Newsletter of the Swiss Center for Affective Sciences



Affect, emotion and affective sciences in Antiquity

RESEARCH FOCUS

Ancient emotions in modern research Prof. Damien Nelis

PAGE 3

Brain and behaviour Laboratory (BBL)



PAGE 4

News

- Completed PhDs
- New books/Special issues
- Awards and grants
- Upcomming events
- On our website
- · Other CISA websites of interest
- Publications

PAGES 5-11





EDITORIAL



TABLE OF CONTENTS

Editorial	Page 2
Research focus	Page 3
Brain and Behaviour Laboratory	Page 4
Completed PhDs	Page 5
New books/Special issues	Page 5
Awards and grants	Page 6
Upcoming events	Page 7
On our website	Page 8
Other CISA websites of interest	Page 8
Publications	Pages 9-12

n the Newsletter's Research Focus, Prof. Damien Nelis reviews some of the fascinating investigations on emotions in the ancient world conducted in the Center, in the context of projects in which he was himself strongly involved, or also projects led by other colleagues. Even though, as clearly described in this Research Focus, the ancients, such as Homer and Seneca, were already questioning the role and impact of emotions, historically emotions have often been neglected or considered as mainly detrimental to human behaviour and cognition. However, the affective sciences are proving increasingly useful not only, obviously, to explain affective phenomena such as emotions, moods or stress, but also to explain cognition and behaviour. Basic and applied research in the affective sciences has developed a lot in the last 30 years, bringing together a large number of disciplines such as anthropology, computer science, economics, history, law, linguistics, neuroscience, philosophy, psychology and sociology, to name a few. An article published in Nature Human Behaviour this summer suggests that it is time to recognize the importance of research on emotions in academia and beyond, and to ask whether we entered a new era: the era of Affectivism.

Studied in the past, recognized in the present, but how will emotions be useful to us in addressing the major issues of the future? A great example can be found when Dr. Cristina Soriano and Prof. Tobias Brosh invite visitors to the Geneva Museum of Natural Sciences' new temporary exhibition "tout contre la terre" to experience our emotions and their impact with respect to the environmental crisis. This is an exhibition, with a very beautiful scenography, that I warmly invite you to discover until June 26, 2022!

As almost every year, a nice way to stay up-to-date with current research in the Center is to attend our Annual Research Forum (ARF). This year, it will take place in autumn 2022 (date to be announced), with a special flavor: just after the ARF we organize the Emotions Brain Forum. Indeed, BrainCircleItalia organizes, in close collaboration with the Swiss Center for Affective Sciences, the Emotions Brain Forum on the topic of «Emotion, behavior, and decisions.» Six internationally renowned women scientists will discuss the role of emotion on our behavior from multiple perspectives: from the relationship between sleep and emotion to the impact of odors on our emotions, from the emotional consequences of traumatic experiences to the importance of being emotionally flexible and empathic. This event, in which the links between emotions, behavior, and decisions will be examined from psychological, philosophical, and neuroscientific perspectives, will be punctuated by art performances.

Finally, I invite you to follow us on Twitter, Linkedin and Youtube, and to share the information we communicate about the Center.

Take care of yourselves and those around you, as well as of your and their emotions!

I wish you all a great end of the year, and already a very happy 2022!

David Sander, and the CISA management team



ESEARCH FOCUS





ANCIENT EMOTIONS IN MODERN RESEARCH

Prof. Damien Nelis

he study of the emotions has become an area of remarkably intense research activity in the field of Classics in recent years. Students of Greek and Latin literature have, of course, always been interested in what Homer, Euripides, Plato, Aristotle, Chrysippus, Lucretius, Vergil, Seneca, and many other writers had to say about emotions, but the sheer amount of recent work is still astonishing. Original readings of much studied texts, new approaches to old questions, and even the publication of new texts have all contributed to the enrichment of our knowledge about the affective sciences in antiquity. After all, as has been often pointed out, the very first word of Homer's Iliad is 'anger'. Over the last ten years or so, in collaboration with the CISA, a small team of Latinists at the University of Geneva has been involved in this trend. UNIGE's Department of Ancient Studies was linked to the CISA at its foundation, in the figure of Philippe Borgeaud, the then Professor of the History of Religions. He ran a series of memorable Friday-morning seminars in the building on the Rue des Battoirs, inviting scholars from near and far, and publication of some of the papers followed (see, for example, P. Borgeaud and A.-C. Rendu Loisel, Violentes émotions. Approches comparatistes, Droz, Geneva 2009). With the retirement of Philippe Borgeaud, matters took a more literary turn, and attention was brought to bear on the question of the translation of the emotions, tracing cross-cultural similarities and differences between the representation of the emotions in Greek and Latin texts. Chiara Battistella (now Associate Professor of Latin at the University of Udine) began working on the Medea of Seneca, a Roman play of the mid-first century CE that is a reworking of the famous Greek version of Euripides, whose play was first performed in Athens in 431 BCE. In addition, Lavinia Galli Milic (Lecturer in Latin at UNIGE) worked on the Latin vocabulary of anger, along lines developed in 'The GRID Project' at the CISA. The depiction of extreme anger leading to infanticide terrifies and fascinates in almost equal measure, and so the emotions of Medea were the subject of a colloquium held at the Fondation Hardt, Vandoeuvres, in May 2019. A collection of the papers from that event has recently been published (April 2021) as a special issue of the journal Greece and Rome, volume 69, edited by Ed Sanders, a young scholar from the University of London who has done important work on the emotions (see, for example, Envy and Jealousy in Classical Athens. A Socio-Psychological Approach, Oxford University Press, Oxford 2014). In fact, the Medea conference was the third and final act in a trilogy, the trajectory of which was planned from the outset to run from a first event (held at the Fondation Hardt in May 2013) on the affective turn and the field of Classics as a whole. That colloquium was published in 2016 as Emotions in the Classical World: Methods, Approaches, and Directions, edited by D. Cairns and D. Nelis (Franez Steiner Verlag, Stuttgart). Subsequently, a second event, aimed at narrowing the focus, was held in October 2014. Its topic was 'Seneca's tragic passions: philosophical and

literary perspectives', the Roman philosopher Seneca being one of antiquity's most brilliant and influential philosopher of the emotions. A selection of the papers delivered at that event was published in 2017 as a thematic volume of the journal MAIA, Rivista Quadrimestrale di Letterature Classiche, nuova serie, Brescia, volume 69.2. The collaboration with the CISA has undoubtedly widened the research interests and enriched the research profile of the Latinists in Geneva. By means of the three conferences organized in close collaboration with Douglas Cairns (University of Edinburgh) and all the related work undertaken by Chiara Battistella and Lavinia Galli Milic, it has been possible to investigate a range of philosophical and literary topics, including disgust in early Greek literature, grief and consolation in Greek tragedy, horror and pity in ancient Greek aesthetics, the poetics of ancient emotional expression, metaphor and emotion in Euripides and Seneca, weeping in Senecan tragedy, the joy of killing in Seneca's Medea, and much else. While doing so, it has been possible to build bridges between the cutting-edge modern research in the affective sciences being carried out in Geneva and the study of the ancient world. By reading Greek and Roman literature in light of modern research we can come to appreciate just how much the ancients were fascinated by the emotions and the fertility and complexity of their thinking about them. Improved appreciation of that thinking can also provide useful perspectives for the modern scientific study of the emotions, while at the same time contributing to our knowledge of the history of the study of the emotions



BRAIN AND BEHAVIOUR LABORATORY (BBL)

TeamVision

Medical mistakes are an important but preventable cause of death. Developed by 3 CISA members (Donald Glowinski, Emmanuel Badier, Florian Bucheit), the TeamVision solution (https://teamvision.ai/) helps caregivers improve their coordination skills to minimize the risk of incidents. Based on artificial intelligence technology, the analysis and visualization of group dynamics provide objective measures to train in identifying and anticipating risk situations. After having obtained an FNS Spark funding, then Innogap funding in 2020, TeamVision won the Startup prize at the HUG innovation day in October 2021 (https://www.linkedin.com/feed/update/urn:li:activity:6857323285563211778/) allowing it to integrate the Geneus incubator (https://geneus.ch/) to accelerate its development.



Virtual Reality For Kids at BBL: Padawan

Attention Deficit Hyperactivity Disorder (ADHD) is a common disorder that affects approximately 5% of children. The Padawan research project, led by Dr. Frédéric Grouiller and using the VR and MRI platforms of the Brain & Behaviour Laboratory, aims to determine whether a virtual reality intervention in a playful environment combined with electroencephalography (EEG) recording would be feasible and tolerated in children. Indeed, an effective therapy, based on virtual reality training with neurofeedback, would improve the progression of children compared to traditional neurofeedback and thus avoid the undesirable effects of drug treatments. For this project Dr Grouiller received support from the Novartis FreeNovation Foundation and Dr Carole Guedj received support from the Gertrude von Meissner Foundation for the application to ADHD children.

VR For Kids at BBL: MRI Adventure

Whether for research or clinical purposes, children also sometimes need to be scanned in an MRI. However, in the youngest children, the realization of such an examination can be a source of difficulties that lead to the production of unusable scans. The MRI Adventure project, developed in collaboration between the Brain & Behaviour Laboratory and the Centre universitaire d'informatique (CUI) of the UNIGE, aims to determine if the use of virtual reality would be beneficial to prepare children before conducting an MRI scan. A virtual reality application on a VR headset allowing children to immerse themselves inside a 3D reproduction of an MRI in a playful and safe context was developed so that they could familiarize themselves with the safety rules, learn to control their fears and acquire the ability to remain still during an MRI scan.









Completed PhDs

Rodrigo Diaz successfully defended his PhD thesis "What (do people think) is an emotion" on January 29, 2021 under the supervision of Prof. Kevin Reuter (University of Bern).

Constant Bonard successfully defended his PhD thesis "Emotion and Meaning" on February 5, 2021 under the supervision of Prof. Julien Deonna.

Rayatdoost Soheil successfully defended his PhD thesis "Computational Understanding of the Interaction between Facial Expressions and Electroencephalogram (EEG) Signals for Emotion Recognition" on February 9, 2021 under the supervision of Prof. Soleymani, Prof. Rudrauf and Prof. Chopard.

Julien Gaviria Lopez successfully defended his PhD thesis "Dynamic functional brain correlates of negative emotions and their interactions with executive control" on March 19, 2021 under the supervision of Prof. Patrik Vuilleumier.

Heather Carlson successfully defended her PhD thesis "Aftermath of Valence and Arousal in Odors" on June 22nd, 2021, under the supervision of Prof. Patrik Vuilleumier and David Sander.

Cyrielle Chappuis successfully defended her PhD thesis "Voice and first impression formation: the role of context and vocal parameters in person perception" on July 5th, 2021, under the supervision of Prof. Didier Grandjean.

Juliette Vazard successfully defended her PhD thesis "The Anxious Inquirer: Emotions and Epistemic Uncertainty" on July, 15th 2021 under the supervision of Prof. Fabrice Teroni and Prof. Jérôme Dokic (EHESS, Paris).

Emilie Qiao successfully defended her PhD thesis "Effects of Emotions on Social Cognition" on September, 17th 2021 under the supervision of Prof. Patrik Vuilleumier

NEW BOOKS / SPECIAL ISSUES



The Oxford handbook of emotional development.

Dukes, D., Samson, A., & Walle, E. (Eds.). Oxford University Press.

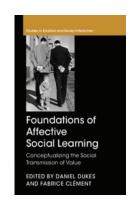
Available at: https://global.oup.com/academic/product/the-oxford-handbook-of-emotional-development-9780198855903?cc=ch&lang=en&

Foundations of Affective Social Learning

Dukes, D., Clement, F. (Eds.). Cambridge University Press.

Available at: https://www.cambridge.org/gb/academic/subjects/psychology/social-psychology/foundations-affective-social-learning-conceptualizing-social-transmission-value?format=PB

Ever wondered how we learn from others what matters (and what doesn't)? Interested in how cultures are formed and perpetuated? The paperback version of Foundations of Affective Social Learning (CUP) is out now and explains how different cognitive and affective mechanisms are employed to learn socially what to value and what to ignore, what matters for those closest us. Dr. Daniel Dukes (University of Fribourg) and Prof. Fabrice Clément (University of Neuchatel) edited this volume which features international experts from different fields, including current CISA members, Prof. David Sander, Prof. Christian Mumenthaler & Prof. Thibaud Gruber







Awards and grants

Agnès Baehni was awarded the "Prix Adolphe Neuman" for her master thesis, and the "Prix Dr de Dukszta" for her master's grades.

Tobias Brosch was obtained funding from the Swiss Innovation Agency for the project "eNet - an adaptable platform for advanced local energy markets" and from Innosuisse SWEET consortium grant for the project "Pathways to an efficient future energy system through flexibility and sector coupling". He was also the principal investigator for the project "Evidence-based development of sustainability communications to maximize behavioral impact", from NOUS productions.

Julien Deonna et Fabrice Teroni were funded by the SNSF for the project entitled "Emotion and Mental Imagery", which will start in September 2022.

Didier Grandjean was obtained a grant from the Fondation Boninchi for the project entitled "Stay emotionally close to defeat critical periods. Impact of shared and interactive emotional reading program with parents on preterm brain development during the first months of life".

Ulf Hahnel was granted an SNSF Eccellenza Professorial Fellowship for the project entitled « Evidence-based pathways towards sustainable judgment and decision-making: A multi-dimensional perspective », scheduled to start on May 2022.

Steve Humbert-Droz was granted the fellowship "Bourse Philibert Collart" from the Société Académique (SACAD), Geneva.

Marcello Mortillaro obtained a mandate from the Ecole Hôtelière de Lausanne for the project "Developing a performance-based assessment of emotional intelligence and its different facets for the hospitality sector".

Michele Davide Ombrato was granted the fellowship "Bourse Philibert Collart" from the Société Académique (SACAD), Geneva.

Eva Pool was awarded a "Subside Tremplin" of the University of Geneva. This subside makes it possible for female researchers at the University of Geneva to free up time in order to enrich their research portfolio, write articles, finalize or publish their thesis, or go abroad.

Marzia Varutti was granted a two year Marie Slodowska Curie Actions fellowship from the Union European for the project entitled "Curating Emotions: « Exploring emotional competence in curatorial practice ».

Juliette Vazard obtained a two year SNSF Postdoc Mobility grant at City University of New York and at the University of Toronto.

"TeamVision" was awarded the HUG Startup 2021 Prize and the 3rd HUG Academy Innovation Prize. "Team Vision" is a project led by Donald Glowinski, Florian Bluchheit and Emmanuel Badier from the Swiss Center for Affective Sciences and Brain Behavior Laboratory of the University of Geneva (see page 4 of this Newsletter).







Tout contre la terre, Natural History Museum Geneva

(October 14, 2021 to November 6, 2022). Dr. Cristina Soriano and Prof. Tobias Brosch participated in the new temporary exhibition "Tout contre la Terre" at the Geneva Musèum. They invite us to explore our emotions and behaviors in the context of the environmental crisis. http://institutions.ville-geneve.ch/fr/mhn/votre-visite/agenda/tout-contre-la-terre/

Alpine Brain Imaging Meeting (ABIM) in Champéry (Switzerland)

(January 9 to 13, 2022). The conference will feature 4 days of talks, with invited speakers who are experts in different aspects of MRI and EEG in cognitive and clinical neuroscience, as well as free talks and poster presentations by other participants. Information and registration on https://www.unige.ch/ABIM/

Annual Research Forum 2022 (ARF)

(Date to be announced). The next edition of the Annual Research Forum will take place at the Campus Biotech in Geneva. The ARF offers the opportunity to meet peers (old and new) and get updated on the fascinating research carried out at the Center, and the last logistic developments.

Emotions Brain Forum - Geneva

(Date to be announced). Brain Circle Italia and the Swiss Center for Affective Sciences co-organize a special symposium on "Emotion, Cognition, and Behavior". The Emotions Brain Forum is itinerant. It gathers scientists from universities and institutions from all over the world to analyse the emotions, considering all their biochemical, genetic, epigenetic, psychological and neurological aspects. The BrainForum will take place in eight cities: Jerusalem, Genova, Rome, Lugano, Milan, Geneva, London and Lisbon. Information and registration: https://www.emotionsbrainforum.org

Attitudinal normativity - Geneva

(April 7-8, 2022). Workshop organized by Roberto Keller within his Doc.ch project "On the normativity of Correctness".

Annual Conference of the Society for Affective Science

(March 30 - April 2, 2022). Online event. Prof Andrea Samson is member of the program committee. https://society-foraffective-science.org/conferences/2022-sas-annual-conference/

Honoring Ronald de Sousa - Geneva

(May 22-23, 2022). Conference honoring the work of Ronald de Sousa organized by Julien Deonna, Christine Tappolet and Fabrice Teroni.

Emotion and Rationality - Geneva

(May 25, 2022). One-Day Graduate Workshop following the Festschrift for Ronnie de Sousa's Rationality of Emotion organized by Antoine Rebourg and Agnes Baehni.

Envy - Geneva

(June 22, 2022). One-day Symposium on Sara Protasi "The Philosophy of Envy" organized by Emanuela Ceva, Julien Deonna and Fabrice Teroni.

Political Role of Moral Emotions - Geneva

(June 25-26, 2022). Two-day conference on the normative, conceptual and practical dimensions of political emotions organized by Emanuela Ceva (Geneva), Andrew I. Cohen (Georgia State), Julien Deonna (Geneva), Nenad Stojanovic (Geneva) and Fabrice Teroni (Geneva).

International Summer School in the Affective Sciences (ISSAS) (July 7-15, 2022) at the Château de Bossey, near Geneva

Biennial summer school of the Swiss Center for Affective Sciences, next year devoted to the topic "Emotions and Well-Being". For further information: https://www.unige.ch/cisa/education/summer-school-issas/issas-2022/





On our website https://www.unige.ch/cisa/

Research materials are available at https://www.unige.ch/cisa/research/materials-and-online-research/research material/. Free of charge for non commercial research projects.

Online Platform on Emotional Competence at https://www.unige.ch/cisa/research/materials-and-online-research/online-research/, including the major contributions and debates in the literature on emotional intelligence, potential applications, as well as results of the most recent research.

FACSGen is available to the scientific community. A demo is available for download, along with an introductory video tutorial on www.unige.ch/cisa/facsgen

Other CISA websites of interest

XPhi Replicability: https://sites.google.com/site/thexphireplicabilityproject/ The XPhi Replicability project, coordinate by Prof. Florian Cova, seeks to reach a reliable estimate of the replicability of empirical results in experimental philosophy.

Publications

Abo Foul, Y., Eitan, R., Mortillaro, M., & Aviezer, H. (2021). Perceiving dynamic emotions expressed simultaneously in the face and body minimizes perceptual differences between young and older adults. *Journals of Gerontology. B, Psychological Sciences & Social Sciences*. doi:10.1093/geronb/gbabo64

Antypa, A., Perrault, A., Vuilleumier, P., Schwartz, S., & Rimmele, U. (2021). Suppressing the morning cortisol rise after memory reactivation at 4 a.m. enhances episodic memory reconsolidation in humans. *The Journal of Neuroscience*, 41(34), 7259-7266. doi:10.1523/JNEUROSCI.0096-21.2021

Bates, A. E., Primack, R. B., ..., Gruber, T., ..., & Duarte, C. M. (2021). The global COVID-19 lockdown reveals humans as threats and custodians of biodiversity. *Conservation Biology*. 2021 May 20: 109175. doi: 10.1016/j.biocon.2021.109175

Bonard, C. & Vazard, J. (2021). Pas de panique ? *Les Ateliers de l'Ethique/*

The Ethics Forum: COVID-19 and Emotions, 16, 1.

Bracco, F., Masini, M., Glowinski, D., Piccinno, T., & Schaerlaeken, S. (2021). Simulation as a training method for electricity workers' safety. *International Journal of Environmental Research and Public Health*, *18*(4), 1591. doi:10.3390/ijerph18041591

Carlson, H. (2021). Aftermath of valence and arousal in odors. doi:10.13097/archive-ouverte/unige:153937 Retrieved from https://nbn-resolving.org/urn:nbn:ch:unige-1539375

Charpentier, C., Faulkner, P., Pool, E. R., ..., & O'Doherty, J. (2021). How representative are neuroimaging samples? Large-scale evidence for trait anxiety differences between fMRI and behaviour-only research participants. *Social Cognitive and Affective Neuroscience*. Advance online publication. doi: 10.1093/scan/nsabo57

Cheval, B., Maltagliati, S., Sieber, S., Beran, D. H., Chalabaev, A., Sander, D., . . . Boisgontier, M. P. (2021). Why are individuals with diabetes less active? the mediating role of physical, emotional, and cognitive factors. *Annals of Behavioral Medicine*. doi:10.1093/abm/kaaa120

Cheval, B., Mongin, D., Cullati, S., Uribe Caparros, A., Pihl-Thingvad, J., Chopard, P. A., & Courvoisier, D. (2021). Associations of emotional burden and coping strategies with sick leave among healthcare professionals: A longitudinal observational study. *International Journal of Nursing Studies*, 115, 103869. doi:10.1016/j.ijnurstu.2021.103869

Cheval, B., Sivaramakrishnan, H., Maltagliati, S., Fessler, L., Forestier, C., Sarrazin, P., . . . Boisgontier, M. P. (2021). Relationships between changes in self-reported physical activity, sedentary behaviour and health during the coronavirus (COVID-19) pandemic in france and switzerland. *Journal of Sports Sciences*, 39(6), 699-704. doi:10.1080

/02640414.2020.1841396

Ceravolo, L., Schaerlaeken, S., Frühholz, S., Glowinski, D., & Grandjean, D. (2021). Frontoparietal, Cerebellum Network codes for accurate intention prediction in altered perceptual conditions. *Cerebral Cortex Communication*, *2*(2):tgabo31. doi: 10.1093/texcom/tgabo31.

Ceravolo, L., Frühholz, S., Pierce, J., Grandjean, D., & Péron, J. (2021). Basal ganglia and cerebellar contributions to vocal emotion decoding: a high resolution fMRI study. *Scientific Reports*, 11(1):10645. doi: 10.1038/s41598-021-90222-6.

Clément, F., & Dukes, D. (2021). Affective social learning: A lens for developing a fuller picture of socialization processes. In D. Dukes, A. C. Samson, & E. Walle. (Eds.), *The Oxford handbook of emotional development*. Oxford University Press.

Publications

Conte, B., Hahnel, U., & Brosch, T. (2021). The dynamics of humanistic and biospheric altruism in conflicting choice environments. *Personality and Individual Differences*, 173, 110599. doi:10.1016/j. paid.2020.110599

Coppin, G., Audrin, C., Monseau, C., & Deneulin, P. (2021). Is knowledge emotion? the subjective emotional responses to wines depend on level of expertise and sensitivity to key information about the wine. *Food Research International*, 142, 110192. doi:10.1016/j.foodres.2021.110192

Coppin, G., Audrin, C., Monseau, C., & Deneulin, P. (2021). Is knowledge emotion? The subjective emotional responses to wines depend on level of expertise and sensitivity to key information about the wine. Food Research International. doi: 10.1016/j.foodres.2021.110192

Coppin, G., & Pool, E. (2021). Affect, "wanting", and relevance: Commentary on Lutz et al. (2020). *Addictive Behaviors*, 115, 106792. doi: 10.1016/j.addbeh.2020.106792

Cousse, J., Trutnevyte, E., & Hahnel, U. (2021). Tell me how you feel about geothermal energy: Affect as a revealing factor of the role of seismic risk on public acceptance. *Energy Policy*, 158, 112547. doi:10.1016/j.enpol.2021.112547

Cova, F., Strickland, B., Abatista, A., Allard, A., Andow, J., Attie, M., ... & Zhou, X. (2021). Estimating the reproducibility of experimental philosophy. *Review of Philosophy and Psychology*, 12(1), 9-44.

Cova, F., Gaillard, M., & Kammerer, F. (2021). Is the phenomenological overflow argument really supported by subjective reports? *Mind & Language*, 36(3), 422-450.

Debarnot, U., Perrault, A., Sterpenich, V., Legendre, G. Y. T., Huber, C., Guillot, A., & Schwartz, S. (2021). Motor imagery practice benefits during arm immobilization. *Scientific Reports*, 11(1), 8928. doi:10.1038/s41598-021-88142-6

Debracque, C., Gruber, T., Lacoste, R., Grandjean, D., & Meguerditchian, A. (2021). Validating the use of functional Near-Infrared Spectroscopy in monkeys: The case of brain activation lateralization in Papio Anubis. *Behavioural and Brain Research*, 403, 113133. doi: 10.1016/j. bbr.2021.113133.

Delplanque, S., & Sander, D. (2021). A fascinating but risky case of reverse inference: From measures to emotions! *Food Quality and Preference*, 104183. doi:10.1016/j. foodqual.2021.104183

Denervaud, S., Hess, A., Sander, D., & Pourtois, G. (2021). Children's automatic evaluation of self-generated actions is different from adults. *Developmental Science*, 24(3), e13045. doi: 10.1111/desc.13045

Deonna, J. A., & Teroni, F. (2021). Which Attitudes for the Fitting Attitude Analysis of Value? Theoria.

Deza, Y., Fang, X., Petzold, J., Spreer, M., Riedel, P., Marxen, M., ... Smolka, M. N. (2021). Effects of moderate alcohol levels on default mode network connectivity in heavy drinkers. *Alcoholism: Clinical and Experimental Research*, doi:10.1111/acer.14602

Deza, Y., Baez Lugo, S., Vuilleumier, P., Chocat, A., Chételat, G., Poisnel, G., & Klimecki, O. M. (2021). Whole blood serotonin levels in healthy elderly are negatively associated with the functional activity of emotion-related brain regions. *Biological Psychology*, 160, 108051. https://doi.org/10.1016/j.biopsycho.2021.108051

Di Poi, G., Dukes, D., Tran, M., Meuleman, B., & Samson, A. C. (2021). Comment les familles d'enfants avec besoins éducatifs particuliers ont vécu la crise de la COVID-19: Observations préliminaires pour la Suisse. [How families with children with special educational needs experienced the Covid-19 crisis: Preliminary observations for Switzerland]. Revue suisse de pédagogie spécialisée, 1, 9–18.

Dukes, D., & Audrin, C. (2021). Émotions positives à l'école : quel intérêt ? [Positive emotions at school: Where is the interest?]. Educateur (L)', 4, 4-5.

Dukes, D., & Samson, A. C. (2021). COVID-19: Donnons la parole aux parents d'enfants avec des besoins éducatifs particuliers [COVID-19: giving voice to the parents of children with special educational needs]. *Pages romandes*, 1, 28–31.

Dukes, D., Samson, A., & Walle, E. (Eds.). (2021). The Oxford handbook of emotional development. *Oxford University Press*.

Dukes, D., Van Herwegen, J., Alessandri, M., Alnemary, F., Rad, J. A., Lavenex, P. B., Bolshakov, N., Bölte, S., Buffle, P., Ying Cai, R., Campos, R., Chirita-Emandi, A., P. Costa, A., Costanzo, F., Di Poi, G., Des Portes, V., Faivre, L., Famelart, N., Fisher, M., ... Samson, A. C. (2021, February 15). Introducing the COVID-19 crisis Special Education Needs Coping Survey. PsyArXiv. doi.org/10.31234/osf.io/rtswa

Dukes, D., Abrams, K., Adolphs, R., Ahmed, M. E., Beatty, A., Berridge, K. C., Broomhall, S., Brosch, T., Campos, J. J., Clay, Z., Clément, F., Cunningham, W. A., Damasio, A., Damasio, H., D'Arms, J., Davidson, J. W., de Gelder, B., Deonna, J., de Sousa, R., Ekman, P., Ellsworth, P. C., Fehr, E., Fischer, A., Foolen, A., Frevert, U., Grandjean, D., Gratch, J., Greenberg, L., Greenspan, P., Gross, J. J., Halperin, E., Kappas, A., Keltner, D., Knutson, B., Konstan, D., Kret, M. E., LeDoux, J. E., Lerner, J. S., Levenson, R. W., Loewenstein, G., Manstead, A. S. R., Maroney, T. A., Moors, A., Niedenthal, P., Parkinson, B., Pavlidis, I., Pelachaud, C., Pollak, S. D., Pourtois, G., Roettger-Roessler, B., Russell, J. A., Sauter, D., Scarantino, A., Scherer, K. R., Stearns, P., Stets, J. E., Tappolet, C., Teroni, F., Tsai, J., Turner, J., Reekum, C. V., Vuilleumier, P., Wharton, T., & Sander, D. (2021). The rise of affectivism. Nature Human Behavior, 5(7):816-820. doi: 10.1038/541562-021-01130-8.

Erdemli, A., Audrin, C., & Sander, D. (2021). The role of epistemic emotions in learning from others. *Behavioral and Brain Sciences*, 44, E151. doi:10.1017/S0140525X20001624

Filippa, M., Monaci, M.G., Spagnuolo, C., Serravalle, P., Daniele, R., & Grandjean, D. (2021). Maternal speech decreases pain scores and increases oxytocin levels in preterm infants during painful procedures. *Scientific Reports*, 11(1).

Filippa, M., Saliba, S., Essely, R., Gratier, M., Grandjean, D., & Kuhn, P. (2021). Systematic review shows the benefits of involving the fathers of preterm infants in early interventions in neonatal intensive care units. *Acta Paediatrica*, 110(9):2509-2520. doi: 10.1111/apa.15961.

Frick, A., Schleihauf, H., Satchell, L.P. & Gruber, T. (2021). Carry-over effects of tool functionality and previous unsuccessfulness increase overimitation in children. *Royal Society Open Science*, 8, 201373. doi: 10.1098/rsos.201373

Gaviria Lopez, J., REY, G., Bolton, T., Delgado, J., Van De Ville, D., & Vuilleumier, P. (2021). Brain functional connectivity dynamics at rest in the aftermath of affective and cognitive challenges. *Human Brain Mapping*, 42(4), 1054-1069. doi:10.1002/hbm.25277

Gaviria Lopez, J., REY, G., Bolton, T., Van De Ville, D., & Vuilleumier, P. (2021). Dynamic functional brain networks underlying the temporal inertia of negative emotions. *Neurolmage*, 240, 118377. doi:10.1016/j.neuroimage.2021.118377

Gruber, T., Bazhydai, M., Sievers, C., Clement, F., & Dukes, D. (2021). The ABC of social learning: Affect, behavior, and cognition. *Psychological Review*. doi.org/10.1037/rev0000311

Gruber, T. (2021) How does the chimpanzee mind represent its cultures? Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43).

Publications

Ischer, M., Coppin, G., De Marles, A., Esselier, M., Porcherot, C., Gaudreau, N., Cayeux, I., & Sander, D., Delplanque, S. (2021). Exogenous capture of visual spatial attention by olfactory-trigeminal stimuli. *PLoS ONE 16*(6): e025943. doi: 10.1371/journal.pone.0252943

Labbé, C., Trost, W., Grandjean, D. (2021). Affective experiences to chords are modulated by mode, meter, tempo, and subjective entrainment. *Psychology of Music*, *49*(4):915-930. doi:10.1177/0305735620906887.

Li, L., Yu, Q., Zhao, W., Herold, F., Cheval, B., Kong, Z., . . . Zou, L. (2021). Physical activity and inhibitory control: The mediating role of sleep quality and sleep efficiency. *Brain Sciences*, 11(5), 664. doi:10.3390/brainsci11050664

Mahmoodi, J., Patel, M., & Brosch, T. (2021). Pay now, save later: Using insights from behavioural economics to commit consumers to environmental sustainability. Journal of Environmental *Psychology*, 76, 101625. doi:10.1016/j.jenvp.2021.101625

Maltagliati, S., Rebar, A., Fessler, L., Forestier, C., Sarrazin, P., Chalabaev, A., . . . Cheval, B. (2021). Evolution of physical activity habits after a context change: The case of COVID 19 lockdown. *British Journal of Health Psychology*. doi:10.1111/bjhp.12524

Medit-aeging research group. (2021). Whole blood serotonin levels in healthy elderly are negatively associated with the functional activity of emotion-related brain regions. *Biological Psychology*, 160, 108051. doi:10.1016/j.biopsycho.2021.108051

Mella, N., Grouiller, F., Mouthon, M., & Picard, F. (2021). Neural concomitants of remote memory in a comedian with exceptional verbal memory. *Journal of Cognitive Enhancement*. doi:10.1007/s41465-021-00210-x

Mihailov, E., López, B. R., Cova, F., & Hannikainen, I. R. (2021). How pills

undermine skills: Moralization of cognitive enhancement and causal selection. *Consciousness and Cognition*, 91, 103120.

Monaci, M. G., Gratier, M., Trevarthen, C., Grandjean, D., Kuhn, P., & Filippa, M. (2021). Parental Perception of Vocal Contact with Preterm Infants: Communicative Musicality in the Neonatal Intensive Care Unit. *Children*, 17;8(6):513. doi: 10.3390/children8060513.

Mongin, D., Uribe Caparros, A., Gateau, J., Gencer, B., Cheval, B., Cullati, S., & Courvoisier, D. (2021). Dynamical analysis in a self-regulated system undergoing multiple excitations: First order differential equation approach. *Multivariate Behavioral Research*, 56(4), 649-668. doi:10.1080/00273171.2020.1754155

Montagrin, A., Martins-Klein, B., Sander, D., & Mather, M. (2021). Effects of hunger on emotional arousal responses and attention/memory biases. *Emotion*, *21*(1), 148-158. doi:10.1037/emo0000680

Munoz Tord, D., Coppin, G., Pool, E., Mermoud, C., Pataky, Z., Sander, D., & Delplanque, S. (2021). 3D-printed pacifier-shaped mouthpiece for fMRI-compatible gustometers. *ENeuro*, *8*(5), ENEURO.0208-0221.2021. doi:10.1523/ENEURO.0208-21.2021

Palminteri, S., & Lebreton, M. (2021). Context-dependent outcome encoding in human reinforcement learning. *Current Opinion in Behavioral Sciences*, 41, 144-151. doi:10.1016/j.cobeha.2021.06.006

Panteleeva, Y., Courvoisier, D. S., Glowinski, D., Grandjean, D. M., & Ceschi, G. (2021). Effects of emotionally incongruent musical excerpts on memory retrieval. Psychology of Music. doi. org/10.1177/03057356211034571

Pebsworth, P. A., Gruber, T., Miller, J. D., Zuberbühler, K., & Young, S. L. (2021). Selecting between iron-rich and clay-rich soils: A geophagy field experiment with black-and-white colobus monkeys in the

budongo forest reserve, uganda. *Primates*, *62*(1), 133-142. doi:10.1007/s10329-020-00845-y

Pernin, T., Dominice Dao, M. I., Cheval, B., Courvoisier, D., Haller, D. M., Narring, F., . . . Guessous, I. (2021). The ABC of primary care for university students: A 3-step structured approach at geneva university hospitals. *SN Comprehensive Clinical Medicine*. doi:10.1007/s42399-021-00926-z

Pesbworth, P., Gruber, T., Miller, J. D., Zuberbühler, K., Young, S. L. (2021). Selecting between iron-rich and clay-rich soils: a geophagy field experiment with black-and-white colobus monkeys in the Budongo Forest Reserve, Uganda. *Primates*, 62,133-42. doi:10.1007/s10329-020-00845-y

Prosetzky, I., Poustka, L., Dukes, D., & Samson, A. C. (2021). Eine internationale Studie zu Auswirkungen der COVID-19-Pandemie auf Familien mit einem behinderten Kind: Wie ging es den Familien in Deutschland? Ein Bericht [An international study on the impact of the COVID-19 pandemic on families with a child with special educational needs: How did German families fare? A report]. *Teilhabe*, 60, 2, 88–89.

Rahman, K., Vandoni, M., Cheval, B., Asaduzzaman, M., Hasan, M. N., & Rahman, S. T. (2021). Exploring two pandemics in academic arena: Physical activity and sedentary behaviors profile of university students in bangladesh. European Journal of Investigation in Health, *Psychology and Education*, 11(2), 358-371. doi:10.3390/ejihpe11020027

REY, G., Bolton, T. A. W., Gaviria Lopez, J., PIGUET, C. M., Preti, M. G., Favre, S., . . . Vuilleumier, P. (2021). Dynamics of amygdala connectivity in bipolar disorders: A longitudinal study across mood states. *Neuropsychopharmacology, 46*(9), 1693-1701. doi:10.1038/s41386-021-01038-x

Ros, T., Kwiek, J. B., Andriot, T., Michela, A., Vuilleumier, P., Garibotto, V., & Ginovart, N. (2021). PET imaging of dopamine neurotransmission during EEG neurofeedback. *Frontiers in Physiology, 11*(590503) doi:10.3389/fphys.2020.590503

Rudrauf, D., Debbane, M., & Samson, A. C. (2021). Current challenges and advances in computational and artificial agent modelling for the simulation of affective social learning and regulation of motivated behaviours. In D. Dukes, A. C. Samson, & E. Walle (Eds.), *Handbook of emotional development*. Oxford University Press.

Samson, A. C., Di Poi, G., Tran, M., & Dukes, D. (2021). Die Auswirkungen der COVID-19 Pandemie in der Schweiz: Erste Beobachtungen bei Familien mit Kindern sonderpädagogischem Förderbedarf [The effects of the COVID-19 pandemic in Switzerland: First observations in families with children with special educational needs]. Schweizerische Zeitschrift für Heilpädagogik, 27(5-6), 18–25.

Sander, D., & Delplanque, S. (2021). Unconscious emotional processing. Food Quality and Preference, 104177. doi:10.1016/j. foodqual.2021.104177

Sander, D., & Nummenmaa, L. (2021). Reward and emotion: An affective neuroscience approach. *Current Opinion in Behavioral Sciences*, *39*, 161-167. doi: 10.1016/j. cobeha.2021.03.016

Schaerlaeken, S., Glowinski, D., & Grandjean, D. (2021). Metaphors Evoked by the Sound Listening of Classical Music: Characterization, Classification, and Measurement. *Psychology of Music.* doi. org/10.1177/0305735621991235

Scherer, K. R., Dieckmann, A., Unfried, M., Ellgring, H., & Mortillaro, M. (2021). Investigating appraisal-driven facial expression and inference in emotion communication. *Emotion*, *21*(1), 73-95. doi:10.1037/emooooo693



Publications

Seuss, D., Hassan, T., Dieckmann, A., Unfried, M., Scherer, K. R., Mortillaro, M., & Garbas, J. (2021). Automatic estimation of action unit intensities and inference of emotional appraisals. *IEEE Transactions on Affective Computing*. doi:10.1109/TAFFC.2021.3077590

Sideropoulos, V., Dukes, D., Hanley, M., Palikara, O., Rhodes, S. Riby, D., Samson, A. C., & Van Herwegen, J. (2021). The impact of COVID-19 on anxiety and worries for families of individuals with Special Education Needs and Disabilities in the UK. Journal of Autism and Developmental Disabilities. https://doi.org/10.1007/s10803-021-05168-5

Silva, L. (2021). 'Is Anger a Hostile Emotion?'. Review of Philosophy and Psychology.

Silva, L. (2021). 'Anger and its Desires'. European Journal of Philosophy.

Silva, L. (2021). 'The Efficacy of Anger'. In A. Falcato, & S. Silva, *The Politics of Emotional Shockwaves*. Palgrave Macmillan.

Simonet, D. V., Miller, K. E., Askew, K. L., Sumner, K. E., Mortillaro, M., & Schlegel, K. (2021). How multidimensional is emotional intelligence? bifactor modeling of global and broad emotional abilities of the geneva emotional competence test. *Journal of Intelligence*, *9*(1). doi:10.3390/jintelligence9010014

Sterpenich, V., Van Schie, M., Catsiyannis, M., Ramyead, A., Perrig, S., Yang, H., . . . Schwartz, S. (2021). Reward biases spontaneous neural reactivation during sleep. *Nature Communications*, 12(1), 4162. doi:10.1038/s41467-021-24357-5

Stussi, Y., Pourtois, G., Olsson, A., & Sander, D. (2021). Learning biases to angry and happy faces during pavlovian aversive conditioning. *Emotion*, *21*(4), 742-756. doi:10.1037/emoo000733

Su, X., Cai, R. Y., Uljarevi, M., Van Herwegen, J., Dukes, D., Yang Y., Peng X., & Samson, A. C. (2021). Brief report: A cross-sectional study of anxiety levels and concerns of Chinese families of children with Special Educational Needs and Disabilities post-first-wave of COVID-19. Frontiers in Psychology, 12, 1614. doi:10.3389/fpsyt.2021.708465

Tarun, A., Wainstein-Andriano, D., Sterpenich, V., Bayer, L., Perogamvros, L., Solms, M., . . . Van De Ville, D. (2021). NREM sleep stages specifically alter dynamical integration of large-scale brain networks. *IScience*, 24(1), 101923. doi:10.1016/j. isci.2020.101923

Teroni, F. (2021). 'Evaluative Theories in Psychology and Philosophy of Emotion'. Mind and Language.

Teroni, F. (2021). 'Emotions and Memory'. Emotion Researcher. https://emotionresearcher.com/emotions-and-memory/

Thomasson, M., Benis, D., Saj, A., Voruz, P., Ronchi, R., Grandjean, D., Assal, F., & Péron, J. (2021). Sensory contribution to vocal emotion deficit in patients with cerebellar stroke. *Neuroimage Clinical*, 31:102690. doi: 10.1016/j.nicl.2021.102690.

Ting, C., Palminteri, S., Lebreton, M., & Engelmann, J. B. (2021). The elusive effects of incidental anxiety on reinforcement-learning. Journal of Experimental Psychology. *Learning, Memory, and Cognition*, doi:10.1037/xlm0001033

van Assche, M., Simioni, S., Vrti ka, P., Sander, D., Schluep, M., & Vuilleumier, P. (2021). Neuroimaging of emotional dysregulation in multiple sclerosis: relationship with alexithymia. Swiss Archives of Neurology, Psychiatry and Psychotherapy. https://doi.org/10.4414/sanp.2021.03216

Vazard, J. (2021). From Habits to Compulsions: Losing Control?. *Philosophy, Psychiatry, & Psychology*, 28(2), 163-171

Veer, I. M., Riepenhausen, A., Zerban, M., Wackerhagen, C., Puhlmann, L. M. C., Engen, H., . . . Kalisch, R. (2021). Psycho-social factors associated with mental resilience in the corona lockdown. *Translational Psychiatry*, 11(1). doi:10.1038/s41398-020-01150-4

Walle, E., Dukes, D., & Samson, A. C. (2021). Conceptualizing and Advancing an Interdisciplinary Account of Emotional Development. In D. Dukes, A. C. Samson, & E. Walle (Eds). (forthcoming). *The Oxford handbook of emotional development*. Oxford University Press.

Wharton, T., Bonard, C., Dukes., D., Sander, D. & Oswald, S. (2021). Relevance and emotion. *Journal of Pragmatics*, 181, 259-269. doi:10.1016/j. pragma.2021.06.001

Wirsich, J., Jorge, J., Iannotti, G. R., Shamshiri, E. A., Grouiller, F., Abreu, R., Vulliemoz, S. (2021). The relationship between EEG and fMRI connectomes is reproducible across simultaneous EEG-fMRI studies from 1.5T to 7T. *NeuroImage*, 231, 117864. doi:10.1016/j.neuroimage.2021.117864

Wittman, M., & Mella, N. (2021). Having children speeds up the subjective passage of lifetime in parents. Timing & Time Perception. doi:10.1163/22134468-bja10023

Wuensch, L., Pool, E. R., & Sander, D. (2021). Individual differences in learning positive affective value. *Current Opinion in Behavioral Sciences*, 39, 19-26. doi: 10.1016/j.cobeha.2020.11.001

Zaharia, A., Dell-Angela, L., Sander, D., & Samson, A. C. (2021). The potential of board games to promote emotional competences. In D. Dukes, A. C. Samson, & E. Walle (Eds.), *Handbook of emotional development*. Oxford University Press.

Zaharia, A., Noir-Kahlo, K., Bressoud, N., Sander, D., Dukes, D., & Samson, A. C. (2021). Proof of concept: A brief psycho-educational training program to increase the use of posi-

tive emotion regulation strategies in individuals with autism spectrum disorder. *Frontiers in Psychology* – Positive Psychology.

Zhu, L., Yu, Q., Herold, F., Cheval, B., Dong, X., Cui, L., . . . Zou, L. (2021). Brain structure, cardiorespiratory fitness, and executive control changes after a 9-week exercise intervention in young adults: A randomized controlled trial. *Life*, 11(4), 292. doi:10.3390/life11040292

is the newsletter of the Swiss Center for Affective Sciences, a research centre for the interdisciplinary study of human emotion

The Swiss Center for Affective Sciences is hosted by the Université de Genève Campus Biotech Centre Interfacultaire en Sciences Affectives 9, ch. des Mines - 1202 Genève - Switzerland Tel: (+41) 22 379 09 31

Editor: cisa@unige.ch

For further information on our work, see our website https://www.unige.ch/cisa/

Follow us on Twitter: @CISA_UNIGE

Youtube: @CISA_UNIGE

Linkedin: Swiss Center for Affective Sciences ■

swissuniversities



FONDS NATIONAL SUISSE
SCHWEIZERISCHER NATIONALFONDS
FONDO NAZIONALE SVIZZERO
SWISS NATIONAL SCIENCE FOUNDATION

