

Coventry University

Political events that achieve national and international significance have complex dynamic features that warrant analysis of their contributing individual, group-based and collective emotions. Social structures and collective memory are background features of large-scale political behaviour which are necessary to providing a coherent explanatory account but not sufficient in practice to determine the emotions that arise during actions to secure or maintain control of economic and cultural resources. In this paper, I provide an overview of the role of theoretical work on the emotional drivers of populist political behavior and exemplify the issues identified with two recent examples: Brazil's 2013 anti-government protests and the United Kingdom's 2016 Brexit vote. Thematic analysis of 25 interviews with Brazilians during the 2014 FIFA World Cup and 20 interviews with UKIP voters pre- and post-2015 General Election and before the UK Referendum highlight the following themes: how emotions contribute to popular or widespread political action (e.g., protests, voting behaviour), the role of dynamic relational and contextual features in the transformation and generation of further individual and collective emotion (e.g., including the emergence of group leaders, a sense of collective unity or disunity, an identifiable social movement etc.), and explore longer-term implications of emotion-laden divisions, restriction of intergroup solidarity and in the development of longer-term collective political identities and ambitions. Potential implications are briefly discussed in terms of policies and affective practices that might encourage "healing" or inclusive consensus norms as well potential long-term ways to address sources of group-based dissatisfaction, resentment, disengagement or distrust.

## **Culture and Emotions as Barriers to Environmental Change**

Allison Ford, Kari Marie Norgaard

University of Oregon

Why are changes in practice that would move society towards sustainability so slow to come? What are the barriers to change at individual, organization and institutional levels? Using qualitative research on Americans and Norwegians, we show that knowledge about environmental risk incites negative emotions such as fear, helplessness and despair. The management of negative emotions is shaped by cultural norms and local feeling rules. In Norway, dissonance between an environmentally progressive national identity and reliance on fossil fuels resulted in the social organization of denial, in which climate change was acknowledged, but backgrounded, allowing for continuity of daily life. In America, dissonance between a cultural valuation of individual autonomy and material dependence on institutions to meet basic human needs resulted in individualized responses to collective environmental problems. Different cultural understandings of self in relation to society led to different responses to similar emotional responses. In order for people to move towards sustainability, we must account for cultural norms, emotion norms, and the need for a sense of continuity in everyday life.

### **The Emotional Dynamics of Right- and Left-Wing Political Populism**

Mikko Salmela<sup>1</sup>, Christian von Scheve<sup>2</sup>

<sup>1</sup>University of Helsinki, <sup>2</sup>Freie Universität Berlin

Affects and emotions are prevalent in populist political parties and movements, both in the rhetoric of populist politicians and among their electorate. However, it is not clear if the same or different emotions motivate support for right- and left-wing populism. We argue that partially dissimilar emotional dynamics may be at play behind politically opposite branches of populism. Existing research has associated both right- and left-wing populism with increased fear and insecurity experienced in contemporary capitalist societies on the one hand, and with anger, resentment, and hatred on the other hand. Yet there are significant differences in the targets of right- and left-wing anger and resentment. Left-wing populists tend to blame neoliberal policies and the national and supra-national institutions (e.g., EU, IMF) enforcing policies that are suspected to increase injustice, inequality, and precariousness. This recruits indignation and anger that many may harbor on moral grounds. In contrast, right-wing populists' anger and resentment are targeted towards refugees, asylum seekers, the long-term unemployed as well as at ethnic, religious, and sexual minorities and "cultural elites". These emotions may also be rooted in perceptions of immoral or inappropriate behavior, but they are, so we argue, also driven by the mechanism of repressed shame that we claim to be more characteristic of right-wing populism. This mechanism transforms fear and insecurity into anger, resentment, and hatred against perceived "enemies" of the precarious self, as suggested by sociological emotion theories of Scheff (1994) and Turner (2007). Right-wing populist parties are eager to name such enemies in their rhetoric. Left-wing populism, in turn, associates more with acknowledged shame that allows individuals to self-identify as aggrieved and humiliated by neoliberal policies and to direct blame at politics, politicians, and institutions perceived to be responsible for the situation. Moreover, we suggest that the proportion of citizens in a country affected by neoliberal politics can be an important factor influencing either the acknowledgement or the repression of shame. The former type of shame holds emancipatory potential as it allows individuals to identify and establish bonds with others who feel the same for similar reasons. In contrast, those who blame themselves remain in the experience of shame. This is the situation in countries less affected by the economic crisis where citizens are facing the consequences of globalization and their vulnerability in more individualized terms.



# **Symposia 2: Challenges to Emotion Theories, Exemplified by Specific Emotions (Jealousy, Shame, Schadenfreude, and Hate)**

Friday, July 28, 10:50-12:30, Lindell Ballroom Salon B

## **What Can Jealousy Tell Us about Theories of Emotion?**

Christine R. Harris

University of California, San Diego

Jealousy is the theme of countless plays, movies, and songs. It is mentioned in texts as old as the bible, with God himself claiming to be a jealous god. Legal systems in some cultures and times have granted special dispensation to acts committed out of jealousy due to the belief that one had little power to resist the impulses brought on by circumstances such as finding a spouse in the arms of a lover. Despite its old and powerful history, jealousy is rarely included in theoretical accounts of specific emotions. This talk will use the case of jealousy to explore whether our current conceptualizations of emotions adequately capture the complexities and dynamics of some social emotions. Jealousy fails to meet some of the criteria for basic emotions (e.g., no unique nonverbal display). However, I argue there are data consistent with the proposition that jealousy is likely an evolved emotion with its own unique motivational state. I suggest in its most primitive form, jealousy arises over an appraisal as simple as the attention of a loved one is being usurped by a rival, which gives rise to the motivation to break up the unwanted liaison. This core form of jealousy can be seen in 6-month-old humans or in dogs, which suggests that one need not have complex thoughts about the nature of a relationship to have jealousy (or jealous motivations). The jealous motivation is different than that ascribed to other emotions such as anger or fear, although those emotions often arise as well in a jealousy episode (particularly in adults or older children as cognitions about the meaning of the liaison between the rival and other become increasingly important). This talk will also explore how jealous episodes often occur over a longer time span than is captured in most theories of emotion. I will discuss the temporal dynamics of jealousy, including factors that differentially impact early and late processes involved in the elicitation and manifestation of jealousy. The talk will raise the possibility that functional views of emotion have concentrated too much on the subset of emotions that have clear and unique nonverbal signs, arise quickly, and last for a short time and that focusing on the motivation state of an emotion may help account for some of the seemingly disparate instances of jealousy.

## **When are Different Emotions the Same? Consider Shame**

W. Gerrod Parrott

Georgetown University

Emotion categories, like all categories, group exemplars together on the basis of their having sufficient similarities to justify overlooking their differences. However, within-category differences should not be overlooked and may lead to important insights about how emotions function. This point can be illustrated by considering recent research on the nature of shame. Shame has been associated both with public exposure to a disapproving audience and with a negative evaluation of the self. There are good reasons why these two aspects are often linked: self-perception is influenced by how the self is perceived and treated by others. Yet, public scorn and self-contempt are not always correlated; research shows that shame is sometimes more directed toward public perceptions and other times more directed toward negative self-

evaluation, resulting in different action tendencies and phenomenology. Shame also has been shown to take on different forms when a person's moral standing has been undermined compared to when a person's public image has been undermined. Furthermore, cultural context affects the character of shame, with one example being provided by contrasts between cultures having independent or interdependent selves. These findings suggest a more nuanced basis for what constitutes shame, and they highlight the importance of recognizing subtypes without undermining the usefulness of the overarching category. This conclusion can be extended to other categories of emotion. Refinements to emotion theory can be considered in this light. For example, some theorists have adjusted the concept of "basic emotion" to encompass families of emotions; others have abandoned the concept of basic emotion and replaced it with that of underlying "ur-emotions" that are never expressed without additional elaboration and adjustment. Such theoretical adjustments more accurately depict the ways that context, culture, development, and self-regulation affect the form and function of emotions.

### **Schadenfreude and Gluckschmerz Challenge How Some Emotions Should Be Characterized**

Richard Smith

University of Kentucky

Schadenfreude (pleasure at another person's misfortune) and gluckschmerz (pain at another person's good fortune) are usually defined as short-term reactions of either pleasure or pain in response to a specific event happening to another person. However, a close examination of the experience of each emotion suggests that this characterization is unsatisfactory, raising questions about how emotions of this kind might best be construed. Both emotions are usually so strongly entangled with the backdrop conditions priming their occurrence. Malicious envy is one frequent cause. This often lingering, constantly recharging, sometimes disposition state, inspires a chronic readiness to feel either emotions, as the case may be. In the case of schadenfreude, the misfortune will have been longed for, but also unexpected, as this is the nature of a frustrating, envy-producing social comparison – the envied person usually does not suffer enough – that is why they are envied. When the misfortune occurs, it is an exquisite, distinctive pleasure, producing a "yes!" reaction, as the "bad" news arrives. This pleasure can reverberate through the envying person's being, in part because of the enduring, full nature of the backdrop conditions. In the case of gluckschmerz, the good fortune can also be unexpected, but unwanted, creating a distinctive pain, a "no!" reaction, as "good" news strikes. This can send shock waves through the envying person's being. Finally, when backdrop factors such as malicious envy exist, there are implications for the longevity of the schadenfreude and the gluckschmerz, and for various aftereffects. In the case of schadenfreude, there will be likely reasons to keep the feeling going, to savor it, to relive it, and perhaps energize subsequent justified aggression or the inhibition of helping. In the case of gluckschmerz, the prior envy may become exacerbated, fueling a transformation into resentment and outrage, entangled and inseparable from the gluckschmerz. In neither case, it is hard to understand the experiences of either emotion in terms of the discrete, short-term reaction to the misfortune or good fortune.

### **Long Term Sentiments Versus Short Term Emotions? The Case of Hate**

Agneta Fischer

University of Amsterdam

Current emotion theories all define emotions as short term reactions towards stimuli in order to restore the interaction with the environment. However, there are several mental states that are often regarded as emotions, at least by lay persons, but that do not fulfill these criteria,

especially that of immediate and short term reaction. One such example is hate, but there are other examples like love, revenge, envy, contempt. These 'emotions' are certainly not immediate reactions to a stimulus and can linger for years. This long-term element of emotional states has received little attention from emotion theorists for various reasons. I will use the term 'sentiment' introduced by Frijda and colleagues (1991) to account for the emotional elements in such enduring mental states, and will try to further develop this concept. Sentiments can be conceived of as long term emotional attitudes that increase the likelihood to elicit an emotion when confronted with the target stimulus. Sentiments can develop when individuals start appraising a stimulus not as a specific event, but as part of a chain of events. This implies that people use a broader category to include a stimulus as touching upon their concerns. One act of derogation may thus not be seen as an independent act of a specific person, but as typical for this person, implying that the person himself becomes the target of hate, love, contempt. In addition, not only one person, but a whole group of people may become the target of one's sentiment, as is the case in many conflict regions. In other words, new emotional stimuli start being included in a broader category, thus developing into a sentiment. This broader inclusion process can be the result of learning, based on one's own previous experiences, as well as vicarious learning and learning by social sharing. The question is, however, do such sentiments also imply certain action tendencies, and would these lead to emotional expressions or behaviors, which would distinguish them from mere attitudes? And how should we conceptualize specific instances of sentiments that would act like emotions? How are long-term and short-term reactions actually related, and are they contradictory? These and other theoretical issues will be explored on the basis of the example of 'hate'.

#### **Discussant**

Ira Roseman  
Rutgers University

## **Symposia 2: Emotional Expressions and Language Evolution**

Friday, July 28, 10:50-12:30, Lindell Ballroom Salon C/D

#### **Linguistic and Emotional Expressions: Analogies and Differences**

Disa Sauter  
University of Amsterdam

Nonverbal communication of emotions occurs across multiple modalities, including facial expressions, vocalisations, and postural configurations. This talk will consider the question of whether, and if so how, nonverbal communication of emotions may be different from other human communicative behaviours, such as language. I will discuss the continuum between unconditioned reflexes and voluntary actions in the production of nonverbal emotional expressions. Using the example of vocal signals, vocal production can be considered to occur on a continuum ranging from fully involuntary (e.g., a scream of pain) to entirely voluntary (e.g., giving a planned speech). I will argue that this continuum does not, however, fully align with the distinction between emotional and linguistic signals. I will also review the effects nonverbal expressions have been proposed to have on observers, including the information they convey, and the subjective and behavioural changes they may elicit in observers. I will argue that these functions have analogies in linguistic signals, and that additional similarities can be found in the perception of emotional and linguistic signals, with categorical perception occurring in both

domains. Finally, I will consider which functions may be unique to nonverbal emotional expressions, and the extent to which those functions apply to expressions in different modalities.

### **Does the Alarm Calling System of Putty-Nosed Monkeys Show that Emotional Expressions are the Building Blocks of Language?**

Kate Arnold

University of St. Andrews

Emotion has long been recognized as an important driver of animal behavior. It is involved in organizing physiological, motivational and cognitive systems that facilitate adaptive responses to a wide range of phenomena including predator detection, intra-specific aggression and maintaining stability and cohesion within social groups. Until quite recently, animal vocalizations were considered to primarily reflect emotional arousal but with the 'cognitive revolution' in psychology, the possibility that animals might use signals with features in common with linguistic communication, such as semanticity, became something of a hot topic. Following the pioneering work of Marler, Cheney and Seyfarth on vervet monkeys, a sizable body of work has sought to demonstrate that some animal vocalizations, most notably alarm calls in primates and birds, might be referential in that they provide information about objects or events in the environment. While most researchers acknowledge that a referential/affective dichotomy is most certainly a false one, comparatively little research has focused on the role of emotion in producing vocal signals for which the potential for semanticity has been demonstrated. This, combined with the difficulty in measuring affective states in nonhuman animals in natural contexts, has resulted in a paucity of empirical work in this area, although this is beginning to change. Work on wild putty-nosed monkeys has shown that while their alarm calling system could be easily be interpreted as referential, it is far more likely that listeners must infer 'meaning' from a combination of the call type and any available contextual information. Further, these calls are sometimes combined into a particular sequence that could eventually lead to compositional syntax. I will argue that while these calls have features that foreshadow semantic and even syntactic communication, their production is primarily driven by emotional states. Such emotional expressions, therefore, unsophisticated as they may be, could provide the substrate on which language has been built.

### **The Referential Value of Emotional Prosody: A Comparative Approach to the Study of Animal Vocal Communication**

Piera Filippi

Aix-Marseille Université

Recent studies addressing animal vocal communication have challenged the traditional view of meaning in animal communication as the context-specific denotation of a call. These studies have identified a central aspect of animal vocal communication in the ability to recognize the emotional state of signalers, or to trigger appropriate behaviors in response to vocalizations. This theoretical perspective is conceptually sound from an evolutionary point of view, as it assumes that, rather than merely referring to an object or an event, animals' vocalizations are designed to trigger reactions that may be adaptive for both listeners and signalers. Crucially, changes in emotional states may be reflected in prosodic modulation of the voice. Research focusing on the expression of emotional states through vocal signals suggests that prosodic correlates of emotional vocalizations are shared across mammalian vocal communication systems. In a recent empirical study, we showed that human participants use specific acoustic correlates to judge the emotional content of vocalizations across amphibia, reptilia (non-aves and aves), and mammalia. These results suggest that fundamental mechanisms of vocal

emotional expression are widely shared among vocalizing vertebrates and could represent an ancient signaling system. But what's the evolutionary link between the ability to interpret emotional information in animal vocalizations and the ability for human linguistic communication? I suggest to identify this link in the ability to modulate emotional sounds to the aim to trigger behaviors within social interactions. Hence, I will emphasize the key role of the interactional value of prosody in relation to the evolution and ontogenetic development of language. Within this framework, I will report on recent empirical data on humans, showing that the prosodic modulation of the voice is dominant over verbal content and faces in emotion communication. This finding aligns with the hypothesis that prosody is evolutionarily older than the emergence of segmental articulation, and might have paved the way to its origins.

### **From Speech Act Theory to Affective Pragmatics**

Andrea Scarantino

Georgia State University

It is common knowledge that emotional expressions are rich communicative devices. We can learn much from the tears of a grieving friend, the smiles of an affable stranger, or the slamming of a door by a disgruntled lover. What has been missing so far is a systematic analysis of what can be communicated by emotional expressions of different kinds, and of the analogies and disanalogies between non-linguistic communication and its linguistic counterpart. This paper introduces a general theory of the communicative moves the expression of emotions makes available. This theory builds upon both general evolutionary principles and Austin and Searle's taxonomy of speech acts. This may seem surprising, because not every emotional expression is an act of speech. Yet, I will argue that there are important and so far largely unexplored similarities between the communicative dimensions of emotional expressions and speech acts. These similarities shed new language on how language may have evolved in a gradualist fashion through the progressive sophistication of emotional expressions.

## **Paper Session 3: History of Emotion**

Friday, July 28, 14:00-15:40, Lindell Ballroom Salon A

### **Affective Defense: Late-Antique and Early Medieval Authors' Use of Emotion as Proof of Motives for Violence**

Jilana Ordman

Lake Forest College

My paper argues that after the dissolution of the Western Roman Empire catholic clerics' judgment of those who committed acts of interpersonal violence became inextricably linked to Christian conceptions of the ideal purposes of emotion. From the second century on, Mediterranean patristic authors transitioned from condemning all interpersonal violence to following Roman standards for just conflicts. As a result, patristic authors ultimately approved of violence undertaken in defense of a Christian Roman Empire. At the same time, these men were also developing new ideals and standards for the experience and expression of emotion. Christian thinkers replaced Hellenistic Greek stoicism, that had been adopted wholeheartedly by Roman intellectuals and emperors, with a Platonic and Neoplatonist ideal that emotions could enable closeness to God. The end of the Western Roman Empire took away the approved reason for violence to be committed by Christians, but left Neoplatonist ideals for emotion in place. Early medieval clerics condemned all organized violence, but nonetheless in their hope of a re-unification of Christians in Europe they called on barbarians they supported to defend

others of the faith and aggressively gain more converts. Men who fought for these clerical ideals were striving for a greater good, while those who shed blood for selfish material reasons were guilty of mortal sin. Late Antique and Early Medieval clerical texts show the distinctions these authors drew between such warriors, and their judgments of them, through their use of late antique Neoplatonist ideals for emotion. However, by the seventh century the development of repeatable penance, and confessors efforts to discern the religious devotion of penitents by observation of their emotions, firmly embedded affect in clerics' methods for gaining insight into historical actors states of mind. Confessors saw physical expressions of emotion and penitents' description of their experience as material evidence of internal states, motives for any actions. Clerical authors then applied this method for attributing motives for violence. Over time, experiences and expressions of emotion became key for all clerical authors judgment and presentation of Christians' motives for engaging in acts of violence. Warriors' experiences or expressions of affect provided evidence that defended or condemned them.

### **“Mixed Emotions”: The Declaration of Independence, Adulation and Outrage**

Kathryn Temple

Georgetown University

The Thomas Jefferson Foundation Monticello website includes a page devoted to the pretense that children can write in to ask Jefferson questions after they tour the plantation. To one eager interlocutor who asked Jefferson “how did you feel?” about writing the Declaration of Independence, the imagined Jefferson responds, “I had mixed emotions due to the alterations ...by the congress. In general I was pleased....”

Although the “Jefferson” of the website does not indicate which of the “alterations” displeased him, one can imagine that the deletion of an item from the second part of the document, that famous accusation against the British for fomenting slavery, may have been what he was thinking about. That this section of the original draft and its subsequent deletion became a hot point of contention is hardly surprising: the Colonists and the British, as well as Jefferson himself, were entangled in a morass of conflicting emotions over the issue, emotions that have continued to drive reactions to the document since it was signed.

This paper analyzes the “mixed emotions” response to the Declaration of Independence. Adulation is as common as what can only be called outrage: most uncritical readers thrill to the phrases in the first two paragraphs while others want to hold the signers to their claims that “all men are created equal.” What has been less examined is the emotional content of the second part of the document, the “Facts...submitted to a candid world.” This is the section that eventually appeared without Jefferson’s indictment of slavery. While these “facts” make up more than half of the content of the document and almost certainly had as much rhetorical authority in their time as the Declaration’s stirring claims to natural law, they have seemed to have less relevance to the Declaration’s emotional afterlife.

This paper traces the paired responses of adulation and outrage through reading the relationship of the less often cited portions of the document to subsequent encomiums and attacks, suggesting their role in the continued life of the Declaration not only in the U.S. but across the globe. The paper then asks how the Declaration of Independence might serve as a focus for constitutional patriotism. Given its roots and the way its message has been both used and abused over the centuries, is the Declaration of Independence an object that can usefully serve to attach us to constitutional ideals?

### **The Role of Emotion in the Erosion of Deference in Edwardian England**

Hera Cook

University of Otago, Wellington

This paper analyses the emotions involved in resistance to deference and in the rejection of deferential relations. The legitimacy of traditional authority in British society was based upon and maintained by deferential relations that came under increasing challenge throughout the twentieth century. Sociologist Howard Newby argued in the 1970s that the meaning of deference to the actor was crucial. Deference implied a commitment on the part of the actor - it was "more than quiescence or "the necessary pose of the powerless." Rather, "the interaction of the powerless with the powerful becomes identification of the powerless with the powerful". Deference was a "form of social interaction," that involved an affective relationship between the person deferring and the person to whom they deferred. This paper focuses on an Edwardian agricultural labourer born in 1893. In a series of interviews in 1969, he described how, as a young person, he set himself outside the emotional community within which he lived. He rejected his parent's Christianity, began refusing to tip his hat to his superiors, with the exception of the schoolmaster and his wife. This rejection of deference was part of the experience of this generation. The contrast between this man's deferential, respectful parents and his resistance is repeated in other interviews with agricultural labourers and other workers of his Edwardian generation. This was a radical break with existing relations of power. What are the emotions involved in the affective relationships that constitute deference and what are the emotions involved in the rejection of deference? How does emotion interrelate with new ideas, values and meanings?

### **Comedy and Emotion in 18<sup>th</sup>-Century British Theater**

Laura Rosenthal

University of Maryland

In the period from 1660-1800, the style of comedy on the British stage changed from the biting, cynical style of the Restoration to a new sentimental comedy in which virtuous characters prevail against challenging circumstances and unscrupulous enemies. The new style aimed less for humor and more for explicit emotional responses, measured in tears. The switch has mostly been explained in terms of a conscious effort advocated by moralists of the time to reform the stage and offer admirable rather than dissolute characters as models of appropriate behavior. I will explore the possibility, however, that this change has less to do with a moral transformation and more to do with the emergence of a new "emotional regime" that takes place around 1700. As a coda, I will explore the paradox that while the cynical comedies of the Restoration are still produced and most of the sentimental comedies have slipped into obscurity, modern comedy on stage, in film, and on television has, until very recently, tilted heavily toward the sentimental.

### **Flashbulb Memories: A Critical Construct to Examine the Relations Between Emotions and Memory for Collective Events and an Ideal Field for Fostering Collaborations Between Psychologists and Historians**

Olivier Luminet<sup>1</sup>, Spijkerman Rose<sup>2</sup>

<sup>1</sup>Université Catholique de Louvain, <sup>2</sup>Universiteit Gent

Flashbulb memories (FBMs) are memories for the circumstances in which people heard about public news. Different models were developed to identify the variables that predict the formation of FBMs. Appraisals of novelty and importance play a central role, together with the specific emotional state of surprise and the intensity of the emotions felt. Then, attitudes, knowledge, rehearsal and the memory for the event itself are the other predictors. These models highlight the role of immediate responses and delayed ones, and the impact of cognitive and affective factors.

FBMs are particularly interesting phenomenon to better understand the complex relationship between emotion and memory in a collective context. Brown and Kulik (1977)

advocated for a special memory mechanism. Later studies emphasized that reconstructive aspects were highly active, thus making FBMs similar to ordinary memories (e.g., Neisser & Harsch, 1992). Only recently follow-up studies were conducted. They showed that after ten years, FBMs stay almost unchanged (Hirst et al., 2015). This long-term consistency, together with exceptional levels of vividness and confidence are central dimensions that could make 'FBM-events' more likely to stay in the collective memories of a community.

To investigate FBMs in the remote past, we conducted a study on Belgian descriptions of the Armistice of November 1918, which ended the four years of World War I. We analyzed 35 accounts from both diaries and memoirs. We found that characteristics of FBMs were often present, with detailed descriptions including sensory perceptions, mentions of the source, the time of reception, thoughts and the emotions that were felt when learning about the news.

This study provides an ideal framework to highlight how psychological and historical perspectives on the emotion-memory relationship could mutually benefit on a theoretical and methodological level. By studying more remote FBMs, psychologists could extend their field of knowledge. Using historical sources is also a way to access natural accounts of FBMs since people were not specifically asked to give a description of their memory, as was generally the case in the psychological studies. Studying FBMs is interesting for historians as well. They can examine how and what people usually remember about public events, what kind of historical meaning they attach to these memories and the way they recount them. FBMs could give insights into people's perception, memory and reflection of an event on a personal level, which could then contribute to source criticism, and the evaluation and interpretation of historical sources.

## **Paper Session 3: Intentionality**

Friday, July 28, 14:00-15:40, Lindell Ballroom Salon B

### **Can Moods Reveal Aspects of the Truth**

Rick A. Furtak

Colorado College

In this talk, I give an affirmative answer to the question (raised in my title) of whether moods can reveal aspects of the truth. How could a pervasive mood fit within a theoretical account of human emotions as felt recognitions of significance, which are capable of representing more or less accurately the situations in which they arise? Although moods are not susceptible to being "justified" in quite the same way that an episode of anger, grief, or pride might be, they can nonetheless be true to reality insofar as they make us aware of actual features of the world. Drawing on literature from multiple academic disciplines, I address some frequently cited reasons for viewing moods or attunements as lacking intentional content altogether, or else imposing a merely subjective coloration onto our surroundings. Some evidence shows that our general affective state of mind is likely to dispose us toward feeling certain emotions — those that are more consonant with whatever mood we happen to be in. This does not, however, mean that our moods have a comprehensively distorting effect: on the contrary, the selective focus which they provide is precisely what allows certain aspects of the world to show up more vividly within our affective attention. Moreover, the ways in which our bodily state may be conspicuous in a specific mood (or one that is typical or characteristic for us) can also harbor world-disclosing potential. For reasons such as these, I think it should not be our default assumption that a mood is "about nothing." Such an assumption leads us to



imagine that a preference for pleasant rather than painful moods is as light a matter as a preference for sweet flavors over bitter ones — which would be yet another way to trivialize our affective experience, telling ourselves and others not to take it seriously. Moods are misunderstood if regarded as internal states projected by human beings onto the world, and so is the type of significant truth which is disclosed to us through our affective experience. (Adapted from a chapter of a forthcoming book project.)

### **Intention, Emotion, and Feeling**

Corey Maley

University of Kansas

Many theories of emotion take emotions to be intentional: if I am angry, I am angry at someone, or about something. On the view I defend, emotions are not necessarily intentional, although they are components of more complex states that contain an intentional component. In English, these complex states correspond to the ambiguous term “feeling.” When we attend to the difference between non-intentional emotions and the complex states of which they are a part, we gain some clarity in how to theorize emotions, including how to best think about the status of so-called “basic” emotions, and how to think about which things that we ordinarily call “emotions” are intentional.

Consider sadness, which I claim is an emotion, and as such, not necessarily intentional. We can coherently imagine someone feeling sad, but not sad about anything in particular. Contrast this with feeling guilty, which I claim is not an emotion, but a feeling, and as such is necessarily intentional. We cannot coherently imagine someone feeling guilty, but not about anything. Imagine that someone claimed to feel guilty, but not about anything in particular. What would warrant calling such a state “guilt” if not for the thing about which the person feels guilty? It is incoherent to feel guilty about nothing in particular.

Some evidence for this distinction between “emotion” and “feeling” comes from ordinary language (at least in English) of how we speak of the two. For emotional states, there is no clear difference between claiming that one is in the state and that one is feeling that state. For example, there is no difference between saying “I am sad” and “I feel sad.” However, there is a difference when it comes to feelings: claiming that one is guilty and one feels guilty are two different things. I can feel guilty for something that I have not done, and I can be guilty of something for which I have no emotional response whatsoever. Another line of evidence for this distinction comes from attention to the ways in which people experience feelings like guilt. Some people report experiencing guilt as a kind of anxiety. Other people experience guilt as a kind of self-anger. This differs from emotions like sadness: different people experience the emotional component of feelings like guilt in different ways, but different people do not experience the emotional component of sadness in different ways.

### **What is a Jamesian Emotion?**

Jordan Taylor

University of Pennsylvania

William James’s theory of emotions is seldom given serious attention these days. When it is discussed positively, it is portrayed as a work-in-progress for psychology, one that requires significant conceptual updating. Little discussion is afforded to its finer details. This presentation is part of an attempt to clarify James’s theory of emotions. I offer corrections to two misconceptions of the theory that can be found in much of the contemporary literature on James. These misconceptions are largely due to readers systematically neglecting the context within which James developed his theory, specifically how its elements are described through his *Principles of Psychology* and satellite texts.

The first mistake is a conflation of his theory with a superficially similar one published by Carl Lange, forming the so-called “James-Lange theory.” This conflation removes James’s theory from its context and leads readers to draw false implications from it: particularly, it strips Jamesian emotions of their personalist foundation and renders them little more than brute feelings. The second mistake is a failure to acknowledge James’s distinction between physiological changes (or “bodily stirrings”) and behaviors (which are world-directed actions). This results in an implausible hypothesis that spreads the term “emotion” too thinly across distinct ranges of phenomena. Conversely, noting this distinction allows for emotions to occupy a more nuanced position that may have implications for issues in moral psychology and philosophy of action.

In correcting these misconceptions, I show that James’s theory should not be rejected as quickly as many commentators believe. Instead, James offers a means of thinking of emotions as strongly embodied phenomena. Jamesian emotions weave through our perceptual systems and help to shape the world as we perceive it. While considered “noncognitivist” by today’s common standards, a Jamesian emotion is intentional, not epiphenomenal, and aids its organism in navigating the features of the world as it impacts that organism. This charitable portrayal is unavailable to those who would misconceive James’s theory in the ways mentioned above.

## **Paper Session 3: Emotion and Morality**

Friday, July 28, 14:00-15:40, Lindell Ballroom Salon C

### **Is There Such a Thing as Genuinely Moral Disgust?**

Mara Bollard

University of Michigan

In recent years, discussions of moral disgust have become increasingly frequent, both in the psychological and the philosophical literatures. Advocates of moral disgust all defend some version of the claim that disgust has a legitimate – or proper, positive, important, or indispensable – role to play in moral judgment and discourse. Moral disgust skeptics, on the other hand, seek to deny such claims. How precisely to interpret the disputes that have arisen between moral disgust’s advocates and its critics is a surprisingly complex matter. What does not seem to be at issue in debates in the moral disgust literature, at least not by the lights of the scholars involved, is the ontological question of whether there is, in fact, a distinctive psychological state of genuinely moral disgust. In this paper, I investigate the previously neglected ontological question. I argue that the case has not yet been made that there is such thing as genuinely moral disgust. The talk proceeds as follows. First, I attempt to make the ontological question a well-formed one by spelling out two conditions that any account of genuinely moral disgust must satisfy. Next, by way of illustration, I apply these conditions to a prominent account of moral disgust and argue that the account ultimately fails to provide convincing evidence in favor of the existence of genuinely moral disgust. I discuss why its failure is instructive and provides support for the general skeptical claim I am making. Lastly, I conclude by briefly discussing why the skepticism about moral disgust I offer here is importantly different from existing skeptical views in the philosophical literature.

### **The Downside of Second Chances: Envy, Changeability, and Distributive Justice**

Manuel Gonzalez, Yochi Cohen-Charash

Baruch College & Graduate Center, CUNY

Research examining how envy relates to distributive justice perceptions has yielded mixed results showing either negative relationships or no relationship between them. One possible reason for these mixed results is the failure to consider possible moderating variables. Here, we focus on the equity rule of distributive justice, according to which distributions are just when the ratio of inputs/outputs is equal across people (Adams, 1965). We examine if the extent to which the situation can be changed moderates the relationship between envy and distributive justice perceptions.

Researchers have argued that individuals can cope with envy by reappraising their outcomes as unfair (Ben-Ze'ev, 1992). Theory suggests that such coping often occurs when one's undesirable outcomes are unchangeable (Major, Testa, & Bylsma, 1991). By this coping perspective, envy should negatively predict distributive justice perceptions in unchangeable (relative to changeable) situations.

A competing perspective is based on equity theory (Adams, 1965). Envious individuals may perceive less equity in changeable situations than in unchangeable situations. Specifically, in changeable situations, envious individuals not only have inferior outcomes, but they must also work harder (increase their inputs) to change the situation and obtain the same outcome as the envied other. By this equity perspective, envy should negatively predict distributive justice perceptions in changeable (relative to unchangeable) situations.

To test these competing perspectives, we recruited 241 participants for a scenario study. We manipulated social comparison (whether a similar other's outcome was better than or similar to the protagonist's) and changeability (whether or not the protagonist had another chance to obtain the desirable outcome). We measured envy before the changeability manipulation, and then measured distributive justice perceptions.

In line with the equity perspective, envy negatively predicted distributive justice perceptions in changeable situations, but not in unchangeable situations. These results suggest that providing opportunities to change unfavorable situations will not necessarily cause envious individuals to perceive these situations more favorably, contradicting previous assumptions (Major et al., 1991).

## **“How Did You Feel the Last Time You Squashed a Bug?”: Compassion, Moral Responsibility, and the High-Functioning Psychopath**

Katie Rapier

Washington University in St. Louis

On many accounts, the low-functioning psychopath escapes moral responsibility in the same way an individual with moderate intellectual disability ( $IQ < 52$ ) might be exempt (Shoemaker, 2010). For the purposes of this essay, I will ignore the arguments concerning exemption for individuals with low-functioning presentations of mental disorders. I am more interested in cases where we are not convinced that an individual with a mental disorder meets cognitive deficiency criteria for exemption from moral responsibility or legal insanity: individuals such as the high-functioning psychopath. These individuals are often highly successful – holding prestigious positions at universities or running business featured on the Forbes Global 2000. By nearly all definitions these individuals are competent to stand trial and face the legal consequences of their actions. But are they morally competent? More specifically, are high-functioning psychopaths morally responsible for their actions?

Many philosophers argue that it is the rational deficits present only in individuals that I have designated low-functioning psychopaths that mediate moral responsibility (Kennett, 2010). Caouette (2013), for example, argues that while it might be motivationally difficult for

psychopaths to act morally, there is no evidence that they cannot act morally. High-functioning psychopaths in particular should be able to overcome any rational deficits and learn to act morally.

Despite their intellectual competence, I argue that high-functioning psychopaths should not be held morally responsible for their actions. High-functioning psychopaths are emotionally deficient. Specifically, high-functioning psychopaths are unable to pick up on compassion-relevant cues in the environment through emotional pathways. This deficit, on my view, prevents the psychopath from recognizing moral situations – i.e., feeling the force of moral salience.

I begin by discussing the clinical criteria for psychopathy through psychological literature – highlighting the importance of deficits in compassion. Then I distinguish between high-functioning and low-functioning psychopaths. Next I discuss how compassion and responsiveness to punishment develop in typically developing human beings versus psychopaths. I then describe moral agency and moral responsibility, using Vargas's (2013) reasons-responsiveness account. I consider several consequences of this view and answer potential objections, such as those that claim that high-functioning psychopaths are motivationally rather than emotionally deficient. I conclude that in the mind of a psychopath, killing another human being carries no more affective force than squashing a bug.

### **Situation Emotions in a Dual-Process Account of Moral Judgement**

Daniel Shargel

Lawrence Technological University

Emotions play a central role in theories of moral psychology. Philosophers in the sentimental tradition argue that moral judgment is grounded in our emotional responses, and Joshua Greene has drawn on neuroscience research to argue that emotions specifically drive deontological, rather than consequentialist, moral judgments. I will argue that this view is based on two theoretical mistakes.

First, Greene mischaracterizes the distinction between the types of processes that figure in these judgments. It is common in the Dual Process literature to group together a number of different distinctions, such as controlled/automatic, model-based/model-free, slow/fast, and rational/emotional. I will argue that recent research in psychology and affective neuroscience suggest that it is a mistake to group the rational/emotional distinction with the others in this list, since emotions interact with both types of processes.

Second, the conventional ways of characterizing brain areas such as the amygdala and orbitofrontal cortex as emotion areas is at best misleading. There is strong evidence that these areas are involved in emotional processes, but that evidence does not support the inference that activity in these areas is emotional activity. Activity in these areas is implicated in a variety of cognitive processes, and we need to have a nuanced understanding of how emotion relates to perception, action, and representations of value to accurately characterize the roles of these areas.

Having made these criticisms, I will argue that emotions do influence moral judgments, but they do so indirectly, through a temporary, generic modulation of our representations of value.

## **Paper Session 3: Recent Advances in Crying Research**

Friday, July 28, 14:00-15:40, Lindell Ballroom Salon D

## **Reactions to Appropriate and Inappropriate Tears**

Ursula Hess<sup>1</sup> and Agneta Fischer<sup>2</sup>

<sup>1</sup>Humboldt University in Berlin, <sup>2</sup>University of Amsterdam

The social function of crying is assumed to elicit support from others. Do tears, however, have this function irrespective of context? Or are tears sometimes seen as merely strategic, or unjustified, or exaggerate? And what types of reactions does this elicit? We report three studies, in which we examined whether crying persons elicit more facial responses and subjective reports of empathy, stress or irritation when the crying was presented as appropriate versus inappropriate. Female participants viewed videos of crying (versus neutral-looking) men and women, preceded by reading an appropriate versus inappropriate reason explaining why the person in the video was crying. We measured perceived stress, empathy, pity, irritation (Studies 1-3), skin conductance (Study 1) and facial expressions (Study 2). Across studies, results show that viewing someone cry versus neutral or sad evoked more empathy and pity, whereas inappropriate tears elicited less empathy and pity, and more irritation. In addition, tears in inappropriate contexts elicited more smiles (AU12) than in appropriate contexts, and men who displayed inappropriate tears were considered more emotional than women. These studies show that tears that are considered inappropriate do not evoke support, which suggests that the social functions of crying vary with context.

## **Making Emotional Faces: A Study of the Methodology Used to Assess the Signal Value of Tears**

Randy R. Cornelius, Claire Ayako, Jun A. Wang, Anne Fritzson, Samantha Thompson, Rachel Waldman, and Laura K. Smith

Vassar College in Poughkeepsie

Developed in our lab (Cornelius et al., 2000) and refined by Vingerhoets and his students and colleagues, the “erased tear” paradigm, in which participants are shown photographs of crying people’s faces obtained from the media with the tears intact or digitally removed, has revealed a number of important aspects of the perception of tears. It is quite evident, for example, that tears have a pronounced “signal value;” that is, tears indicate to others that the crying person is most likely experiencing an emotion in the sadness family, and at a high level of intensity. Data also suggest that tears signal that the crying person is feeling vulnerable and the presence of tears may be taken by others to signify that the crying person is in need of aid or emotional comforting (see Hendriks & Vingerhoets, 2006; Hendriks et al., 2008). The signal value of tears appears to be so salient that it may affect perceivers without their awareness that they are viewing a crying person’s face (see Balsters et al., 2013). Hitherto, all studies of what has been termed the “tearing effect” have used between-groups designs to compare the reactions of participants to the same face with tears and with the tears digitally removed. In the present study, we sought to understand more of the characteristics and, indeed, the possible limits of the tearing effect by employing a within-subjects design in which participants were shown a slideshow of four different women’s faces in which each face was presented twice. Participants were first asked to evaluate the face on a number of dimensions, then either add or remove a tear from the face, and finally to evaluate the face again. Participants were never asked to manipulate the same face twice, and six different randomized orders of the faces were used. Results suggested that participants were not always aware that they had evaluated the tearful and non-tearful faces differently.

## **Interactive Effects of Tears and Muscular Facial Expressions**

Asmir Gračanin<sup>1</sup>, Emiel Krahmer<sup>2</sup>, Martijn Balsters<sup>2</sup>, Dennis Küster<sup>3</sup>, and Ad J. J. M. Vingerhoets<sup>2</sup>

<sup>1</sup>University of Rijeka, <sup>2</sup>Tilburg University, <sup>3</sup>Jacobs University in Bremen

Emotional tearing is an expressive behavior that accompanies different self-reported emotional states, ranging from sadness to joy. Emotional tears are proposed to have evolved as a means of communication: their function is to convey distress, helplessness, submission, and friendly intentions of the crier, which eventually results in elicitation of pro-social responses of observers. A still unanswered question is how exactly tears interact with muscular facial expressions in order to convey such information. Do tears promote the perception of emotional intensity and sincerity of expression in general or do they convey more specific information? To answer these questions, we exposed sixty participants to pictures of individuals expressing six basic emotions (anger, disgust, fear, happiness, sadness, and surprise) or having a neutral expression, with or without artificially added tears. Additionally, we presented participants with a comparable group of artificially created faces (avatars). Participants' task was to report which of the seven emotional expressions they perceived, and to rate the intensity and sincerity of the expressed emotion, as well as the empathy felt towards the expressing individual. Results showed that tearful faces were more often perceived as sad and angry, and less often as disgusted and surprised. Interestingly, tears added more intensity to correctly recognized expressions of not just sadness but also of anger and fear. Tears also facilitated perception of sincerity and empathy felt towards models expressing sadness and anger, while they decreased perceptions of sincerity of disgust. These results are discussed in the context of the tears' ability to function as an attachment-related signal of distress, designed by evolution to convey distress and submission, and to promote social bonding.

### **Why Do We Cry? A Laboratory Investigation of the Intrapersonal Function of Tears**

Leah Sharman, Genevieve Dingle, and Eric Vanman

University of Queensland in Brisbane

One of the main functions of crying may be to facilitate recovery after having been in distress. That is, crying could serve to sedate, reduce pain, and restore the homeostatic balance. Attempts to explore this topic have previously used retrospective studies, with none experimentally testing this functional explanation. This experiment investigated the intrapersonal functional explanation of crying by evaluating if crying before a stressor will facilitate coping and recovery. Participants were first year undergraduate female students at the University of Queensland asked to watch several short videos lasting 20 minutes. Participants were randomly assigned to either the sad or neutral (interesting) video sequence. Videos chosen in the 'sad' condition were chosen for their extreme emotion elicitation, i.e., sad crying responses. Performance on a stressor (cold pressor task) was then timed. Throughout the experiment participants heart rate, respiration, and facial expressions were recorded through iMotions using FACET software. Saliva samples were also taken at 4 separate time points to measure changes in cortisol over the hour for baseline, video response, reaction to stressor, and a final time point. It is predicted that compared to controls participants who have cried will (a) be able to withstand a stressful task for longer; (b) show lower levels of cortisol following the stressor; and (c) have faster physiological recovery to baseline following the stress task measured using heart rate, respiration, and salivary cortisol. Preliminary results and implications will be discussed.

### **The Facial Thermography and Physiology of a Crier**

Marc Baker

University of Portsmouth

Crying is a reliable indicator of emotion and it has strong communicative properties. However, crying is also hypothesized to have self-soothing properties independent of social support. One way in which we can assess if crying has a self-soothing effect is to measure the temporal dynamics of peripheral physiology during episodes of crying. Using a novel methodology to elicit crying we measured a large range of physiological variables including facial temperature changes, heart rate, heart rate variability, respiration, and skin conductance. There were large thermal changes associated with the sad films with criers reaching higher temperatures than non-criers. Some of the temperatures changes were extremely large compared to reported changes under other emotions. Temperatures increased around the tear production and continued throughout the crying episode. The temperature changes also correlated with a large spike of sympathetic nervous system activity around the time of tear production. There were indications of reduced physiological response after tear production whilst non-criers showed increased physiological responding over the entire sad film epoch. We conclude that crying episodes are accompanied by large peripheral physiological response from both the strands of the autonomic nervous system. We also find that criers show different patterns of response to non-criers but only after the production of a tear.

## **Paper Session 4: Emotional Development**

Friday, July 28, 16:00-17:40, Lindell Ballroom Salon A

### **Parent-Infant Communication about Discrete Emotions**

Jennifer M. Knothe and Eric A. Walle

University of California, Merced

Parent socialization of emotion is critical for children's emotional development. One mechanism through which parents socialize emotional understanding is their conversations about emotions. Lagattuta and Wellman (2002) reported that parent-child conversations about negative and positive emotions differed in quality, with talk about negative emotions including increased emotion vocabulary and more questions. However, the researchers only compared emotional valence, not discrete emotion categories. The present study examined parents' communication about specific aspects of discrete emotion contexts.

Infant-caregiver dyads ( $n=39$ ; 21 female infants,  $M_{age}=18.69$  months) completed a semi-structured picture book task. The book included 10 images, each featuring a single child (emoter; half female) facially and posturally expressing an emotion (i.e., sadness, anger, disgust, fear, and joy) toward an object (referent). Parents described each image separately to their child as a story. We hypothesized that parents would emphasize the emoter in sadness and anger contexts and emphasize the referent in disgust and fear contexts; no a priori predictions were made for joy.

Observations were transcribed and coded for frequency of parent mentioning the emoter, referent, and emotion label, parent questions, and parent pointing toward the emoter and referent. Each variable was analyzed separately using repeated measures mixed linear modeling controlling for trial and on-task parent words. A Bonferroni correction was applied to all pairwise comparisons.

Significant main effects of emotion were found for parent mentioning the emoter,  $F(334)=27.01$ ,  $p<.001$ , the referent,  $F(338)=19.79$ ,  $p<.001$  and emotion labels,  $F(335)=3.45$ ,  $p=.009$ . Pair-wise comparisons revealed that parents referenced the emoter significantly more

in anger and sadness contexts, whereas they mentioned the referent significantly more in joy, disgust, and fear contexts. Parents labeled the emotion more in anger and disgust than joy.

Although parent questions were not influenced by emotion, a significant effect of infant gender was present,  $F(36.11)=7.52$ ,  $p=.009$ . Specifically, parents asked more questions to girls than boys about anger, sadness, and disgust contexts.

Finally, parent pointing differed significantly by emotion towards the emoter,  $F(264.12)=4.39$ ,  $p=.002$ , and the referent,  $F(267.15)=2.69$ ,  $p<.001$ . Parents pointed significantly more to the emoter in sadness than disgust and joy contexts, and to the referent more in fear and joy than in anger contexts.

This study identifies important differences in how parents communicate about discrete emotions with their infant, particularly contextual elements warranting increased attention. Further research examining cross-cultural differences in parent socialization of emotion and its impact on infant behavior will be discussed.

### **Emotion Regulation Strategies in Preschoolers with Autism Spectrum Disorder**

Heather Nuske<sup>1</sup>, Darren Hedley<sup>2</sup>, Alexandra Woollacott<sup>3</sup>, Phoebe Thomson<sup>4</sup>, Suzanne Macari<sup>5</sup>, and Cheryl Dissanayake<sup>2</sup>

<sup>1</sup>University of Pennsylvania, <sup>2</sup>La Trobe University, <sup>3</sup>Seattle University, <sup>4</sup>University of Melbourne, <sup>5</sup>Yale University

**Background:** Emotional dysregulation predicts challenging behaviors and mental health problems in children. Recent studies have highlighted that children with Autism Spectrum Disorder (ASD) use less adaptive strategies for regulating their emotion and tend to have a limited repertoire of regulatory behaviors compared to their typically developing (TD) peers, however it is unknown how these strategies map on to wellbeing, mental health and associated factors in children with ASD.

**Methods:** Forty-four children with ASD and 29 matched TD children (2-4 years) were administered tasks from the Laboratory Temperament Assessment Battery. Tasks were designed to mimic everyday life experiences requiring children to regulate low-level stress (e.g. waiting for a snack). Coders blind to diagnostic group coded emotion regulation strategies, ranging from other- to self-directed, communicative to comforting, passive to active and approach-oriented to avoidance-oriented. Parents reported on their child's mental health, wellbeing, sleep quality and self-development.

**Results:** TD children used social strategies mediated through unfamiliar people more than all other strategies. In the ASD group better mental health was significantly associated with less self-stimulation and gaze aversion (perceptual disengagement), and less gaze aversion was associated with better wellbeing and less sleep problems. Higher self-evaluation/autonomy was related to less avoidance/more approach in both groups.

**Conclusions:** These results underline the association of wellbeing with comfort- and avoidance- strategies in children with ASD and, furthermore, highlight the particular importance of supporting co-regulation through unfamiliar adults, sleep quality and self-development. Results help to identify important emotion regulation intervention targets in children with ASD.

### **Emotions Teach: Social Emotional Calibration in Typical and Atypical Development**

Heather Nuske<sup>1</sup>, Darren Hedley<sup>2</sup>, Lacey Chetcuti<sup>2</sup>, Samantha Galea<sup>2</sup>, and Cheryl Dissanayake<sup>2</sup>

<sup>1</sup>University of Pennsylvania, <sup>2</sup>La Trobe University

**Background:** Emotional expressions of significant others teach children about the world around them. We define this process, social-emotional calibration, a process by which, after observing or experiencing another's emotional expression (e.g. facial, vocal, bodily) in response to a particular referent (e.g. an object, event, topic, social or cultural practice, attitude, another



person), the child's emotional reactions to that referent calibrate with those of the observed person. Preliminary research on such learning from others' emotions in autism spectrum disorder (ASD), suggests difficulties in this area relative to their typically developing peers, which may help to explain the atypical social and non-social emotional reactivity patterns common in this disorder (e.g. reduced enjoyment of "happy" events such as birthdays, fear of vacuum cleaners).

**Methods:** To examine social-emotion calibration, we created a novel eye-tracking pupillometry paradigm. We showed 20 preschoolers with autism and 20 matched typically developing preschoolers videos of an actor opening a box and reacting to the occluded object inside, with fear or happiness. We expected preschoolers to come to perceive the box as containing a positive or threatening stimulus through emotionally calibrating to the actor's emotional expressions. Children's mean pupil diameter (indicating emotional reactivity) was measured whilst viewing an up-close, visually identical image of the box before and then after the scene, and this difference was taken as an index of social-emotional calibration and compared between groups.

**Results:** Whilst the typically developing preschoolers responded more emotionally to the box after, compared to before the scene (as indexed by an increase in pupil size), those with autism did not, suggesting their reaction to the object was not affected by the actor's emotional expressions. The groups did not differ in looking duration to the emotional expressions; thus, the pupil dilation findings cannot be explained by differences in visual attention. More social-emotional calibration on the happy condition was associated with less severe autism symptoms.

**Conclusions:** Through the measurement of physiological reactivity, findings suggest social-emotional calibration is diminished in children with autism, with calibration to others' positive emotions as particularly important. This study highlights a possible mechanism by which individuals with autism develop idiosyncratic reactions to features of their environment, which is likely to impact their active and harmonious participation on social and cultural practices from infancy, throughout the lifespan. More research is needed to examine the mediators and developmental sequence of this tendency to emotionally calibrate to others' feelings about the world.

## **Parental Emotion-Related Behaviors that Facilitate and Inhibit Adolescent Disclosure to Parents During Everyday Interactions**

Janice Disla and Alexandra Main  
University of California, Merced

Adolescent disclosure to parents is an important predictor of positive parent-adolescent relationships and adolescent socio-emotional adjustment (Kerr & Stattin, 2000). However, much of the existing research on adolescent disclosure is based on adolescents' reports of how often and what kinds of information they disclose to parents. Less work has examined spontaneous disclosure in the context of parent-adolescent discussions, particularly how often adolescents disclose and the nature of such disclosures. Furthermore, while adolescent disclosure is more likely to occur in the context of high quality parent-adolescent relationships (Smetana & Comer, 2015), little is known about specific parental behaviors during everyday interactions that facilitate or inhibit disclosure. Parental behaviors that communicate empathy, such as validating or showing interest in their adolescents' feelings or point of view, may be particularly important in facilitating adolescent disclosure because they indicate a non-judgmental context for adolescents to share information and emotions. The present study explored how parental dispositional empathy, empathic behaviors (validation and interest), negative emotion-related

behaviors (e.g., contempt, criticism), were associated with spontaneous adolescent disclosure in a semi-naturalistic setting.

Fifty parent-adolescent dyads (30 female, M adolescent age=14.84) participated in a discussion about a source of conflict in their relationship. Parent and adolescent emotion-related behaviors (including validation and interest) were coded using the Specific Affect Coding System (SPAFF) and adolescent disclosure was coded using modified versions of the Couples Interaction Coding System and Supportive Behavior Coding Systems. Disclosures were coded for frequency (number of times the adolescent disclosed during the discussion), duration (length of each disclosure statement), and intensity (degree of information revealed and emotion expressed while disclosing).

Preliminary analyses revealed that overall levels of parental validation were positively associated with intensity and duration of adolescent disclosures ( $r=.57$  and  $.54$ ,  $p=.018$  and  $.025$ , respectively). Specifically, the proportion of times parents displayed validation immediately prior to instances of adolescent disclosure was positively associated with the intensity of disclosure ( $r=.61$ ,  $p=.009$ ) controlling for other types of parental emotion-related behaviors (i.e., negativity, positivity). Additionally, parent negative emotion-related behaviors (e.g., contempt, criticism) immediately following adolescent disclosures showed a trend toward being negatively associated with the frequency of adolescent disclosure during the conversation ( $r=-.40$ ,  $p=.10$ ), and adolescent-reported conflict with parents was negatively associated with the frequency of disclosure ( $r=-.53$ ,  $p=.028$ ).

Findings suggest that specific parental behaviors, particularly parental validation, play an important role in facilitating adolescent disclosure and encouraging future disclosures in the context of positive parent-adolescent relationships.

## **Paper Session 4: Research on Specific Emotions**

Friday, July 28, 16:00-17:40, Lindell Ballroom Salon B

### **From Anxiety to Boredom**

Avraham Rot

Johns Hopkins University

While anxiety has been chiefly researched in the field of psychopathology, the phenomenon of boredom has been explored more extensively by positive and existential psychologists, behaviorists, literary critics and historians, sociologists, anthropologists, and philosophers. This disciplinary separation, I argue, is both an expression of the difference between anxiety and boredom and a hindrance to the systematic study of this difference. My paper is an initial assessment of the significance and scope of this structural lacuna, conducted through the study of the intellectual history of the difference between anxiety and boredom. Sigmund Freud never worked out a theory of boredom because anxiety had been the implicit presupposition of his psychoanalytic psychology. Due to the same rationale of mutual exclusion, Martin Heidegger, who discussed both phenomena extensively, nonetheless never considered them in juxtaposition. And yet, despite the disciplinary and theoretical separation and the apparent contrast between anxiety and boredom, there is an important sense in which the difference between these emotions is not wide but subtle. Just as anxiety is commonly defined as fear in the absence of a specifiable danger, boredom is definable as anxiety in the absence of actual fear. And since there is no fear in boredom, there is also no guilt in boredom, which is arguably the most important characteristic distinguishing boredom from clinical depression,

while clinical depression and other mood disorders often remain indistinguishable from anxiety disorders. Thus, at the psychological level, boredom can be defined as anxiety without fear. At the sociological level, boredom can be regarded as a secularized version of anxiety. On these theoretical grounds, I put forth the historical argument that anxiety, which has gained wide currency as both a diagnostic category and a form of patient complaint in the field of mental health, and boredom, which has become increasingly prevalent in ordinary speech and everyday experience, are complementary phenomena, or, what amounts to the same thing, two aspects of a single phenomenon: secularization. Much like production and consumption, the two economic aspects of capitalism, which differ so greatly both psychologically and phenomenologically that observers focusing on one have tended to overlook the other, anxiety and boredom are the two apparently contrasting emotional aspects of secularization, which is indissolubly related to the emergence of the capitalist economy and the ensuing differentiation between work and leisure, the individual and the social, the private and the public, adulthood and childhood, normalcy and pathology.

### **Aristotle on Anger and Righteous Indignation as the Motives of Revolution**

Marta Jimenez

Emory University

In Politics V Aristotle studies the phenomenon of stasis (often translated as ‘faction’ or ‘revolution’) and includes under this notion all sorts of conflicts that threaten the constitution. Commentators tend to classify different types of stasis in Aristotle attending to whether agents are motivated by political injustice, by mere self-interest or by personal rivalry, and often discuss only cases of stasis due to political injustice as relevant to a theory of revolution. However, these cases have for Aristotle a strong unifying motivating source in that those who exercise stasis or “promote revolution” (stasiázousin) are “seeking equality” (to ison zētountes V.1, 1301b28-9), a motive that we commonly attribute to revolutions in the modern sense. In this paper I argue against the classification of cases of stasis in political and non-political and show that Aristotle considers even those cases of stasis due to self-interest and to personal rivalry as ultimately motivated by a desire to eliminate an injustice that is in some sense political. My argument develops through an analysis of the relationship between the psychological roots of the desire of equality that causes stasis and the sources of anger (orgē), jealousy (phthonos) and righteous indignation (nemesis) – three emotions that Aristotle associates with reactions to apparent injustice. I show that the examples that Aristotle uses in his discussion of anger, jealousy and indignation in Rhetoric and in Nicomachean Ethics cannot be classified as cases of mere personal rivalry and that are significant for a proper understanding of political conflict. Moreover, I argue that anger and indignation are appropriate for Aristotle not only at the level of personal interactions between individuals (when someone or someone’s close circle of friends are treated with contempt, spite, and insolence, or when someone else has unmerited prosperity), but these emotions also have validity at the level of political relationships and are the ultimate motives of revolution insofar as they express one’s concern for political equality.

### **In Which Sense are Collective Emotions “Collective”? Thinking with and about Indignation**

Frédéric Minner

Institut of Sociological Research, Swiss Center for Affective Sciences, University of Geneva

Collective emotion is a concept widely used in emotion theory, but it remains poorly understood (von Scheve and Ismer 2013). Since the notion is fundamental both as an object of study and as an explanatory tool, it is crucial to understand it better. I contend then that collective emotions are emotions that go through a “process of collectivization” (Kaufmann

2010) that admits different degrees: there are collective emotions that are more collective than others. My argument dwells on the methodology of “fictional genealogy”—a narrative that attempts to explain a phenomenon of civilization by describing how it might have come to be (Williams, 2006). The phenomena under scrutiny are the institutions of penal justice. My claim is that these institutions can emerge from the collectivisation of indignation. Indeed, as a reaction toward a wrong and a wrongdoer, indignation typically motivates individuals to publicly denounce the situation and accuse the wrongdoer. The public is called to become indignant, and to act as a third party regulator so as to suppress the wrong and to punish the wrongdoer. Thus indignation seems to easily give birth to a process of collectivization that generates an “affective-We”. From the passage of “I-indignations” to “We-indignation”, different convergent “We-attitudes” emerge that provide the ground for the coordination of “We-actions” anchored in the action tendencies of indignation. Collective actions can then result in the making of laws and the constitution of tribunals the purpose of which is the regulation of the original wrong, but also of future wrongs. When successfully institutionalized, indignation applies to the largest We possible—the whole society. The new institutions have extensive and general consequences in terms of scope and endurance over time (Dewey, 1954), which means that indignation has reached its higher degree of collectivization as these consequences extend beyond the initial situation.

### **Forgiveness and the Multiple Functions of Anger**

Antony Aumann, Zac Cogley  
Northern Michigan University

Central to most philosophical accounts of forgiveness is the idea that forgiving someone involves overcoming, letting go of, or forswearing our anger with her for what she has done. This view of forgiveness requires a clear account of anger. Unfortunately, many philosophers operate with a simplistic and provincial account. Our aim is to show the value of engaging with psychological research about anger when theorizing about forgiveness.

The starting point for our analysis is a functional account of anger. One function of anger is to appraise an interpersonal situation. Specifically, the appraisal is of some person (the wrongdoer) for doing wrong out of ill will toward or insufficient moral concern for another person (the victim).

Many philosophical accounts of forgiveness focus only on this appraisal aspect of anger. But recent empirical work shows that anger also does more. It has at least two additional psychological functions. First, anger has a communicative function: it communicates to the wrongdoer that his action was morally wrong. Second, anger has a sanctioning function: it imposes costs on, or punishes, the wrongdoer for what he did.

The goal of our paper is to provide an account of forgiveness that accommodates this psychologically richer view of anger. We maintain that once a wrongdoer feels guilty and apologizes, anger no longer serve the victim’s purposes. The communicative function has achieved its aim: getting the wrongdoer to see what she did was wrong. So too has the sanction function: getting the wrongdoer to commit not to reoffend. Thus, since the victim no longer needs the functions of anger, forgiveness is in order.

Our project is motivated by the belief that attending to recent philosophical and psychological research on anger can help elucidate forgiveness. Thus, we primarily seek to develop a theory of forgiveness that is sensitive to recent work on anger. But our account will also have three additional virtues. First, it will elucidate why forgiveness can be a reasonable response to wrongdoing. Second, our account will explain more perspicuously than many standard accounts why it is reasonable to forgive others for minor wrongs. Finally, our theory of

forgiveness will shed light on the ethics of forgiveness: why forgiveness is typically elective but can sometimes be required.

### **Independent Effects of Relational and Practical Repair on Guilt**

Luka Katic, Danielle M. Shore, Brian Parkinson

University of Oxford

Recent findings by de Hooze and colleagues (2012) question whether guilt's primary function is relationship repair. In their research, repair of the material damage perpetrated on the victim alleviated the perpetrator's guilt even when that repair was implemented by a third person. De Hooze and colleagues therefore conclude that guilt motivates people to correct the situation and not repair the relationship. However, many of the reparative actions motivated by guilt are more directly relationship-oriented. In particular, acknowledgement of personal responsibility and apology (e.g., Howell et al., 2012; Tomlinson et al., 2004) may operate independently of any direct alleviation of practical harm. The present research therefore attempted to assess the separate and interactive effects of apology and practical repair following a transgression on experienced guilt, extending the methods used in de Hooze's research. We independently manipulated repair of material damage and apology (interpersonal relationship repair) in two vignette studies and one laboratory experiment to test the hypothesis that apology would have a guilt reducing effect regardless of repair of material damage.

Study 1 used a vignette similar to that used by de Hooze and confirmed her finding that material repair reduces guilt when someone other than the transgressor repairs the material damage. However, apology information increased self-blame appraisals in the third-party repair condition, suggesting that participants may have inferred that apologising protagonists blamed themselves to a greater extent. Study 2 modified the apology manipulation to avoid these implications about self-blame, and showed that intended apology and material repair each had independent negative effects on reported guilt. Study 3 used a directly involving guilt induction in a laboratory setting and confirmed that guilt was alleviated when participants apologised, independently of the material damage repair. These findings suggest that relationship-repair motives play a role in guilt over and above any consequences of putting right the situation that initially provoked the guilt.

## **Paper Session 4: Emotion Regulation**

Friday, July 28, 16:00-17:40, Lindell Ballroom Salon C

### **Do You Think You Can Control Love? A Questionnaire Study on the Perceived Control of Love**

Kruti Surti, Sandra J. E. Langeslag

University of Missouri-St. Louis

Romantic love is applicable to majority of the population and being able to modulate love feelings could be beneficial for individuals. A previous study has shown that people think that love is somewhat uncontrollable and that attachment is more controllable than infatuation. In the current study, we tested whether people think it is easier to up- or down-regulate love and whether people think it is easier to regulate love or emotions. A sample 286 participants (230 women, 52 men, 3 gender queer, 1 other) completed a 34-item questionnaire regarding their views about their ability to up-regulate, down-regulate, start, stop, express, and suppress love (i.e., infatuation, attachment, sexual desire), and emotions (i.e., happiness, fear, anger,

sadness). They also completed the Emotion Regulation Questionnaire (ERQ) which assessed the habitual use of cognitive reappraisal and suppression for emotion regulation. In general, participants thought it was easier to up- than down-regulate love and emotions, and that it was harder to increase infatuation than attachment and sexual desire. Participants also thought suppressing their love feelings was easier than expressing them, and thought it was harder to start and stop feelings of infatuation compared to attachment and sexual desire. Additionally, the more participants habitually used cognitive reappraisal for emotion regulation, the easier they perceived it was to increase and decrease their love feelings. Finally, participants also thought it was easier to start love from scratch and stop love completely the more habitually they used reappraisal. Overall, these results reveal that the more people use cognitive reappraisal in their daily lives the more they think they can regulate their love feelings, which suggests that there is an overlap between love and emotion regulation. However, some aspects of love, such as infatuation, are still seen as uncontrollable as indicated by the current and previous studies. Nevertheless, previous research has shown that love regulation is feasible, which suggests that perceptions regarding love being somewhat uncontrollable are false. Future work should test whether the false beliefs could be changed using psychoeducation.

### **The Emotion Regulation Questionnaire: Croatia Adaptation and Conceptual Validation**

Igor Kardum, Asmir Gračanin  
University of Rijeka

Emotion Regulation Questionnaire (ERQ, Gross & John, 2003) is a measure of habitual use of two different aspects of emotion regulation, cognitive reappraisal and expressive suppression. We validated the Croatian version of the ERQ and we additionally tested the conceptual validity of the questionnaire by evaluating previously unexplored hypotheses. The current study first explored the factor structure of the ERQ and confirmed its ability to reliably distinguish between the use of the two emotion regulation strategies. Next, we tested criterion validity of ERQ, focusing on its discriminant and incremental validity. To that aim, we tested the relations of the two ERQ scales with the Big five dimensions of personality, their facets, as well as with habitual positive and negative mood. The observed relations corroborated the results of earlier studies, allowing for the conclusion that Croatian version of ERQ has equivalent predictive validity as ERQs in other languages. Finally, we tested conceptual validity of the ERQ in a quasi-experimental context by exploring its relations with refined and more specific self-report measures of experienced emotion and ongoing emotional regulation processes. Reappraisal scale was related to these measures in a conceptually-fitting manner. However, we observed some unexpected relations of suppression scale with situational emotional reactions. While the validation of the Croatian version of ERQ that was based on the replication of its factor structure and its criterion validity largely corresponds to the results of the previous studies, its additional testing in the quasi-experimental context showed that the suppression subscale could represent a measure of emotional inhibition rather than the tendency to hide one's current feelings.

### **Interpersonal Emotion Regulation: The Effect of Support Goals on Emotion Sharing**

Lisanne Pauw, Disa Sauter, Gerben van Kleef, Agneta Fischer  
University of Amsterdam

More often than not, emotion regulation takes place at an interpersonal level. Extant research has investigated the prevalence and effectiveness of social sharing. So far, however, few studies have looked into the process of sharing itself. What kinds of needs and goals do sharers have and how do these affect their sharing behavior? In answering this question, two types of support goals can be distinguished: socio-affective support (i.e., validation, empathy)

and cognitive support (i.e., reappraisal). Whereas socio-affective support is predicted to be desirable and effective on the short term, cognitive support is considered necessary for emotional recovery on the long term (Rimé, 2009). Here we present a study in which we investigated how these support goals affect people's verbal expressions of emotion. To this end, participants shared a negative emotional experience in front of a video camera, imagining that they were talking to a friend via Skype. We predicted that participants seeking socio-affective support would express more emotions, whereas those seeking cognitive support would share more appraisals regarding the emotional event (e.g., certainty, coping potential, unpleasantness). We manipulated participants' support goals by convincing them of the effectiveness of socio-affective support, cognitive support (i.e., reappraisal), or, in the control condition, of mere social sharing, and then explicitly instructed them to pursue the respective type of support. Results indicated that the manipulation of the cognitive goal was successful, but participants reported similar socio-affective support goals across conditions. In line with the first hypothesis, participants in the socio-affective goal condition expressed more emotion words comparing those in the cognitive goal condition, with those in the control condition falling in between. Furthermore, those in the socio-affective goal condition used significantly less appraisals compared to those in the cognitive goal condition, as well as the control condition. Finally, exploratory analyses revealed that those with a cognitive goal more frequently made a more explicit appeal for support, compared to participants in the other conditions. In conclusion, people appear to have a tenacious motive to gain socio-affective support, which is associated with a greater use of emotion words and a lower frequency of appraisals. Increasing cognitive support goals appears to be associated with communicating explicit requests for help, which might be an effective means to obtain one's goal and thereby facilitating long term recovery.

## **Measurement and Validation of Emotion Regulation in Non-Western Culture: The Case of India**

Nutankumar Thingujam<sup>1</sup>, Imlisongla Longkumer<sup>2</sup>, Silajit Guha<sup>1</sup>, Alisha Chettri<sup>1</sup>

<sup>1</sup>Sikkim University, <sup>2</sup>Nagaland University

There are various measures of emotion regulation. Yet all of them are standardized in the West. The objective of the study was to investigate whether there is a need to develop a new test for the measurement of emotion regulation scale in Indian context? Therefore, the present research examined the applicability of a widely used 10-item Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) among the university students in India. Study 1 (n = 396) examined and found that every item of the ERQ was understood by more than 80% percent of the respondents. In study 2 (n = 383) 32 new discrete emotion based items were added and factor analysis showed that three factors could be extracted with good reliabilities, that is, emotional suppression (alpha = .85; 12 items), cognitive reappraisal of negative emotion (alpha = .72; 13 items), and cognitive reappraisal of positive emotion (alpha = .82; 11 items). However, the reliabilities of the original two sub-scales, that is, emotional suppression (alpha = .463) and cognitive reappraisal (alpha = .516) were very low if only the original ten-item was used. Study 3 (n = 200) examined validity and observed that the emotional suppression was correlated with cognitive reappraisal of negative emotion, hope, agreeableness, neuroticism, but insignificant with cognitive reappraisal of positive emotion, self esteem, optimism, life satisfaction, extraversion, conscientiousness, and openness to experience. Cognitive reappraisal of negative emotion was correlated with cognitive reappraisal of positive emotion, hope, optimism, agreeableness, conscientiousness, and openness to experience but insignificant with self esteem, life satisfaction, extraversion, and neuroticism. Cognitive reappraisal of positive emotion was correlated with hope, life satisfaction, but insignificant with the remaining variables. These results show that the extended ERQ (36-item) is related to other

psychological constructs but different because the correlation sizes are either small or insignificant. Further it is concluded that the existing ERQ is not completely applicable in India, a non-western nation.

### **Toward an Integrative Typology of Emotion Regulators Profiles**

Mélanie Laberge, Michel Cossette  
HEC Montréal

This theoretical paper proposes to study the emotional display rules at work. The research question is : What differentiates a display rule of another ? Emotional display rules are behavioral expectations about which emotions ought to be expressed and which ought to be hidden (Rafaeli et Sutton, 1989, p. 8). It demands to suppress, display or retain specific emotions when serving clients. This concept has mainly been studied in contexts where employees have to work with a smile. There are several other contexts that are unknown to the scientific community, such as bailiffs, prison officers and police officers. The major contribution of this research lies in the integrative vision of the emotional display rules.

A literature review will be carried out in order to elaborate a new typology of emotional display rules using the notion of integrative emotions (eg. happiness, friendliness) and differentiating emotions (eg. anger, hostility) (Kemper, 1984, Wharton and Erickson, 1993). The display rules are classified according to the display of integrative emotions and suppression of differentiating emotions (conventional rules), the display of differentiating emotions and suppression of integrative emotions (reverse rules), the suppression of all emotions (neutral rules), the display of all emotions (involved rules) and the display and suppression of integrative and differentiating emotions (mixed rules). This classification system which integrates all types of emotional workers will be a first for the scientific community.

From a theoretical point of view, current models and typologies of display rules do not capture the complexity of emotional regulation at work because of their focus on employees who must express integrative emotions and suppress differentiating emotions. This is because it is the norm, most of the time (Wharton, 1999). For this reason, it is necessary to develop a holistic typology of this type of work, which is a classification system that integrates the different types of emotional workers. Future studies could use this typology to develop a new scale for emotion regulation. From a practical point of view, we have everything to gain by taking an interest in this subject because it affects the tasks of the majority of employees in our society. Thus, the results of my research will give a better understanding of the specific issues of each type of emotional work and the differences related to it. This will allow the managers to improve their hiring process, as well as being better equipped to train and coach their employees.

## **Paper Session 4: The Face in Context**

Friday, July 28, 16:00-17:40, Lindell Ballroom Salon D

### **Non-Verbal Behavioural Signals of Empathy: A Coding Scheme for Dyadic Social Interactions**

Christine Spencer, Gary McKeown  
Queen's University Belfast

Empathy is a complex, multifaceted phenomenon thought to be critical in communicative processes and the formation and maintenance of social bonds (Rumble, Van Lange & Parks, 2010). Being able to understand and respond appropriately to the affective state and non-verbal



cues of conspecifics plays an important adaptive role in a host of fundamental human activities, primarily including parental care provision and the formation and maintenance of co-operative alliances and relationships (McKeown, 2013). Emotion researchers have utilised a number of approaches in the assessment of empathy, from self-report measures (Baron-Cohen & Wheelwright, 2004; Spreng et al., 2009), to the use of emotion-ratings (Stellar et al., 2012; Cikara et al., 2014) and still, acted emotion-laden images of the eyes (Baron-Cohen et al., 2001). However, greater understanding of the complex manners in which empathy is expressed dynamically in a natural live social interaction is required, as well as greater understanding of the role of context in empathy perception.

A rigorous methodological annotation procedure was performed with the aim of isolating a set of non-verbal signals present during empathising behaviour in a social interaction between friends. A secondary aim of this procedure was to examine the relationship between the presence of empathy cues and status and dominance cues. 10 hours of unstructured, natural conversation between acquainted English-speaking dyads was annotated and rated for cognitive and affective alignment to form a set of 200 30-second clips. These clips were then subjected to online crowdsourced annotation of empathy. A smaller stimuli set was created, consisting of clips identified as being rated highest for empathy, in addition to controls. This set was then annotated by three trained raters for a full range of micro and macro-level non-verbal behaviours, and was rated a second time for empathy via crowdsourced annotation using a continuous rating tool, forming estimates of empathy intensity expressed in real time by each interactant in the dyad. This allowed the identification of patterns of specific non-verbal cues signalling empathy.

It was concluded that specific sets of non-verbal cues may be associated with the presence of empathy in low-intensity and higher-intensity emotional contexts. These cues appear to be commonly present in the absence of cues of status, dominance and power. Future work aims to enhance understanding of the contribution of contextual information to empathy perception and how this information impacts on our understanding of the emotions and motives of other people.

## **Behavioral Characteristics of Expressive Suppression During Marital Conflict**

Katlin Bentley, Tammy English

Washington University in St. Louis

Inhibiting emotion expression through expressive suppression has distinct cognitive, affective, and social costs. This emotion regulatory strategy reduces expressive behavior but does not decrease negative emotional experience (Webb et al., 2012). Dealing with a volatile internal state while maintaining composure is cognitively demanding, causing suppressors to be distracted and inattentive during interpersonal interactions (Richards et al., 2003). Accordingly, frequent suppression use is linked to lower relationship satisfaction and less closeness (English et al., 2012). In romantic relationships, spouses' ability to optimally coregulate their own and their partners' emotion arousal levels is linked to improved relationship quality (Levenson et al., 2013). Suppression is thought to disrupt affective coregulation by making it harder for suppressors and their partners to read and react to each other's emotions. It remains unclear precisely how this translates to in vivo nonverbal behavior displayed when suppressing one's emotions or when interacting with a suppressing partner. In the present study, we examine whether suppression influences nonverbal behavior dynamics for suppressors and their partners in the context of conflict interactions among married couples. To address this issue, 130 married couples ( $N = 260$ ) were randomly assigned to an expressive suppression or control condition before engaging in a 10-minute conflict discussion. Behavioral coding targeted facial expression, body movement, and talking. Individuals in the suppression condition smiled less

and gestured less than those in the control condition. Suppressing husbands (but not wives) had more neutral expressions and fidgeted more often. Wives of suppressing husbands hid portions of their face (e.g., covered mouth with hand) and looked at their partner more often. Suppressors spoke less frequently and were interrupted less by their partners, but the total amount of time spent speaking did not differ between suppressors and those in the control condition. Findings indicate that suppression impacts not only the regulator's facial expression but also their body movements and conversational dynamics. Gender differences in the behavior of suppressors and their partners suggest that situations where husbands use suppression lead to greater differences in nonverbal behaviors between partners and therefore may be more damaging to communication.

### **Emotional Congruency in the Perception of Ambiguous Facial Expressions**

Dmitry Lyusin<sup>1</sup>, Yulia Kozhukhova<sup>2</sup>, Ekaterina Suchkova<sup>1</sup>

<sup>1</sup>Higher School of Economics, <sup>2</sup>Russian Academy of Sciences

Emotional congruency (EC) consists in the facilitation of the processing of positive stimuli while in a positive mood and of negative stimuli while in a negative mood. In the field of emotion perception, EC manifests in the better perception of emotions that are congruent with a perceiver's emotional state. EC effects are not robust and depend on a range of conditions. Our study aimed at exploring EC at the earlier and later stages of the perception of ambiguous facial expressions with the use of two different mood induction procedures.

We suggested that EC would be stronger when emotion perception is more driven by top-down processes and weaker when it is more influenced by bottom-up processes (stimulus-driven). On this basis, we hypothesized that EC would be weaker in perception of ambiguous expressions (1) when the duration of stimulus presentation is very short and a perceiver does not have enough time for stimulus processing; (2) when the duration of stimulus presentation is relatively long which allows a perceiver to use his/her emotional state as a cue for making judgment (in accordance with the affect-as-information theory).

#### **Experiment 1**

##### **Method**

Sixty-nine university students with various majors aged from 17 to 29 took part in the study.

To elicit happiness and sadness, two pretested animation movies were shown to participants. The set of 18 emotional scales was given after each movie for mood induction check. The order of happiness and sadness conditions was counterbalanced.

Main experimental tasks were administered after each mood induction. Eight pictures of male and female faces from the NimStim database with ambiguous expressions that could be perceived as being either happy or sad presented for 50, 100, 200, and 1000 ms followed by a pair of emotion terms (e.g., happiness-surprise or sadness-irritation). Participants were asked to choose a word that described the emotional expression in the best way. The task consisted of 32 trials. The dependent variable was calculated as a difference between the number of responses "sadness" and "happiness".

##### **Results**

RM ANOVA showed the significant main effect of emotional state but no significant interaction between emotional state and stimulus presentation duration.

Experiment 2 (N=58) aimed at replicating Experiment 1 using a different mood induction procedure, namely autobiographical memories, and yielded similar results.

**Conclusion.** EC was obtained using two various mood induction procedures. The results suggest that EC effect is robust across earlier and later stages of perception of ambiguous expressions.

## **Human Smiles Accomplish Three Tasks of Social Living**

Paula Niedenthal<sup>1</sup>, Adrienne Wood<sup>1</sup>, Magdalena Rychlowska<sup>2</sup>, Jared Martin<sup>1</sup>

<sup>1</sup>University of Wisconsin-Madison, <sup>2</sup>University of Cardiff

I present novel data from a variety of paradigms that provide support for a social-functional theory and classification of the human smile. Niedenthal and colleagues (2010) originally nominated three fundamental tasks of social living that distinct smiles might accomplish: rewarding the self and others, signaling approachability in order to foster cooperation, and communicating dominance in the negotiation of social hierarchies. The tasks are not mutually exclusive, nor are the smiles that help people accomplish them expected to be highly stereotyped or categorical. The social-functional approach acknowledges that facial expressions flexibly adapt to the demands of the social environment. Findings from four research programs support the proposed classification of smiles in that they identify 1) three distinct motivations for smiling, 2) three physically distinguishable smile gestures that communicate functionally unique meanings, and 3) theoretically coherent influences of the smiles on cortisol and cardiovascular measures of stress in a social stress test. First, we conducted a cross-cultural study in which respondents from nine countries rated the extent to which a number of social motives and internal feeling states cause a person to smile. Exploratory factor analysis revealed the best factor solution, with good agreement across cultures, to be three factors that corresponded to the Reward, Affiliative, and Dominance functions of smiles. Second, we used a reverse-correlation technique to build dynamic, animated prototypes for each smile based on perceivers' mental representations of the facial features that comprise each of the smiles. We then obtained ratings from separate participants confirming that the smiles conveyed their hypothesized social signal of reward, affiliation, and dominance. Finally, in a modified Trier Social Stress test, in which participants gave extemporaneous "speeches" while being evaluated by a judge, we showed that the three physically distinct smiles modulate social stress responses in a manner consistent with their presumed meaning. Of greatest interest, participants who saw Dominance smiles during their speech compared to Reward smiles as feedback exhibited greater physiological reactivity as assessed by hormone and cardiac measures, consistent with a higher stress response. When taken together, the findings provide strong evidence for three classes of smile that help humans accomplish the fundamental tasks of social living.

## **Disrupting Facial Expressions of Emotion Increases Risk Taking**

Stephanie Carpenter, Paula Niedenthal

University of Wisconsin-Madison

Emotional responses provide information about whether or not risk should be avoided. Existing research on fear and decision making suggests that when people feel fear, they take less risk (Lerner & Keltner, 2001). The present research examined the regulatory role of input from facial expressions in risky decision making. We observed in pilot testing that people display expressions of fear during a standard risky decision task. If the facial expressions inhibit risk taking in this task, then preventing spontaneous fear expressions should lead to greater risk taking. To test this hypothesis, we randomly assigned participants (N = 112) to an experimental or control condition. In the experimental condition, stiff and inflexible medical tape was attached to participants' foreheads to disrupt activation of the corrugator muscle (that controls movement of the forehead and eyebrow), and a mouth guard disrupted activation of the zygomaticus and levator muscles (that control movements of the mouth). In the control condition, tape did not disrupt corrugator activation and a mouth guard was not worn. All participants then performed a standard risky decision task known as the Balloon Analogue Risk Task (BART; Lejuez et al.,

2002), where a greater number of balloon pumps signals more risk taking. As predicted, disrupting the activation of facial muscles during the BART led to riskier decisions, i.e., more balloon pumps ( $M = 1048.71$ ,  $SD = 321.28$ ), as compared to control participants who did not have disrupted facial muscle activation ( $M = 922.31$ ,  $SD = 302.06$ ),  $t(110) = 2.14$ ,  $p = .034$ . This influence of disrupted facial expressions of emotion on decision behavior was found to only occur in the risky decision task where facial expressions of fear were observed, and not during hypothetical likelihood judgment tasks that did not elicit facial expressions. Our results suggest that facial expressions are critical to risk taking, and have implications for how emotions influence decision making.

## Saturday, July 29, 2017

8:30-10:10	Symposia 3			
	Perspectives on Affective Empathy  <i>Lindell Ballroom Salon A</i>	Naturalistic Assessments of Affective Evaluations and Emotion Regulation Strategy Preferences  <i>Lindell Ballroom Salon B</i>	The Power and Perils of Contempt: Advances in Understanding  <i>Lindell Ballroom Salon C</i>	
10:10-10:30	Coffee break, <i>Lindell Ballroom foyer</i>			
10:30-12:10	Paper Session 5			
	Social Exclusion  <i>Lindell Ballroom Salon A</i>	Facial Expression  <i>Lindell Ballroom Salon B</i>	Cultural Studies  <i>Lindell Ballroom Salon C</i>	Emotion and Communication  <i>Lindell Ballroom Salon D</i>
12:10-13:40	Break for lunch, <i>on one's own</i>			
13:40-14:40	Plenary Session—President's Symposium, "Crisis? What crisis? In the face of replication failures and methodological challenges, what is the role of empirical evidence for theories of emotion?", <i>Lindell Ballroom Salon C/D</i>			
14:40-15:40	Poster Session 2, <i>Khorassan Ballroom</i>			
15:40-16:00	Coffee break, <i>Lindell Ballroom foyer</i>			
16:00-17:30	Late-Breaking Research Session, <i>Lindell Ballroom Salon C/D</i>			
17:30-19:00	Closing reception with light dinner, <i>Khorassan Ballroom West</i>			

## Symposia 3: Perspectives on Affective Empathy

### Saturday, July 29, 8:30-10:10, Lindell Ballroom Salon A

#### The Self and Other in Empathy

Heidi Maibom

University of Cincinnati

Empathy is often described as feeling an emotion that is more appropriate to another person's situation than to our own. This suggests that the closer we get to replicating exactly what another person feels, the better our empathizing is. Our job is to transform ourselves, imaginatively, into the other and experience what she does in her situation. I shall argue that this is a mistake. Were we simply to take on another's experience as another, it would be foreign to us and could not be experienced in the intimate way the target of empathy experiences her own emotions. For her emotion to be felt by us in a way that resonates with us it must be a sort of compromise emotion between how we would respond in her situation and how she, as a matter of fact, responds. Without compromise, we are left with either projection or self-alienation. Like perspective taking, the point of empathy is not self-transformation. It is to feel something consonant with what another person feels, but in our own person, and to do so we must retain a great deal of ourselves. Harriett Beecher Stowe claims that what really aroused her empathy for slaves was the death of her favorite child. She wrote "at his dying bed and grave I learned what a poor slave mother must feel when a child is torn away from her." (Stowe 1852/2009) She learned this lesson not intellectually, but affectively by sharing in her grief. But part of the grief is her own, coming from her own experience with loss. Far from being

a limit to our empathy, our own experiences, felt personally in our bodies, are the elements out of which empathy for others blossoms. References: “(Almost) Everything You Ever Wanted to Know about Empathy,” in Heidi Maibom ed., *Empathy and Morality* (OUP 2014) Heidi Maibom ed., *The Routledge Handbook of Philosophy of Empathy*, in press.

### **Empathy and Bereavement**

Kathleen Higgins

University of Texas at Austin

Empathy, understood as involving one person’s imaginatively taking the perspective of another, requires that the empathizing person have some experiential basis that would make possible a sense of what the other person is going through. The bizarre phenomenology of bereavement makes it very difficult for those who have not experienced a comparable loss to take the perspective of those who are in the throes of it. Literary and other artistic works that deal with bereavement can afford some degree of vicarious experience for those lacking first-hand familiarity with this condition and thereby facilitate empathy. Having such first-hand experience, on the other hand, makes possible empathy of a more complete sort with others who have it, and empathizing with others in this situation can itself be a means of working through grief.

### **Priming the Mind to See Its Double: Testing a Chinese Version of Empathy across Cultures**

Louise Sundararajan

Rochester Psychiatric Center

This study explores a Chinese version of empathy based on the notion of gan-lei (responding according to categorical correspondence). The notion of gan-lei makes the following claims about empathy: a. The basis for empathy lies in ontological parity—perceiving the other as a being like oneself—such that empathy is likely to be engendered when the mind sees its double in the other. b. Humans have the capacity to greatly extend ontological parity, hence are capable of empathy for objects beyond the human kind. To test these hypotheses about empathy, we make the following predictions: • The capacity of the human mind to see its double wherever it looks can be primed. • Expanded empathy, as evidenced by an empathic relationship with nature, is associated with emotional wellbeing. The experiment involved priming two different mind-sets to images of mountain scenes, one for an asymmetrical, practical relationship between a person and nature and one for a symmetric, empathic relationship. Subjects were college students from three different Asian cultures. As predicted, the group primed for a symmetrical relationship with nature, relative to their counterpart primed for an asymmetrical relationship, scored significantly higher on outcome measures of emotional wellbeing. Results replicated an earlier study conducted in Iran (Sundararajan & Fatemi, 2016) that supported these predictions.

### **Empathy and the Paradox of Fiction**

Heleen Pott

Erasmus University, Rotterdam

A popular view today is that reading literature is one of the best ways to strengthen our imagination and expand our empathic capabilities. Consuming a lot of fiction would make us better, more empathic people. In this paper, I will focus on empathy induced by reading fiction, and ask some critical questions. How is it possible to have feelings for a character that you know does not exist outside the literary text? Is empathy with fictional characters a real emotion? What do we actually experience, when we feel moved by the tragic fate of Tolstoy’s

Anna Karenina? I will point out that fictive empathy differs considerably from empathy in the real world, and poses unresolved problems for current psychological theories of emotion. What's more, the so-called 'paradox of fiction' (Radford 1975) is not a real paradox.

### **Feelings for Pictures**

Jenefer Robinson

University of Cincinnati

Theorists of empathy often contrast emotional contagion, sometimes called low-level affective empathy, with high-level affective empathy, which requires taking the perspective of the other person or imagining being in the other person's situation. Pictures of people with happy- or sad-looking facial expressions and gestures may induce happiness or sadness in others who unconsciously mimic these expressions and gestures (a process known as emotional contagion). But great paintings, especially of the Romantic tradition, often invite empathy in viewers in a subtler way, by inviting us to take the emotional perspective of the artist in the picture. Thus Goya's emotional perspective in his Executions of the Third of May is one of pity for the helpless victims and indignation at the situation in which they find themselves, and viewers are encouraged to share this emotional perspective. Viewers' empathy is therefore primarily for the (apparent) artist's emotional perspective rather than simply for the figures depicted in the painting, and the best way to share that perspective is to feel with the emotions expressed by the artist in the picture. Hence expressive pictures do give us practice in taking the perspective of another person.

## **Symposia 3: Naturalistic Assessments of Affective Evaluations and Emotion Regulation Strategy Preferences**

Saturday, July 29, 8:30-10:10, Lindell Ballroom Salon B

### **Affect Evaluation in People with and without Internalizing Disorders**

Renee J. Thompson<sup>1</sup>, Katharina Kircanski<sup>2</sup>, Ian H. Gotlib<sup>2</sup>

<sup>1</sup>Washington University in St. Louis, <sup>2</sup>Stanford University

Affect evaluation—how people think they should feel—is an important component of emotional experience. For example, affect evaluations inform people about whether they should regulate their emotions by increasing or decreasing their positive or negative affect and can provide feedback to shape future experiences. We examined whether people with internalizing disorders evaluate their affective experiences more extremely than do people without psychiatric disorders. We assessed how women diagnosed with Major Depressive Disorder and/or Generalized Anxiety Disorder (clinical; n=51) and healthy controls (n=19) thought they should feel in the moment (“should” affect) and should have reacted to a recent event (“regretted” affect) during a typical week of their lives. We used experience sampling to assess participants' current, should, and regretted affect eight times a day for seven days. With respect to should affect, participants, independent of diagnostic status, reported that they should be feeling more positive affect and less negative affect. The clinical participants' reports were more extreme than were those of the healthy control participants, even after accounting for mean affect. With respect to regretted affect, clinical participants reported regretting their affective reactions more frequently than did control participants. On the other hand, when people

regretted their reactions, participants, independent of diagnostic status, typically thought they should have reacted with greater positive affect and less negative affect and generally reported wishing their reactions had been shorter in duration. These findings highlight how people with internalizing disorders are generally more extreme in the affect evaluations than are healthy controls. Future research should examine which factors contribute to the association between affect evaluation and internalizing disorders. For example, we posit that distress tolerance and emotional avoidance may help explain associations between affect evaluation and internalizing disorders.

### **Meta-Emotions, Emotional Awareness, and Depression Severity: An Experience Sampling Study**

Natasha Haradvala, Haijing Wu, Renee J. Thompson  
Washington University in St. Louis

Meta-emotions are defined as emotions that occur in response to other emotions (e.g., feeling guilty about feeling happy). Although preliminary evidence indicates that depression is associated with increased meta-emotions as measured via global self-report, much remains unknown about meta-emotions, including how regularly they are experienced and whether degree of emotional awareness constructs (including attention to and clarity of emotion) influence their occurrence. In the present study, we aim to establish norms for meta-emotional experiences in everyday life, determine whether higher levels of emotional awareness are associated with a greater likelihood of meta-emotional experiences, and examine whether negative emotions about negative emotions or negative-negative meta-emotional experiences (e.g., feeling guilty about feeling angry) are associated with depressive severity. We recruited an adult sample ( $n=79$ , ages:  $M=39.0$ ,  $SD=14.5$ ) to participate, including completing seven days of experience sampling and a self-report measure of depression severity. Participants were prompted randomly eight times per day to complete surveys. At each survey, they indicated the degree of attention to emotion and clarity of emotion they were currently experiencing, as well as whether and what kind of meta-emotional experience they were having ("I feel \_\_\_\_ about feeling \_\_\_\_"). Meta-emotional experiences were later coded as negative-negative, negative-positive, positive-positive or negative-negative. Approximately 53% of participants reported at least one meta-emotional experience, with negative-negative experiences most frequently reported. On average, meta-emotional experiences were reported about twice a week, or at 5.7% of surveys ( $SD=9.1\%$ ,  $range=0-41.0\%$ ). Using multi-level modeling, we found that, although attention to and clarity of emotion each individually predicted the likelihood of meta-emotional experiences, only attention to emotion contributed unique variance when both variables were taken into account simultaneously. We also found that higher depressive severity was associated with the likelihood of meta-emotional experiences and specifically with negative-negative, but not other subtypes, of meta-emotional experiences. This research sheds light on how frequently people experience meta-emotions as well as their association with intrapersonal factors (i.e., attention to emotion) and between-person factors (i.e., depression). Findings indicate that most adults experience meta-emotions in everyday life, and that their occurrence is more likely when individuals are paying attention to their emotions. Negative-negative experiences, in particular, are associated with depressive severity. Although these findings would need to be replicated in an MDD sample, they suggest that leading treatments for depression such as cognitive behavior therapy may benefit from emphasizing acceptance of negative emotions.

### **Linking Hedonic and Instrumental Emotion Regulation Goals to Strategy Preferences**

Tammy English, Lameese Eldesouky



Washington University in St. Louis

Individuals have a wide array of strategies to choose from when they want to regulate their emotions. Recent experimental work has begun to elucidate contextual factors (e.g., emotional intensity) that impact emotion regulation strategy selection. One important factor that has yet to be explored is the impact of emotion regulation goals, or the reasons why people are attempting to regulate their emotions. This presentation focuses on how hedonic and instrumental emotion regulation goal pursuit can influence strategy preferences. In the first study, undergraduates ( $N = 136$ ) described their emotion regulation efforts during the high point and low point of each day for one week. We examined how strategy use varied based on daily goals and the social context. As expected, suppression was used more during regulation events where people were pursuing instrumental goals, especially more interpersonal ones (e.g., avoid conflict), when engaged in contra-hedonic regulation (e.g., dampening positive emotion), and when others were present. In contrast, distraction and reappraisal were used more when regulating for hedonic reasons (e.g., to feel better) and when engaged in pro-hedonic regulation (e.g., dampening negative emotion). In the second study, we took an experimental approach to better understand the effect of goals on strategy selection. Undergraduate participants ( $N = 143$ ) were instructed to pursue either a pro-hedonic goal or an impression management goal during a social interaction with an unacquainted peer. Results showed that reappraisal was only preferred over suppression when pursuing a pro-hedonic goal. Supporting a functionalist approach, findings from these studies suggest emotion regulation strategy preferences may depend on a strategy's utility to reach one's goals. When regulating for hedonic reasons, individuals are more likely to select a strategy that effectively changes emotional experience and when regulating for social reasons strategies that target expression are preferred. Emotion regulation use and effectiveness in daily life in youth at high and low familial risk for depression

### **Emotion Regulation Use and Effectiveness in Daily Life in Youth at High and Low Familial Risk for Depression**

Lauren M. Bylsma, Jennifer S. Silk, Cecile D. Ladouceur  
University of Pittsburgh

Youth with depression symptoms or who are at familial risk for depression have been shown to have more limited repertoires of emotion regulation (ER) strategies, a greater use of maladaptive relative to adaptive strategies, and have less effective strategy use based on laboratory studies and retrospective self report. However, little is known about ER strategy use and effectiveness in daily life of youth at risk for depression. Youth participants were 29 high-risk and 31 low-risk adolescents (9-13yo, 52% female) who completed a 10-day experience sampling protocol (5 weekdays and 4 weekend days) using a smartphone app, with up to four weekday reports (after school) and 9 weekend-day reports. Youth reported on their most negative emotional event since the last report, including their appraisal of the negative event, as well as a checklist of ER strategies and related behaviors that they utilized and their self-reported effectiveness. Surprisingly, high and low risk youth did not differ on their overall frequency of reported use of the ER strategies of reappraisal, distraction, suppression, avoidance, problem solving, or social support seeking. However, overall, the high-risk group reported experiencing less benefit following ER strategy use, even after controlling for their appraisal of the negative event ( $ps < .01$ ). The high-risk group did report a greater frequency of other maladaptive coping behaviors, including higher use of rumination, worry and self-blame following negative events ( $ps < .01$ ). Results suggest that high-risk youth show less ability to effectively regulate their negative emotions in daily life and greater use of maladaptive coping responses to daily life negative events.

# **Symposia 3: The Power and Perils of Contempt: Advances in Understanding**

Saturday, July 29, 8:30-10:10, Lindell Ballroom Salon C

## **Dispositional Contempt: Emerging Insights into the Contempt-Prone Person**

Roberta A. Schriber<sup>1</sup>, Joanne M. Chung<sup>2</sup>, Katherine S. Sorensen<sup>1</sup>, Jonas G. Miller<sup>1</sup>, Richard W. Robins<sup>1</sup>

<sup>1</sup>University of California, Davis, <sup>2</sup>Tilburg University

Contempt is a powerful emotion that involves looking down on and distancing and/or derogating others who violate important standards. Although some people seem to be more contemptuous than others – more likely to feel and express contempt – only now has research begun to examine contempt at the level of personality. What characterizes the contempt-prone person, and what does this tell us about contempt? Across several studies using self-report and emotion elicitation in student and MTurk samples (Ns = 165 to 1,368), we demonstrate that our contemptuous reactions can be conceptualized and measured as a stable individual-difference variable with a range of theoretically predicted correlates. First, we introduce the Dispositional Contempt Scale, highlighting how steps in its development inform theoretical models of contempt. We then unpack the dynamics of dispositional contempt in terms of its (1) nomological network, (2) personality and behavioral correlates, and (3) implications for relationship functioning. We found that dispositional contempt was distinguished from tendencies toward similar emotions – envy, anger, and hubristic pride – and was most unlike compassion-proneness from among the positive emotion dispositions. Suggesting a link between contempt-proneness and inflexible thinking, dispositional contempt was negatively related to mindfulness and cognitive reappraisal. At the broader personality level, more contemptuous individuals tended to be cold and “superior,” showing higher levels of narcissism, other-oriented perfectionism, and various antisocial tendencies (e.g., psychopathy, racism). However, they were also self-deprecating and emotionally fragile, reporting lower self-esteem, higher attachment insecurity, and a greater sense that others impose perfectionistic standards on them. Dispositional contempt predicted individuals’ contemptuous reactions to eliciting film clips, especially when targets showed low competence/power, at which point compassion was elicited in the less contempt-prone. Finally, although dispositional contempt was generally associated with poor relationship functioning, in romantic relationships greater dispositional contempt, as perceived in one’s partner not oneself, predicted one’s lower commitment and satisfaction. Taken together, results give a first look at the contempt-prone person. We discuss how examining contempt as a disposition informs our understanding of contempt as an emotion.

## **Psychological Characteristics and Related Variables Associated with Higher Levels of Everyday Contempt**

Paul E. Jose<sup>1</sup>, Ira J. Roseman<sup>2</sup>, Rebecca Bloore<sup>1</sup>

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Situation-focused anger and disgust (Hutcherson & Gross, 2011; Rozin et al., 1999) are correlated with felt contempt, but systematic examination of possibly related personality traits and sequelae of frequently experienced contempt is just beginning. In the present study we explored whether the Big Five and other psychological traits, as well as a range of potential psychological correlates and outcome variables might be significantly related to an individual difference measure of contempt. Method: 248 university students completed a new self-report measure of emotion: the Emotions in Life scale (EIL; Jose, Roseman, & Bloore, 2015). The EIL

asks respondents how often they (a) actually experience, (b) try to experience, and (c) try to avoid experiencing each of 25 emotions and mood states. Likert scale responses range from Never[1] to All of the time[5]. Participants also completed measures of the aforementioned traits and outcomes. Results: Here we focus on results related to the frequency of actually experiencing contempt. On average, respondents reported a somewhat low frequency:  $M = 1.95$  (corresponding to ‘occasionally’),  $SD = .95$ . Still, roughly 10% endorsed the mid-point of the scale or higher, so more than a few reported experiencing contempt on a somewhat frequent basis. Contempt frequency was negatively correlated with Big Five agreeableness ( $r = -.12$ ,  $p = .07$ ), and positively related to extraversion ( $r = .15$ ) and openness ( $r = .13$ ),  $ps < .05$ . It was also negatively correlated with compassion ( $r = -.19$ ,  $p < .01$ ) and grit ( $r = -.14$ ,  $p < .05$ ), and positively related to aggression ( $r = .21$ ,  $p < .001$ ), maladaptive coping ( $r = .16$ ,  $p < .05$ ); marijuana use ( $r = .17$ ,  $p < .01$ ), tobacco use ( $r = .14$ ,  $p < .05$ ), and fear of happiness ( $r = .13$ ,  $p < .05$ ). Multiple regression identified one strong negative association (compassion) and four strong positive associations (extraversion, openness, getting into fights, and marijuana smoking). Bootstrapped mediation analyses showed the influence of agreeableness, openness, and extraversion on compassion, fighting, and marijuana smoking was in each case mediated by experienced contempt. Discussion: Treating contempt as an individual difference variable, we found, as expected, that frequent experience of contempt was generally associated with maladaptive constructs, such as lack of compassion and fighting others. However, extraversion and openness were also associated with feeling more contempt. Potential explanations and implications for our understanding of the antecedents and consequences of experiencing contempt are discussed.

### **“Little Marco”, “Lyn’ Ted”, and “Crooked Hillary”: The Power of Contempt in American Electoral Politics and Beyond**

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Distinctive causes, responses, and effects of contempt make it a powerful political emotion. Appraisal determinants or correlates of contempt—bad character and incompetence (Fischer & Roseman, 2007; Hutcherson & Gross, 2011)—affect central dimensions on which candidates are evaluated (Todorov et al., 2005). Insofar as actions of contempt include communicating derogation to third parties (Romani, Grappi, & Bagozzi, 2013), engendering contempt can have ramifying effects upon its target’s reputation and support among a wider public. If people feeling contempt tend to terminate relations with its targets (Fischer & Roseman, 2007; Gottman & Levenson, 1999), the consequences for a candidate and a political party may be long-lasting. And if by affirming social norms defined in contrast to its targets, shared contempt can strengthen bonds of solidarity and community cohesion (Erikson, 1966), contempt can help form and hold together political alliances and movements. So is contempt observable in politics, and does it have these hypothesized effects? Analyzing data from a representative national sample ( $N=486$ ) in the 1995 American National Election Studies pilot, Johnston, Roseman, and Katz (2014) found voters’ felt contempt mediated the relationship between perceptions of Bill Clinton’s leadership and vote-related thermometer favorability to Clinton. In a laboratory study of 134 undergraduates watching portions of the 2008 presidential debates, Roseman et al. (2013) found real-time ratings of felt contempt mediated the relationship between perceptions of Barack Obama’s undesirable qualities and favorability toward Obama. In an online panel study of voting-age adults in two 2014 U.S. Senate races ( $N=767$ ), Redlawsk, Roseman, Mattes, and Katz (2016) found contempt was the negative emotion perceived as expressed most in negative campaign ads and candidate communications. Moreover, voters’ felt contempt—not anger or fear—was the negative emotion

that most strongly predicted voting against 3 of the 4 candidates in those elections. Most recently, in an mTurk study of adults during the 2016 presidential campaign (N=335), multiple regressions showed that out of 6 emotions elicited by each of the two major party candidates, contempt regarding Hillary Clinton was the only negative emotion significantly predicting intention to vote for Trump, and contempt regarding Trump was the only negative emotion significantly predicting intention to vote for Clinton (Redlawsk, Roseman, Mattes, & Katz, 2017). In light of contempt's positive and negative effects (e.g., in-group solidarity, out-group exclusion), we discuss research exploring what might be done if one becomes the target of contempt, and/or experiences contempt for others (Roseman, 2017).

### **A Multi-Level Investigation of Attitudes toward Violent and Non-Violent Political Action: Contempt Distinguishes Violence-Supporters from Violence-Rejecters**

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The threat of “home-grown terrorism” has resulted in increasing attempts to understand the factors that predict attitudes toward such actions among a potential support base. Our prior research (Tausch et al., 2011) has built on theoretical models of collective action to shed light on the psychological predictors of support for violence. While collective action research has typically emphasized the role of anger in response to an injustice in motivating action, supporting research has focused entirely on normative actions such as participating in demonstrations. Extending this work, we predicted and found that contempt, rather than anger, predicts support for non-normative forms of collective action, such as violence, sabotage, or “terrorism”. This is because contempt, unlike anger, entails psychological distancing and a lack of reconciliatory intentions (Fischer & Roseman, 2007). The aim of the present research was to further extend this work by distinguishing subgroups of action support (rather than treating attitudes toward a variety of actions as independent variables) and by examining both individual and contextual predictors of attitudes toward violent and non-violent political action. To this end we employed multi-level latent class analysis to identify subtypes of action support at both the individual and context level. This was done in the context of British Muslims’ responses to British foreign policy and respondents were British Muslims (N=670) drawn randomly from 66 neighbourhoods. The analysis identified three classes at the individual level (people supporting neither violent nor non-violent action, people supporting non-violent action and rejecting violence, and people supporting both) and two context-level classes (areas where a majority of residents supports neither form of action and areas where a majority supports either non-violent action only or both). Analysis of individual-level predictors provides further support for our model emphasizing the importance of (political) contempt in predicting support for non-normative collective actions by demonstrating that the expression of contempt toward the government is a key factor that distinguishes the violence-supporting subgroup from people who reject violence. Analysis of contextual predictors indicates that (counter to lay views) neither segregation nor deprivation but normative beliefs predict class membership. Implications of these findings for current counter-terrorism practices in the UK are discussed.

#### **Discussant**

Agneta Fischer  
University of Amsterdam

## **Paper Session 5: Social Exclusion**

Saturday, July 29, 10:30-12:10, Lindell Ballroom Salon A

### **Feeling Excluded? The Emotional Harms of Social Exclusion**

Kate Schmidt

Washington University in St. Louis

As recent political events have shown, social dynamics are often shaped by patterns of inclusion and exclusion. The perception that one is being excluded has the power to shape not only an individual's subsequent behavior, but also has both short and long term emotional impacts. This presentation explores the way social exclusion leads to a unique type of emotional harm for an individual. I draw on both philosophic and psychological research to more clearly articulate the way an individual suffers a harm. This account also has implications for the way we can all act to avoid situations of social exclusion and to mitigate the resulting emotional damage.

Psychologists have explored the different specific effects of social exclusion. Individuals seem to be highly attuned to exclusion, as Gonsalkorale and Williams (2007) show that ostracism results in strong emotional consequences even when coming from sources that are not seen as important. These emotional consequences are both proximal (such as negative mood), and more wide reaching (such as sense of control). Social exclusion can lead not only to feelings of anger and sadness, but also to more anti-social behavior (Chow, 2008).

Philosophic arguments can help show how social exclusion can be understood as an ethical wrong. Individuals work together within moral and epistemic communities, and exclusion is a violation of their agency. Fricker (2007) has argued that when individuals fail to have their word taken seriously by others, it constitutes a type of injustice. Hookway (2010) similarly argues that it is a specific sort of harm to prevent an individual from participating in shared social epistemic activities. These account help to explain and justify the emotional consequences documented in the psychology research. On these philosophic accounts, an individual's emotional response stems not merely from an inconvenience, but from correctly perceiving a distinct type of moral harm.

### **Is Emotional Behavior Stimulus-Driven or Goal-Directed?**

Maja Fischer, Agnes Moors, Peter Kuppens, Batja Mesquita  
KU Leuven

Previous research has examined the influence of rejection on emotional behavior by typically asking rejected people to choose between prosocial and aggressive behavior (Williams, 2007). Results suggest that rejected people sometimes behave aggressively and sometimes prosocially, but it remains unclear which factors differentiate between these two behaviors. Based on a recently developed goal-directed account of emotional behavior (Moors, in press), we propose that most emotional behaviors stem from a goal-directed process in which the expected utilities of different behavioral options are evaluated and the behavioral option with the highest expected utility is chosen. The expected utility of a behavioral option is a function of the values of the outcomes of the behavior and the likelihood that the behavior will indeed lead to these outcomes. Applied to the case of rejection, we argue that rejection produces discrepancies with various goals (e.g., connectedness, status, social norms, and control) and we predict that people will behave prosocially if prosocial behavior has a high expected utility to reduce these discrepancies. We tested this goal-directed account in an experiment in which participants were rejected and we manipulated the relative expected utilities of the behavioral options. First, participants (N=178) were rejected in a cyberball game (a computerized game in which 2 other participants stopped throwing a ball at the participant). Next, participants were

either assigned to a condition in which they could choose to send aggressive or prosocial messages to the other players or to a condition in which they could choose to send aggressive, prosocial, or moralizing messages. We assumed that the relative expected utility of aggression would be higher in the first than in the second condition, and therefore hypothesized that participants would significantly more often choose to behave aggressively in the first than the second condition. The results confirmed our hypothesis, supporting the idea that goal-directed processes are involved in emotional behavior. In addition, it suggests that researchers should not too quickly conclude that certain types of stimuli lead to certain types of behavior when only a limited number of behavioral options are presented in the experimental situation.

### **Dealing with Others' Emotions: The Effects of a Listener's Social Anxiety Level on Mimicry, Contagion and Experiences of the Interaction Partner**

Corine Dijk, Agneta H. Fischer, Gerben A. van Kleef  
University of Amsterdam

An important function of emotions is to coordinate an individual's social interactions. Individuals with social anxiety, however, have emotional problems in interpersonal settings, such as heightened negative affect. This may explain why socially anxious individuals experience interpersonal difficulties. We tested if socially anxious individuals have disturbed emotional reactions when listening to another person telling an emotional story, such as less emotional contagion and less facial mimicry. Furthermore, we examined the effect of a listeners' socially-anxiety level on the experiences of the narrator (i.e., his/her emotions, if he/she felt understood and empathized with the listener, his/her level of self-disclosure and judgment of the other and the conversation).

Participants were coupled in 40 dyads in which the narrators were always without social anxiety and the listeners varied in their level of social anxiety from not at all to severe. Narrators were asked to talk about a happy and a sad event. The expressions of both the narrator and the listener were coded with emotion recognition software. Before and after both conversations, we asked participants about their emotions and experiences. To measure self-disclosure, we counted the number of emotional words that the narrator used. At the end of the two conversations we asked the participants to judge the other's likeability.

Although the social-anxiety level of the listener was related to the experience of more negative emotions and less smiling in general, it did not affect the amount of emotional contagion or mimicry of the emotions of the narrator. Listeners' socially-anxiety level did, however, influence the narrators' self-disclosure; the more socially anxious the listeners were, the more emotional words the narrators used. Narrators also empathized less with more anxious listeners, but this could not explain their use of more emotional words. Listeners' socially-anxiety level did not appear to affect other aspects of the conversation or the judgment they received.

The current findings corroborate the notion that social anxiety is related to an excess of negative affect and less smiling. Although this did not affect the judgment of the socially anxious person, it had an influence on the interaction partner's ability to empathize with the anxious individual. The study indicates that it is important to not only study the effects of social anxiety on the person experiencing it, but also the effect it has on others.

### **Interoception as Protection: A Help Against Social Exclusion and Memory Bias towards High-Calorie Food**

Giorgia Zamariola, Olivier Luminet, Olivier Corneille  
Université Catholique de Louvain  
Introduction

Modern societies characterized by social and economic inequalities are likely to induce feelings of social exclusions in their population. Negative emotions arising from the experience of ostracism may lead individuals to implement dysfunctional emotion regulation strategies, such as seeking for comfort food. Consistent with this idea, several recent studies demonstrated preference for high-calorie food under conditions of social exclusion. More recently, however, Pollatos and colleagues (2015) revealed a less negative impact of social exclusion on mood measures among participants scoring higher in interoceptive accuracy (IAcc). No prior study, however, examined whether social exclusion also influences visual memory for food and whether IAcc may play a role in the latter relation.

#### Aim of the study

The first goal of the study was to test whether social exclusion increased the recall of high-calorie food. We also predicted that the negative emotional impact of social exclusion and the memory bias towards high-calorie food would be smaller among high IAcc participants.

#### Methods

Participants (N = 99) performed the heartbeat perception task to measure IAcc. Afterwards, they completed the Cyberball paradigm where they were randomly assigned to a social inclusion or exclusion condition. Then, they performed a visual memory task in which they were asked to recall pictures of briefly presented high- and low-calorie food and neutral objects.

#### Results

A main effect of condition was not revealed, while IAcc was found as a significant moderator of social exclusion: participants with high IAcc reported less negative mood after being excluded. Participants showed a general memory bias for high-calorie food, but the bias was decreased among individuals with high IAcc, who displayed a lower memory bias towards high-fat – comfort – food.

#### Discussion

To the best of our knowledge, for the first time the link between social exclusion and earlier cognitive processes (i.e., visual memory for food) has been investigated. Most importantly, the role of interoception in emotion regulation was confirmed, providing additional evidence supporting the view that higher IAcc is related to better self-regulation and protects against negative experiences, such as ostracism. These findings revealed that IAcc might also serve as a successful coping strategy, able to decrease the accessibility in memory of potentially 'harmful' stimuli, e.g., high-calorie food. We may speculate that less accessibility would be equal to less attraction and choice of this kind of food.

## **Social Exclusion Triggers Adaptive Reciprocation of Emotional Expressions**

Michael Philipp

Massey University

Social exclusion is an unpleasant and threatening experience that motivates people to restore social connections (Baumeister & Leary, 1995). Enhanced sensitivity to the social intent of others may increase the chance of adaptively fulfilling lost belongingness needs with trustworthy partners and decrease the chance of further exploitation. Research suggests that excluded individuals are better able to detect genuine emotional expressions (e.g., Bernstein et al., 2010). However, it is unknown whether excluded perceivers adaptively reciprocate emotional intent they perceive in others.

Our study manipulated feelings of exclusion in a lab environment. Participants viewed a series of enjoyment-evoked smiles and posed smiles. Reciprocal smiling was measured using facial electromyography. Following each trial, participants categorized the smile as genuine or posed.

Excluded participants better discriminated between genuine and posed smiles, and they exhibited more mouth smiling (i.e., zygomaticus major activity) in response to genuine smiles. Eye-crinkling (i.e., orbicularis oculi activity) did not differ by exclusion condition. These findings are consistent with prior research that has demonstrated that excluded people are sensitive to the genuineness of others' emotional displays (e.g., Bernstein et al., 2010), but also raise questions as to a plausible mechanism of effect.

Conceiving of this effect as "enhanced mimicry" is problematic since excluded participants did not exaggerate eye-crinkling to the genuine smiles that display more eye-crinkling. We conclude by discussing the results of some pre-registered followup studies and propose a generalised "suspicion of motives" framework (akin to Kunstman et al., 2016) for explaining why social exclusion may enhance the detection of others' emotional intent.

## **Paper Session 5: Facial Expression**

**Saturday, July 29, 10:30-12:10, Lindell Ballroom Salon B**

### **Putting 'Context' in Context: The Effects of Body Posture and Emotion Scene on Adult Categorization of Disgust Facial Expressions**

Peter Reschke, Eric Walle, Jennifer Knothe, Lukas Lopez  
University of California, Merced

Research suggests that affective face perception is influenced by contextual elements (Aviezer et al., 2008). However, such investigations often conflate body posture and emotion scene, making it unclear whether it is the posture, scene, or their combination that influence categorization of facial expressions. This investigation examined (1) the effect of isolated emotion posture on disgust face perception, and (2) the added effect of emotion scene on these perceptual ratings.

Participants were randomly assigned to 1 of 2 conditions. In condition 1, 24 participants (11 female) viewed images of disgust facial expressions posed by 6 actors (3 female, 3 male; Tottenham et al., 2009) that were photoshopped onto emotion postures depicting joy, sadness, fear, anger, and disgust. In Condition 2, 22 participants (8 female) rated the same face-posture images photoshopped into emotion scenes matching the emotion posture. All participants viewed images in a random order and were asked to categorize the actor's facial expression of emotion (joy, sadness, fear, anger, or disgust).

Participants' ratings matching the emotion context were analyzed using a generalized mixed linear model with Emotion as a within-subjects factor and Condition as a between-subjects factor.

Consistent with previous research, affective face perception was significantly influenced by context,  $F(9, 1370) = 123.76$ ,  $p < .001$ . Specifically, participant ratings matched the context most often for Disgust (75%) and Anger contexts (74%), and less so for contexts of Fear (50%), Sadness (44%), and Joy (9%). A trending main effect of condition,  $F(1, 1370) = 2.78$ ,  $p = .096$ , suggested that categorization matching the context occurred more often for postures embedded in scenes (54%) than for posture alone (46%). Finally, a significant Emotion x Condition interaction,  $F(4, 1370) = 2.60$ ,  $p = .035$ , indicated that combining emotion scene with posture resulted in a significant increase of contextual influence for sadness (52% from 35%,  $p = .016$ ) and fear contexts (57% from 42%,  $p = .031$ ), a marginal increase for joy contexts (14% from 3%,  $p = .083$ ), but no change for disgust and anger contexts ( $ps > .90$ ).



This study demonstrates that emotion posture can exert a contextual effect on the perception of disgust facial expressions, but only for anger postures. Additionally, and, distinct from prior research (see Aviezer et al., 2008), embedding emotion postures in emotion scenes extends this effect to sadness and fear contexts. Consideration of the findings for the perception of other facial expressions of emotion will be discussed.

### **Effectiveness of a New Training for Multimodal Emotion Recognition Ability**

Katja Schlegel

University of Berne

The ability to recognize other people's emotions from their face, voice, and body is crucial to successful functioning in private and professional life. Although research on ERA has had a long tradition in psychology, the question whether this ability can be improved in healthy adults through training remains largely unstudied. This contribution presents four studies that examine the effectiveness of a new computer-based and self-administered ERA training program. This training features multimodal emotional expressions (i.e., video clips with sound) of 14 different emotions. It consists of 1) an instruction part in which participants learn which nonverbal cues expressed by the face, voice, and body are associated with each emotion, and watch example videos for each emotion; and 2) a practice part in which participants are asked to identify which emotion is being expressed in a series of other video clips and receive feedback on their answers.

Two studies (Study 1 : N=103 and Study 2 : N=168) were conducted with young adults (undergraduate students), one study was conducted online on Amazon's Mechanical Turk (Study 3 : N=161), and one study was conducted with older adults from the community (Study 4 : N=98, mean age=70). All participants were randomly assigned to either the ERA training condition or one of three different control conditions. All participants also completed various standard ERA tests after the respective intervention. Results showed that in young adults and online community participants (studies 1, 2, and 3) facial, vocal, and multimodal ERA was significantly higher in the training groups than in the control conditions. This effect was still significant four weeks after the training. However, the training was not effective in improving ERA in older adults (study 4). In Study 2 we also investigated whether ERA training affected individuals' behaviors and outcomes in a dyadic negotiation task. Unacquainted pairs of participants that had both completed either the ERA training or the control task engaged in an employee-recruiter negotiation and rated their own and their partner's competitiveness. Results showed that dyads that had completed the ERA training reached more egalitarian gains and rated their own and their partner's behavior during the negotiation as less competitive.

Taken together, these studies provide strong evidence for the effectiveness of the new ERA training in improving multimodal ERA and interpersonal outcomes in younger and middle-aged adults, but suggest that a different training method might be needed for older adults.

### **Emotion Recognition and Ageing: Comparing a Sorting Task and a Labeling Task**

Mandy Visser, Jeeseun Kim, Chris Davis

Western Sydney University

This research examined how ageing affects the way people categorize emotional expressions. Studies have shown that seniors are less accurate in recognizing emotions compared to young adults. It is argued this decline in emotion recognition ability is due to cognitive impairments that often occur with ageing. Typically the task used for studying emotion recognition requires participants to classify photographs of facial expressions using a set of labels (e.g., "angry", "happy"). Although this task appears simple it not only requires participants to recognize certain features belonging to an emotional expression, but also requires them to

map these onto pre-specified emotion categories (the given labels). This means that age differences found in this task might be due to problems related to one or both of these abilities. One way of examining this is to determine how older adults perform on a task that allows them to sort emotional expressions into groups that do not have pre-specified labels. To do this, we used a traditional labeling task and a sorting task in which participants were asked to group emotional expressions without labeling them.

Twenty young adults (mean age = 23.8, SD = 4.27) and 20 seniors (mean age = 71.9, SD = 6.93) first completed the sorting task and then the labeling task, using two different decks of emotional expression cards. These decks contained 64 color photographs that showed eight emotional expressions (anger, disgust, fear, happiness, sadness, surprise, contempt, and neutral), presented in two angles (frontal or left sided) of two males and two female models (selected from the Radboud Faces Database). For the sorting task, participants were instructed to sort the images into eight groups, in terms of emotional categories. It was not specified what emotions were displayed on the cards, or into which categories participants had to group them. In the labeling task, eight labels were laid out, each representing one of the original emotional categories. Participants had to sort all cards under one of the labels, one by one.

In the labeling task, seniors produced more errors than young adults for the expressions of contempt, anger, sadness and fear. In the sorting task, seniors grouped a greater number of distinctive expressions together, compared to young adults. This indicates that the problems seniors have in emotion recognition are not solely due to mapping facial features onto labels; they also have problems in knowing which features belong together and which do not.

### **Person Perception: The Role of Dynamic Changes in Facial Expressions**

Xia Fang, Gerben Van Kleef, Disa Sauter  
University of Amsterdam

Dynamic changes in facial expressions of emotion are a valuable source of information in social interactions. As the expressive behaviour of a person changes, the inferences that observers draw may also change, including judgments about the expresser's trait characteristics. Across three studies we examined how observers judge others' personality traits based on changes in their emotional facial expressions from one emotion to another. We measured two dimensions of personality traits in each study, with dimensions taken from three prominent person perception models. Dominance and affiliation were measured in Study 1, competence and warmth in Study 2, and dominance and trustworthiness in Study 3. A strong recency effect was found across all trait judgments, that is, the last displayed emotion in the dynamic expressions had a strong impact on trait ratings. The information of anchor emotions was integrated to a lesser degree and only for valence-related personality trait ratings (i.e., affiliation, warmth and trustworthiness), but not for judgments of dominance and competence. Taken together, these findings suggest that the last displayed emotion in dynamic expressions dominates person perception.

## **Paper Session 5: Cultural Studies**

Saturday, July 29, 10:30-12:10, Lindell Ballroom Salon C

### **“Educators” vs. “Revealers”. Can Emotions Explain the Illiberal Shift in Contemporary Democracies?**

Karolina Wigura

University of Warsaw, University of Oxford

Emotions are often referred to when it comes to contemporary politics. A broader emotional turn in politics is stated – a phenomenon called the “Revenge of Passions” by Pierre Hassner. Strategies based on fear and disgust are used by politicians in contemporary democracies in order to mobilize their electorates, like during the refugee crisis in countries like the US, Britain, Poland, and Hungary.

Emotions, however, have been an important component of political life since the beginning of the human history. If this is so, what actually is the difference between the kind of emotionality, which rules in the politics nowadays, and the one, which was common before illiberalism started to gain such popularity?

This paper examines the hypothesis that emotions can be used as a scarlet dye, to locate also other changes in politics, including the recent illiberal turn. It does so by combining elements of comparative politics with political theory and presenting a novel theoretical framework, constructed around the notions of emotional actors in politics and emotional regimes.

Emotional political actors (political parties, leaders etc.) are interested in particular, mobilizing emotional practices. They treat emotions instrumentally in order to construct a vision of the world which legitimizes their effort to gain and hold power. The two main types of emotional actors are: “educators”, who claim that the citizens’ negative emotions must be educated, in order to make the people more tolerant, less aggressive towards each other etc.; “revealers”, who claim that it is better to “reveal” negative emotions felt by citizens towards strangers, for example, because this will have a cathartic impact on the society.

Emotional regimes refer to dominant patterns of affective politics, which exist in a given society at a given moment. They are revealed in public debate, political decisions, etc. There are three main types of affective regimes: disrupted, when there are at least two strong affective actors who disagree as for the way affects are mobilized; unified, when there is a consensus as for the emotional strategies; and irrelevant, when politics are based more on reason than on emotions.

Whilst emotional practices are nihil novi in politics, the deepening polarization between the two kinds of emotional practices in politics is. The last part of the talk is devoted to showing the advantages and disadvantages of both types of emotional actors’ strategies and showing how these work on concrete examples.

### **How Salient Cultural Concerns Shape Emotions: A Behavioral Coding Study on Biculturals’ Emotional Frame Switching**

Jozefien De Leersnyder, Batja Mesquita

University of Leuven

Different cultural contexts are characterized by different patterns of emotional experience; yet, the mechanism between this intertwining of culture and emotion is poorly understood. In the current study, we investigated whether systematic cultural variation in the salience of concerns can account for cultural variation in emotions. Cross-cultural research has established that autonomy concerns are more central in Western, independent cultural contexts like Belgium whereas community concerns are more salient in non-Western, interdependent cultures like Turkey (e.g., Kağitçibaşı, 1996). Moreover, there is some tentative evidence that violations of autonomy and community concerns are associated with different emotions (autonomy-anger; community-contempt; Rozin, Lowery, Imada, & Haidt, 1999). In the current research, we made use of this knowledge to investigate whether Turkish Belgian biculturals would experience and express different patterns of emotion depending on the context of interaction.

We designed a social experiment in which Turkish Belgian biculturals (N = 57) interacted with a confederate in either a Belgian or a Turkish context. The confederates enacted a script to create one situation that straightforwardly violated autonomy concerns, one situation that violated community concerns, and three situations that could be interpreted as a violation of autonomy, but equally well as a violation of community. In a next step, we coded biculturals' emotional expressions for anger and contempt according to the SPAFF coding scheme (Gottman, McCoy, Coan & Collier, 1996).

As expected, we found that clear-cut violations of autonomy were associated with anger rather than contempt, whereas clear-cut violations of community were associated with contempt rather than anger. However, more importantly, we found that when violations were ambiguous in terms of which concern was at stake, biculturals showed emotional patterns that fitted the context of interaction: more anger than contempt when they interacted in a Belgian autonomy promoting context, but equal anger and contempt when they interacted in a Turkish community promoting context. These findings on biculturals' 'emotional frame switching' can be interpreted as first experimental evidence for the idea that the salience of cultural concerns shapes emotion.

### **A Comparative Study of Embarrassment between Americans and Koreans from the Ethno-Linguistic Perspective**

Jihoon Lee

Lesley University

The present study, rare among research studies, aims to examine the cultural variations of embarrassment, admitting that embarrassment is largely universal. The distinction between individualistic culture and collectivistic culture is considered in comparing how embarrassment is manifested differently between Americans and Koreans. It is assumed that in situations where different cultural norms and the concepts of the self are at play, their degree of embarrassment would differ, thus producing different social behaviors.

Thirty-eight American females and thirty-eight Korean females in their late twenties to early forties participated in the study through an online survey. The survey involved five questions consisting of four open-ended questions and one multiple-choice question. The questions asked how people typify embarrassment, their actual embarrassing episodes, their reaction to entering a class late in terms of the degree of embarrassment and their strategy to deal with it, and their verbal expressions as well as gestures when telling an embarrassing story to close people. Quantitative method was mainly employed using SPSS. Participants' narrative data from open-ended questions were coded into Miller's (1996) categories of embarrassment, such as individual behavior, interactive behavior, audience provocation, and bystander behavior.

The result revealed that there was difference between the global conceptions and real events as previously found (Parrot & Smith, as cited in Miller 1996) regardless of cultures. By cultural groups, there was a statistically significant difference on the source of actual embarrassment between the American group and the Korean group. A sharp contrast between Americans and Koreans was found within bystander behavior, in which one is embarrassed just by observing another person being embarrassed who may be either an acquaintance (team progression) or not (empathic embarrassment). The author argues that the differences between individualistic and collectivistic cultures may have affected the extent to which people felt embarrassed from vicarious sources. Koreans were more embarrassed than Americans when their associates were embarrassed. Also, it was discovered that more Americans than Koreans tended to be reluctant to tell their embarrassing story even to close people, which supports that Americans suppress negative emotion in social life, while promoting positive emotion (Harris,

2015). Relatively, Koreans were more likely to express their embarrassment with more strategic variety than Americans, which seems to help build solidarity in the collectivistic culture.

### **The Facial Expression of Guilt: Production and Cultural Differences**

Eglantine Julle-Daniere, Aldert Vrij, Erik Gustafsson, Bridget Waller

University of Portsmouth

Guilt is a negative emotion but with the potentially crucial function of stimulating pro-social behaviours towards and from others. However, it is currently unknown whether there is a specific expression of guilt that can be reliably identified as such. Here we explore the behavioural expression of guilt in two different cultures known to vary in their propensity for guilt – European/Westerners (N=70) and East Asian (N=58). Guilt was induced in participants through a novel, ecologically valid method. Participants were asked to participate in an experiment and save their data on a portable hard-drive and then pass it to the experimenter. In the experimental condition, participants were told that the USB stick was empty and that all the data had been erased. Participants' responses to this information were video recorded and coded using the Facial Action Coding System (FACS). We conducted a factor analysis and identified a specific group of Action Units (AUs, facial movements) that was reliably associated with feelings of guilt and present in both cultures (AU5-Upper Lid Raiser and AU17-Chin Raiser). We also examined the temporal pattern of guilt, and found sequences that include disbelief, surprise and discomfort. Our results suggest that the experience of guilt unfolds as a composite of different emotional states, making guilt a very complex phenomenon. There were also some interesting, but fairly minor, cultural differences. As a follow-up study, we will assess whether specific facial expressions are reliably identified as guilt by naïve observers and if participants perceive facial expressions as the direct expression of emotion or more as an instrumental action, relating to a specific context and serving a specific purpose within the social interaction.

### **On Emotional Entanglements: Narrating the Affective Politics of “Fatness” and Obesity in Canada**

Michael Orsini

University of Ottawa

In the field of 'obesity', discourses are marked by a jumble of complex moral emotions. Individuals marked as 'obese' are sometimes pitied for their “careless” lifestyles, treated with compassion for their inability to make better choices, or framed as objects of disgust. Researchers and policy makers, for their part, construct their interventions in ways that reflect their own complex, deep-seated feelings about fat. As a societal 'problem, obesity is difficult to dislodge from the capitalist system of production. As fat studies scholars remind us, in our neoliberal age, paradoxically, individuals are exhorted to consume more and eat less.

The paper explores how a series of complex moral emotions such as shame and disgust structure how we think about policy problems, and reminds us that labelling “good” and “bad” emotions might be misguided. While there has been prolonged attention to the health effects of 'obesity', especially as they relate to children, there are growing concerns about “the globalization of fat stigma”, and how policies purported to help obese people might actually compound their stigmatized status. In addition, weight-related stigma has extended beyond Canada to include countries with previously positive attitudes toward larger bodies. Finally, some have argued that that stigma might play a positive role in fighting fat, drawing on the case of smoking cessation programs that were successful in demonizing smokers and reducing smoking rates.

Drawing on interviews with obesity researchers, policy makers and people living with obesity, I am interested in how these different orderings of emotions – what some people call “feeling rules” - help us to think about the ways in which emotions and affects are discursively managed in complex policy environments. Focusing on emotions in the field of ‘obesity’ policy can help us to better understand key concepts that underpin the study of public policy such as rationality, evidence and power.

## **Paper Session 5: Emotion and Communication**

**Saturday, July 29, 10:30-12:10, Lindell Ballroom Salon D**

### **Emotional Curiosity and Emotional Analogies Provide Intrinsic Motivations to Attend to Emotion Related Reactions in Social Contexts**

Gary McKeown

Queen's University Belfast

The Analogical Peacock Hypothesis (McKeown 2013) suggests that human communication evolved due to a need to display mind-reading and theory of mind abilities. Being skilled mind-readers and perspective-takers makes individuals more likely to successfully climb the ranks of a social hierarchy. Being able to display these skills makes individuals more likely to be seen as attractive potential mates and social allies. As a result, human communication has two principle functions, display and alignment. Display communications show off mind-reading abilities; alignment communication behaviors seek to learn and understand about other minds in preparation for display opportunities. The Analogical Peacock Hypothesis suggests that these evolutionary processes have both non-verbal and verbal communicative aspects.

This presentation introduces the concepts of emotional curiosity and emotional analogies within this theoretical framework. The need for alignment, and to understand the internal state of others, creates an intrinsic motivation to observe emotion-related behaviors and the social context in which they occur. This motivation is termed "emotional curiosity," the desire to know and understand which emotional reactions, expressions, and tones are appropriate for a given social situation. This knowledge informs a curious individual of the emotion-related social norms within a given culture or social group, especially one that the individual is motivated to climb.

Similarly, display communications often seek to have an emotional resonance. Display communications often involve the creative combination of concepts and sets of knowledge representations – in this way they can show that the displayer knows a receiver's mind so well that they can present novel combinations of concepts that the receiver had not yet noticed existed in their own minds. Such creative displays garner greater force if they are imbued with an emotional resonance. Analogies, metaphors, and narratives that create an emotional impact become powerful displays of mind-reading abilities. They show both creativity and knowledge of the appropriate emotional force that will be generated by a conceptual combination or narrative resolution.

This combination of an intrinsic motivation to understand emotional reactions within social contexts – emotional curiosity – and imbuing creative analogies with emotional resonance – emotional analogies – lies at the heart of most of our cultural creations. From jokes to poetry, tabloid gossip to novels, and reality television and soap operas to Shakespeare, emotional

curiosity and emotional analogies drive our desire to listen and observe and perform appropriate emotional reactions within their corresponding social contexts.

### **Emotional Contagion from Seeing Versus Hearing Emotions: A Comparison of Adults with Autism Spectrum Conditions and Neuro-Typical Adults**

Donna Berry, Tom Holliss  
Keele University

Observing an emotional display (e.g. another person laughing) frequently leads neuro-typical observers to mirror the observed expressions, recognise the emotion being displayed, and 'catch' the emotion themselves as a subjective change in mood. This emotional contagion is suggested to have evolved as a social mechanism to foster group cohesion amongst individuals engaged in the shared emotional display (Provine, 2004) and to prepare these individuals for potential associated actions (Frijda, 1986). Emotional displays typically contain both visual and auditory information, but the relative importance of these two streams of sensory information is largely unexplored. Individuals with Autism Spectrum Conditions (ASC) reportedly demonstrate reduced emotional contagion (e.g. Helt et al., 2010) and also atypical auditory processing (O'Connor, 2012). The aims of the current study are to confirm whether adults with ASC demonstrate reduced emotional contagion for positive and negative emotions, and to determine whether emotional contagion is driven primarily by hearing or by seeing displays of emotions.

Adult participants (N = 93, 44 with ASC) watched two video montages of strangers exhibiting realistic displays of emotions: one montage in audio-only format (sound files with a blank visual display) and another in visual-only format (muted video clips). Half of the participants watched video montages of laughter and half watched video montages of crying. Participants were asked to rate their mood before and after each video montage using a scale containing items from the PANAS (Watson et al., 1988).

A 2 (Participant group: ASC, Control) x 2 (Sensory content: Audio, Visual) x 2 (Emotional expression: Laughter, Crying) ANOVA revealed that participants in the ASC group found both emotions significantly less contagious than Control participants. For both participant groups, however, the impact of seeing versus hearing emotions was dependent on the emotion being expressed. Hearing others laughing and crying resulted in comparable emotional contagion, but without sound, the facial expressions involved in laughter failed to trigger any change in mood. This suggests that auditory properties of laughter are particularly important for fostering a collective positive mood and forging social bonds. These results have implications for individuals who block out auditory social information by wearing headphones, because these findings suggest that disregarding auditory expressions of laughter could form a barrier to inclusivity within a social group. This could prove particularly disadvantageous to people with ASC, who may already find social inclusion difficult to achieve.

### **The Communicative Effects of Intergroup Schadenfreude**

Paton Pak Chun Yam, Brian Parkinson  
University of Oxford

Most research on schadenfreude concentrates on the conditions that elicit the emotion. The present research aimed to go beyond this focus and investigated the communicative function of intergroup schadenfreude. In particular, we tested the notion that the expression of schadenfreude can be a communicative act, indicating positive in-group bonds and strengthening social relationships. Study 1 assessed real-life experiences of intergroup schadenfreude among supporters of the England football team during the 2014 FIFA World Cup. Study 2, conducted four months later, was designed to substantiate results obtained in

Study 1 by having participants read news reports about the same events. Both studies showed that intergroup schadenfreude in response to another team's defeat was related to an improvement in England's perceived status as well as the intention to celebrate other England fans. Importantly, intergroup schadenfreude mediated the effect of status on the intention to celebrate with other England fans, thus providing initial support for a social affiliation function of expressing intergroup schadenfreude. Study 3 aimed to extend these two studies and investigated recipients' emotion reactions to and inferences made about another ingroup member's expressed intergroup schadenfreude. In this vignette-based study, self-proclaimed England football fans read tweets edited from genuine messages posted on Twitter during the 2014 World Cup, expressing either schadenfreude after Uruguay's defeat against Colombia or victorious joy (i.e. feeling happy about a third-party's victory) about Colombia's winning. Identification was also manipulated to test whether participants' perceived involvement in the team would moderate their responses to the displays of intergroup schadenfreude. Results showed that participants were able to differentiate the verbal expressions of intergroup schadenfreude from those of victorious joy. Moreover, participants in the high-identification condition felt more schadenfreude than those in the low-identification condition when schadenfreude rather than victorious joy was expressed, suggesting emotional convergence. Furthermore, recipients of intergroup schadenfreude messages were more likely than recipients of victorious joy messages to form a negative impression of the expresser, and to distance themselves from the expresser. These findings thus challenged the idea about the social affiliation function of intergroup schadenfreude but also highlighted the importance of context and choosing appropriate control groups in determining the functionality of expressing this emotion. Overall, this research provides novel insights concerning the communicative effects of schadenfreude in an intergroup setting.

### **From Admiration to Irritation: Conceptual Model of Compliment**

Jessica Morton, Olivier Luminet, Moïra Mikolajczak  
Université Catholique de Louvain

A compliment is a verbal act by which an individual attributes merit to another individual. The observation of others achieving high standards is the source of emotions such as admiration or jealousy. These, often intense, emotions, motivate the observer to share his observation with the meritor (the deserving person). Through the compliment, the complimenter (the person who gives the compliment) provides the result of his assessment of merit to the complimented (person who receives the compliment). From this point of view, the compliment can be considered as a tool in social interactions. Through the transmission of a judgment with a positive appearance, the complimenter hopes to induce positive emotions to the complimented. In this respect, the compliment fulfills essential functions at the individual (personal evaluation, capitalization of lived emotions and emotional regulation), relational (communication, reconciliation and attachment) and cultural (recall and development of norms and shared values) level. Given the many implications of the compliment, it is surprising that research on compliments has received so little attention. In this presentation, we propose a conceptual and functional model of the compliment that accounts for its antecedents and consequences.

In some cases, the compliment may elicit negative emotions to the complimented such as discomfort or irritation. Once we accept that the compliment does not systematically produce the effects expected by the complimenter, we are able to investigate the potentially dysfunctional aspects of the compliment. Some studies in educational psychology have already revealed the counterproductive effects of certain compliments (e.g., Brophy, 1981, Koestner, 1987, Alessandri, 1993, Carton, 1996). In accordance with the proposed model, we predict that



several individual (narcissism, extraversion, pro-social character, ...) and contextual characteristics (nature and state of the relationship, pursued goal, cultural norms, etc.) will influence the perception and/or interpretation of the compliment and its (dys)functionality.

The contribution of a functional model of the compliment and the identification of dysfunctional aspects is part of a developmental approach. From this point of view, the individual is able to acquire social skills as a complimenter and complimented, which will be useful in many fields. In the same way, the compliment is an important element in the battery of tools for psychologists. Understanding the strengths and limitations of the compliment allows them to be used wisely and adequately.

## **Plenary Session—President’s Symposium “Crisis? What Crisis? In the Face of Replication Failures and Methodological Challenges, What is the Role of Empirical Evidence for Theories of Emotion?”**

Arvid Kappas, Jacobs University Bremen

Saturday, July 29, 15:30-16:30, Lindell Ballroom C/D

Emotion research is based on theories developed in the context of different disciplines. As in all of science, empirical data from observations and experiments are important in trying to describe, and explain affective processes. Our current understanding of emotions is based on over a century of empirical research using a variety of methods and measures. Yet, some of the most influential studies have never been replicated, such as the Schachter and Singer (1962) experiment. Recent concerns regarding replicability in psychology have led to large-scale initiatives to replicate classical studies and here too, there is concern about key findings relating to emotions. This is a good moment to reflect on what the importance and function of experimental or observational data could or should be and what role emotion researchers might take in this larger debate. This session will take the shape of a panel discussion, where different disciplinary views will be presented. The goal of the symposium is to provide a contribution to how we approach empirical evidence to move forward in our understanding of emotions. Discussants: Arvid Kappas, Jacobs University Bremen John T. Cacioppo, University of Chicago Alan J. Fridlund, University of California Santa Barbara Kathleen M. Higgins, University of Texas at Austin Dawn T. Robinson, University of Georgia

## **Poster Session 2**

Saturday, July 29, 14:40-15:40, Khorassan Ballroom

### **I Can’t Get No: Homesickness and College Satisfaction Across Time Among First-Year College Students**

Isidro Landa, Tammy English, Timothy Bono  
Washington University in St. Louis

### **The Relation Between Two Faces of Envy, Other Feelings, Thoughts, and Coping**

Moemi Asakawa, Satoshi Mochizuki  
University of Tsukuba

### **Candy or Medicine? A Comparison of Gratitude Journaling and Expressive Writing**

Leslie Kirby, Weiqiang Qian  
Vanderbilt University

### **Jealousy in Friendships and Romantic Relationships**

Mingi Chung<sup>1</sup>, Nicole E. Henniger<sup>2</sup>, Christine R. Harris<sup>1</sup>  
<sup>1</sup>University of California, San Diego, <sup>2</sup>Knox College

### **Extending a Social Functional Model of Smiles to Laughter**

Adrienne Wood, Jared Martin, Paula Niedenthal  
University of Wisconsin-Madison

### **The Sound of Fear: Acoustic-Prosodic Features of Anxious Speech**

Marcia Pasqualini<sup>1</sup>, Jared Krajewski<sup>2</sup>, Sebastian Schnieder<sup>2</sup>, Kristen Brown<sup>1</sup>, Sheri Brown<sup>1</sup>  
<sup>1</sup>Avila University, <sup>2</sup>University of Wuppertal

### **Emotional and Motivational Uses of Entertainment: A Comparison Between Music and Gaming**

Caroline Malmgren, Petri Laukka  
Södertörn University

### **Successfully Training Emotion Recognition Accuracy in the Clinical Psychology Education and Beyond**

Lillian Döllinger<sup>1</sup>, Tanja Bänziger<sup>2</sup>, Lennart Högman<sup>1</sup>, Irena Makower<sup>3</sup>, Petri Laukka<sup>1</sup>, Diana Cortes<sup>1</sup>, Håkan Fischer<sup>1</sup>, Stephen Hau<sup>1</sup>  
<sup>1</sup>Stockholm University, <sup>2</sup>Mid Sweden University, <sup>3</sup>Evidens University College

### **Guilt and Organ Donation Registration: The Good Effects of Feeling Bad**

Nicole Henniger<sup>1</sup>, Danielle Blazek<sup>2</sup>  
<sup>1</sup>Knox College, <sup>2</sup>Claremont Graduate University

### **A Temporal Analysis of Parent-Adolescent Emotion Dynamics During Conflict**

Alexandra Main, Rick Dale  
University of California, Merced

### **Do Conflict and Switching Effect Toward Negative Stimulus Relate to Depressive Symptoms?**

Akihiro Masuyama, Satoshi Mochizuki  
University of Tsukuba

### **Cultural Differences of Nostalgia: Self-Related or Other-Related Thoughts**

Masato Nagamine, Miki Toyama  
University of Tsukuba

**How the Situative Informativeness of Emotions Affects Social Inferences Drawn from Them—The Case of Awe and Happiness**

Shimon Elkabetz<sup>1</sup>, Shlomo Hareli<sup>1</sup>, Ursula Hess<sup>2</sup>

<sup>1</sup>University of Haifa, <sup>2</sup>Humboldt-University, Berlin

**Tell Me How You Really Feel: Moral Anger and the Demand for Interpersonal Regard**

Razia Sahi

Georgia State University

**Emotion, New Word Learning, and Autism-Like Traits**

Melina West<sup>1</sup>, Anthony Angwin<sup>1</sup>, David Copland<sup>1</sup>, Wendy Arnott<sup>2</sup>, Nicole Nelson<sup>3</sup>

<sup>1</sup>The University of Queensland School of Health and Rehabilitation Sciences, <sup>2</sup>Hear and Say,

<sup>3</sup>The University of Queensland School of Psychology

**Social Consequences of Breaking Online Emotional Display Rules: A Mixed-Methods Study in Partnership with African American Adolescent Males**

Christy Galletta Horner

Bowling Green State University

**The Affective Nature of Retrospective Confidence Assessments**

William Melanson

University of Nebraska at Omaha

## **Late-Breaking Research Session**

Saturday, July 29, 16:00-17:30, Lindell Ballroom Salon C/D

**Never Let Them See You Sweat: Acknowledging Contextualized Nervousness Does Not Buffer Perceptions of Competence in a Job Interview**

Kaitlin McCormick-Huhn<sup>1</sup>, Matthew Zawadzki<sup>2</sup> and Stephanie Shields<sup>1</sup>

<sup>1</sup>The Pennsylvania State University, <sup>2</sup>University of California, Merced

**Crying Yet Manly: Tears and Masculinity in North America**

Heather Macarthur and Stephanie Shields

Penn State University

**The Contribution of Constrictive versus Expansive Facial Configuration on Perceptions of Threat, Friendliness, Anger, & Joy**

Troy Steiner and Reginald Adams

The Pennsylvania State University

**Social Inclusion and the Perception of Animacy in a Face**

Joseph C. Brandenburg, Daniel N. Albohn, Troy G. Steiner and Reginald B. Adams Jr.

The Pennsylvania State University

**The Social Face Hypothesis: Facial Musculature in Primates Predicts Neocortex Volume and Social Network Size**

Daniel N. Albohn and Reginald B. Adams Jr.  
The Pennsylvania State University

**Differential Attributions of Secondary Emotions on the Basis of Targets' Race and Sex:  
An Intersectional Approach to Infrahumanization**

Carlos Garrido and Reginald Adams  
Penn State University

**Large-Scale Inference and Visualization of the Geometry of Emotional Self-Report and  
Expression**

Alan Cowen, Dacher Keltner  
University of California, Berkeley

**Subliminal Negative Stimuli Affect Inhibition of Return**

Fada Pan<sup>1</sup>, Xiaogang Wu<sup>2</sup>  
<sup>1</sup>Vanderbilt University, <sup>2</sup>Nantong University

**The Social Functions of Gratitude at the Group Level of Analysis: Effects on 3<sup>rd</sup> Party  
Witnesses**

Sara Algoe<sup>1</sup>, Patrick Dwyer<sup>1</sup>, Ayana Younge<sup>1</sup>, Christopher Oveis<sup>2</sup>  
<sup>1</sup>University of North Carolina at Chapel Hill, <sup>2</sup>UCSD-Rady School of Business

**High Frequency Heart Rate Variability Predicts Positive Physical and Mental Health  
Outcomes**

Jared Martin  
University of Wisconsin-Madison

**Negative Affectivity and Helping Behaviors: The Roles of Helping Motives, Gender, and  
Organizational Tenure**

Yongmei Liu<sup>1</sup>, Hongwei He<sup>2</sup>, Wichun Zhu<sup>3</sup>  
<sup>1</sup>Illinois State University, <sup>2</sup>The University of Manchester, <sup>3</sup>Pennsylvania State University

**Positive Emotions in Marriage: Novel Findings from Longitudinal Data and Diverse  
Samples**

Claudia Haase<sup>1</sup>, Verstaen Alice<sup>2</sup>, Lian Bloch<sup>3</sup>, Sandy Lwi<sup>2</sup>, Laura Saslow<sup>4</sup>, Ryan Svoboda<sup>1</sup>,  
Emily Hittner<sup>1</sup>, Robert Levenson<sup>2</sup>  
<sup>1</sup>Northwestern University, <sup>2</sup>University of California, Berkeley, <sup>3</sup>PGSP-Stanford Psy.D.  
Consortium, <sup>4</sup>University of Michigan

**Unpleasant Animal Reminders and Disgust**

Dolichan Kollareth, James Russell  
Boston College

**How Control and Value Antecedents Affect Emotions and Collaborative Processes in a  
Problem-Solving Game?**

Sunny Avry, Gaëlle Molinari  
Université de Genève

**The Expression of Anger in Organizations: A Social-Functional Approach**

Tae Jin Hwang  
Washington University in St. Louis

**Empathy Reduces Bias Towards Counter-Stereotypical Gender Roles**

Danielle Oylser, Bettina Casad  
University of Missouri-St. Louis

**Phenomenology of Jealousy**

Susi Ferrarello  
California State University

**Goal Framing and Ethical Decision-Making: The Mediating Effects of Affective Value Systems on Moral Behavior in Organizations**

Elizabeth Luckman  
Washington University in St. Louis