



Co-funded by the  
Erasmus+ Programme  
of the European Union



**Training for Education Learning and Leadership  
towards a new METropolitan Discipline**

**Inaugural Book**



TELLme – Training for Education, Learning, and Leadership towards a new METropolitan Discipline (Grant Agreement No. 2017-1-IT02-KA203-036974) is co-funded by the Erasmus+ Programme of the European Union. The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

## **Training for education, learning and leadership towards a new metropolitan discipline. Inaugural book**

© 2021 CIPPEC

[www.cippecc.org](http://www.cippecc.org)

Buenos Aires, Argentina

**Editorial coordinator:** Melina Nacke

**Editor:** Patrizia Giordano

**Authors in alphabetical order:** Saúl Alcántara Onofre, Antonella Contin, Gianluigi Contin, Blanca del Espino Hidalgo, Rafael Forero, Valentina Galiulo, Fabio Gallo Perozzi, Marco Kamiya, Jiyeon Kim, Gabriel Lanfranchi, Massimiliano Lepratti, Emilio Mascort Albea, Guglielmo Mormina, Melina Nacke, Alessandro Oggioni, Pedro Ortiz, Gabriela Pastor, Roberto Randazzo, Ramón Reyes Rodríguez, Domingo Sánchez Fuentes, Santiago Soubie, Paolo Tagliolato Acquaviva d'Aragona, Carlos Tapia, Laura Torres & Andrej Žižek

**Covers designers:** Valentina Galiulo & María Koeraus

**Interior designer:** María Belén Félix

We will also like to thanks Michael Cohen, Wang Hongyang, Cesar Jaimes, Giovanni Santamaria, Fernando Bercovich and Stefano Sanna for their contributions to this book.

This book was subject to blind review.

ISBN: 978-987-1479-50-4

First edition

To cite this document: Contin, A., Giordano, P. and Nacke, M. (eds.). (2021). Training for education, learning and leadership towards a new metropolitan discipline. Inaugural book. Buenos Aires: CIPPEC.

**Training for Education, Learning and Leadership  
towards a new METropolitan Discipline**

**Inaugural Book**

# Contents

<b>Preface</b> .....	<b>iv</b>
<i>Sebastián Lew</i>	

<b>Introduction</b> .....	<b>v</b>
<i>Antonella Contin</i>	

## **PART I** **GENESIS OF THE BOOK**

### **CHAPTER ONE**

<b>The genesis and purpose of metropolitan architecture, its discipline in the era of the bigness at the metropolitan scale</b> .....	<b>1</b>
<i>Antonella Contin</i>	
<b>Metropolitan political power</b> .....	<b>15</b>
<i>Pedro Ortiz</i>	
<b>What is a XXI century metropolis?</b> .....	<b>32</b>
<i>Antonella Contin</i>	

### **CHAPTER TWO**

<b>Metropolitan metabolism: the ecological footprint</b> .....	<b>41</b>
<i>Domingo Sánchez Fuentes</i> <i>Emilio Mascort Albea</i>	
<b>Equity versus equality as an example of the metropolitan complexity</b> .....	<b>47</b>
<i>Carlos Tapia</i>	
<b>Metro Gaps. A method to understand and guide sustainable metropolitan development</b> .....	<b>51</b>
<i>Gabriel Lanfranchi</i>	
<b>Metropolitan architecture</b> .....	<b>56</b>
<i>Antonella Contin</i>	

### **CHAPTER THREE**

<b>The Metro-dology</b> .....	<b>77</b>
<i>Antonella Contin</i> <i>Pedro Ortiz</i> <i>Jiyeon Kim</i>	
<b>The six steps on a path towards agreement, between subjects with potentially divergent interests and objectives</b> .....	<b>93</b>
<i>Gianluigi Contin</i> <i>Guglielmo Mormina</i>	

## CHAPTER FOUR

<b>Metropolitan cartography: practice, tactics and projects .....</b>	<b>97</b>
<i>Antonella Contin</i> <i>Valentina Galiulo</i>	
<b>Metropolitan discipline, a terminology .....</b>	<b>104</b>
<i>Ramón Reyes Rodríguez</i>	
<b>TELLme project as a tool for territorialising SDGs in metropolises .....</b>	<b>112</b>
<i>Rafael Forero</i>	

## PART II

### AN IMPERFECT THEORY

#### CHAPTER ONE

<b>The metropolitan genome .....</b>	<b>123</b>
<i>Pedro Ortiz</i>	
<b>The sustainable metropolitan heritage. A profound mutation in our relation to the world .....</b>	<b>151</b>
<i>Blanca del Espino Hidalgo</i>	
<b>Sustainable natural and cultural heritage .....</b>	<b>158</b>
<i>Saúl Alcántara Onofre</i>	

#### CHAPTER TWO

<b>The Metro-Matrix .....</b>	<b>163</b>
<i>Pedro Ortiz</i> <i>Antonella Contin</i>	
<b>Principles, operators and operations .....</b>	<b>173</b>
<i>Antonella Contin</i>	
<b>Urban economy and planning in a changing world .....</b>	<b>182</b>
<i>Marco Kamiya</i>	

## PART III

### THE RULES OF METROPOLITAN SHAPE

#### CHAPTER ONE

<b>Rules of urban-metropolitan shaping and re-shaping .....</b>	<b>193</b>
<i>Ramón Reyes Rodríguez</i>	
<b>Rules of metropolitan governance .....</b>	<b>206</b>
<i>Melina Nacke</i> <i>Santiago Soubie</i>	

<b>Rules of metropolitan relations between urban and rural landscapes .....</b>	<b>212</b>
<i>Gabriela Pastor</i>	
<i>Laura Torres</i>	

<b>Rules of metropolitan quality and beauty .....</b>	<b>216</b>
<i>Antonella Contin</i>	

## CHAPTER TWO

<b>Metropolitan wealth and prosperity .....</b>	<b>223</b>
<i>Andrej Žižek</i>	

<b>The circular economy .....</b>	<b>231</b>
<i>Massimiliano Lepratti</i>	

<b>Social infrastructures and impact economy .....</b>	<b>236</b>
<i>Roberto Randazzo</i>	
<i>Fabio Gallo Peruzzi</i>	

## PART IV

### TOOLS AND TRAINING

#### CHAPTER ONE

<b>Cartography and open data .....</b>	<b>242</b>
<i>Paolo Tagliolato Acquaviva d'Aragona</i>	
<i>Valentina Galiulo</i>	
<i>Andrej Žižek</i>	
<i>Alessandro Oggioni</i>	

<b>Metropolitan training .....</b>	<b>251</b>
<i>Andrej Žižek</i>	

<b>Metropolitan tools: the TELLme Hub and the TELLme virtual lab.....</b>	<b>257</b>
<i>Paolo Tagliolato Acquaviva d'Aragona</i>	
<i>Alessandro Oggioni</i>	

<b>About the partners .....</b>	<b>265</b>
---------------------------------	------------

# Equity versus equality as an example of the metropolitan complexity<sup>37</sup>

Carlos Tapia

Universidad de Sevilla

The way in which complexity has been in charge of what the mechanistic-reductionist paradigm has taken over from Newton to the 1970s has not been a simple terminological substitution. A long adaptation has been and still is necessary, because the scientific-technical foundations have prevailed when a collective work has tried to understand the temporal widening and the spatial dilations that the technologies themselves have brought to contemporaneity, but without being able to give the necessary answer. Once the complex foundation has been assumed, as Morin would say in the 1970s (2008), it is now a matter of abandoning the attempt to reconstruct an organism from fragments of reality and to establish topological connections and analogies, in the sense of high-frequency and excitability relationships, but also in conditioning the place of things to be understood. This *topos*, in the architectural and urban sense, has been defined since Hegel by its objectual presence within the terms of reality, dedicated since then to symbolize its functioning as a donor of a refuge and an enclosure. Today, this reading is no longer possible. It is not necessary to sheath the architecture of a post-modern veil (relativistic and ambiguous) to justify it, but even the most rigorous science gives us a convincing guideline from which to establish an extended logic for the arrival of knowledge.

But even if we understand the paradigmatic change from the simple to the complex, the practice, which is complex, becomes complicated. The complicated is not the complex, as is easily understood, and its pressure leads to inaction. A permanent sensation of temporality, expecting to find the necessary correlations for each articulation of reality as a whole, immobilizes institutions, managers and rulers.

It feels like the world is at work. And it's run by caretaker governments. By default, the government is exercised in place of the one who should exercise it. It may be an extension of the rulers before they leave office, but always with a limitation of action, an inability.

This inoperative, complex, functioning time does not seem to be relative to a necessary transition, but rather a symptom of an end state, for which there are no objectives. Latour (2018) has cleared up the doubt of inaction due to overacting by quoting Trump's son-in-law in 2017 on the first page with his sentence "we have read enough books". If it was a matter of taking action, it was certainly not with a sense of community, but of knowing that he was in the right place on the right day to save his way of life, since a change in the course of the collision is impossible. It is no longer time to

---

<sup>37</sup> To cite this article: Tapia, C. (2021). Equity versus equality as an example of the metropolitan complexity. In: Contin, A., Giordano, P. and Nacke, M. (eds.). (2021). Training for education, learning and leadership towards a new metropolitan discipline. Inaugural book. Buenos Aires: CIPPEC.

redress inequities but rather to paradoxically reaffirm identities. However, that division in which the fascisms are ratified in an idea about the essence of the community, and the communisms, on the basis of a non-substantial praxis, seem to be made by a group of users of a library of books on paper, without a budget for acquisitions since 1945. Neither does the local/global polarity, nor the opposition in politics of the left against the right.

These plastic card users do not have a desire to belong - in our case, to belong to the city - nor do they point their thoughts in the right direction. As Jean-Luc Nancy (1991, p.31) would say, this invention of the community is an excrescence of what we call "society". It is a trap -this is how Nancy defines it-, economic, technical, political, cultural. The community is "what happens to us" from society. And that is why Latour diagnoses as short-sighted anyone who conceives of making decisions by way of politics that do not take into account the new delimitation of conflicts, which go, according to the French author, from the Modern to the Earth. This is a new object-oriented political ecology, which is on the table of the main universities and among them, the Schools and Faculties of Architecture.

If we look at what happened in 2015 in the European Union when it launched its priority proposals for its mandate, we find these prerogatives: *Employment, growth and investment; Digital Single Market; Energy and Climate Union; Internal Market; A fairer and deeper Economic and Monetary Union; A balanced and progressive trade policy to harness globalisation; Justice and fundamental rights; Migration; A stronger partner on the world stage; Democratic change.*

With these keys, we do not see a limit state of the last few days, but a perfection of what already works with autonomy, that is to say, that does not depend on the will of action of its leaders. Europe feels itself to be the cradle and universal champion of democracy. But it would be a question of seeing in this lapse of time what it wanted and what it seeks to be, if those priorities have meant effective changes, and if inaction for temporariness is transferred from society to the communities. Understanding metropolitan areas and being able to make their understanding a discipline requires making decisions, generating policies, avoiding reductionism, and anticipating uncertainty.

In the list of priorities of the European Union for the recently completed period, in which the TELLme project has been developed, it has only been possible to recognise the notion of equity, as a statement, under the heading *A fairer and deeper Economic and Monetary Union*. This section is explained by the phrase: combining stability with equity and democratic accountability. If there is equity, it is in the economic distribution, as a political attitude, subordinated to general stability, in case anyone forgets that we are in office. This warning is inscribed in the very term chosen. In other words, it is not a question of equality, but of equity.

In 2017, the French newspaper Le Monde published one of its informative but rigorous atlases, entitled "Atlas of Critical Economy", which included the short text "equity: the trompe l'oeil of equality". Equality, the Atlas explains, establishes, from the French declaration of the Rights of Man (humans we say today, without even achieving equality in gender with it) and of the Citizen, that all individuals have the same rights and duties. It is known that each citizen, at that time, if he was such, had to submit peacefully to the new social order, germinal, obliged with the fulfilment of rights and duties proper to the rule of law. Let us recall at this moment two books by Rancière (1991 y 2014) on equality for education in Jean Joseph Jacotot (1770-1840).

At present, as a statement, it is not disputed, but its function is far from being fulfilled as far as objectives are concerned. Or, in other words, if it is used on a political level it is accepted, but its short range on a social level since the French Revolution until today is unacceptable. This leads us to think about the interim nature of the ruler who sets his agenda with the political, given that there is no action that transfers it to society (and, therefore, to the communities, trapped by their own designs). If equality at the political level could be defined as a political ideology for the common goods governed by laws, equity at the social level would be a type of "positive discrimination" in favour of the recognition of differences. An expanded perception of this would be undermined if we said that equality is not possible without -previously- inequity. But that in knowing that nothing



prevents capitalism from maintaining its order, either we are unfair in improving the disadvantaged, or there will be no improvement at all. It is a contradiction in terms whose articulation would entail going beyond mere economic improvement, which would necessarily be sought in more priority sections in Europe in the previous period and in the one to follow.

What do we mean by equity? Equity, in the opinion of team TELLme, is composed of several principles, as a constitution, which would establish a basic charter, which on the territory of the city could have a title for its mandate: Urban Political Ecology (UPE according to Cook and Swyngedouw, 2012). But it should free itself from its manifestation by the urban, reaching a territorial rooting more by the approach of nature and society intertwined as a single entity. Perhaps you could bet on the bioregion. In a bioregion, urban metabolism does not establish that vital factors (water, energy, food, etc.) become commodities to be manipulated by specialized labour and high profit for a few. A Bioregional Political Ecology would have 4 principles, as we have concluded in the TELLme project: Environmental Justice, The Common, Senses of Belonging and Rights (to the city, to the landscape, to inclusiveness, to dignity, etc.).

For Environmental Justice, we would break down 4 essential aspects that are complexly intertwined (based on Iris Marion in 1990 and cited by David Schlosberg in 2007): a Distributional Justice (which would be the need for environmental ills not to be concentrated in or near disadvantaged communities but (re)distributed more equitably), a Procedural Justice (the need for a more just and democratic decision-making process and the participation of disadvantaged groups in it), a Capacity Justice (the need to build 'the capacities needed for a healthy and functional community') and an Acknowledgement Justice (the need for recognition and respect for disadvantaged communities suffering from environmental injustice and for those involved in their struggle).

In order to measure their potentialities, operators are articulated, which would be, among others, Cohesion and Social Fabric, Mobility, Governance or Wealth (note that it is not the wealth located above, but the way in which work or the economy are integrated into society for purposes very different from those that have been taken into consideration until now, such as the division of labour that promotes inequity by definition, and which Lefebvre would join differently with architectural action in the need for "une architecture de la jouissance").

For its part, the use of the term "the Commons" or "the Common Goods", refers to a change of mentality, more than to great ideas that are renewed, but that struggle to disapprove the senses attributed to basic notions, apparently immovable, that shape societies, as David Bollier has written in the chapter entitled "The Growth of the Commons Paradigm" (2007). Reorganizing the guidelines of the so-called "Global Public Domain" is its function. The archetype of the commons is not primarily based on a system of property, contracts and markets, but on social rules and norms, as well as legal mechanisms that allow people to share ownership and control of resources. "The tragedy of the Commons", written by Garrett Hardin (1968), and cited by the now-famous author Yochai Benkler in the early 2000s in his lecture on the economic policy of the commons, together with the publication of Elinor Ostrom's 1990 book (reedited 2015), "Governing the Commons" is the main genealogical line on this hugely developed issue to this day, and held as a political key in today's Europe. Here, operators such as Public Space, Heritage, Services, or Knowledge are crucial. Nancy Fraser (2003) has written, based on Foucault, that if Fordist regulation aspired to universality despite its persistent inequality, post-Fordist governmentality for its part separates and channels individuals according to their degree of efficiency and risk prediction, enunciating a "dual society" of the hyperconnected and the excluded. Thinking the Commons, bends, or at least, pretends, the vector of inequality by counterbalance.

Regarding the sense of belonging, self-designation or collective consciousness, it can be said that the communities do not respond to the regulations and projects located on traditional boundaries (municipal, district, etc.), but rather, in a more complex manner, new territorialities are opened in the old boundaries, now areas of confluence. These can range from the emergence of new metropolitan areas, processes in the so-called post-metropolis, communities in transition, etc. Their operators

would be the assembly of the human with the non-human, the centrality, the resilience of communities, etc.

Finally, the Rights. Everyone is familiar with the research carried out by Lefebvre at the end of the 1960s, under the name of "the right to the city". Understood in its origin, it must be considered as an enthusiastic postulation of a new and radical type of urban policy. Today, it is difficult to reconstruct this origin, although it is common to try to invoke it unaltered in more reformist contexts. It was Harvey, in his 2008 essay "The Right to the City", who re-articulated Lefebvre's central belief, arguing that "the right to the city is much more than individual freedom to access urban resources: it is a right to change ourselves by changing the city". Despite Lefebvre's mistrust of giving architects a place in this urban policy, we in architecture have believed that we can find a solution to give all citizens a portion of equity based on our actions to achieve the participation and appropriation of public space by the inhabitants.

It is not time to extend a "principle of hope" in the sense of Ernst Bloch, nor even in the sense of responsibility for that of Jauss, it does not have an *alter-globalization posse*. It is a matter of locating practices that are based on the 4 principles defined for equity living together in the orphanage of interim governments. With this, the aim is to understand the daily life of an architectural intelligence in gestation, along with other social practices. Such a meeting could be called a bioregion, blurring the limits imposed by a city on the rise in terms of economy and representation.

## References

- Benkler, Y. (2003) 'The Political Economy of Commons', UPGRADE, the European Journal for the Informatics Professional, IV (3).
- Bollier, D. (2007), *The Growth of the Commons Paradigm*, MIT Press, Cambridge, Massachusetts/London, pp. 27-40.
- Cook, I. R., & Swyngedouw, E. (2012). *Cities, Social Cohesion and the Environment: Towards a Future Research Agenda*. *Urban Studies*, 49(9), 1959–1979. <https://doi.org/10.1177/0042098012444887>.
- Enzensberger, H. M., Grimm, R. and Armstrong, B. (1982) 'A critique of social ecology', in *Critical Essays: Hans Magnus Enzensberger*. Bloomsbury Academic (German Library), pp. 186–223.
- Fraser, N. (2013) '¿De la disciplina hacia la flexibilización? Releyendo a Foucault bajo la sombra de la globalización', *Revista Mexicana de Ciencias Políticas y Sociales*, 46(187), pp. 15–33. doi: 10.22201/fcpys.2448492xe.2003.187.42392.
- Hardin, G. (1968) 'The Tragedy of the Commons', *Science*. American Association for the Advancement of Science, 162(3859), pp. 1243–1248. doi: 10.1126/science.162.3859.1243.
- Harvey, D. (2003) 'The right to the city', *International Journal of Urban and Regional Research*. doi: 10.1111/j.0309-1317.2003.00492.x.
- Latour, B. (2018) *Down to Earth: Politics in the New Climatic Regime*. Wiley.
- Lefebvre, H. (1968) *Le Droit À la Ville*. (Société et urbanisme).
- Lefebvre, H., Martínez Lorea, I. and Ruiz Martínez, N. (2018) *Hacia una arquitectura del placer*. CIS, Centro de Investigaciones Sociológicas (Clásicos Contemporáneos).
- Mondiplo, F., *Diplomatique*. (2017) *El Atlas histórico [de Le monde diplomatique en español]: El Atlas de Economía Crítica*.
- Morin, E. (2008) *On Complexity*. Hampton Press (Advances in systems theory, complexity, and the human sciences).
- Nancy, J. L. (1991) *The Inoperative Community*. University of Minnesota Press
- Ostrom, E. (2015) *Governing the Commons*. Cambridge University Press (Canto Classics). 1990
- Ranciére, J. (1991) *The Ignorant Schoolmaster: Five Lessons in Intellectual Emancipation*. Stanford University Press.
- Ranciére, J. (2014) *The Emancipated Spectator*. Verso Books.
- Schlosberg, D. (2007) *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford: Oxford University Press. doi: 10.1093/acprof:oso/9780199286294.001.0001.