

The background of the slide features a photograph of several industrial smokestacks or chimneys against a sky with a prominent rainbow. The smokestacks are dark and silhouetted, with some having small lights at their tops. The rainbow is vibrant, with red, orange, yellow, green, and blue bands visible across the upper half of the image.

# MAPEAMENTO DE CONCEITOS E PARADIGMAS PARA A SUSTENTABILIDADE

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**DINAMIA'CET – Instituto Universitário de Lisboa ISCTE**

SPLACH – Spatial Planning for Change  
POCI-01-0145-FEDER-016431

O LNEC e a História da investigação em Arquitectura  
SFRH / BPD / 117167/2016



# MAPEAMENTO DE CONCEITOS E PARADIGMAS PARA A SUSTENTABILIDADE metodologia e enquadramento

- . Cruzamento de dois projetos de investigação:  
SPLACH – Spatial Planning for Change; O LNEC e a História da investigação em Arquitectura
- . Metodologia para identificação de termos e conceitos  
relacionados com o meio urbano

# MAPEAMENTO DE CONCEITOS E PARADIGMAS PARA A SUSTENTABILIDADE objetivos

- . Como podem os conceitos identificados ilustrar as definições atribuídas por diversas áreas disciplinares revelar as preocupações de urbanistas, planeadores, arquitectos e outros profissionais?
- . Podem estes conceitos ajudar o planeamento urbano de hoje no sentido de uma transição para a sustentabilidade?

# MAPEAMENTO DE CONCEITOS E PARADIGMAS PARA A SUSTENTABILIDADE

estrutura da apresentação

1. Sustentabilidade urbana – sinais e desafios
2. Investigação urbana – investigadores
3. Conceptualizar a cidade – revisão de conceitos e definições

1

# SUSTENTABILIDADE URBANA

## SINAIS E DESAFIOS





















# 2

# INVESTIGAÇÃO URBANA

## INVESTIGADORES



Saverio Muratori



M.R.G. Conzen



Kevin Lynch



Abel Wolman



Gianfranco Cannigia



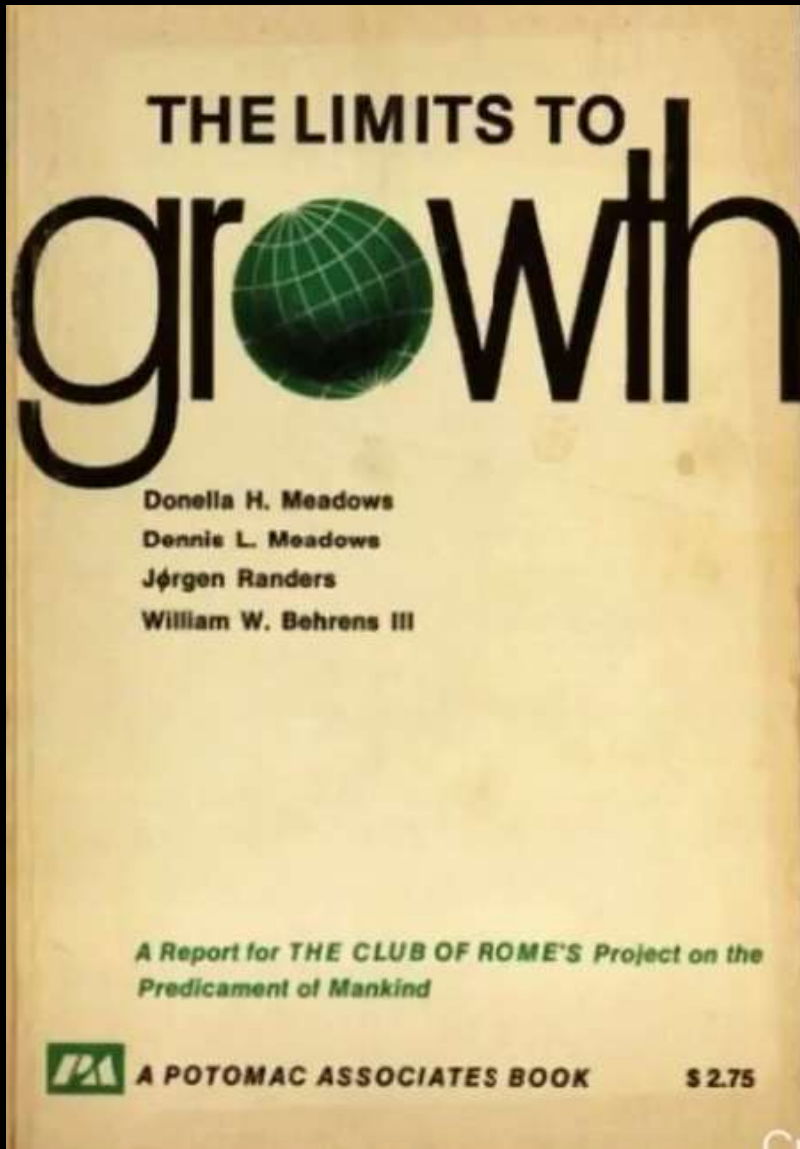
Nuno Portas



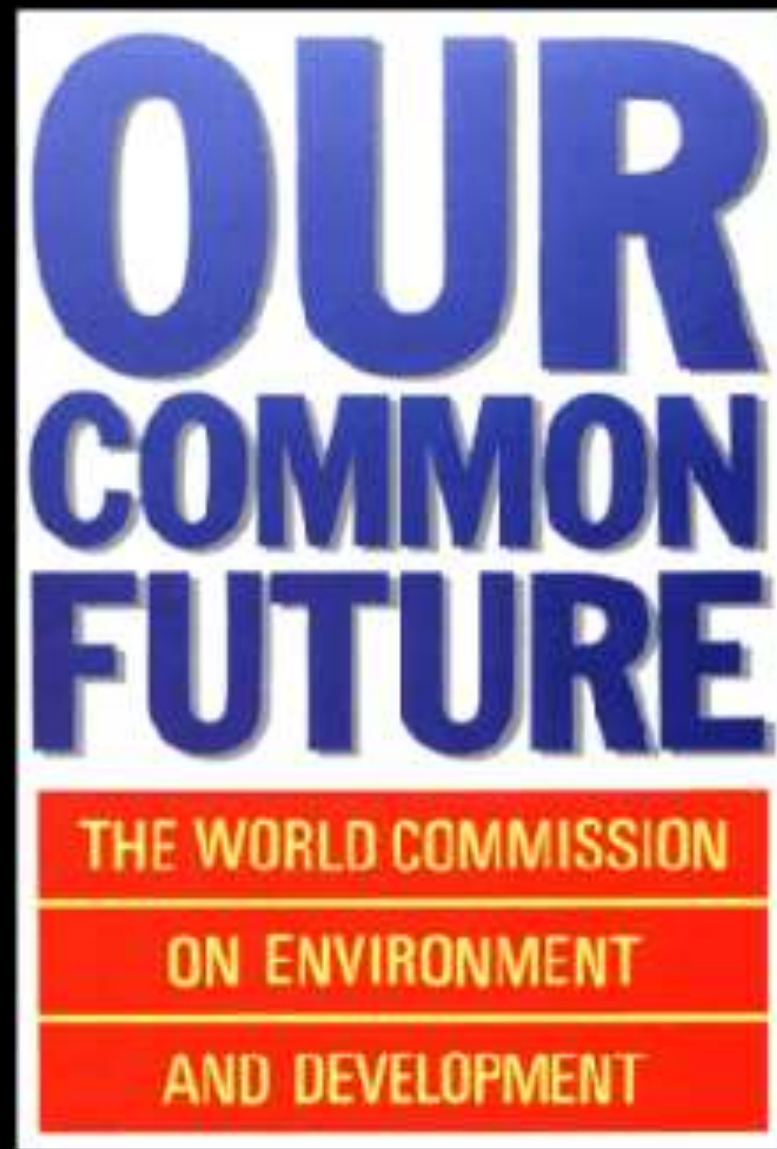
M. Luz Valente Pereira



Spiro Kostof

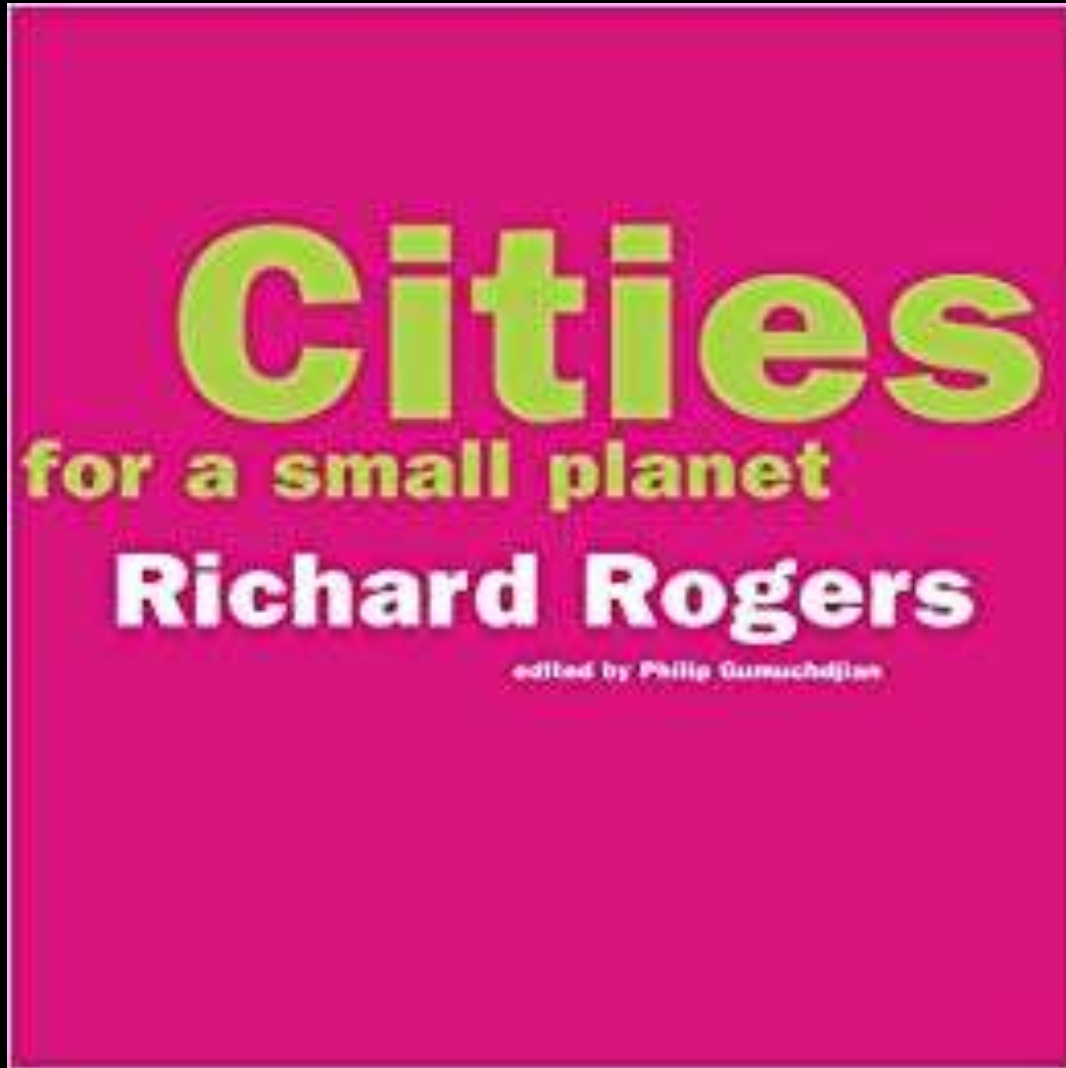


Meadows et al 1972

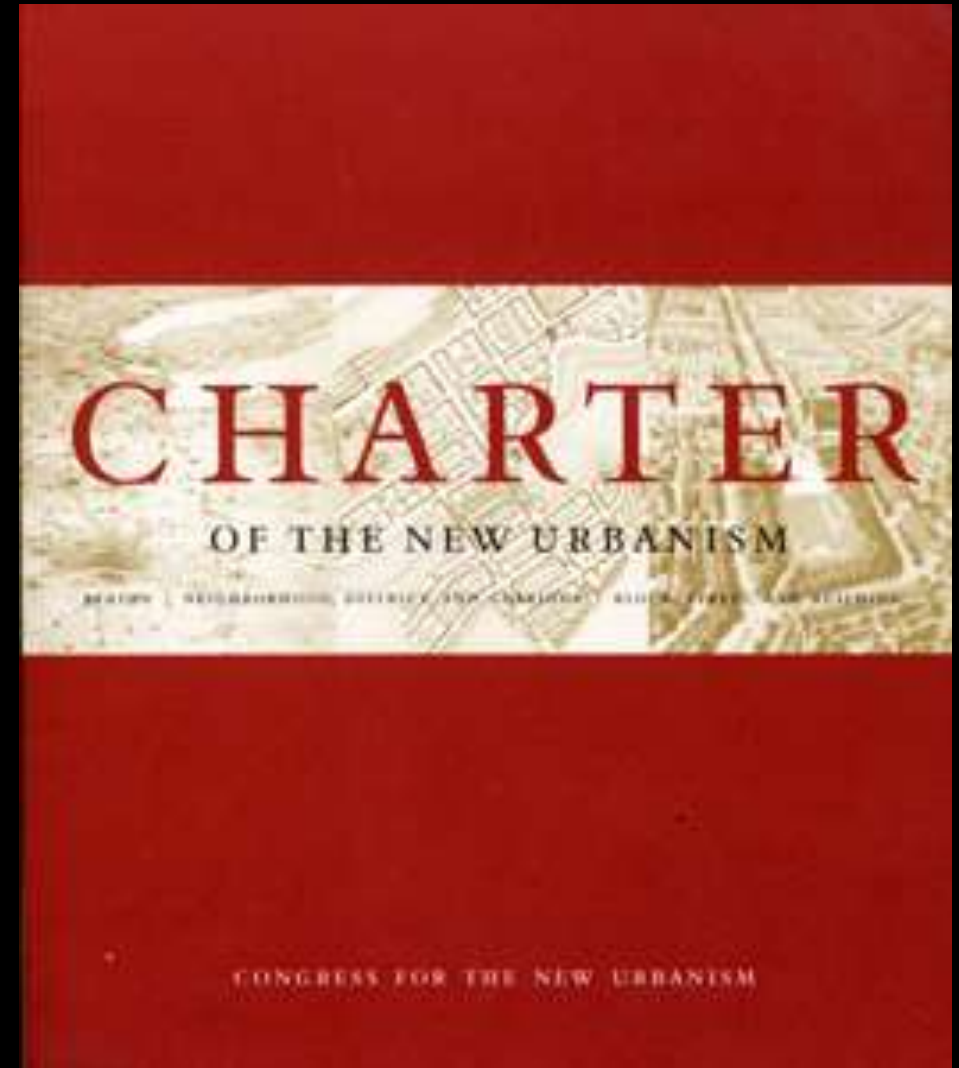


UN 1987

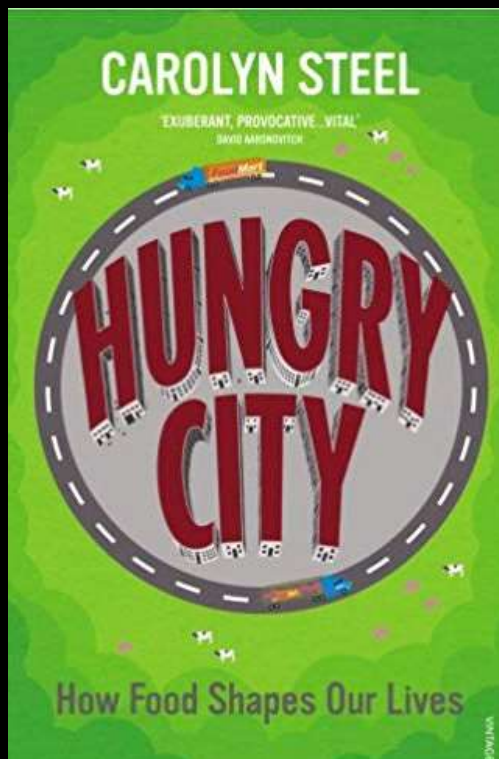




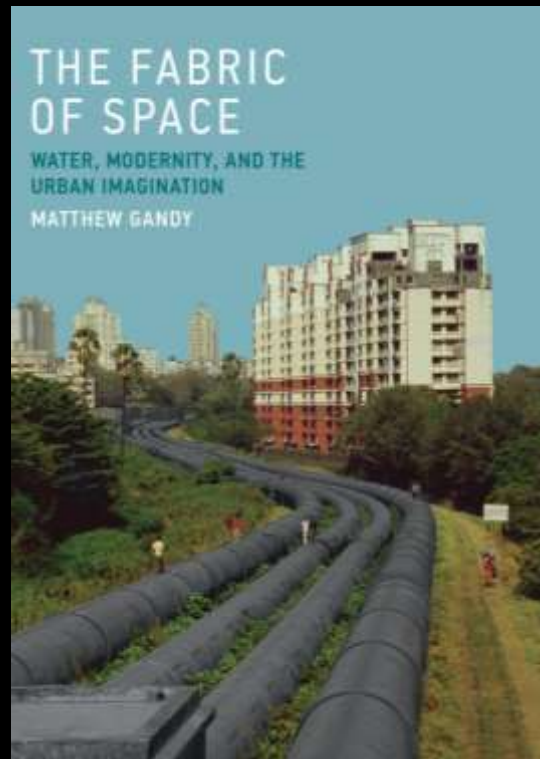
Rogers 1997



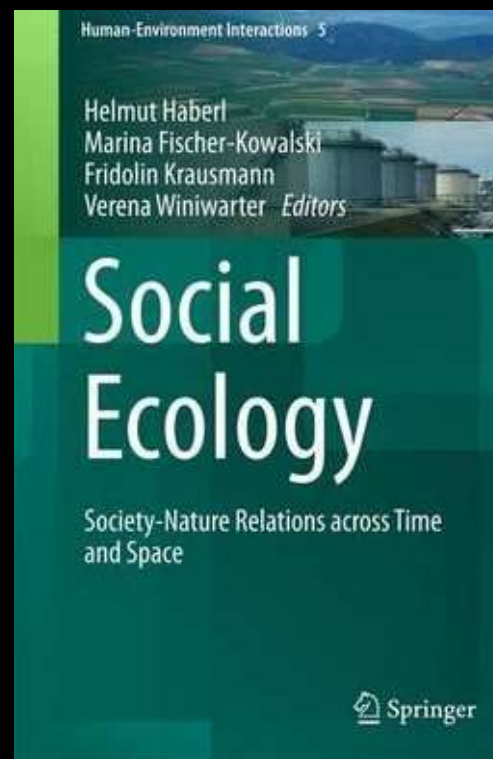
Congress for the New Urbanism 1999



Steel 2008



Gandy 2014



Häberl, Fischer-Kowalski,  
Krausmann, Winiwarter 2016



Marat-Mendes, Mourão, Bento d'Almeida, Niza 2015

3

# CONCEPTUALIZAR A CIDADE

## REVISÃO DE CONCEITOS E DEFINIÇÕES



Quatremère de Quincy ( <b>1842</b> ), <i>Dizionario Storico di Architettura</i> (Fratelli Negretti, Mantova)
Calsat J.H., Sydlar J. P. ( <b>1970</b> ) <i>Vocabulaire international des termes d'urbanisme et d'architecture = Internationales wörterbuch für städtebau und architektur = International vocabulary of town planning and architecture</i> (Société de Difusion des Techniques du Bâtiment et des Travaux Publics, Paris).
Merlin, P. and Choay, F. ( <b>1988</b> ) <i>Dictionnaire de l'urbanisme et de l'aménagement</i> (Presses Universitaires de France, Paris).
Rodrigues, M. J. M, Sousa, P. F., Bonifácio, H. ( <b>1990</b> ), <i>Vocabulário Técnico e Crítico de Arquitectura</i> (Quimera Editores, Coimbra).
Larkham, P. J and Jones, A. ( <b>1991</b> ) <i>Glossary of Urban Form</i> (Historical Geography Research Series, Birmingham).
Conzen. M. R. G. ( <b>2004</b> ) <i>Thinking about urban form: Papers on urban morphology 1932-1998</i> (Peter Lang, Oxford).
Cowan, R. ( <b>2005</b> ) <i>The dictionary of urbanism</i> (Streetwise Press, Tisbury, UK).
Institute for Local Government ( <b>2010</b> ) <i>Understanding the Basics of Land Use and Planning: Glossary of Land Use and Planning Terms</i> ( <a href="https://www.ca-ilg.org/sites/main/files/file-attachments/2010_-_landuseglossary.pdf">https://www.ca-ilg.org/sites/main/files/file-attachments/2010_-_landuseglossary.pdf</a> ) accessed 29 May 2018.

TERMS	1842	1970	1988	1990	1991	2004	2005	2010
Access System/Back Lane					•			
Accessibility ( <i>Accessibilité</i> )		•	•				•	•
Appropriation/Appropriate ( <i>Appropriation</i> )		•	•				•	•
Appropriation of the Territory		•						
Area		•		•			•	
Architectural Intervention Area ( <i>Architettonica</i> )	•							
Building ( <i>Edifizio</i> ) ( <i>Bâtiment/Construction</i> )	•	•	•	•	•	•	•	
City ( <i>Ville</i> )	•	•	•	•			•	
Designing/Projecting ( <i>Design</i> )	•	•	•				•	
Division of the house ( <i>Divisione</i> )	•							
Environment ( <i>Environnement</i> )		•	•				•	•
Form		•		•			•	
Internal Space				•				
Neighbourhood ( <i>Quartier</i> )	•	•	•			•	•	
Public Space ( <i>Espace Public</i> )		•	•					
Private Space								
Projecting the City ( <i>Projetter</i> )	•							
Space ( <i>Espace</i> )		•	•	•			•	
Territory of the Housing								
Urban Project ( <i>Planification Urbaine</i> )		•	•		•		•	
Urban Area ( <i>Zone à Urbaniser</i> )		•	•	•			•	
Urban Centre ( <i>Centre Urbain</i> )		•	•	•				
Urban Planning ( <i>Aménagement du Territoire</i> )		•	•				•	
Urban Form/Form Complex ( <i>Forme Urbaine</i> )			•			•	•	
Urban System ( <i>Système</i> )			•					
Urban Space/Urban Landscape						•		•
Urbanity ( <i>Urbanité</i> )			•	•				
Zone		•						
Zoning ( <i>Zonage</i> )		•	•	•			•	•

The emptied body of the urban system and the culturally expressive shapes included in it	Pereira, 1973
The structures visible in cities, from which new models and processes can be inferred	Batty, 2013
Main physical elements structuring and shaping the city, including urban tissues, streets, squares, plots and buildings, among others	Oliveira 2018
Spatial configuration of fixed elements of a metropolitan area, including its relation to environmental sustainability, involving density, compactness, land-use and other dimensions	Lo, 2016



Physiognomy or townscape, combining town plan, patterns of building forms and patterns of urban land use	Conzen, 1960
Study of the city as human habitat, considering nature and artifact in their evolution and of its components	Moudon, 1997
Interdisciplinary study of the physical form of cities and the processes that shape it in time	Oliveira 2018

A sustainable society can persist over generations; is farseeing enough, flexible enough, and wise enough not to undermine its physical and social systems of support	Meadows et al, 1972 [2002]
Meeting the needs of the present without compromising the ability of future generations to meet their own needs	UN, 1987
Sustainable urban forms survive processes of change and provide environmental quality within settlement patterns over different times	Marat-Mendes, 2002
Continuous maintenance of city functioning, including mobility, districts, land uses and aesthetics which are significant to the inhabitants of any particular city	Fouda, 2014

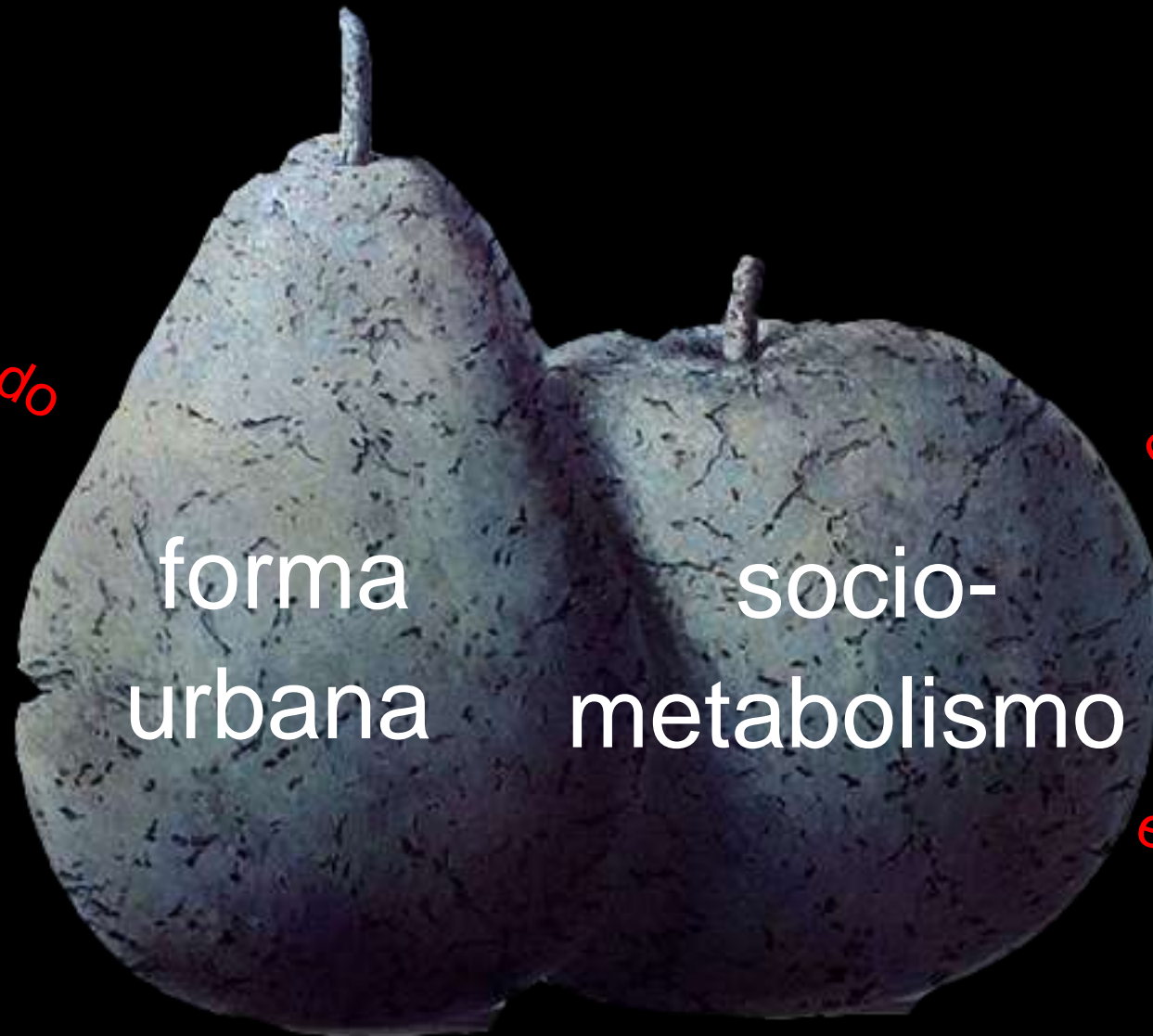
<b>TERMS</b>	<b>DEFINITION</b>	<b>REFERENCES</b>
<b>City</b>	“The city as 'urban object' is mainly the structure of political-economic forces that determine its conditions and characteristics of development. The city as an urban object is above all the body and the organism that inhabits it, vivifies and transforms”	Pereira, 1973, 8
<b>Environment</b>	“An element of the urban system that corresponds to the aspects that has to do with the symbolic values and the physical comfort of the urban system, its modes of consumption and appropriation”	Pereira, 1973, 48
<b>Urban Form/Form Complex</b>	“An element of the urban system that corresponds to its emptied body, to full and empty, to the 'shape' not animated but with capacity to signify, in other words, culturally expressive”	Pereira, 1973, 49
<b>Urban Space/Urban Landscape</b>	“It is the set of aspects that in urban reality can refer to space, exist in space, are directly or indirectly spatially. The urban space participates in the urban and architectural domain, it is not only form but inhabited form, 'organized' form, living form that changes and evolves”	Pereira, 1973, 9
<b>Urban System</b>	“It is a set of co-present elements that have the property of having relations among themselves and between their attributes. Elements of a system are its parts, its components, and its attributes, the properties of its elements”	Pereira, 1971, 1

Alguns termos-chave e definições relacionados com Arquitectura e Urbanismo identificados em relatórios proveniente da Divisão de Construção e Habitação e da Divisão de Arquitectura do LNEC – 1962-1974



TERMS	DEFINITION	REFERENCES
<b>Biophilic urbanism</b>	Urban approaches enabling green roofs, greens walls and water sensitive design to increase habitat opportunities	Thomson, Newman, 2017
<b>Metabolism</b>	'Big picture' quantification of inputs, outputs and storage of energy, water, nutrients, materials and waste within a specific urban area	Kennedy, Pincetl and Punje, 2011
	Analysis of vital change within cities, considered as living systems, focusing on its relationship with the biophysical environment and human-nature and city-hinterland links	Faraud, 2017
<b>Sitopia</b>	A city that is strongly linked with its hinterland through a food network, structuring food-related activities and respective land-uses	Steel, 2008
<b>Urban ecosystems</b>	Coupled human-natural system in which people are dominant agents, and dependent beyond its boundaries on large material and energy inputs, with capacity to absorb pollution and waste	Alberti, 2015
	The complex ecosystem constituted by the city, including social, economic and natural elements, within a specific region or watershed and with specific features, connotations and boundaries	Hua, Shao, Zhao, 2016

Alguns termos-chave e definições relacionados com Urbanismo Sustentável identificados na Revisão de Literatura do Projeto SPLACH – 2000-2019



forma  
urbana

socio-  
metabolismo

edificado  
infraestrutura  
equipamento  
espaços livres

energia  
usos de solo  
provisão de bens  
equilíbrio social

cidade sustentável

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# Obrigado!

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