FONDAZIONE PRADA PRESENTS "HUMAN BRAINS," A MULTIDISCIPLINARY PROJECT DEDICATED TO BRAIN STUDIES

Milan, 1 October 2020 — In 2018 Fondazione Prada undertook a multidisciplinary project for the study of scientific themes in depth. These reflections engendered "Human Brains," a program of exhibitions, debates and publishing activities that will take place from November 2020 to November 2022. The project is the result of a complex research conducted in collaboration with a scientific board chaired by Giancarlo Comi and composed of researchers, physicians, psychologists, linguists, philosophers, popularizers and curators, such as Jubin Abutalebi, Massimo Cacciari, Viviana Kasam, Udo Kittelmann, Andrea Moro, and Daniela Perani.

"Human Brains" is a new challenge for a cultural institution like Fondazione Prada. During the last twenty-five years it has investigated a plurality of creative themes and languages, pushing beyond the boundaries of contemporary art to connect with the present, and explore a dimension of discovery and interpretation of possible future scenarios. Fondazione Prada's interest in the current state of neurosciences is an expansion of its intellectual inquiry, but one that continues to address fundamental issues of today. Historically, science and culture have been inseparable, and in constant dialogue with each other. The advent of our "technological age" has produced new frontiers of invention, and new social, cultural and political questions for humanity. Culture evolves with these profound shifts in scientific knowledge. And so too, our understanding of what it means to be a human during increasingly uncertain times.

The "Human Brains" initiative is centered on the brain, a unique organ for the complexity of its functions, which are fundamental to characterize human beings. The scope of the investigation will survey different fields: from neurobiology to philosophy, from psychology to neurochemistry, from linguistics to artificial intelligence and robots. The brain will be analyzed from an anatomical-functional point of view, while also focusing on the brain aging processes and on neurodegenerative diseases.

The scientific approach of the project proves our need for discovering the brain in its structural, functional and biochemical articulation, in order to create a relationship with human and social sciences. The aim is to involve a wide community of researchers in different fields linked to neurosciences as well as a non-specialized public—made of young people and students that share a great curiosity—and to stimulate fundamental questions and reflections such as those on the origin of human thinking and acting.

An open project in constant evolution, "Human Brains" aims to experiment new collaboration and dialogue methods among scientists and scholars thus testing innovative communication formats addressed to a heterogeneous and international public. In this convergence of distant perspectives and scientific and cultural approaches, the human brain will be declined in the plural—as expressed by the title—to underline its intrinsic complexity and the



irreducible singularity of each individual.

The fundamental historical and conceptual milestones that contributed to the identification of the brain as a place of thought will be analyzed throughout the project, as well as the key theme of the relationship between mind and brain. Furthermore, the nervous basis of sensations, emotions, memory and superior functions such as conscience, language, creativity and abstract thinking will be at the center of the investigation. A few more complex themes—such as subconscious and freedom of decision—will be delved into by shedding light on the science's crucial role in dealing with these themes as well as its limitations. The project will deal extensively with technological developments in neuroimaging and with techniques of functional exploration of the brain. Neurobiology and neurophysiology studies will be equally delved into, with their interconnection, the messages they exchange and their super-specializations.

The first part of "Human Brains" will be featured from 9 to 13 November 2020 during the online conference "Culture and Consciousness" on an interactive platform linked to Fondazione Prada's website. The event will be structured in five daily discussions focused on the study of conscience in neurosciences. Each panel will include a debate between two scholars coordinated by one or more moderators.

The first two discussions will see neuroscientist Mavi Sanchez-Vives and neurobiologist Jean-Pierre Changeux, moderated by neurologist Giancarlo Comi, and neurobiologist Eve Marder with neuroscientist Antonio Damasio, moderated by neurologist and neuroscientist Daniela Perani. They will explore the biological fundaments of conscience, from the neurofunctional mechanisms to neurochemical and molecular basis, and they will carry on indepth analysis of connectivity as a cerebral substrate of conscience state and the revolutionary techniques that allow investigating the brain in vivo.

Two discussions between neurolinguist Andrea Moro and cognitive psychologist Stanislas Dehaene will be moderated by cognitive neurologist Jubin Abutalebi, while the anthropologist Ian Tattersall and neuroscientist Idan Segev will be moderated by neuroscientist Katrin Amunts. They will examine the concept of consciousness in relation to anthropology, the key role of language and its connection to the emotional and affective sphere to then reflect on the future evolution of research and on the attempts to create thinking machines.

Philosopher Michele Di Francesco and psychiatrist and neuroscientist Giulio Tononi will hold the final discussion, moderated by scientific journalist Vivian Kasam; it will be a crucial moment to confront different perspectives and approaches to the complex question of conscience. Moreover, Giancarlo Comi and Massimo Cacciari will reflect on the contributions of all the previous discussions.



The online conference will be accompanied by the publication of digital contents, such as video interviews, in-depth analysis and podcasts—a way to gradually approach the five discussions and an opportunity to actively involve the public and to interact with the scholars invited.

The second chapter of "Human Brains," scheduled for 2021 at Fondazione Prada's venue in Milan, consists of an international conference accompanied by an exhibition project. The intent of this conference is to compare some of the most prestigious neuroscience international institutions on the progress of research and on the future developments in terms of normal and pathological aging of our brain. In fact, despite the great developments in medicine, neurodegenerative diseases cannot benefit from therapies to influence their evolution significantly. A strategical and coordinated combination of stakeholders and the contribution of technological and methodological innovation is fundamental to support possible positive developments in this field. Several international institutions will contribute to the project: Harvard Medical School, Brigham and Women's Hospital, Ann Romney Center for Neurological Diseases, Boston, US; Hôpital de la Salpêtrière, Sorbonne University, Neurology department and ICM, Paris, France; IRCCS Ospedale San Raffaele, Milan, Italy; Juntendo University Hospital, Department of Neurology, Tokyo, Japan; Karolinska University Hospital, Department of Clinical Neuroscience, Stockholm, Sweden; German Center for Neurodegenerative Diseases (DZNE) within the Helmholtz Association, Bonn, Germany; Max Planck Institute of Neurobiology, Munich, Germany; Montreal Neurological Institute-Hospital, MC Gill Research and teaching Institute, Canada; UCSF Weill Institute for Neuroscience, University of California, San Francisco, US; University College London Hospitals NHS Foundation Trust, National Hospital for Neurology and Neurosurgery Faculty of Brain Sciences, Institute of Neurology, Department of Brain Repair and Rehabilitation, UK; Weizmann Institute of Science, Tel Aviv, Israel; and Yale School of Medicine, New Haven, US.

On the occasion of the 2022 Venice Art Biennale, Fondazione Prada's venetian venue will host an exhibition entirely dedicated to brain studies that will mark the third phase of "Human Brains" project. The exhibition, curated by Udo Kittelmann in dialogue with the scientific board, will represent an attempt to translate into an exhibition form the history of the studies on human thinking and the current scientific research up until future challenges, linked to the developments of molecular medicine and the analysis of microscopical mechanisms that make up our brain activity.

Press contacts

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HUMAN BRAINS – CULTURE AND CONSCIOUNESS

VIRTUAL MEETING (9 – 13 NOVEMBER 2020) SCIENTIFIC PROGRAM

Monday, 9 November 2020, 7 – 9 pm (CET)
Discussion 1 I Neurobiological Bases of Consciousness

Speakers

Mavi Sánchez-Vives (Barcellona, Spain) | Searching for Consciousness: From Neurons to the Complex Brain Network

Jean-Pierre Changeux (Paris, France) | *The Connectomics of Conscious Processing: From the Molecular to the Cultural Level*

Moderator

Giancarlo Comi (Milan, Italy)

Tuesday, 10 November 2020, 7 – 9 pm (CET)
Discussion 2 I Functional and Structural Neuroimaging

Speakers

Eve Marder (Waltham, Massachusetts, US) | *Individual Differences and Differential Resilience* Antonio Damasio (Los Angeles, California, US) | *The Imaging of Consciousness*

Moderator

Daniela Perani (Milan, Italy)

Wednesday, 11 November 2020, 7 – 9 pm (CET) Discussion 3 | The Languages of Human Consciousness

Speakers

Andrea Moro (Pavia, Italy) | Impossible Languages: Infinity, Consciousness and the Roots of Racism

Stanislas Dehaene (Paris, France) | *Human Singularity: Which Aspects of Consciousness Are Shared with Other Primates and Which Are Unique?*

Moderator

Jubin Abutalebi (Milan, Italy)

Thursday, 12 November 2020, 7 – 9 pm (CET)
Discussion 4 | Evolution of Culture: How Far Will Go? (From Anthropology to Technology)

Speakers

lan Tattersall (New York, USA) | *Culture as the Ultimate Expression of Evolution* Idan Segev (Lausanne, Switzerland) | *Design for a Creative Brain*

Moderator

Katrin Amunts (Düsseldorf, Germany)

Friday, 13 November 2020, 7 – 9 pm (CET)
Discussion 5 I Consciousness: the Still Open Questions (Two Different Perspectives)

Speakers

Michele Di Francesco (Pavia, Italy) | *Fifty Years of Consciousness: A Philosophical History* Giulio Tononi (Madison, Wisconsin, US) | *Consciousness and Our Place in Nature*

Moderator

Viviana Kasam (Milan, Italy)

Concluding remarks
Massimo Cacciari (Milan, Italy)
Giancarlo Comi (Milan, Italy)