“WE NEED TO THINK OF CITIES NOT JUST AS ARTIFACTS BUT AS SYSTEMS BUILT MORE LIKE ORGANISMS THAN MACHINES”

Michael Batty, *The New Science of Cities*
HOW DID WE EVER THINK WE COULD CONTROL SOMETHING AS COMPLEX AS A CITY?
UTOPIA VS COMPLEXITY
Housing crisis causes surge in sheds with beds
BREAKING NEWS

THE SYSTEM ISN’T BROKEN.
IT WAS BUILT THIS WAY!
URBAN SOCIETY = COMPACT URBANISM + SOCIAL CAPITAL*
WHENEVER THERE IS A PROBLEM.... SOMETHING IS TOO BIG

LEOPOLD KOHR
POTENTIAL FOR INNOVATION/RESPONSE

HIGH

UNDER-CONSTRAINED

SWEET SPOT

OVER-CONSTRAINED

LOW

LESS

MORE

DEGREE OF CONSTRAINT
BE A RADICAL INCREMENTALIST
BUILD URBAN SOCIETY IN 12 EASY LESSONS

KELVIN CAMPBELL AND ROB COWAN
PROBLEM MOUNTAIN

PROBLEM MOLEHILLS
Jane Jacobs

ORGANISED

COMPLEXITY
SIMPLE, CLEAR PURPOSE AND PRINCIPLES GIVE RISE TO COMPLEX AND INTELLIGENT BEHAVIOUR. COMPLEX RULES AND REGULATIONS GIVE RISE TO SIMPLE AND STUPID BEHAVIOUR.

—DEE HOCK
COMPLEX POLICIES

SIMPLE PROTOCOLS
OPEN
RESPONSIVE ENVIRONMENTS
A MANUAL FOR DESIGNERS
collaborate

night is the m

together, "tear

lyrics and mus

uncharitable, "merciless, "m
DRIVERS OF CHANGE
SCALABILITY
REPLICABILITY
INTERCHANGEABILITY
.....THROUGH TYPOLOGY
.....OR THE INVISIBLE CHASSIS
FIXED ENDSTATES

INITIAL CONDITIONS
EARLY INTERVENTION > RESPONSIVE ACTION

20%  80%
COMPLEXITY THAT WORKS IS BUILT UP OUT OF MODULES THAT WORK PERFECTLY, LAYERED ONE OVER THE OTHER.

Kevin Kelly
COMMAND + CONTROL

ENABLING BEHAVIOURS
SMART CITIES SOUND ALRIGHT, WHAT ABOUT SMART CITIZENS?
THE CHAORDIC PATH

FLOW
CREATIVITY

CHAMOS
Dispair

CHAOS

ORDER

CONTROL
Rigidity

Sweet spot of generative emergence
PREDICT AND PLAN

YEARS

0 5 10 15 20 25 30

VISION

PREDICT

PLAN

REVIEW
MANAGE THE PRESENT:
THE PAST IS SPENT AND DONE
THE FUTURE UNCERTAIN

Marcus Aurelius
CONTINUOUS FEEDBACK/REVIEW

YEARS
0 1 2 3 4 5 6

VISION

FEEDBACK

PLAN

REVIEW
MANY SMALL CHANGES

BIG DIFFERENCE
It is not the strongest species that survive, nor the most intelligent, but the ones most responsive to change.

- Charles Darwin
VIVA LA EVOLUCIÓN