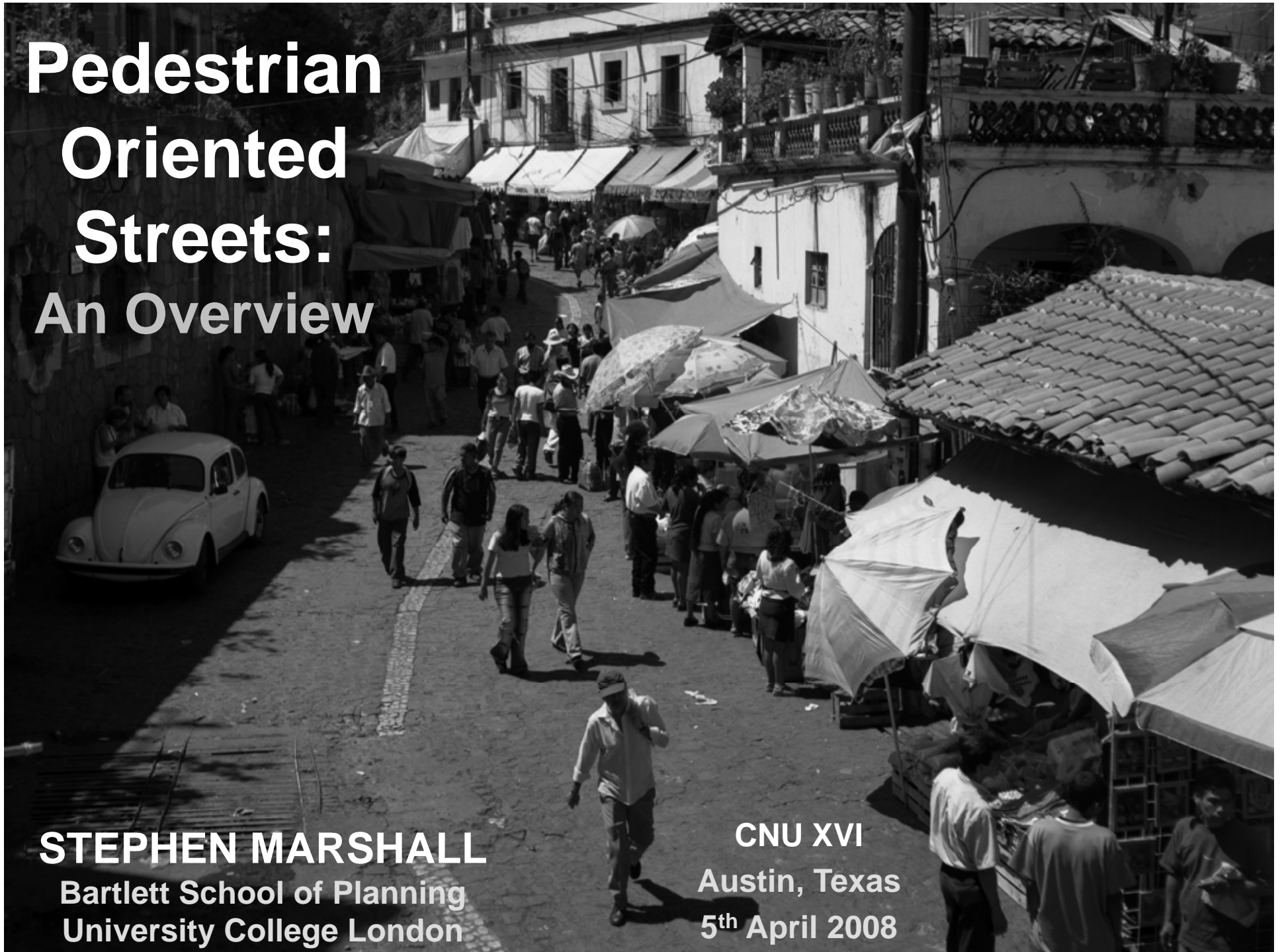


Pedestrian Oriented Streets: An Overview

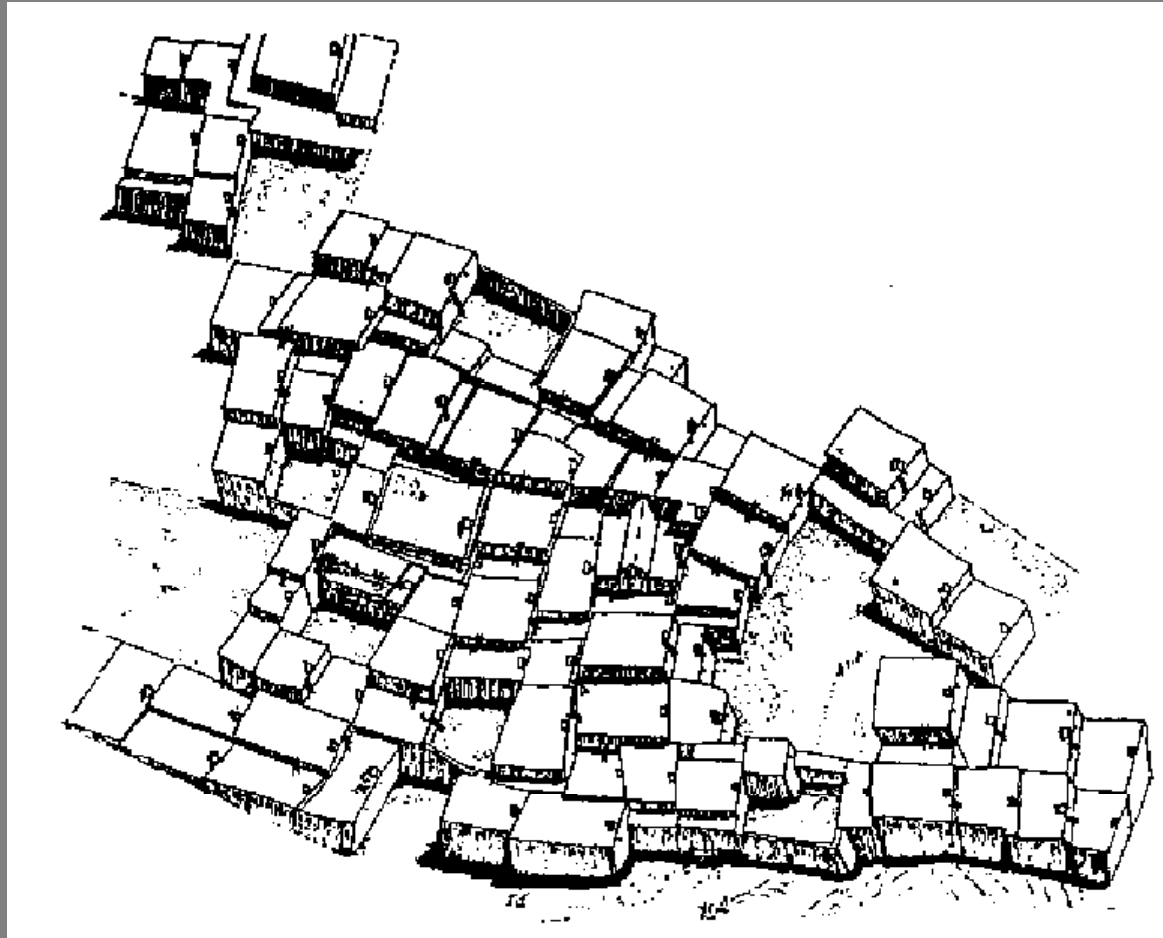


STEPHEN MARSHALL
Bartlett School of Planning
University College London

CNU XVI
Austin, Texas
5th April 2008

What is a naturally good
pedestrian environment?



















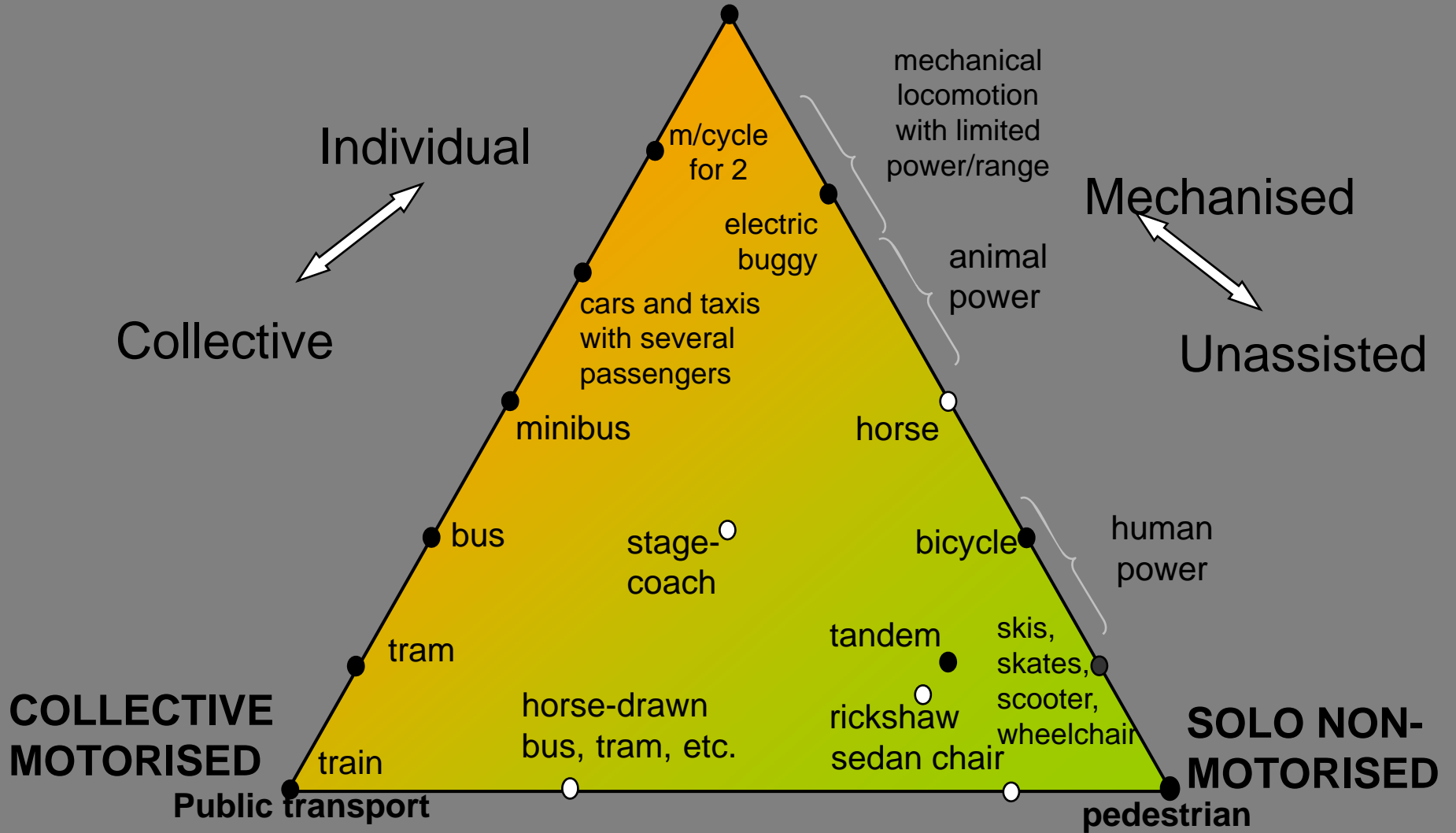


Walking – characteristics

- Relates to physical capabilities of people
- Limited speed and range
- Manoeuvrable, tight turning radius
- Can negotiate non continuous surfaces, steps, etc.
- Sensitive to weather

SOLO MOTORISED

solo car, van, etc.

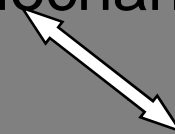


Individual



Collective

Mechanised



Unassisted

COLLECTIVE
MOTORISED

Public transport

train

horse-drawn
bus, tram, etc.



tram

bus

stage-
coach



minibus

horse

bicycle

human
power

tandem

skis,
skates,

scooter,
wheelchair

rickshaw

sedan chair



pedestrian

SOLO NON-
MOTORISED









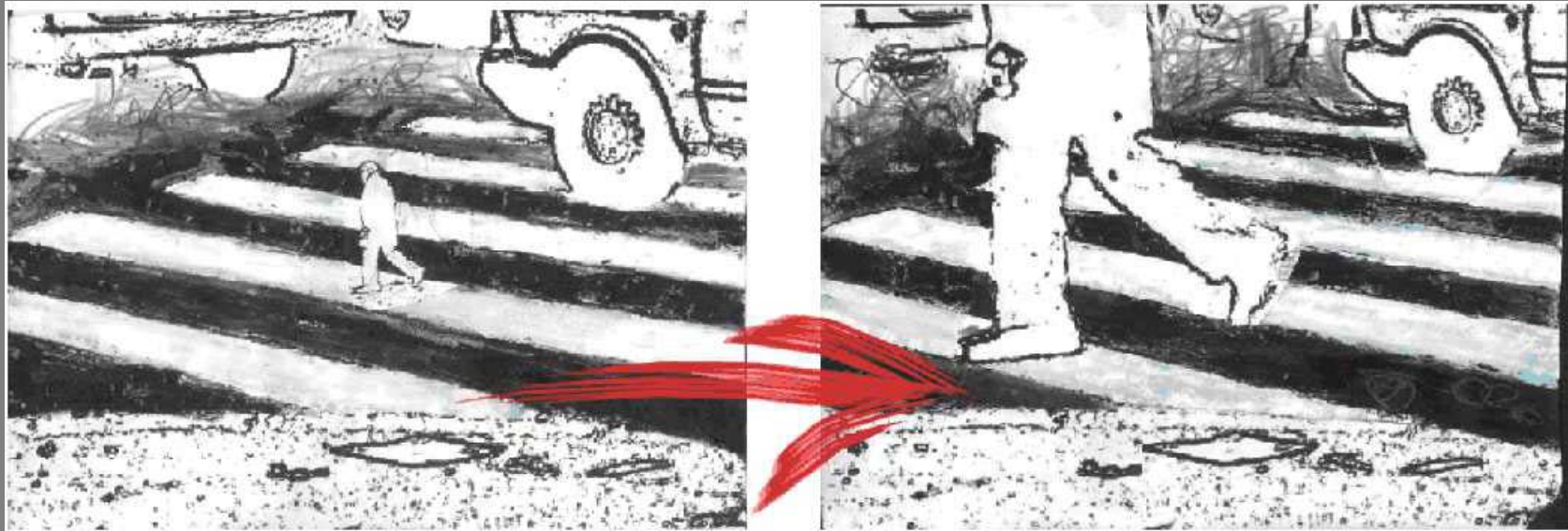






Need to consider human
perceptual/psychological factors...

Pedestrian scale



K Rauhala / PROMPT project

Public space as a living room



- Somewhere you might want to spend time...
- Not just a 'waiting room'

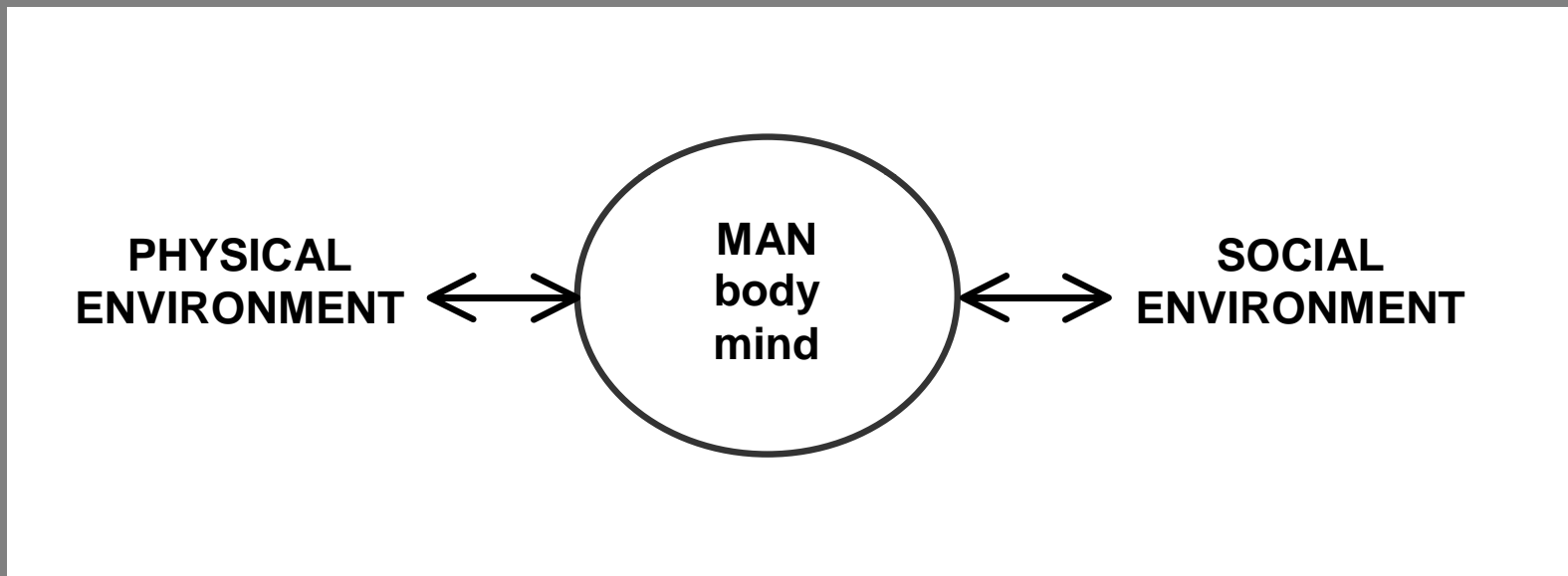
K Rauhala / PROMPT project

Perception of space as being 'for' pedestrians



K Rauhala / PROMPT project

Social environment



PROMPT Project – Kari Rauhala

Various desired expectations concerning pedestrian environment

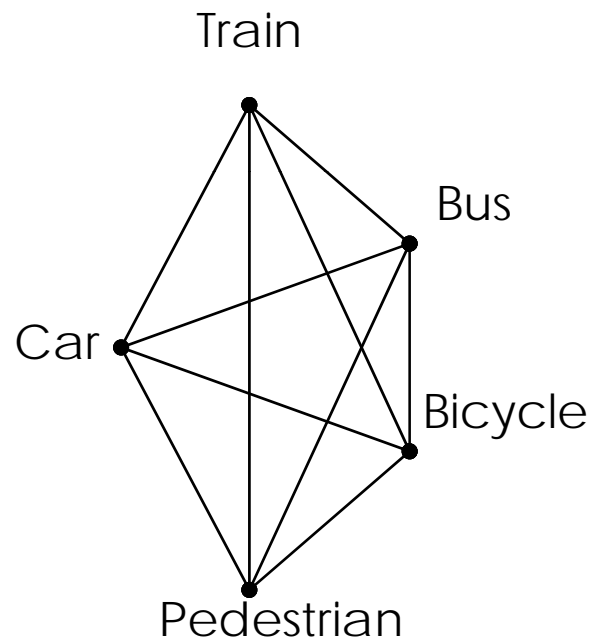
	Physical environment	Social environment
body	- safety of walking	- security against criminality
	- protection against pollution and noise	- safety against other road users
	- health	- accessibility of social activities
	- accessibility of places	- organisation of social functions
	- accessibility of other transport modes	- distribution of social functions
	- chaining of trips	- social visibility
	- walking distances	- possibility for privacy
	- bioclimatic and sensory comfort	
mind	- perceptivity, understandability	- cultural habits
	- orientation	- social acceptance
	- sense of safety	- social contacts and relations
	- variety and beauty	- participation to social life
	- self identification	- withdrawal from social life

Don't forget where the pedestrian street is in relation to other spaces / locations...

Don't forget where the pedestrian street is in relation to other spaces / locations...

- ...in terms of how the pedestrian connects up with other transport modes (modal fit)

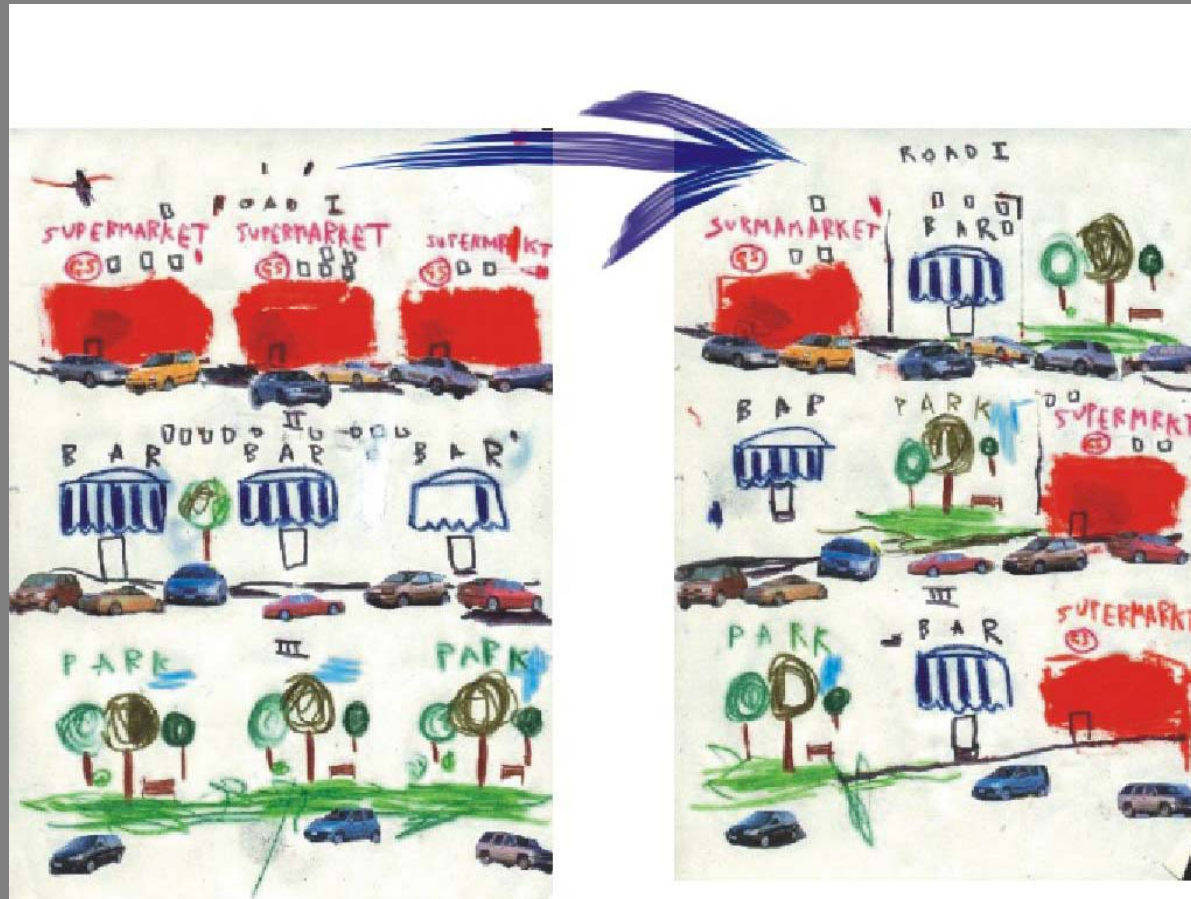
The modal 'food chain'.



Don't forget where the pedestrian street is in relation to other spaces / locations...

- ...in terms of how the pedestrian connects up with other transport modes (modal fit)
- ...in terms of how the pedestrian is accessible to different land uses

Localization of facilities

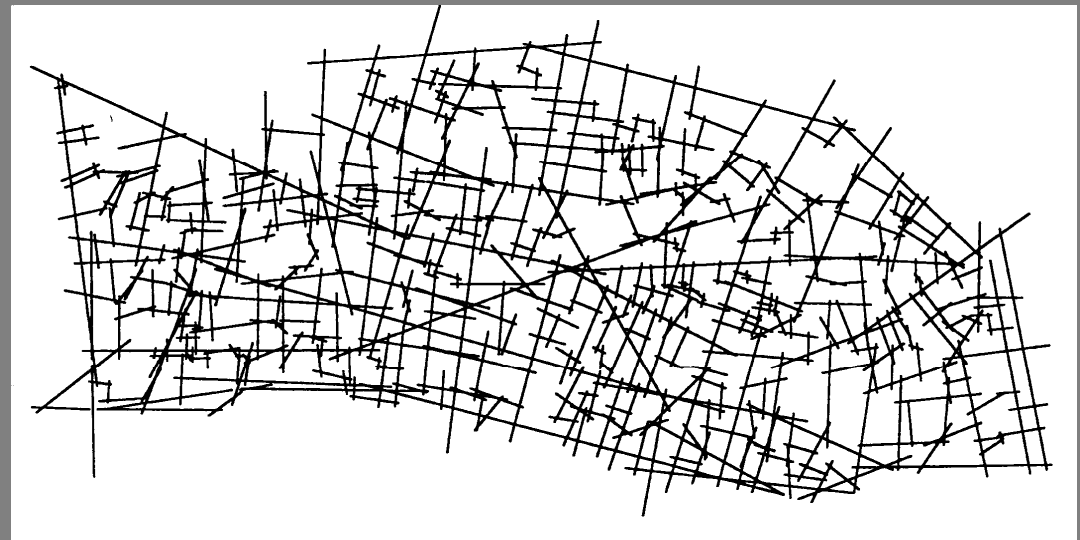


K Rauhala / PROMPT project

Don't forget where the pedestrian street is in relation to other spaces / locations...


- ...in terms of how the pedestrian connects up with other transport modes (modal fit)
- ...in terms of how the pedestrian is accessible to different land uses
- ...and in terms of social-spatial structure, identities of place, cognitive maps, etc.

Pedestrian space and configuration



Hillier (1996)

Towards a more holistic approach

	Physical design of infrastructure, etc. (What is provided)	
Pedestrian as moving object/mode		

Towards a more holistic approach

Physical design of
infrastructure, etc.
(What is provided)


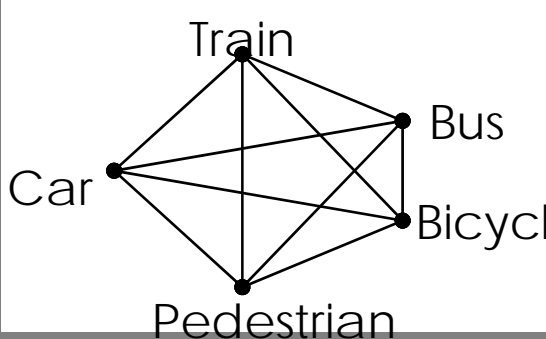

Pedestrian
as moving
object/mode




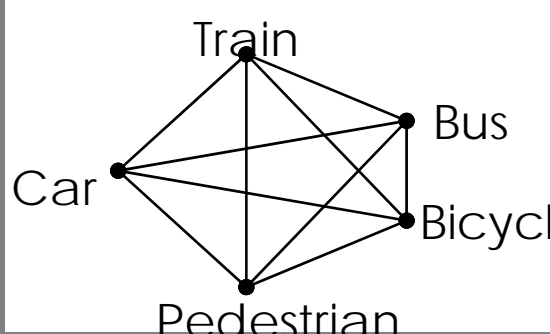

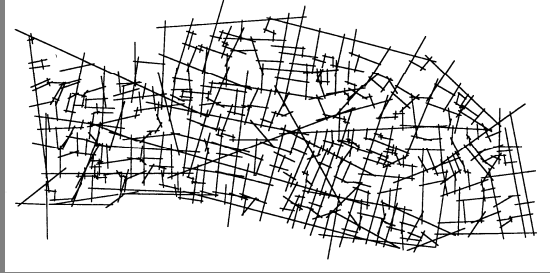
Pedestrian
as 'whole
human'



Towards a more holistic approach

	Physical design of infrastructure, etc. (What is provided)	Location and configuration (Where it is / fits)
Pedestrian as moving object/mode		 <pre>graph TD; Train --- Car; Train --- Bus; Train --- Bicycle; Train --- Pedestrian; Car --- Bus; Car --- Bicycle; Car --- Pedestrian; Bus --- Bicycle; Bus --- Pedestrian; Bicycle --- Pedestrian;</pre>
Pedestrian as 'whole human'		

Towards a more holistic approach

	Physical design of infrastructure, etc. (What is provided)	Location and configuration (Where it is / fits)
Pedestrian as moving object/mode		
Pedestrian as 'whole human'		

Messages (1)

- The pedestrian is ‘more than a mode’
- Pedestrian streets must be functional for pedestrians in physical terms...
- but must be much more – address the ‘whole human’ – aesthetics and feelings (as individual human in an environment) plus social factors
- A pedestrian street should connect well with other modes, land uses and social fabric of cities

Messages (2)

- Design becomes a 'political' activity – allocation of parts of the surface of the earth to different users– not just a professional / technical activity
- Solutions seem to suggest an interdisciplinary approach: transport planners + urban designers + urban planners

Further Reading

- Moudon, A. V. (ed.) (1987) *Public Streets for Public Use*. New York: Van Nostrand Co.
- Hillier, B. (1996) *Space is the Machine*. Cambridge: Cambridge University Press.
- Gehl, J. (2001) *Life between buildings: using public space*, 5th ed., translated by Jo Koch. Copenhagen: Danish Architectural Press.
- Marshall, S. (2005) *Streets and Patterns*. London and New York: Spon Press. (Deals with street types and networks, including those for pedestrians and in relation to other modes of transport)
- Rauhala, K. (2007) Promotion of Walking: A Complex Interdisciplinary Task, in Marshall, S. and Banister, D. (eds) *Land Use and Transport. European Research Towards Integrated Policies*. Oxford: Elsevier. (Deals with the person as a human not just a moving object)
- Marshall, S. (2008) *Cities Design and Evolution*. London and New York: Routledge. (Some images from here – and spatial structure)