



EPSRC

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and skills



UCL

COMPLEX BUILT ENVIRONMENT SYSTEMS

Integrated decision-making about housing, energy and wellbeing

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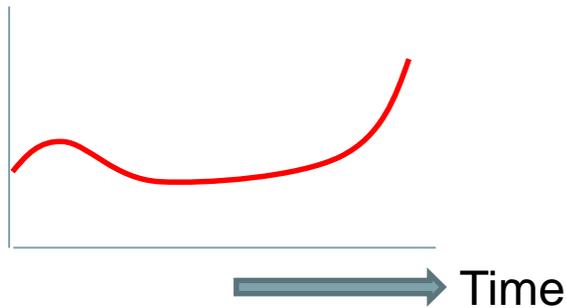
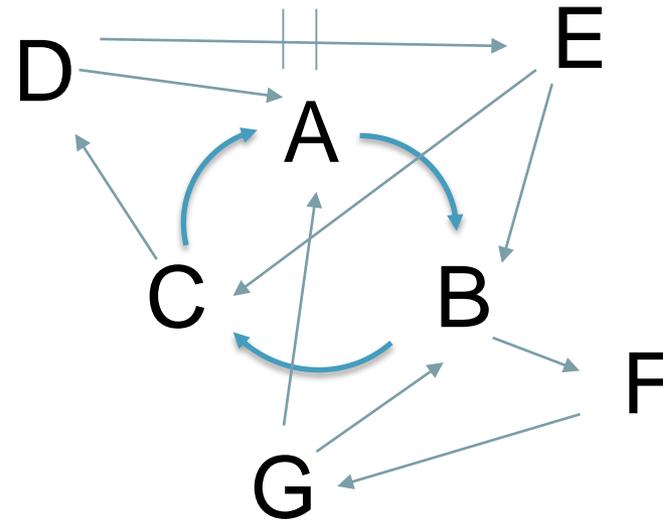
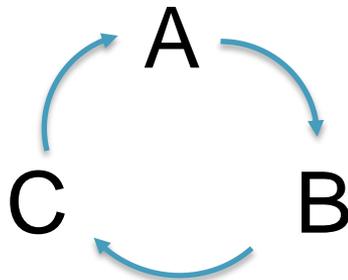
A wrong but useful set of pictures, a policy simulation tool, and some decision support

Mapping and simulating how the housing, energy and wellbeing “system” works over time

To build consensus about

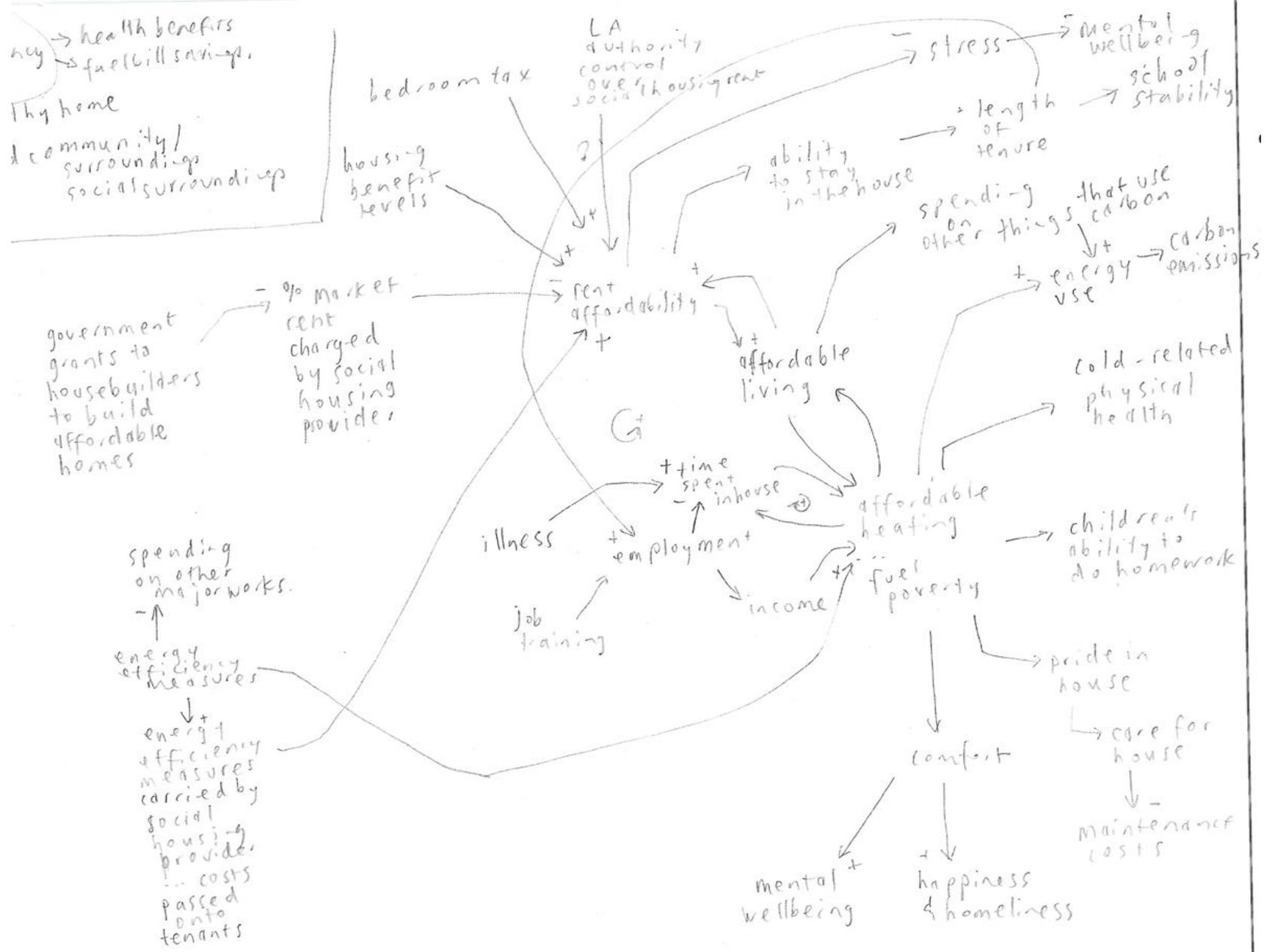
- What the problems are
- What the shared goals are
- How we best achieve them

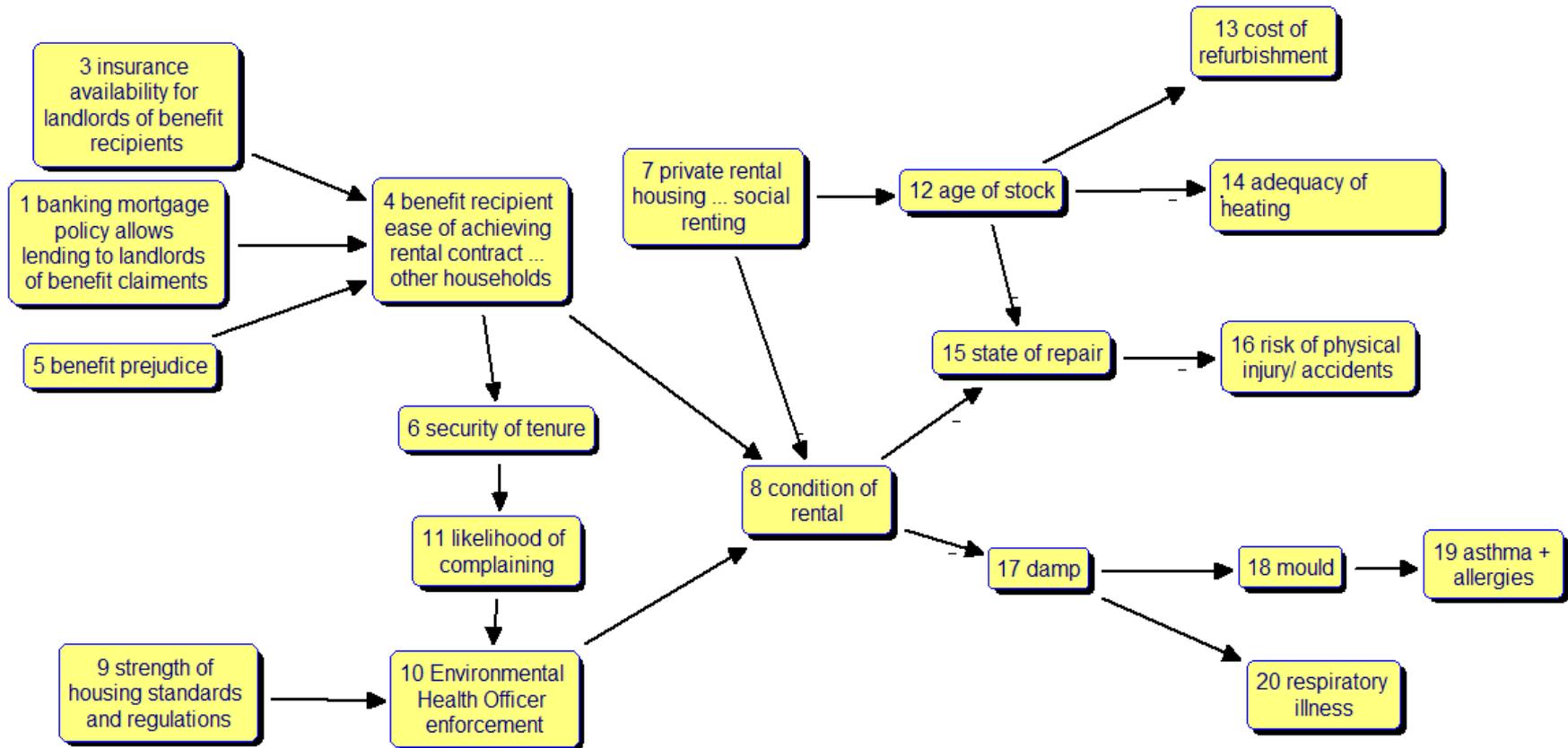
Dynamic systems thinking

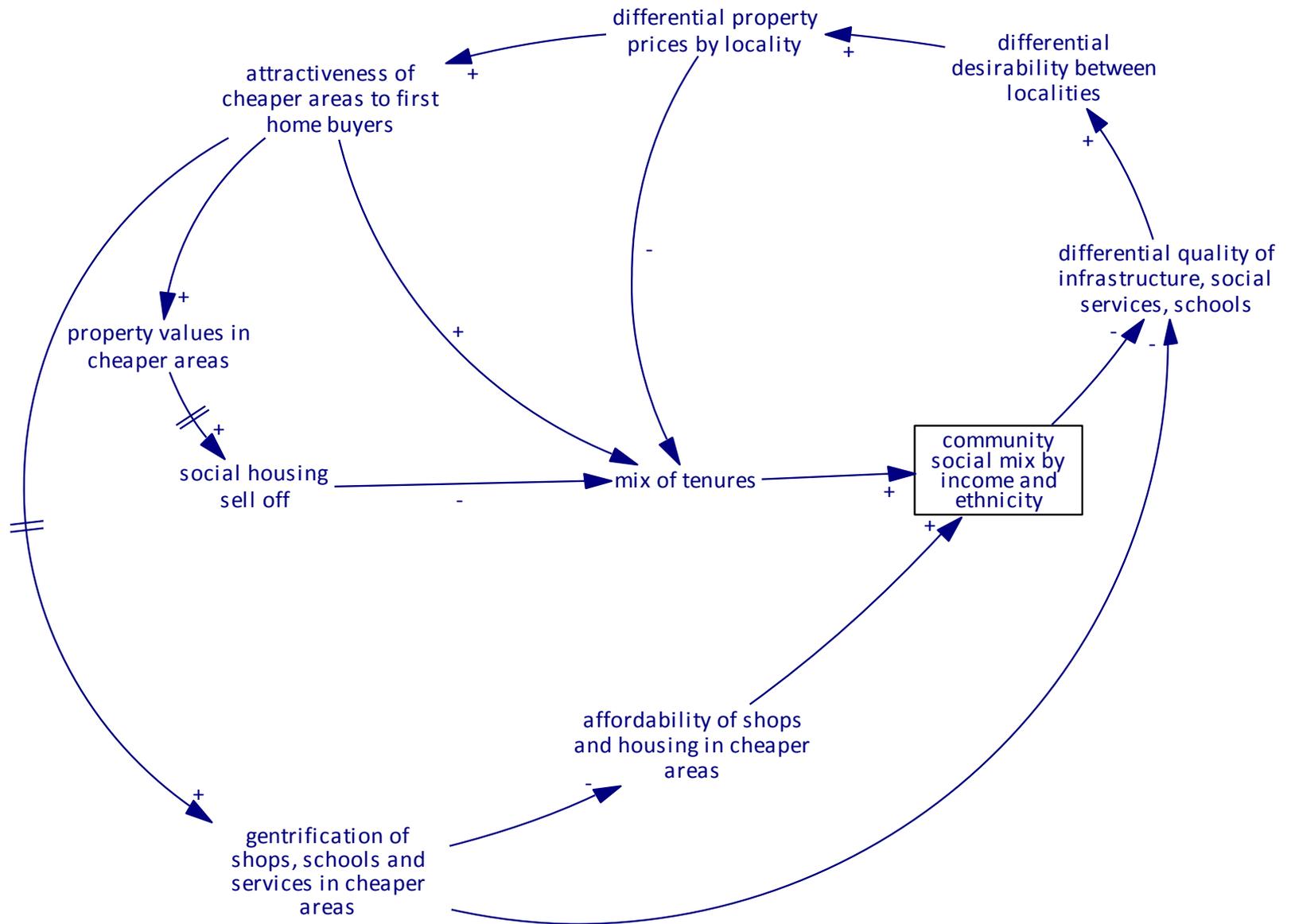


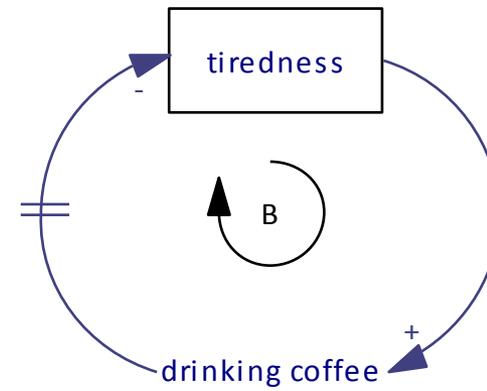
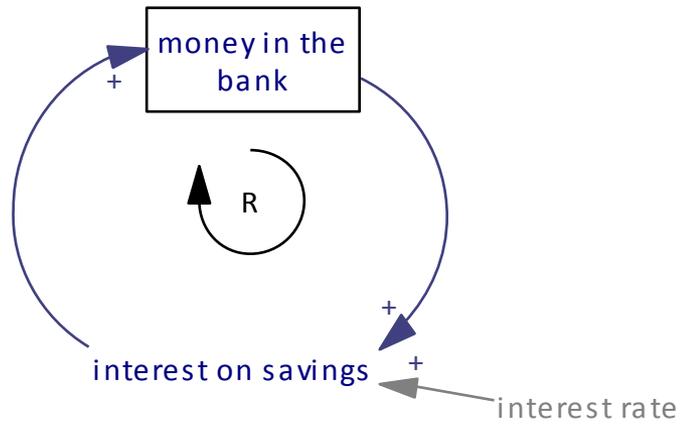
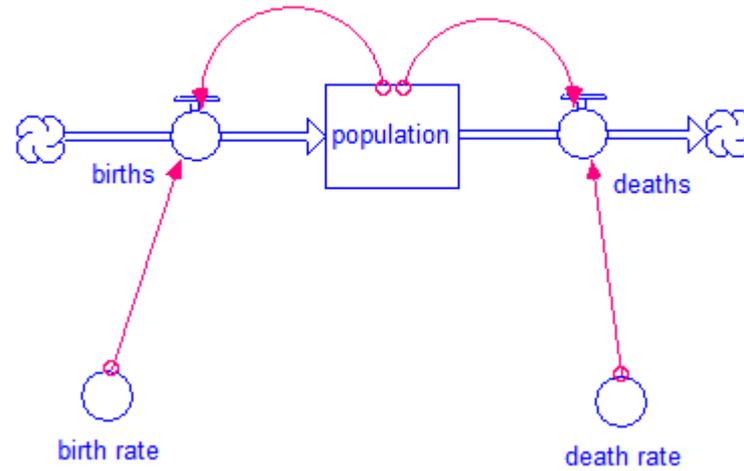
Places to intervene in a system

10. Numbers and constants
9. Rates of things
8. Altering time delays
7. Strength of feedback loops
6. flows of information
5. The rules of the system
4. The capacity to change, evolve, self-organize
3. the goals of the system
2. The mindset or paradigm
1. The ability to work above paradigms









example housing simulation_FINAL.STMX

Themes from the interviews

1. Quality of neighbourhoods
2. Ventilation and indoor air quality
3. Overcrowding
4. Land ownership, value and development patterns
5. Energy and climate change
6. Housing affordability
7. Temperature optimisation

