

Book of abstracts

The possible: A sociocultural theory and its consequences

Vlad Glăveanu

Webster University Geneva, Switzerland

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This talk will advance and exemplify a sociocultural approach to the notion of the possible. Instead of grounding this concept within usual dichotomies with the actual or 'what is', sociocultural theory focuses on what the possible enables in our lives which is the experience of 'what could be', 'what might come', 'what could have been' and 'what can never be'. All of these are not disconnected from the actual but build on it and transform it altogether. They do so by helping us develop new perspective on the world, a process that requires acts of repositioning and position-exchange in physical, social and symbolic terms. These old and new, dominant and alternative perspectives enter in dialogue in ways that expand our horizon of possibility for both thought and action. In the end, the sociocultural theory of the possible places diversity of positions and perspectives at the heart of human possibility and, in this way, equates the negation of difference as its opposite (the non-possible). In the end, implications of these approach will be discussed briefly in relation to society and education. Pedagogies of the possible are proposed, in particular, as a radical re-thinking of education for the 21st century.

Dr. Vlad P. Glăveanu is Associate Professor and Head of the Department of Psychology and Counselling at Webster University Geneva, Associate Professor II at the Centre for the Science of Learning and Technology (SLATE), University of Bergen, Norway, and Director of the Webster Center for Creativity and Innovation (WCCI). His work focuses on creativity, imagination, culture, collaboration, and societal challenges. He edited the Palgrave Handbook of Creativity and Culture (2016) and the Oxford Creativity Reader (2018), co-edited the Cambridge Handbook of Creativity Across Domains (2017) and the Oxford Handbook of Imagination and Culture (2017), authored *The Possible: A Sociocultural Theory* (Oxford University Press, 2020) and *Wonder: The Extraordinary Power of an Ordinary Experience* (Bloomsbury, 2020), and authored or co-authored more than 200 articles and book chapters in these areas. Dr. Glăveanu co-edits the book series Palgrave Studies in Creativity and Culture for Palgrave Macmillan. He is editor of Europe's Journal of Psychology (EJOP), an open-access peer-reviewed journal published by PsychOpen (Germany). In 2018, he received the Berlyne Award from the APA Div 10 for outstanding early career contributions to the field of aesthetics, creativity, and the arts.

*Transformative experience design:
Exploring novel spaces of the self in the phygital era*

Andrea Gaggioli

Catholic University of the Sacred Heart, Italy

There are experiences in life that can change us forever, in terms of core beliefs and values, eventually leading to the construction of new meaning. Despite anecdotal accounts of transformative change are found in a number of historical biographies and in the popular culture, the psychological process of transformative change has not been systematically investigated. In my talk, I will focus on transformative experience as a process that allows individuals to explore new spaces of possibilities for thinking, feeling and acting, by providing novel lenses or frames through which understanding themselves and reality. Furthermore, I will discuss the possibilities afforded by emerging “phygital” spaces as a catalyst for personal and transformation.

Andrea Gaggioli is professor at Università Cattolica del Sacro Cuore in Milan. His research focus is the psychology of human experience and its role in personal change, using a broad spectrum of methods, instruments, and technologies. At the applied level, his goal is to integrate neuroscience, digital tools, and art to design transformative experiences that improve people's lives. He enjoys collaborating with designers, technologists, but also with philosophers and artists, and getting inspiration from them. Prof. Gaggioli has carried out his Ph.D. in Psychobiology at the Faculty of Medicine of the University of Milan, where he studied the experiential dimensions of virtual reality. Over the last 20 years, he has been involved in several projects exploring the frontiers of UX in VR, digital health, AI and robotics. His research has been largely funded by the European Commission. He has published over 150 articles in peer-reviewed journals, including Science and Nature, and keynoted at several conferences, including EuroVR, Persuasive Technology, Design & Emotion, Supporting Health by Tech, and others. His research is regularly featured in international media outlets, including The New York Times, Die Zeit, Reuters, and Scientific American.

What does it mean 'possible' in 'possible futures'?

Roberto Poli

University of Trento, Italy

I shall frame Possibility Studies within the framework of Futures Studies. By distinguishing different components of Futures Studies, namely 'forecasting', 'foresight', and 'anticipation', different nuances of 'Possibility' emerge. Put briefly, forecasting deals with data extrapolation, foresight with the visualization of different futures, and anticipation with their translation into action. The interplay among them paves the way for a deeper, layered, understanding of possibility.

Roberto Poli, professor of philosophy of science at the university of Trento, UNESCO Chair in Anticipatory Systems and Director of the Master Programme in Social Foresight. Recent publications: *Working with the Future* (Bocconi University Press, 2019), *Handbook of Anticipation* (ed., Springer, 2019).

People-First Marketing and the possible

Marie Taillard

ESCP Business School, UK

The digital era has triggered a complete transformation of the marketing function in organizations. Marketers have shifted from a focus on selling products to satisfying the needs of customers, or “getting their jobs done”. As customers have engaged more deeply with the brands that matter to them, and the boundaries between customers and firms have continued to blur, forward-looking marketers have adopted a collaborative approach to marketing in which people embracing a variety of roles contribute to building, promoting and shaping brands and their offerings. Customers, employees, business partners, influencers and more, form veritable ecosystems of value creation, opening up new possibilities that redefine not just markets but also cultures. One such example is the advent of peer-to-peer lodging solutions around the world that has redefined the hospitality industry as well as how people travel and discover the world. At the same time, the power of data continues to disrupt the marketing landscape, turning personalized solutions into table stakes and challenging brands to define the possible by imagining new ways to engage ever more meaningfully with the people in their ecosystems.

Dr. Taillard earned her MBA from Columbia Business School and her PhD from the University of London. Her previous academic work was in Linguistics, a field in which she developed her interest in the study of language in use. She specializes in studying marketing management and consumer behavior from the perspective of the communications that take place between consumers and firms and amongst consumers themselves. She is interested in how technology has transformed relationships between stakeholders in organizations and in how consumers, in particular, contribute to creating value with brands. She has also conducted research in the area of change management and digitalization. Her extensive professional background is in services marketing and in the travel/tourism industry. She held management positions in the United States for American Express, Council Travel, UTA French Airlines, Club Med and Accor Hotels. Marie Taillard is a member of the American Marketing Association, the Academy of Marketing Science and the Association for Consumer Research. As a member of ESCP Business School’s permanent Faculty since 2007, she teaches in several postgraduate and executive programmes at the School. She is the Director of the School's unique and successful MSc and Executive MSc in Marketing and Creativity whose launch she spearheaded in 2009. She is expanding her research in Marketing and Creativity as the Director of the Creativity Marketing Centre on the London Campus of ESCP Business School. She was named L'Oréal Professor of Creativity Marketing in November 2015.

The dynamic potential of imagining the impossible

Giovanni Corazza

University of Bologna, Italy

Culture is ever-expanding thanks to the sociocultural processes of assimilation of the products of our creative minds. In turn, creativity is a dynamic, context-embedded, phenomenon requiring potential originality and effectiveness. In this talk we want to address the following fundamental question: How can our potential for originality and effectiveness be maximized? Imagining the impossible can be shown to be a powerful methodology to free our exploratory mechanisms in search for potential originality, but coming back to earth with the fruits of this orbit is just as critical to ensure potential effectiveness.

Giovanni Emanuele Corazza is a Full Professor at the Alma Mater Studiorum University of Bologna, President of the Fondazione Guglielmo Marconi, founder of the Marconi Institute for Creativity, Member of the Marconi Society Board of Directors. His research interests are focused on the development of the Dynamic Creativity Framework. The Marconi Institute for Creativity (MIC), a joint initiative of the Fondazione Guglielmo Marconi and of the University of Bologna, was founded in 2011 with the purpose of establishing creative thinking as a science. The three pillars upon which MIC operates are those of scientific research, education activities, and support to the process of creativity and innovation.

Serendipity and moral imagination: Generating possible futures by chance

Samantha Copeland

TU Delft, Netherlands

We cannot make a better future if we cannot imagine what that will look like, and it is difficult to imagine from a place we have not experienced, or about things we have never seen. Creativity suggests that we can move beyond our experience into something new, and imagine truly novel worlds and possibilities. But feminist theory in epistemology and ethics show that imagination, for some, can be constrained from without: if we aren't given the images and experiences that give content to our imaginings, or when we are told or lead to believe that our imaginings represent only im-possibilities, it is much harder to create new, meaningful, possible futures for ourselves. In this talk I look at how serendipity comes into play here; we are attracted to the possibilities that serendipity narratives show us, because they show us how the unexpected can give us new imaginary content, despite the constraints we find ourselves within.

Samantha Copeland, PhD, has come to philosophy through the humanities, graduating from the early years of the BHum degree at Carleton University in Ottawa, Canada. She did a Masters of Philosophy at Queen's University, Ontario, looking at the impact of psychopharmacology—using pills to treat mental disorders—on how we think about psychiatric categories. For her PhD dissertation, 'The Case of the Triggered Memory', she joined my interests in how scientific knowledge is produced and changes when new technology is developed with the ethics of curiosity-driven science when human participants are needed for research. From there, she joined the CauseHealth project for three years as a postdoctoral fellow at the Norwegian University of Life Science. In the meantime, she co-founded the Serendipity Society. Dr. Copeland joined TU Delft as an Assistant Professor in 2018.

Uncertain possibilities: New directions for creative learning

Ron Beghetto

Arizona State University, USA

Encounters with uncertainty can engender states of genuine doubt. Although uncomfortable, such experiences can open new horizons of possibilities for creative thought and action. As will be discussed, encounters with uncertainty are often unplanned, however, they can also be intentionally designed into learning experiences. If this is the case, then this raises several questions for educators and researchers, including: What if educators designed encounters with uncertainty into learning experiences? How might such designs promote new possibilities for creative learning? What are the potential benefits, challenges and possibilities offered by such designs for research and practice? The aim of this presentation is to address these questions and offer insights into how designing with uncertainty can help shift our educational and research practices away from a focus on pedagogies of sameness and toward new and more promising possibilities for creative learning and life.

Ron Beghetto is an internationally recognized expert on creative thought and action in educational settings. He holds the Pinnacle West Presidential Chair and serves as a Professor in the Mary Lou Fulton Teachers College at Arizona State University. Dr. Beghetto is the Editor for the *Journal of Creative Behavior*, Co-Editor for *Review of Research in Education*, Series Editor for *Creative Theory and Action in Education* (Springer Books), and serves as a creativity advisor for Lego Foundation. He is also a Fellow of the American Psychological Association, the Society for the Psychology of Aesthetics, Creativity and the Arts (Div. 10, APA), and the International Society for the Study of Creativity and Innovation (ISSCI). He is the 2018 recipient of the Rudolf Arnheim Award for Outstanding Achievement in the Psychology of Aesthetics, Creativity and the Arts and 2008 recipient of Daniel E. Berlyne Award from Div. 10 of the American Psychological Association.

Using problem identification and construction to determine the possible

Roni Reiter-Palmon

University of Nebraska Omaha, USA

Problem identification and construction is commonly seen as the first step in creative problem solving. Problem construction consists of two main aspects. The first aspect focuses on the identification of problems in the environment, that is determining that a problem exists that needs to be solved. The second aspect of problem construction focuses on the structure and description of a problem in order to then generate and develop a solution. The problem identification and construction process has been shown to be a strong predictor of creativity. Actively engaging in this process, either naturally or through training and instructions has been linked to increased creative performance. Importantly, the problem identification and construction focuses on the possible: identifying a problem to be solved (rather than ignoring or viewing as an error), identification of important goals (possible) and constraints (impossible). As such, the problem identification and construction process provides a road map for the possible.

Dr. Roni Reiter-Palmon is a Professor of Industrial/Organizational (I/O) Psychology and the Director of the I/O Psychology Graduate Program at the University of Nebraska at Omaha (UNO). She is also the Director of Innovation for the Center for Collaboration Science, an inter-disciplinary program at UNO. She received her Ph.D. in I/O Psychology from George Mason University, Fairfax, Virginia. Her research focuses on creativity and innovation in the workplace at individual and team level, development of leadership and creative problem-solving skills, and leading creative individuals. Her research has been published in leading journals such as *Journal of Applied Psychology*, *Creativity Research Journal*, *The Psychology of Aesthetics, Creativity and the Arts*, *Human Resources Management Review*, and *Leadership Quarterly*. She is an associate editor for the *European Journal of Work and Organizational Psychology*, as well as *Frontiers: Organizational Psychology*. She is the former Editor of *The Psychology of Creativity, Aesthetics and the Arts*, the leading journal on the psychology of creativity. She serves on the editorial boards of 10 additional journal in I-O psychology, management, and creativity. She has obtained over 8 million dollars of funding from granting agencies, public and non-profit organizations, and businesses. She has been elected as a fellow of APA Division 10 (creativity) and division 14 (I-O) in recognition of her contribution to the field of organizational and team creativity. She has received the University of Nebraska system award for research in 2017.

A virtual utopia – Liminal spaces for transformative learning

Bel Le Hunte

University of Technology Sydney, Australia

With global studios and travel banned for Australian students in 2021, students from the Bachelor of Creative Intelligence and Innovation in Australia (at the University of Technology Sydney) were invited to attend a virtual global studio with colleagues from the intentional community of Auroville, South India. As students were in a liminal space “betwixt and between” worlds – neither fully in the traditional learning environment of a university nor in the full utopian context of Auroville, they were still able to wonder and imagine what life would be like without money, or understand what it would mean to have no religion (and yet have an intensely spiritual, purpose-led life). Worldview shifts and “peak transformative experiences” were still abundant, demonstrating the generative power of liminal spaces as explorations of the possible.

Professor Bel Le Hunte is an international author and an expert in the field of Creative Intelligence. Over the past three decades she has worked across a broad range of creative industries, from advertising and journalism, to publishing and new media. She’s been a creative consultant, creative director, brand consultant and copywriter (in the UK, Australia and India) for over 500 brands across a diverse range of media – covering the world’s most successful blue chip companies to social enterprises and start-ups. In her professional life, Bel has focused on digital innovation, educating consumers, clients, students and colleagues on the creative potential of next generation technology since the time she was creative director on the launch of Microsoft Windows ’95. Bel’s research interests lie in the thinking, theory and practice of creativity and in trailblazing educational innovation. She also has a research interest in cross-media innovation, storytelling and the social, cultural and political impact of media consumption. At UTS, Bel is the course director for the Bachelor of Creative Intelligence and Innovation, responsible for the interdisciplinary integrity and inspiration behind this flagship combined degree. She teaches creative thinking, theory and practice across disciplines from Anthropology to Media and Creative Writing – and works with academics from across all faculties at UTS as well as with industry stakeholders, to create this world-first, future-facing transdisciplinary degree. Currently, Bel is working on her fourth book. Her novels, short stories, articles and commentaries are published internationally to critical acclaim. Her most recent passion is a start-up with fellow authors at www.wutheringink.com – the world’s first author-run portal for published writers.

Cruising creativity and the end of utopia

Anne (Dan) Harris

RMIT University, Australia

In this spoken word performance, I riff on Jose Esteban Munoz's notion of queer futurity and utopias in order to critique contemporary creativity and explore the creative potential of an emergent possibility studies. Through this lens of non-dominant, anti-capitalist activism, I return to a creativity embedded in mess, risk, outsidership, abjection, marginalisation and social change. I revisit historical moments of creative rebellion, in order to remind audiences of the revolutionary potential and history of creativity as an antidote to today's commodification of creativity and its artefacts.

Associate Professor Anne M Harris is a Principal Research Fellow (Research Associate Professor) in the School of Education and the Design and Creative Practice ECP. Anne recently completed an ARC DECRA Fellowship investigating creative ecologies in secondary school and across the education lifespan. Her research focuses upon the intersection of creativity, performance and digital media at both practice and policy levels, upon youth cultures and cultural, ethnic and gender diversities; and on performance and activism. The necessity of work across these areas—particularly the role of creative practice to inform/evoke/transform social change (specifically through public pedagogy, activism, and creative education)—is evidenced by the international uptake of my work and the ubiquitous hunger for more creative approaches to education, research and community/industry partnerships. She is the creator and editor of the Palgrave Macmillan book series *Creativity, Education and the Arts*, the ABER co-editor of the *Journal of Curriculum and Pedagogy* and on the editorial board of several journals and book series. She co-edited the following special issues: “Critical Approaches to Arts Based Research,” co-edited with Mary Ann Hunter and Clare Hall, UNESCO Observatory Multidisciplinary Research in the Arts (2014); “Creative Pedagogies” co-edited with Stacy Holman Jones, *Departures in Critical Qualitative Research* (2014); and “Sexuality, Culture and Creativity: Commodification and Contemporary Publics” co-edited with Yvette Taylor, *Continuum: Journal of Media & Cultural Studies* (2016).

Crealectic intelligence: From absolute possibility to self-possibility

Luis de Miranda

Uppsala University, Sweden

Crealectic intelligence is natural intelligence inasmuch as the essence of Nature – and therefore of Culture – is defined as a creative process of exteriorizations, interiorizations and unifications grounded in absolute possibility. The crealectic frame posits that there are at least three complementary modes of intelligence, namely analytic (an objectifying discretization of the real in which machines may excel), dialectic (which deals with meaningful contrasts between entities or positions) and crealectic (which deals with the actualizations, unifications or realizations of creative evolution). No healthy society is possible without a holistic harmonization of these three performative aspects of thinking. The idea that creation or creativity is an immanent rather than only transcendent cosmological principle is typical of process philosophies, both Western and Eastern: for example, in Heraclitus (Holm-Hadulla 2013, p. 297), Taoism (Yu 1981), Bergson or Alfred North Whitehead for whom “Creativity is the universal of universals characterizing ultimate matter of fact.” (1929, p. 31). Not unlike within the new-materialist turn (Haynes 2014), this onto-generative notion of creative becoming (Cheng, 2018) has also been equated with a becoming-world of “absolute possibility” (de Miranda, 2021, p. forthcoming). The object of crealectic intelligence is thus the relative possibilization and realization of possibility, the constant becoming real, biological and social of natural creation, the multimodal externalization and adunation of the multiple as source. While the generative concept of Creal is an all-encompassing a priori, its crealectic results may be specific to any given doing and singular transformations of the world. As was understood by existentialist philosophers, chief among them Sartre and Heidegger, the universe is a possibilization furnace. The simultaneously immanent and transcendent – “transimmanent” (Nancy 1996, p. 48) – ground of ever-emerging possibilization (Ermöglichung) is conceived as opening for the making-possible (Heidegger 1995, p. 364; Heidegger 1996, p. 244). This cosmological opening may be summarised in a simple modal formula: “It is possible”, where It designates the ultimate being-becoming. “There is a practical consciousness, an ‘I can’ that underlies and precedes the reflective self-consciousness of the ‘I think’, but the ‘I can’ is given and coeval with an ‘it can’” (Sinclair, 2017, p. 191).

Luis de Miranda lives in the Stockholm archipelago and is a researcher affiliated with the department of History of science and Ideas at Uppsala University, where he works on the theory and practice of philosophical health at the Center for Medical Humanities and Social Sciences. A PhD from the University of Edinburgh (2017), Luis is a philosopher, historian of ideas, philosophical counselor and international author of non-fiction and fiction. His books, for example an introduction to Artificial Intelligence and Robotics or the novel *Who Killed the Poet?*, have been translated into a dozen languages. *Being and Neonness* was published by MIT Press in 2019, and *Ensemblance* by Edinburgh

University Press in 2020. In 2018, Luis de Miranda founded The Philosophical Parlour, through which, in partnership with the Stockholm psychotherapy institute Livslinjen, he occasionally offers personalised philosophical care and counseling. Also trained as a Lacanian psychoanalyst, he is a certified practicing member of the Swedish Society for Philosophical Practice (SSFP). In 2019, he initiated the network Philosophical Health International. He also helps corporations such as Vattenfall on philosophical health and crealectic development.

Does problem solving in teams promote or undermine the production of possibilities?

Gerard Puccio

The State University of New York at Buffalo, USA

Teamwork is central to problem solving in organizations, and one of the most common methodologies used is to engage in problem solving in organizations is meetings. This presentation reviews the results of a study that examined the divergent output of teams made up of individuals without formal creativity training, versus groups comprised of with members who had participated in varying levels of formal training. Traditional face-to-face meetings for teams without creativity training demonstrated a clear propensity to diminish production of potential solutions to a real challenge. While teams made up of trained participants showed a significantly greater ability to produce a larger and more original set of possible solutions. The overall results were clear, creativity training dramatically enhanced the generation of possibilities in teams. The implications of these findings, along with contrasting behaviors associated with the untrained and trained teams, will be discussed in terms of the production of possibilities.

Gerard J. Puccio is the Department Chair and Professor at the International Center for Studies in Creativity (ICSC), SUNY-Buffalo State. Dr. Puccio has written more than 60 articles, chapters and books. His most recent book titled *Organizational Creativity and Innovation: A Personal Journey for Innovators and Entrepreneurs* (2018 by Sage Press), highlights the crucial role creativity plays in an economy driven by innovation. Prior to this publication, Dr. Puccio co-authored *The Innovative Team*, published by Jossey-Bass, a fable about a team that was able to apply proven creative-thinking tools to turn around a dysfunctional and unproductive situation. Dr. Puccio is an accomplished speaker and consultant; he has worked with major corporations, universities, and numerous school districts. Some of his recent clients include the BBC, Fisher-Price Brands, Blue Cross and Blue Shield, Nestle, The Smithsonian Institution, BNP Paribas, Rubbermaid, Coca-Cola, and the Fashion Institute of Technology. He has delivered creativity workshops and presentations across the United States and in more than 20 different countries. In 2013 Dr. Puccio was selected by the Teaching Company as one of America's Great Lecturers and as such was invited to design and deliver a "Great Course" titled *The Creative Thinker's Toolkit*. Dr. Puccio was also a featured speaker at a TEDx event held in New York City in December of 2012. To date his talk has over 100,000 views. Gerard holds a Ph.D. in organizational psychology from the University of Manchester, England.

Making schools – Making families, dynamics in the process of gentrification

Pernille Hviid

University of Copenhagen, Denmark

In this presentation, I investigate ecological ruptures and their development. An ecological rupture is considered to appear and echo in all levels of the ecology, from micro interactions between human beings to relations between institutions and legislation and societal values. The historical situation was one of gentrification, Danish middleclass families settled in districts in Copenhagen, previously populated by ethnic Danish working class families and migrants. While appreciating the (cheaper) environment and the pulse of the urban living, the families rejected certain public schools of the area. This not only severely damaged the economy of the schools but it also affected its academic profile and performance, as the student who left or did not enroll were generally high-achieving students. Such institutional situation is considered a municipal anomaly, and we were commissioned to initiate processes to “repair” the rupture. We aim at addressing these processes of creating new possibilities for a fruitful coexistence of school and families, through the lens of cultural historical psychology, and the intervention builds on the premises of meaning making, dialogue and collaboration. From the analysis, the deep interdependency between families and school stands out. While the schools struggled to survive, the families in question struggled tirelessly to form the kind of family they wanted to be. From that situation, a dialogical process began, with the aim of inventing sustainable solutions.

Pernille Hviid is Associate Professor at the University of Copenhagen, Denmark. She is a researcher within the disciplines of developmental, educational psychology and community psychology. She has primarily investigated developmental potentials and obstacles in the interrelations between developing children and other people and practices in their socio-cultural institutions (family, pre-school, school, leisure-time centers or managerial practices of public well-fare institutions). For the last three years she has worked to establish a theoretical and methodological platform for Center of Cultural Life Course Studies drawing on a) life-span theory (e.g. Baltes); a psychological discipline arguing that development is a life-long process, b) life-course theory (e.g. Elder); a sociological approach to the interdependencies between human beings and their historically changing and interlinked, institutionalized surroundings, c) cultural psychology (e.g. Valsiner); an approach that studies developmental processes in interrelations between collective and individual meanings and d) existential psychology (e.g. Heidegger, Packer); underlining that human beings develop projects and concerns in life, and that they, through their engaged involvements in life contribute to cultural changes and development and thus, their future living.

Object-thought mutualities in weaving the possible

Frédéric Vallée-Tourangeau

Kingston University, UK

Creative problem solving under laboratory conditions is commonly operationalized in terms of so-called insight problems. Researchers often add a layer of abstraction by presenting problems as verbal riddles, unconnected to a physical world that can be seen, touched, and manipulated. Such a task procedure is termed second order because the agent is essentially a mind in a vat. Putting aside the challenges of interrogating such isolated minds, accounts of creativity and discovery must, perforce, be formulated in terms of conjectured operations that are strictly mental. In this cognitive science scenography objects are absent. In contrast, a first order procedure embeds the mind in its natural materiality and invites the agent to think with and through objects. Thus, a mentally simulated world is replaced with a world that can be seen and touched. Changes to the physical model of the problem result in new perceptions and trigger new actions. These actions may not reflect the strategic implementation of a plan; rather, new ideas are enacted. These enacted object-thought mutualities weave the possible.

Frédéric Vallée-Tourangeau obtained his PhD from McGill University. His research has explored causal and Bayesian reasoning. Drawing inspiration from the foundational work of Ed Hutchins, Bruno Latour and Lambros Malafouris, he has been working on problem solving from a distributed cognition perspective, seeking to better understand how new ideas are distilled through action.

Material agency and possibility

Wendy Ross

London Metropolitan University, UK

Possibility thinking is an exploration of 'what could be', 'what is to come', 'what could have been' and 'what is not or will never be'. It is associated with a form of thinking which frees itself from the actual through imagination and daydreaming. At first glance there is little place for the material in this mode of thinking. However, in this talk, I will explore two aspects of how the material world can scaffold and even constitute this form of thinking. First, I will demonstrate how intentional actions over and through objects support and extend possibility thinking by allowing people to model and enact brain bound thoughts. These actions reveal new unanticipated possibilities. Second, I will move to a detailed examination of how accidents arising from both unintentional actions and material agency can disrupt a cognitive trajectory and in so doing generate new possibilities. In both cases I will argue that the combination of the possible and the actual in the material generates a novel possibility space. The material world not only anchors thinking to the actual but lifts it up to the possible.

Wendy Ross is a Senior Lecturer at London Metropolitan University. Her main topic of research is the role of serendipity in higher cognitive processes such as problem solving and creativity. She draws on a range of methods from eye-tracking and experimental psychology to focused cognitive ethnography. She is currently co-editing two collections on serendipity: *The Art of Serendipity* (Palgrave) and *Serendipity Science* (Springer). She is the Secretary of the Serendipity Society and overall conference and symposia chair. In 2021 she was awarded the Frank X Barron prize by Division 10 of the APA.

Psychology's task, the uselessness of determinism, and the multi-maybe future

Roy F. Baumeister

University of Queensland, Australia

This talk will briefly make three points. First, conceptualizing the future as composed of multiple possibilities is a central human trait, indeed one that escapes our smartest animal relatives. Second, determinism is deeply unhelpful as a basis for psychological theory, because it mostly needs to explain how agents deal with situations defined by multiple possibilities (threat, opportunity, success/failure, influence, etc.) Third, we suggest that determinism is probably wrong anyway, resting on circular reasoning and a discredited premise. The concluding suggestion is that human free will or agency, such as it is, is not the source of multiple alternative possibilities — but rather an evolutionary adaptation to environments that present alternative possibilities.

Roy F. Baumeister is professor of psychology at the University of Queensland. He among the most prolific and most frequently cited psychologists in the world, with over 650 publications. His 40 books include the New York Times bestseller *Willpower*. His research covers self and identity, self-regulation, interpersonal rejection and the need to belong, sexuality and gender, aggression, self-esteem, meaning, consciousness, free will, and self-presentation. In 2013 he received the William James award for lifetime achievement in psychological science (the Association for Psychological Science's highest honor).