

LA MATERIA DEL HABITAR

THE MATTER
OF DESIGN

12. 09. 2019
14:00 - 18:00 HRS

AUDITORIO PSICOLOGÍA
CAMPUS SAN JOAQUÍN - PUC

The Matter of Design. Solid Fluids in the Understanding of Past and Present Materials

Pontificia Universidad Católica de Chile (PUC)

Santiago, 12-13 September 2019

RATIONALE

The workshop aims to open a comparative inquiry into the solid-fluid tension, through the practices of experts engaged in the study and design of materials that conform the past and future of human habitation, such as archaeologists and architects respectively. The workshop is part of a project entitled ***Solid fluids in the Anthropocene***, lead by Tim Ingold (University of Aberdeen) and Cris Simonetti (Pontificia Universidad Católica de Chile) and funded by the British Academy for the Humanities and the Social Sciences. The project responds to calls to rethink the relationship between human and earth sciences by launching a transdisciplinary dialogue on the properties of materials relevant to our present epoch. The project concentrates particularly on those relating to the tension between solidity and fluidity deeply ingrained in the western intellectual tradition, and implicit in a number of theoretical debates across the sciences and the humanities (for more info, see <https://www.solidfluids.org>).

SUMMARY SCHEDULE

Thursday 12 September 2019 (Auditorio Psicología, Campus San Joaquín, PUC)

14.00 – 14.30 ‘Introduction: Sculpting past and future’ (Cristián Simonetti)

14.30 – 15.00 ‘The creative archaeologist. Circulation of soils and water in the site’s ‘cultivation’ (José Marmol)

15.00 – 15.30 ‘Atmospheric imprints: Affective constructing through flexible moulds’ (Daniela Jacob)

15.30 – 16.00 Discussion (Consuelo Araos)

16.00 – 16.30 Coffee break

16.30 – 17.00 ‘From concrete to timber: rethinking the materiality of the built environment’ (Eduardo Wiegand)

17.00 – 17.30 ‘Mutable and fundamental: Earthen architecture and design’ (Rachel Harkness)

17.30 – 18.00 ‘Soft matter: a hard problem for the philosophy of phases’ (Simon Peres)

18.00 – 18.30 Discussion (Andres Haye)

ABSTRACTS

Mutable and fundamental: Earthen architecture and design

Rachel Harkness, Edinburgh School of Arts

This talk will consider earth as a material used in design practice worldwide. Techniques and practices of building and decorating with earth are both ancient and modern. Furthermore, people building with earthen materials do so with them in various states of solidity-fluidity and they do so as part of many differing cultural traditions. From mud and cob to adobe brick and rammed earth, earthen structures and surfaces tend to carry the sense of the foundational or fundamental with them from the grounds they come from. Their popularity also hints at the ubiquity and availability of earth as a raw material as well as its renewability. This paper will pivot then, on this double character of the material and its role in design: its mutability and fundamentality. With the builders and makers that work with earth, I'll attempt to think through their embrace of some of the material's connotations and their eschewing of others - namely the idea that that it is of the past - and their celebration of its potential to help shape the futures they are building.

Atmospheric imprints: Affective constructing through flexible moulds

Daniela Jacob, EHESS

Within the workshop of flexible cases in the school of architecture of the Pontificia Universidad Católica de Valparaíso, practitioners replace with fabric the traditional rigid case used in concrete construction. This method favors the appearance of curved and fluid forms, that could even be described as humid. This figures rescue the liquid qualities of concrete, in contrast with the orthogonal forms produced by industries that work massively with this material. The production in this workshop, that permits collective experimentation between students and teachers, which test and create forms of making with this material. This situated practice, that puts attention to the landscape that surrounds it, reveals through the imprints left on the surfaces of the object created, that concrete is a receptive material. Being a negative of the surfaces it enters in contact with. This presentation will examine this practice through ethnographic experience, to conclude in an speculative form about the possible futures that might be opened by alternative forms of working with concrete.

The creative archaeologist. Circulation of soils and water in the site's cultivation'.

José Marmol, Universidad Complutense de Madrid

Creativity in archaeology has been understood as following the doctrine of hylomorphism, the imposition of mental forms to passive matter, specially in the work of crafting descriptions of concrete moments of the site for retrospective analysis and visual reconstruction. Against this, I propose to observe the circulation of water and soils that happens at the site. Archaeologists join this mobilization with their actions to adequate the space to their necessities. This participation affect their bodies not only with movement but also with the incorporation of soil and water into them, which force to take creative, improvised actions like to hydrate or to shelter from the dust. Being part of this circulation, they joins the rhythms of the site's 'circulatory system'. This is observed among Spanish and Japanese archaeologists, whose tools reflect the influence of masonry and gardening, respectively. Despite their differences, in both

cases archaeologists deal with furrowing the soil surfaces where solid earth is turned into dust or mud, and also with the management of water in bodies, ambient and surfaces. This idea reminds that of “cultivation”, that is related to other forms of creativity such Japanese non-hylomorphic one. The participation into the site’s life requires to perform creative actions, ecological ones, that are used to maintain the appearance of a site’s concrete moment to further record. Reflect about this is important to acknowledge how the circulation of liquids and solids constitute the archaeological site, and the bodily actions related, like quenching thirst, which are part of a creativity congruent with the material turn.

Soft matter: A hard problem for the philosophy of phases

Simon Perés, University of Aberdeen

This paper takes soft matter as epitomising three crucial questions for the metaphysics and epistemology of states of matter (phases) in general. First off, what is the relationship between phases and properties of materials? Secondly, are states of matter discrete or continuous (e.g. does 'soft' occupies the middle of a sliding scale between 'solid' and 'liquid')? Thirdly, how to account for different scales, including but not limited to microscopic and macroscopic? I then argue in favour of a *logical* approach inspired by Wittgenstein's last philosophy and contemporary Japanese architectural practice. It considers phases as terms emerging in the use of material quantities, that is, categories immanent in material manipulation as it composes and decomposes things. Such an approach is *descriptive*, i.e. eschews the reduction of material phenomena to their causes and examines a variety of entities and practices without favouring a specific one. It is also *modal*: instead of deploying a generic theory of relations, it analyses the concrete modalities of the joining and parting of matter (e.g. reversible or destructive; direct or mediated). Finally, it is *scale-agnostic*— it considers all scales on an equal footing without, for instance, giving priority to the microscopic.

Introduction: Sculpting past and future

Cristián Simonetti, Pontificia Universidad Católica de Chile

This introduction reflects on the way in which the practices of archeologists and builders meet temporally and materially as they face the past and future of dwelling design. Outside the pretensions of objectivity typical of the sciences that study the past, or the standardization processes that characterize the construction industry, in such professional contexts matter and imagination entangle through gesture. Through the use of their most common characteristic tool, namely the trowel, the surfaces of the past and the future of dwelling design do not precede the gestures that respectively "discover" and "construct" them. Moving beyond the categories of construction and discovery, I argue that studying the past and creating the future resemble an *act of sculpting*, which proves to have serious implications for the categorial distinction between solidity and fluidity foundational to modern thinking, as well as to the Anthropocene, the proposed geological epoch where humans become a geological force.

From Concrete to Timber: Rethinking the Materiality of the Built Environment

Eduardo Wiegand, University of Cambridge

In the last century, concrete has consolidated as the predilect construction material to densify cities in altitude. Concrete – the most highly produced and consumed building material in late

human history – is a leading player in climate change and waste disposal, marking the stratigraphic onset of the Anthropocene, a term proposed for a new geological epoch in which humans have become the leading geological force capable of altering the course of Earth history irreversibly. In recent years, wood has emerged as a renewable alternative to concrete due to its potential to generate a carbon-neutral cycle. Since the late 2000s, the technological advances on wood-engineered products have developed as an alternative material for multi-story buildings. In this context, this presentation reflects on the cycle and properties of building materials vis-à-vis the climate emergency we have today. I argue for the need to think about the intersection between temporality and materiality to transit from a concrete to a wooden built environment.

BIOGRAPHIES

Consuelo Araos is an assistant professor at the Institute of Sociology of the Catholic University of Chile. She is a sociologist and PhD in Social Sciences at the École Normale Supérieure de Paris. Her research focuses on the co-production of domestic space and practical kinship through the observation of residential proximities in urban context. Her research investigates ethnographic and phenomenological perspectives, intersecting sociology, anthropology and architecture. Since 2006, she has conducted fieldwork with family configurations from different socio-economic backgrounds in Santiago. Currently, she participates in the 9x18 Laboratory of the UC School of Architecture, where she conducts applied research on innovative dwelling environments and urban regeneration policies in peri-urban areas.

Rachel Harkness is interested in how people make manifest their (eco-)designs for living. She mostly works ethnographically in the UK and USA with makers, and for the last decade her creative and anthropological research has centred upon the topics of building, materials, learning-through-doing, the senses, and environmental values and action. Recently she has been part of collaborative projects considering the materiality of concrete in our time of ecological crisis, has been building with eco-builders in Scotland, and making art installations inspired by their practices. Rachel is a Lecturer in Design Ecologies at Edinburgh College of Art, part of the University of Edinburgh, Scotland, where she helps run the postgraduate degree called Design for Change and combines teaching contextual and critical studies of design with courses on social and ecological or environmentally-friendly design.

Andrés Haye Associate Professor at the School of Psychology, Pontificia Universidad Católica de Chile. PhD in Psychology, by the University of Sheffield, UK. Associate researcher of the interdisciplinary research platforms Normalcy, Difference & Education (NDE) and the Interdisciplinary Center for Intercultural and Indigenous Research (CIIR). His areas of interest are social psychology, philosophy, and social theory, doing research about topics related to the bond of mind and society: the social basis of memory, involving historical memory of political events; the physiological, cognitive, and cultural aspects of intergroup and political attitudes, comparing generations; and the nature of language operations in biographical discourse both among the youth and the elder.

Daniela Jacob is a Sociologist, graduated from the Pontificia Universidad Católica de Chile. She holds a Master in Social Anthropology from the London School of Economics and Political Science, and is a Ph.D. student in Ecole des Hautes Etudes en Sciences Sociales in Paris.

José Mármol-Martínez: Murcia, Spain. Archaeologist and amateur artist. Currently PhD student at Complutense University of Madrid, working on ethnography of creativity in the archaeological practice, focusing on Spanish and Japanese archaeologists. Representative for South Europe at World Archaeological Congress Students Committee and former director of the Monte Miravete archaeological project (Spain). He has worked on several archaeological topics such public archaeology or archaeology of the Contemporary past, among others works relating videography, photography and art.

Simon Peres is a PhD student at the University of Aberdeen's Department of Anthropology. His research, which combines anthropology with metaphysics and philosophy of science, explores

the nature of materials and states of matter in contemporary architecture and materials science.

Cristián Simonetti is Assistant Professor at the Programa de Antropología, Pontificia Universidad Católica de Chile. His work concentrates on how bodily gestures and environmental forces relate to notions of time in science, the topic of a monograph entitled *Sentient Conceptualisations. Feeling for Time in the Sciences of the Past* (Routledge, 2018). He currently leads the projects *Solid Fluids in the Anthropocene* (with Tim Ingold) and *Concrete Futures*, funded respectively by the British Academy and Fondecyt, Chile.

Eduardo Wiegand is an architect with experience leading interdisciplinary design teams and R&D construction projects. He has collaborated with academia, governmental institutions and the industry on the development of innovative building systems, sustainable materials and new construction policies. Recently his work has been focused on researching construction systems for the development of tall wooden buildings. After graduating from Pontificia Universidad Católica de Chile, he completed postgraduate studies at Aalto University in Helsinki and the University of Cambridge.