



# THE NOTEBOOKS OF THE CHAIR #2

“ Cities and AI ”



# THE STEERING COMMITTEE OF THE ETI CHAIR



**Professor Didier Chabaud**  
Managing Director

Professor at IAE Paris, former president of the Academy of Entrepreneurship and innovation, co-editor in head of the Journal of Entrepreneurship (classified A HCERES), Didier Chabaud has written about one hundred journal articles with peer-reviewed journals, book chapters and publications, on the entrepreneurial processes.



**Professor Carlos Moreno**  
Scientific Director

Associate Professor at IAE Paris, pioneer of the concept of "Living Cities", Carlos Moreno is a well-known scientist in France and in the world. He is a member of the Scientific Committee of the Higher Council of strategic training and research, of the scientific council of the "Institut Mines-Télécom" and the academic board of the Strate Design School in Singapore. Carlos Moreno was awarded the 2019 Prospective Medal by the Architecture Academy.



**Dr. Florent Pratlong**  
Deputy Managing Director

Lecturer at the Sorbonne School of Management, Florent Pratlong is an innovation specialist, in charge of the management of innovation Masters degree at the University Paris 1, Commission Secretary at the Technology Academy, participant in the actions of the Paris Club of the Directors of Innovation, he designed and deployed innovation training programs and "Learning expeditions".



**Catherine Gall**  
Expert in Innovation

Formerly held the position of International Executive of the Steelcase Group for many years. In particular, she led the Action Research projects on Labor Prospective until 2018. She then directed "thecamp", a unique campus of the future dedicated to positive inter-company innovation located in Aix en Provence. She is now passionate about creating programs and experiences that foster creative thinking, encourage collective intelligence and accelerate the experimentation of new ideas at the scale of a company, a city or a territory.

**Pr Carlos Moreno**

Scientific Director and co-founder of the  
ETI Chair

# EDITORIAL

From the moment we are born to our last breath, the urban environment is the primary universe, space and time of humans. The issues at stake in the urban transformation are ecological, social and economic, centring on the citizen. Technology is not an end in itself – it is but a catalyst, albeit an extremely powerful one, in this transformation process.

Nonetheless, the digital revolution, and in particular artificial intelligence, is profoundly modifying the urban environment as phenomenon, all over the world. This dimension prompts us to add a new component to qualify the city of the 21st century: the ubiquity, or the ability to enjoy a technological connection anytime, anywhere, for as long as we need.

We are now witnessing the convergence of open data, digital mapping, geolocation and the co-construction of new services. Immersed in a socio-territorial environment, data are becoming massive, being processed by algorithms and contributing to the emergence of new services and uses. Transport on demand, car sharing, multi-modal mobility, decentralised energies, heritage showcasing, inviting urban public spaces, personalised healthcare, better quality of living for the ageing and elderly, massive on-line education, open arenas for culture, art and leisure, participatory democracy under open governance systems, collaborative information systems, and more: these are just a few examples of the services that are emerging today, and which will make the city of tomorrow a living, breathing place, where smart cities, social inclusion and technological innovation will become one.

Yes, with climate change and in the age of Covid-19, the role of digital and AI applications will be crucial for the years to come. We want AI that serves humans, cities and citizens, to help improve their quality of living, not subject it to its rules.

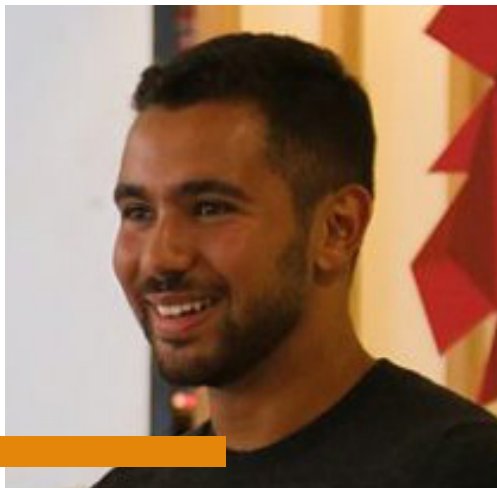
It is with great pride that we present to you this collection of texts, which is the result of the considerable work carried out by Hubert Beroche during a world tour of AI. Capturing the many facets of the research and experimentations being carried out on and with AI is of essential importance, in our eyes, to bring out new food for thought and action on this key topic.

Enjoy!

# SUMMARY

1.	THE LIVING CITY	6
2.	THE HUMAN CITY	14
3.	THE PROTECTIVE CITY	23
4.	THE INCLUSIVE CITY	30
5.	CITIES AND GENDER	38
6.	THE CITIZEN CITY	43
7.	THE ECOLOGICAL CITY	50
8.	THE ACCESSIBLE CITY	57
9.	APPENDIX: PERSPECTIVES ON AI	64





## Hubert Beroche

Project manager "City of the quarter of an hour and AI" at the ETI Chair

# INTRODUCTION

This publication extends from a world tour of "Urban AI", on which I embarked from July to December 2019. Over a period of 6 months, I explored 13 cities and met with nearly 130 AI players, in search of the answer to a single question: can AI help us create sustainable cities?<sup>1</sup>

The project, carried out in partnership with the ETI Chair, gave rise to multiple analyses, thought processes and debates around the topic "AI and Cities": will we live in cities under surveillance? How can autonomous mobility be used to serve our territories (rather than the other way around)? Is AI going to kill our cities? Are we witnessing the advent of invisible cities?... This publication is an attempt to respond to all those questions (and many more!). However, far from wrapping up the discussion, it aspires to open up new horizons, and stir new questions.

AI is a phenomenal technology that has already revolutionised our lives and is on the verge of transforming our cities. However, on its own, AI is but a tool – a *pharmakon*, as Bernard Stiegler would say. Now it is up to us to take hold of this technology to take up the major challenges of our time and take action for a better world. Taking hold of a technology does not just mean developing or using it. It means understanding it and taking ownership of it so that it cannot enslave us. It means taking the time to explore all the possibilities it holds to bring about a desired and desirable future. It means, lastly, making sure that it serves our humanity and our ideals.

1. On this line of research, see the *URBAN AI* report (Hubert Beroche).