Florian Jaton
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Education

Oct. 2013–Nov. 2017	Université de Lausanne
	PhD in Social Sciences
	Supervisor: Prof. Dominique Vinck (UNIL)
	Co-supervisor: Prof. Sabine Süsstrunk (EPFL)
March 2016–April 2017	University of California, Irvine
	Research stay as *Junior Specialist*
	Donald Bren School of Information & Computer Sciences
	EVOKE Lab & Studio, headed by prof. Geoffrey C. Bowker
Sep. 2011–Feb. 2013	Université de Lausanne
	Master in Political Science
Sep. 2007–June 2010	Université de Lausanne
	Bachelor in Arts
	English Literature
	Philosophy

Professional Academic Experiences

Oct. 2018–2019	Invited Scholar at the Centre de Sociologie de l'Innovation (CSI) of the École nationale supérieure des Mines de Paris (Mines ParisTech)
Jul. 2018–Dec. 2019	Postdoctoral Researcher at the Digital Humanities Institute of the École polytechniques fédérale de Lausanne (EPFL)
Oct. 2013–Dec. 2017	SNF PhD Student at the Université de Lausanne
	Director: Prof. Dominique Vinck

Institutional Activities

Oct. 2013–Dec. 2016	In charge of the research seminars of the Laboratory for Digital Humanities of the Université de Lausanne (LaDHUL)

Funded Research Projects

Oct. 2013–Sep. 2017	Opening the Black Box of Digital Tools: An Ethnography of Computational Photography
	Four-year NSF Excellence Grant Doc.ch (SHS), POLAP1 148948

Teaching Activities

Sep. 2014–Jan. 2015   With Dominique Vinck, in charge of the Bachelor course (EPFL) *Software Studies*

Editorial Activities

August 2017   Reviewer for the journal *Sociologie et Sociétés*

July 2016   Reviewer for the journal *Revue d'Anthropologie des Connaissances*

Nov. 2015–June 2016   With Dominique Vinck, guest editor for the Special Issue of the journal *Revue d'Anthropologie des Connaissances* entitled "Ce que les data font faire aux Humanités (et vice-versa). Processus frictionnels de mise en base de données"

Keynote Lectures

July 2018   *Why is there ethnography of algorithms at all? With some elements regarding curious entities called "ground truths"*. Keynote lecture at "La iniciativa de Tecnología y Sociedad", Universidad de los Andes, Bogota, Colombia, 26 July, 2018

Organization of Conferences

September 2017   With David Pontille, Claude Rosental and Geoffrey Bowker, organization of the workshop "Ethnographier les infrastructures informationnelles. Résultats et méthodes" Université de Lausanne

August 2017   Chairman of the panel "Making Algorithms : Inscriptions, Benchmarks and Computers"
Annual Meeting of the Society for Social Studies of Science, Boston

Recognitions

June 2018   *Société Académique Vaudoise* Award for the Best PhD Thesis of the Université de Lausanne

October 2013   Excellence Grant Doc.ch (SHS)

March 2013   Université de Lausanne Faculty Award for the Best Master's Thesis in Social & Political Sciences

In the Press/On the Web

July 2018   *Les uns et les autres*, Uniscope, N°635, p.2

June 2018   *Dr. Florian Jaton wins the "Société Académique Vaudoise" Prize*, Newsletter of the Digital Humanities Institute, EPFL

November 2014   *Un ethnologue dans la photo*, Uniscope, N°530, pp. 6-7

Skills

Languages   French (mother language), English (fluent), Spanish, German

Computer skills   Python, HTML/Javascript/PHP, Matlab, Adobe Illustrator/Photoshop

Main Publications

Jaton F (2017) We get the algorithms of our ground truths: Designing referential databases in digital image processing. *Social Studies of Science* 47(6) : 811-840. doi: 10.1177/0306312717730428

In this open-access paper published in *Social Studies of Science,* I document the practical efforts of a group of scientists designing an image-processing algorithm. The article shows – for the very first time – that the problems often considered to be the starting points of computational models are in fact provisional results of time-consuming, collective and highly material processes that engage habits, desires, skills and values. In the project being studied, problematization processes lead to the constitution of referential databases called 'ground truths' that enable both the effective shaping of algorithms and the evaluation of their performances. Working as important common touchstones for research communities in image processing, the ground truths are inherited from prior problematization processes and may be imparted to subsequent ones. The ethnographic results of this study suggest two complementary analytical perspectives on algorithms: (1) an 'axiomatic' perspective that understands algorithms as sets of instructions designed to solve given problems computationally in the best possible way, and (2) a 'problem-oriented' perspective that understands algorithms as sets of instructions designed to computationally retrieve outputs designed and designated during specific problematization processes. If the axiomatic perspective on algorithms puts the emphasis on the numerical transformations of inputs into outputs, the problem-oriented perspective puts the emphasis on the definition of both inputs and outputs.

Jaton F (2017) *The Constitution of Algorithms. Ground-Truthing, Programming, Formulating*. PhD thesis, Université de Lausanne, Lausanne, Switzerland.

In this PhD monograph – currently not searchable – I account for practices whose articulation sometimes ends up constituting computerized methods of calculation, often called "algorithms." Contrary to most contemporary studies that document what existing algorithms do, this laboratory study documents what is done in order to make algorithms come into existence. This exploratory journey into computer science in action is marked by three main findings. First, many computerized methods of calculation rely upon referential databases called "ground truths" that gather sets of "input-data" and their manually designed "output-targets" counterparts. The processes leading to the definition of these ground truths heavily impact on the nature of the algorithms they help to constitute and evaluate. Second, writing lines of code capable of modifying digital data in some desired ways is, not surprisingly, central to the constitution of algorithms. Yet it is only by considering computer programming also as a practice – and not only as the expression of mental skills – that we may begin to fully appreciate this fascinating yet neglected activity. Third, the progressive reduction of ground-truth databases may help to formulate relationships between their data and their targets. These formulating practices may sometimes enable the enrollment of certified mathematical claims that will establish the horizons of further computer programs. These three discoveries are intimately related: formulating practices rely on, and sometimes influence, ground-truthing practices that themselves are supported by programming practices that are themselves sometimes irrigated by the results of formulating practices. What we call an "algorithm" may thus be considered, to a certain extent, an uncertain product of these three interrelated activities.

Jaton F and Vinck D (2016) Processus frictionnels de mise en bases de données. *Revue d'Anthropologie des Connaissances* 10(4) : 489-501. doi: 10.3917/rac.033.0489

In this introductory paper to a special issue I co-directed with Dominique Vinck for the *Revue d'Anthropologie des Connaissances*, we started from the following observation: while most of the database projects that are under way in the Human and Social Sciences (HSS) are sources of controversies and disputes, almost nothing has been said about these heuristic frictions. How come? Many social studies of databases analyzed the effect databases have on society. But as different and interesting as they are, these studies have in common that they largely ignore the relationships between digital databases and HSS and the mutations they may provoke. Today, more and more funding for innovative projects gathering practitioners of HSS and of computer science and technologies are allocated; what happens when these actors work together in order to design a database? How do (dis)agreements and compromises arise? What paths do collective practices of data structuration take? The papers of this special issue try to tackle all these questions.