Digital Minds

5th Rencontres de l'EDAR 2021 – Interdisciplinary doctoral seminar 10-11.06.2021

What role does digital culture play in EDAR doctoral research?
The Rencontres de l'EDAR 2021 aim to formulate an initial answer to this question.
Stories of the vicissitudes, the potential for innovation and the research problems related to digital culture and technology will be at the centre of the debates that will bring together the EDAR community and key witnesses to the digital turn in research.

A major issue for research at EPFL, the *digital transition* is commonly referred to in the singular, while at the same time constituting a specific aspect of the historical transition that is at work today on the climate, energy, health, and social fronts too. However, if we consider the field of architecture and sciences of the city, digitisation – understood as the transfer of knowledge from the physical world to the digital world, determining the conditions of immaterial reproduction and simulation of material processes – in fact identifies a specific discontinuity within a bundle of processes with disparate temporalities. Over the very long term, it is part of the history of calculated representation which, since the Middle Ages, has progressed in parallel with the evolution of construction and building site techniques. Over the very short term, it refers to the advent of the big data regime and artificial intelligence, impacting in very specific ways different fields of study, such as statistical sociology, territorial analysis, typological studies, history writing, or constructive experimentation.

Therefore, it seems necessary to recognise the wide variety of forms taken by digital culture in relation to EDAR research in terms of study topics, research questions or methodologies. Thus, digitisation counts in the definition of research topics relating, for example, to forms and processes of representation; project conception and design; construction; territorial analysis, modelling and simulation; and history, theory, and criticism. At the same time, it influences operational methodologies relating to investigation, corpus constitution, knowledge production, as well as data verification, archiving and accessibility. It guides the constitution of bibliographies, the system of references and the researcher's "imaginary museum". It conditions the elaboration of collection or study case systems, within which to make comparisons; it determines the choice (or arrangements) between quantitative or qualitative approaches, as well as between classification approaches – species, families, types, etc. –, or monographic approaches as a study of a *unicum*. Finally, digitisation is as much an accelerator of interdisciplinarity as it is a condition for strong disciplinary specialisation.

The *Digital Minds 5th Rencontres de l'EDAR*, conceived as a "snapshot" of current research, will make it possible to uncover the effective impact of digital culture on the subjects, methods, fabrication, and scientific results of EDAR's scholars research.

The seminar will take place in a hybrid manner, on site with a limited number of people (phd students registered to course AR-610) with respect to the sanitary regulations, as well as on Zoom, https://epfl.zoom.us/s/66671738650

PROGRAMME

8h30

Welcome by Elena Cogato Lanza, EDAR Director Morning Introduction by Nicola Braghieri (LAPIS-EPFL)

8h50-9h50

Alina Volynskaya (LHST EPFL), New order of things. Digital archives and knowledge representation.

Frederick Chando Kim (LDM1), *Deep Architectural Form. Towards a Machine Understanding of Architecture.*

Debate with Anita Auer (English Department, UNIL) and Paolo Tombesi (FAR-EPFL)

10' break

10h00-11h00

Mikhael Johanes (LDM1), Machine Reading of Architectural Spatial Pattern. Boris Hamzeian, The "3-dimensional Wall" of the Centre Pompidou in Paris: Invention and evolution of a polyvalent device.

Debate with Anthony Masure (Institut Recherche Art et Design, HEAD) and Bernard Cache (CNPA EPFL)

10' break

11h10-12h30 <u>Talk: Mario Carpo (The Bartlett School of Architecture)</u> <u>and Nicola Braghieri (LAPIS EPFL)</u>

12h30-13h30 Lunch

13h30-13h45

Afternoon Introduction by Elena Cogato Lanza (LAB-U EPFL)

13h45-14h45 Lecture: Chiara Cavalieri (UCL Louvain)

10' break

14h50-13h50

Aurélie Dupuis, Julien Lafontaine Carboni, Nagy Makhlouf, Estefania Mompean Botias (ALICE), Deep banquet. Rethinking symposia under confined democraties and imperatives of digital turn.

Armelle Hausser (LASUR), Participation citoyenne et numérique: de nouveaux outils pour planifier le territoire?

Debate with Charlotte Mazel-Cabasse (Digital Center EPFL) and Nicola Nova (Media Design HEAD)

10' break

16h00-17h00

Stéphanie Savio (ACHT), Hannes Meyer: between mass propaganda and social critique. Christina Doumpioti (LDM1), Intensive Differences. Inversing Form-Finding. Debate with Jérôme Baudry (CDH EPFL) and Corentin Fivet (SXL EPFL)

17h00-17h30 Conclusions