Affect & Emotion Newsletter of the NCCR Affective Sciences

DOES THIS VICTIM NEED JUSTICE?

RESEARCH FOCUS

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RESEARCH FOCUS

Does this victim need justice?



Legal scholars **Milena Abbiati** and **Mina Rauschenbach**, who work on the NCCR project "Law and Emotions", are investigating the extent to which social supports influence the basic emotional reaction to criminal assault and may help the victim to overcome the trauma of the event.

nterpersonal violent crimes are virtually endemic in our society, notably those committed against women. A number of studies in Western countries suggest that up to 25% of women experience sexual assault at some time in their lives and 30% will be physically abused in a sexual-romantic relationship. One out of five women in Switzerland is a victim of this kind of violence during her lifetime.

These figures are just the tip of the iceberg since for every case reported, at least three go unreported. When added to the fact that in non-Western countries these percentages triple, the epidemiology of interpersonal violence against women is a pressing social issue. Furthermore, victims and their emotions are now increasingly taken into account in many criminal justice systems. There is thus a strong need for empirical studies establishing if and in what way the legal system can be an additional support for recovery.

Our study investigates how lay support and experience of the criminal justice system relate to the emotions and coping of victims of interpersonal violence. In particular, we measure the degree to which these two factors help victims' recovery.

Seventy victims of interpersonal violence, of whom 91% were women, were recruited via public advertisement and asked through semi-structured interviews about their emotions regarding the assault, coping strategies, lay support and criminal justice experience. Correspondence factorial analyses indicate that the experience of going through the criminal justice system – and, to a lesser extent, lack of lay support – have a general detrimental impact on victims' emotional adjustment and lead to affective disturbances, whereas positive lay support and lack of justice system experience relate highly to recovery.

Our results show clearly that support is essential for victims' recovery. However, for those who were more emotionally focused, lay support is central, whereas for those who were more problem-focused, justice system experience is pre-eminent. Yet, for the latter, the traditional courtroom experience exacerbates lack of comprehension, rage and anger. This category of victims is more likely to go through secondary victimization. We can thus conclude that alternative procedures such as restorative justice are more suitable for them.

Our purpose is to constitute a set of guiding rules concerning how best to interact with and support different kinds of victims, with a particular focus on violence against women. To this end, we are working at the local level with the main Geneva organisations for victim assistance as external consultants. At an international level, we are working with the International Red Cross Committee (CICR) as expert advisors for a program on institutional responses to victims in the context of international criminal trials.



See our forthcoming journal publication:

RAUSCHENBACH M. et SCALIA D., sous la direction de ROBERT Christian-Nils, "Victimes et justice internationale pénale: Perplexité?", in Revue internationale de la Croix Rouge, to appear June 2008



INTERVIEW

Off to a flying start



Gilles Pourtois, who was recently awarded a Starting Grant to support up-and-coming research leaders by the European Research Council, spoke to Terence MacNamee about his research plans for the future.

TMcN: What is the Starting Grants program that gave you this award?

GP: This is the first edition of a new funding program launched by the European Research Council (ERC) last year. Starting grants are intended to help young researchers to establish themselves independently. We were told that the applications were judged by 20 panels, covering all fields of science, engineering and scholarship. There were above 9,000 applications this time. Only 300 participants were eventually awarded an ERC starting grant. I was one of the lucky ones!

TMcN: You won nearly 900,000 Euro. What will the money help you to do?

GP: With this amount, I plan to hire two researchers (a PhD student and a post-doctoral fellow) for a period of 5 years. So the money will help me start a new team of scientists, working almost exclusively on this particular project - how anxiety transforms human cognition - for the next 5 years.

TMcN: You have decided to carry out your research program at the University of Ghent. Why is that, and what are you going to do there?

GP: The department of Experimental, Clinical and Health Psychology at the University of Ghent offers outstanding working conditions to install this project and carry out the various experiments that will be part of it. This department is acknowledged around the world for its research excellence in psychology. It provides very good research facilities.

My particular project will study the effect of anxiety on human cognition. I am talking here about sub-clinical anxiety, the kind that does not require medical treatment. I will focus on two cognitive abilities: selective attention and decision making. These two are good areas of cognition where we can study the modulatory role of anxiety. I intend to test the prediction that anxiety, whether it is a temporary state or a more permanent trait of personality, profoundly alters these two facets of human cognition. Anxiety makes people attend more preferentially to negative events in their environment (this is known as "hypervigilance") and usually makes it hard for them to reach decisions. But little is known about the mechanisms in the human brain by which anxiety affects selective attention and decision making.

The best thing about my project is that it will combine behavioral methods with brain-imaging tools (EEG and fMRI) to explore the impact of anxiety on cognition. All this should help me to get a better picture of how anxiety works in the human brain.

TMcN: What will this study contribute to affective science?

GP: Anxiety is highly prevalent in our societies. According to recent surveys and clinical studies, nearly 25% of Europeans

will experience a clinical level of anxiety within their lifetimes. When it turns into a condition requiring medical attention, such as depression or post-traumatic stress disorder, anxiety can be quite a crippling experience for the person affected. A deeper understanding of how sub-clinical anxiety may change and dynamically shape human cognition could therefore help doctors to better diagnose (and perhaps even treat) the repercussions of anxiety on a wide range of everyday human behaviors. So I think my project has clear clinical implications, and during these coming five years I hope to develop points of collaboration or research synergies with established clinical psychologists.

TMcN: How will this work help your own future career and where do you see it going?

GP: I think that getting this ERC award will facilitate my integration into a strong university department. I see this award as a first important step in my career, giving me the unique opportunity to conduct new research on my topic with an independent team of researchers for a period of several years. These are really outstanding working conditions. After the 5 years are up, I should be in a pretty optimal position to pursue research and teaching at the University of Geneva or Ghent University or somewhere else in Europe.





Events

SEMMER ON STRESS

Co-leader of the NCCR Project "Emotions at Work" Prof. Norbert Semmer of the University of Bern just taught a two-day course on Stress at Work at the Claremont Graduate University in Claremont, California, U.S.A.

He gave invited talks about the "Stress as Offense to Self" concept at the University of Arkansas Business School, Fayettville, Arkansas (Jan. 15, 2008) and at Georgia Tech, Atlanta GA (Jan. 30). He was also invited to be a member of the closing panel at the APA/ NIOSH conference "Work, Stress, and Health" in Washington DC (March 5-8).

NEUROSCIENCE IN THE SNOW

Once again A.B.I.M., the Alpine Brain Imaging Meeting, took place at Champery from January 13-17, 2008. The four conference days were divided into four sessions with invited speakers who are recognized experts on this year's main topics: Attention and Emotion in Pain Perception, Diffusion Tensor Imaging, Motivation and Decision Making, and Resting States of the Brain. Each session presented an overview of current methodologies and applications in human brain imaging. Invited talks were followed by free communications by other participants and discussions. Prof. Patrik Vuilleumier of our Centre, who helped to organize the meeting, reports that there were "lots of good things, but a few unfortunate accidents" - on the ski slopes, that was! Patrik himself was the main accident victim. but that did not stop him from coleading yet another successful A.B.I.M.

NEUROSCIENCE AT LAW

A colloquium on the use of neuroscience tools in the criminal justice system ("Les enjeux de l'utilisation des outils des neuroscientifiques dans le procès pénal") was held on February 8 2008 at the University of Geneva. It was chaired by Prof. Philippe Borgeaud, leader of the NCCR's "Myths and rites" project. It was organized by two staff members of the NCCR, Sebastian Korb (doctoral candidate in psychology) and Sébastien Hauger (doctoral candidate in law). This meeting addressed the use of brain imaging, lie detection and other such tools, and the role of medical experts in criminal proceedings. Among the speakers were Didier Grandjean, Karim N'Diaye, Prof. Christian-Nils Robert, and Prof. Bernard Baertschi, all of the NCCR.

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"NATURAL" ETHICS?

Famed American neuroscientist Prof. Michael Gazzaniga was in Geneva on February 15 to give an invited lecture entitled "Free? Neuroscience and the mechanics of decision-making". Gazzaniga is director of the SAGE Center for the Study of the Mind at the University of California, Santa Barbara and a pioneer and leading figure in what has become known as cognitive neuroscience. Positioned at the frontier of research on human behavior and the functioning of the brain at molecular level, this discipline aspires, in the years to come, to identify the "natural" basis of ethics common to the entire human race. Gazzaniga's lecture marked the opening of the Interfaculty Neuroscience Centre at the University of Geneva, which now offers the first interdisciplinary master's degree in neuroscience in Switz.erland. The head of the new interfaculty centre is Prof. Patrik Vuilleumier, who is also a co-leader of the "Neural Architecture" project within our NCCR.

THE DREAMING BRAIN

As we went to press, the Semaine du Cerveau was taking place at the University of Geneva. On March 15, there was a "café scientifique" discussion about dreams and the brain focussing on the recent book "La fabrique des rêves" by Sophie Schwartz, psychologist and associate of the NCCR.

AFFECTIVE SCIENCES LIBRARY

The NCCR has been aiming for some time to set up a library of affective sciences. This will be the first comprehensive re-

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search library of its kind in the world: a collection of books, papers and other materials spanning the disciplines which study emotion, from neuropsychology to the history of ancient religions. The library will be accessible to scholars from all parts of the world who visit the Centre as invited professors, conference participants or collaborating researchers.

The library has been inaugurated by a generous donation of books from Oxford University Press in England. OUP has published many of the most important titles in the affective science field in recent years, and the books they are donating through the good offices of their senior commissioning editor in the area, Martin Baum, will contribute significantlyto getting our library off to a good start.

| FACIAL EXPRESSION CONFERENCE |

The 12th European Conference on Facial Expression takes place on July 28 – 31, 2008 at the University of Geneva, and preparations are already underway, as we hear from local organizing committee Susanne Kaiser, David Sander, and Birgit Michel.

2008 marks the 30th anniversary of the publication of the Facial Action Coding System (FACS). To commemorate this anniversary, the International Society of Facial Expression Measurement and Meaning will host this special conference under the auspices of the NCCR.

Electronic Abstract submissions to the conference are welcome through the conference website of the Centre

affectco.unige.ch/FACS-Congress-2008

For upcoming events at the NCCR, see our website www.affective-sciences.org/events





Staff changes, awards and achievements

On December 31 2007, - Holger Herz was replaced by Frédéric Schneider on project 9, working with Ernst Fehr in Zurich.

On January 15, 2008, Postdoc Christelle Chrea, who was working on the Firmenich project, left for Sydney, Australia, to take up a research position at the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia's national science agency.

On January 17 2008 Eva Krumhuber, staff member of the NCCR, successfully defended her PhD thesis (Title: "Temporal aspects of facial displays") at the School of Psychology, Cardiff University, Wales. For this dissertation she won the "Hadyn Ellis Prize for Outstanding Dissertation" (Best PhD) within her School at the end of January 2008. On January 23, 2008, Elise Dan, staff member of the NCCR, successfully defended her doctoral thesis at the University of Geneva.

Projet 10 (philosophy, led by Prof. Kev-

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Publications

Achaibou, A., G. Pourtois, S. Schwartz, and P. Vuilleumier (2008): Simultaneous recording of EEG and facial muscle reactions during spontaneous emotional mimicry: Neuropsychologia 46, 4, 1104-1113.

Andersson, F., B. Glaser, M. Spiridon, M. Debbané, P. Vuilleumier, and S. Eliez (2008): Impaired Activation of Face Processing Networks Revealed by Functional Magnetic Resonance Imaging in 22q11.2 Deletion Syndrome: Biological Psychiatry 62, 6, 49-57.

Brosch, T., Grandjean, D., Sander, D., Scherer, K. R. (2008): Behold the voice of wrath: Crossmodal modulation of visual attention by an-



The National Centres of Competence in Research (NCCR) are a research instrument of the Swiss National Science Foundation

in Mulligan) has obtained 2 doctoral positions (3 years) within the FNS-funded Doctoral School of Philosophy for a project on the self and the emotions. The 2 new PhD students will be directly affiliated with the NCCR.

Two young researchers of the NCCR Affective Sciences have been awarded major funding by the European Research Council (ERC) under its new Starting Grants programme. Dr Tanja Singer, based in Zurich, was awarded CHF 2,400,000 to continue her study of the neuronal, hormonal and psychological mechanisms underlying social behavior. Dr Gilles Pourtois, based in Geneva, was awarded CHF 1,400,000 to pursue his experimental research into anxiety and its effects on decision making and selective attention. (See the interview with him on page 3 of this issue.)

The two researchers were selected out of a field of 9,000 applications for funding. These "starting grants" are intended

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ger prosody. Cognition, 106, 1497–1503.

Grandjean, D., Sander, D., Lucas, N., Scherer, K. R., Vuilleumier, P. (2008): Effects of emotional prosody on auditory extinction for voices in patients with spatial neglect. Neuropsychologia, 46(2), 487-496.

Peelen, M. V., A. P. Atkinson, F. Andersson, and P. Vuilleumier (2007): Emotional Modulation of Body-Selective Visual Areas: Social Cognitive and Affective Neuroscioence (SCAN) 2(4):274-283.

Rodogno, R. (2007) : On the Importance of Well-Being: Ethical Theory and Moral Practice, September 2007. to help promising young researchers to get started in independent academic careers. The sum awarded goes to fund their own salaries, as well as research assistants and equipment over a five-year period. This program was launched last year by the ERC, itself a newly-founded European umbrella organization with the goal of fostering research excellence throughout the continent.

For vacancies at the NCCR, see our website www.affective-sciences.org/ positions ■

JUST OFF THE PRESS

Brosch, Tobias (2008). Emotionelle Aufmerksamkeit [Emotional attention]. Saarbrücken: VDM.■

Deonna, Julien A. and Fabrice Teroni (2008):Qu'est-ce qu'une émotion ? Paris: Librairie philosophique J. Vrin.

Deonna and Teroni's book is a systematic introduction to the central aspects of the most recent discussions in the philosophy of emotions. They delineate the geography of the affective domain from a philosophical standpoint, and attempt to explain what emotions are through a suspenseful voyage among the main alternative theories. According to the authors, both members of the NCCR's philosophy project, the originality of the book lies in the way it manages to be both a systematic and a lively introduction to the domain of emotion while nevertheless being a serious and up-to-date academic contribution to the contemporary debate on what emotional experiences are and what they consist of.

Affect & Emotion

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For further information on our work, see our website www.affective-sciences.org

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