

Complex systems and public health

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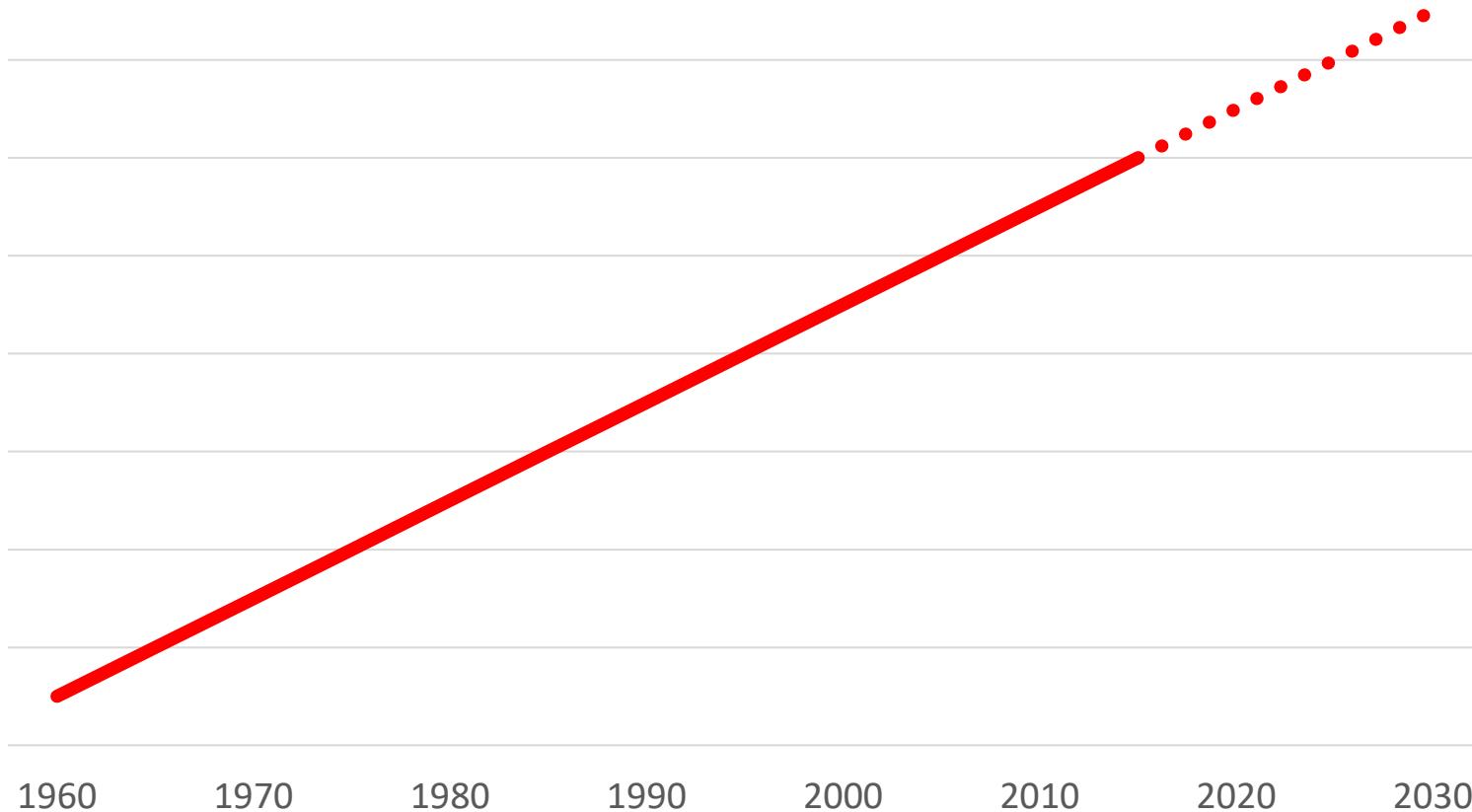


Obesity...

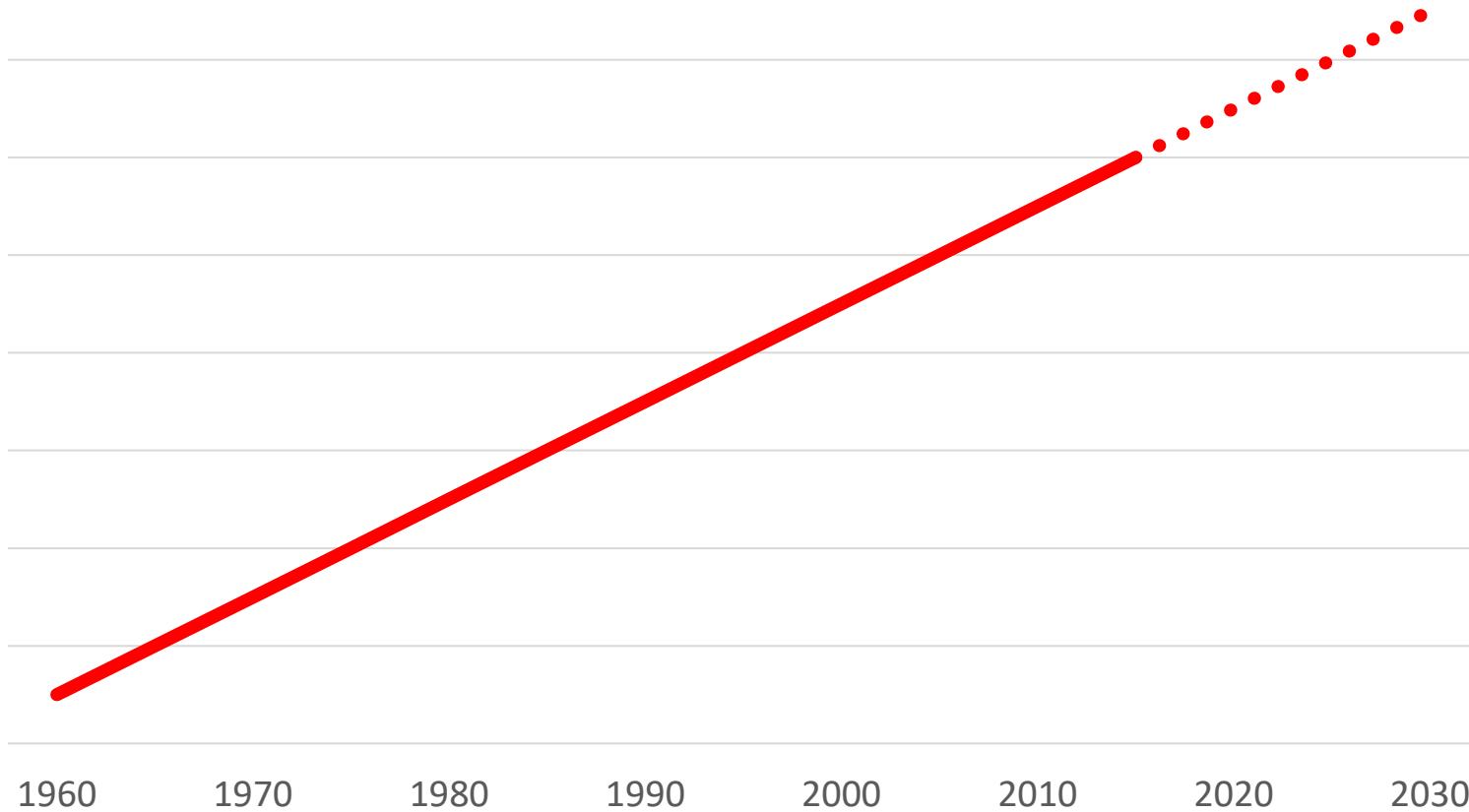




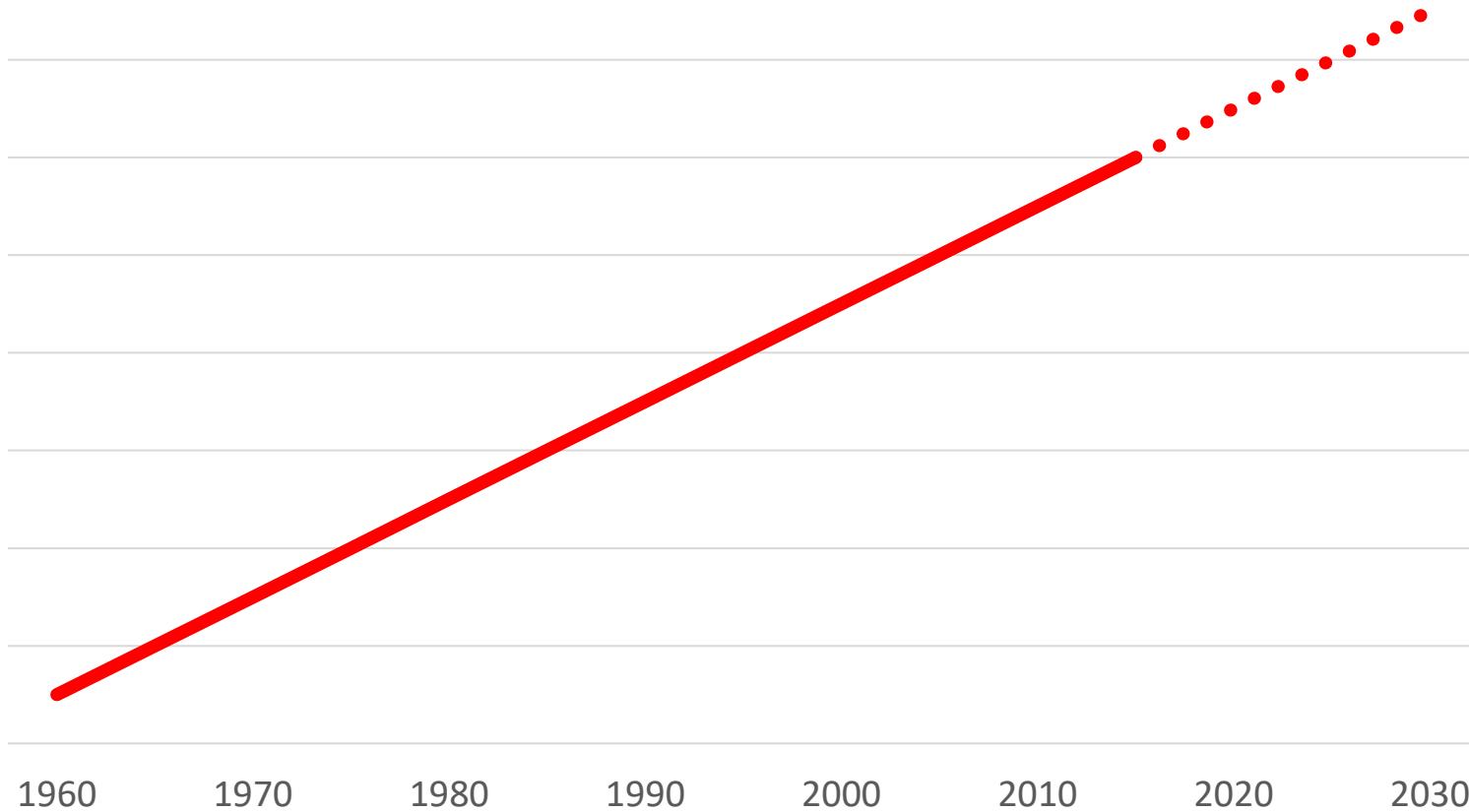
Population stupidity



Average laziness



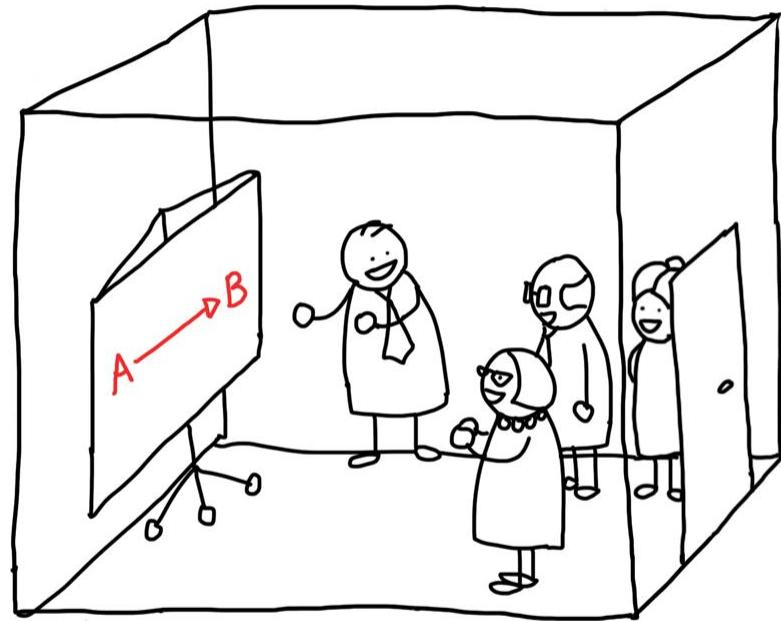
Median greed

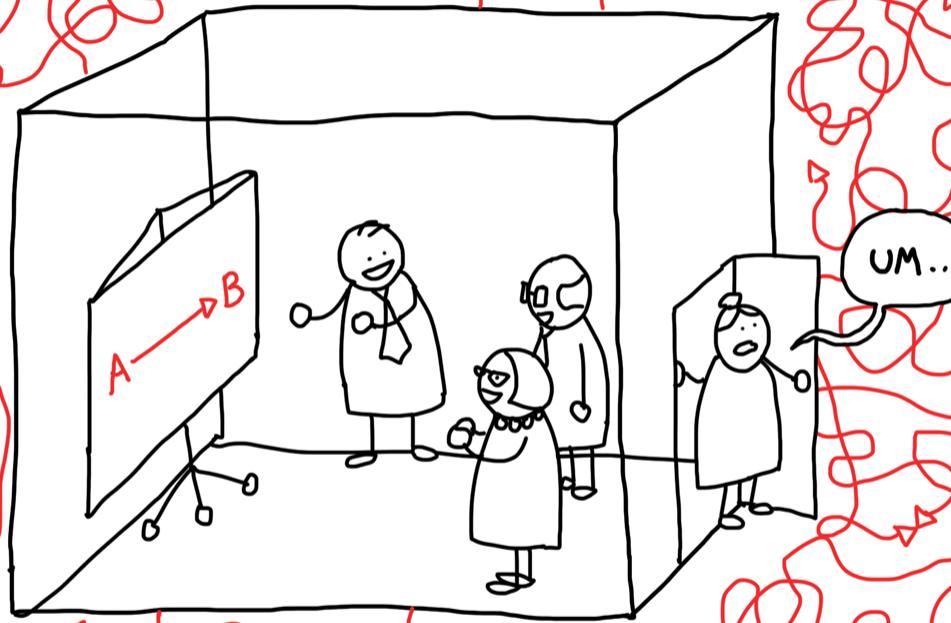




Breezewood, Pennsylvania, 2008 <http://www.edwardburtynsky.com/>

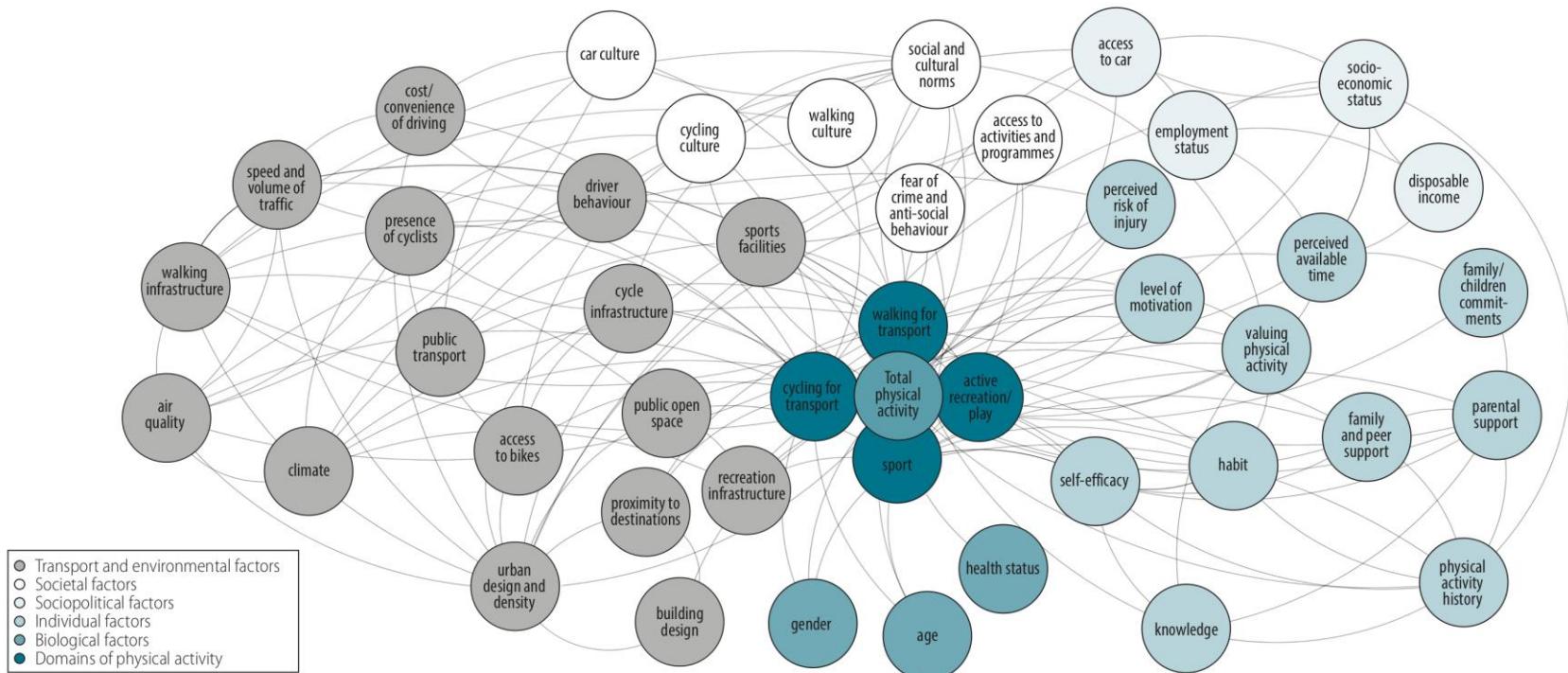
Complex adaptive systems





Complex adaptive systems

Fig. 1. An initial physical activity system map



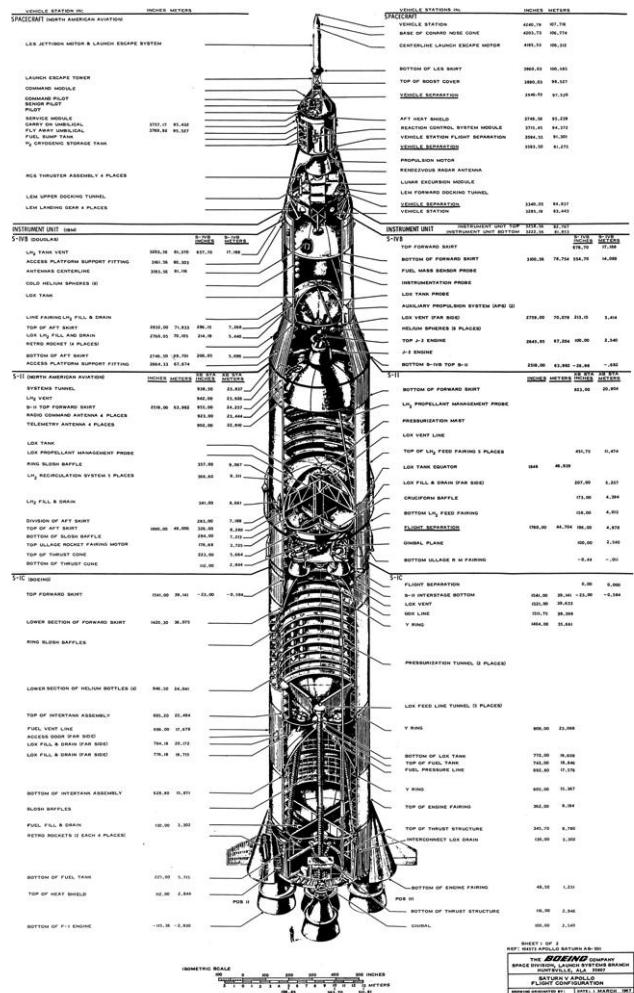
Note: This map provides an illustration of some of the main drivers of physical activity and inactivity, and the relations between them, based on evidence from systematic reviews and expert opinion. The map is a tool to illustrate the breadth of factors driving physical activity, and does not purport to provide a definitive description of all possible ways of conceptualizing the physical activity system.

MORE ACTIVE PEOPLE FOR A HEALTHIER WORLD



Complex adaptive systems

SATURN V APOLLO FLIGHT CONFIGURATION



EX LIBRIS
David T. Craig

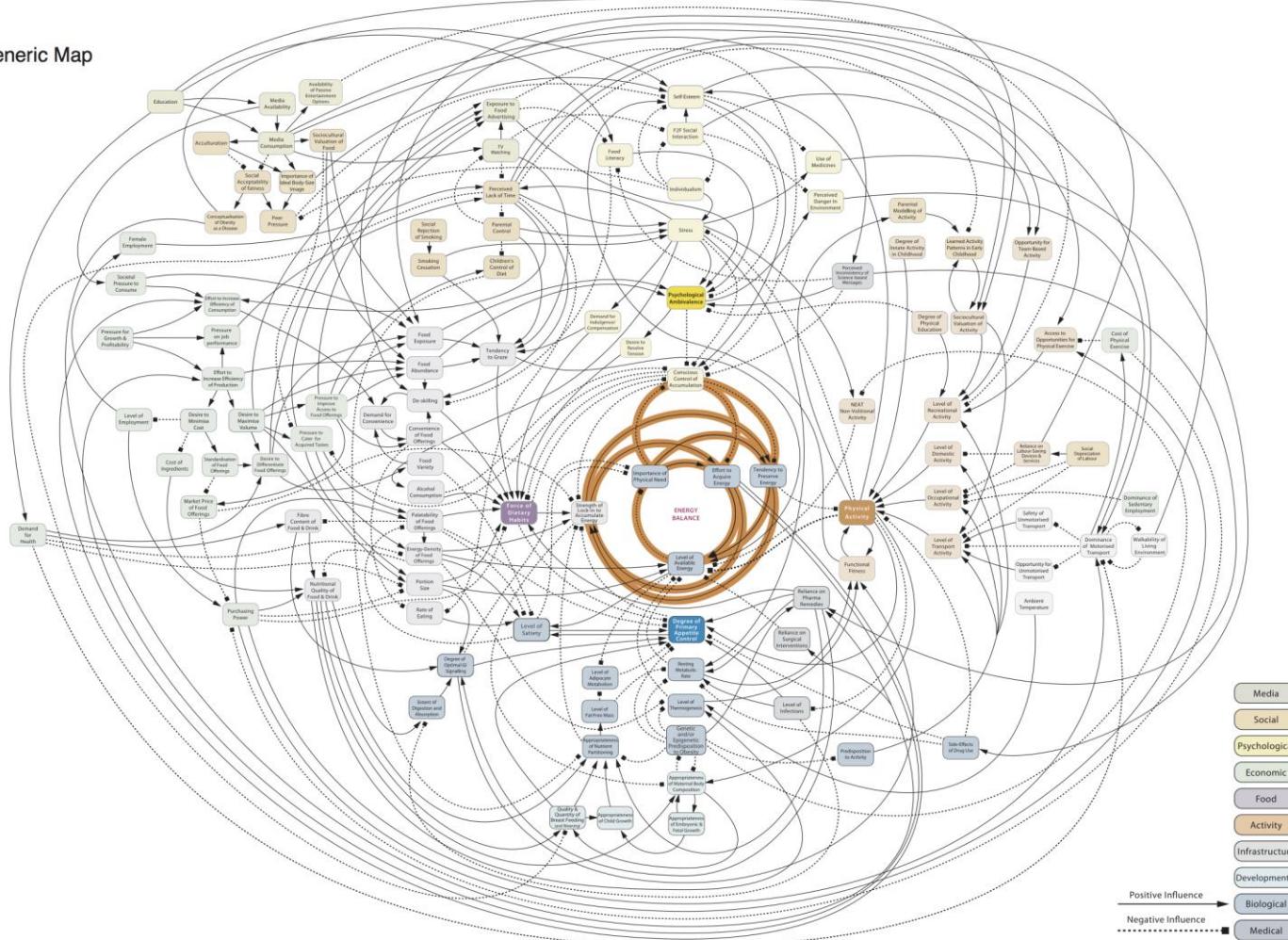
HUNTSVILLE
ENGINEERING

SHRINE #1
DON SPRAGUE

FOR ADDITIONAL COPIES PHONE:

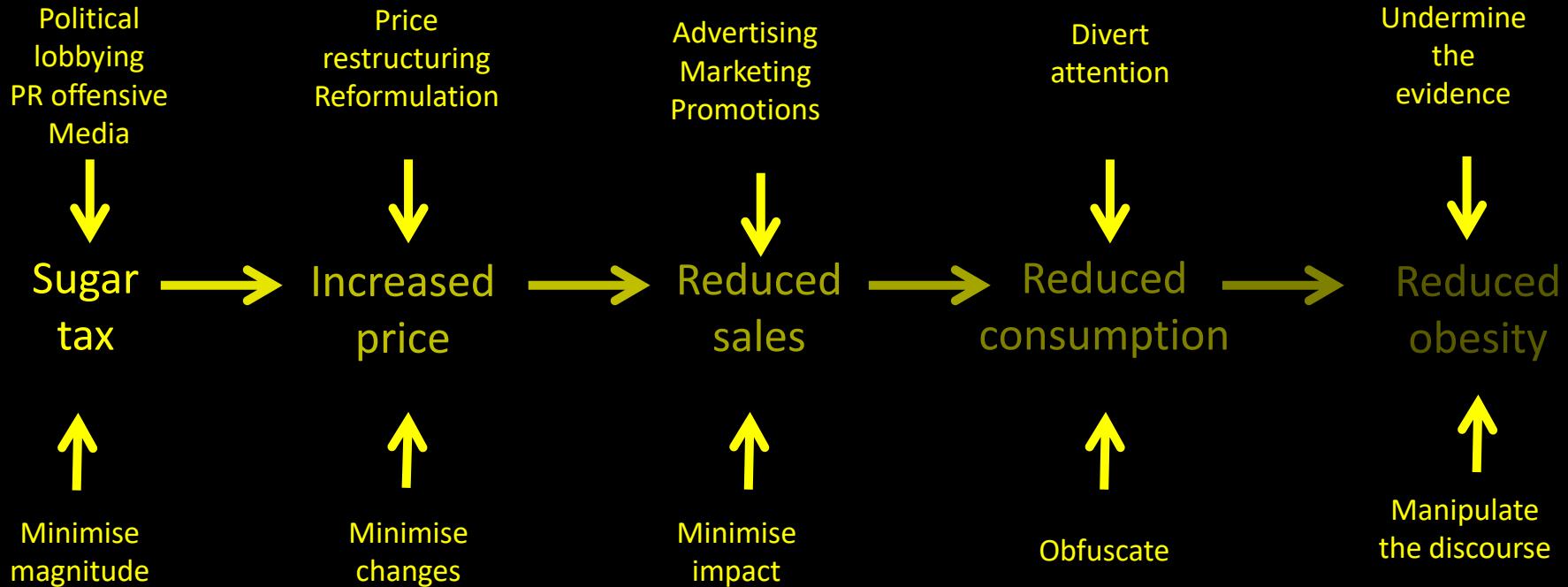
Map 0

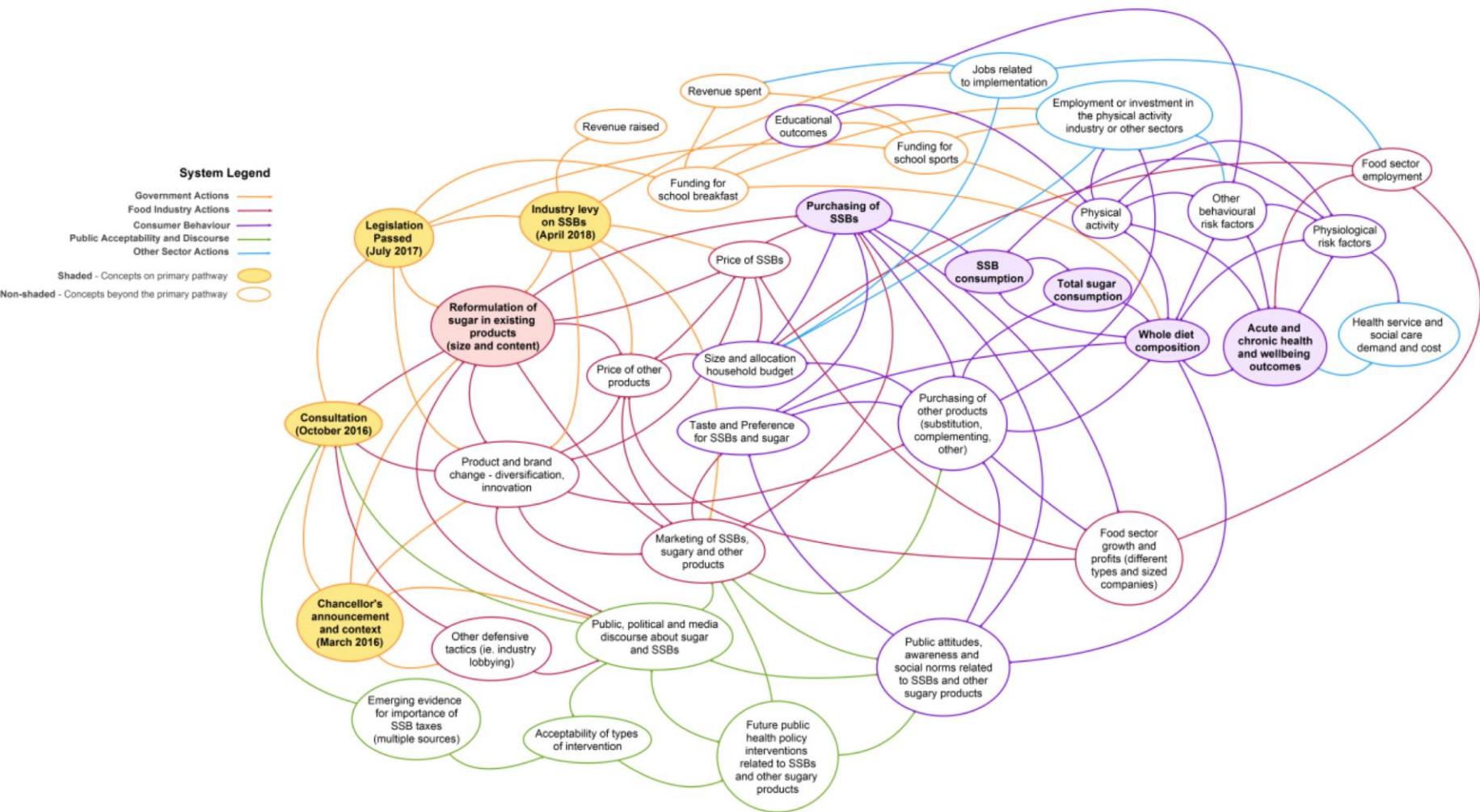
Full Generic Map



Complex adaptive systems

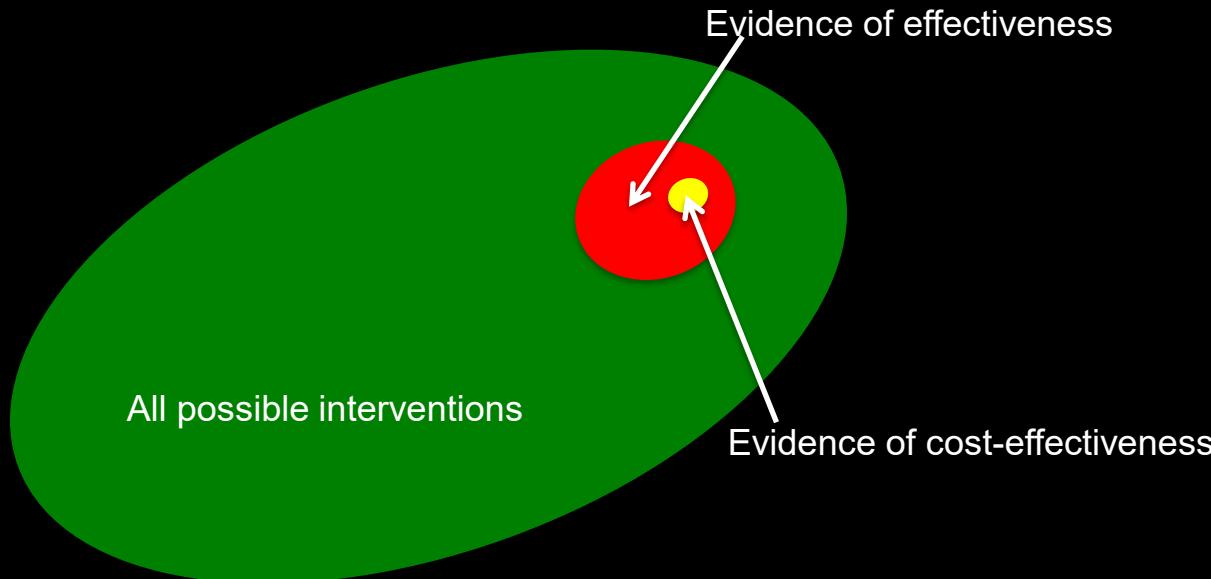
Sugar tax → Increased price → Reduced sales → Reduced consumption → Reduced obesity

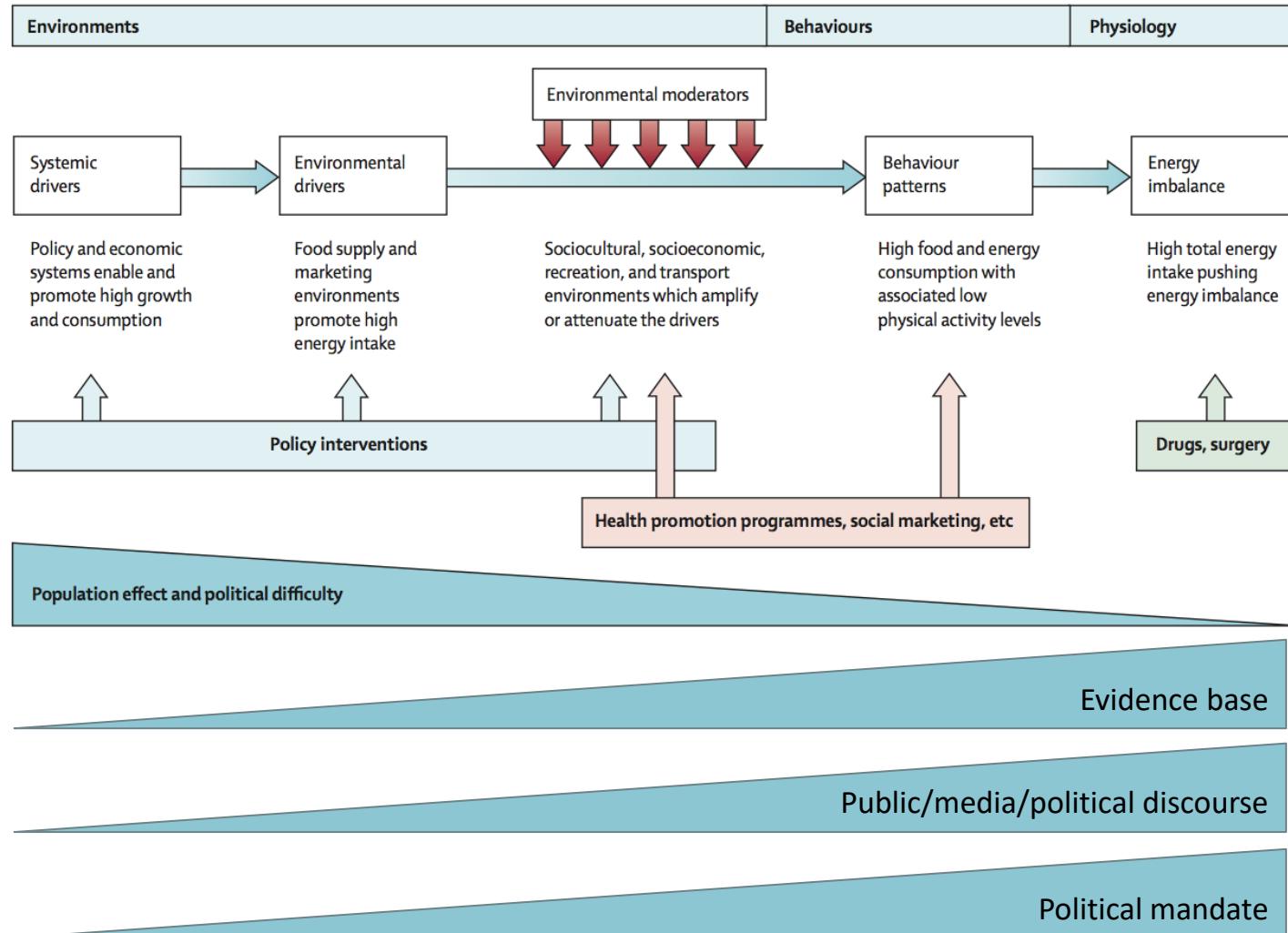




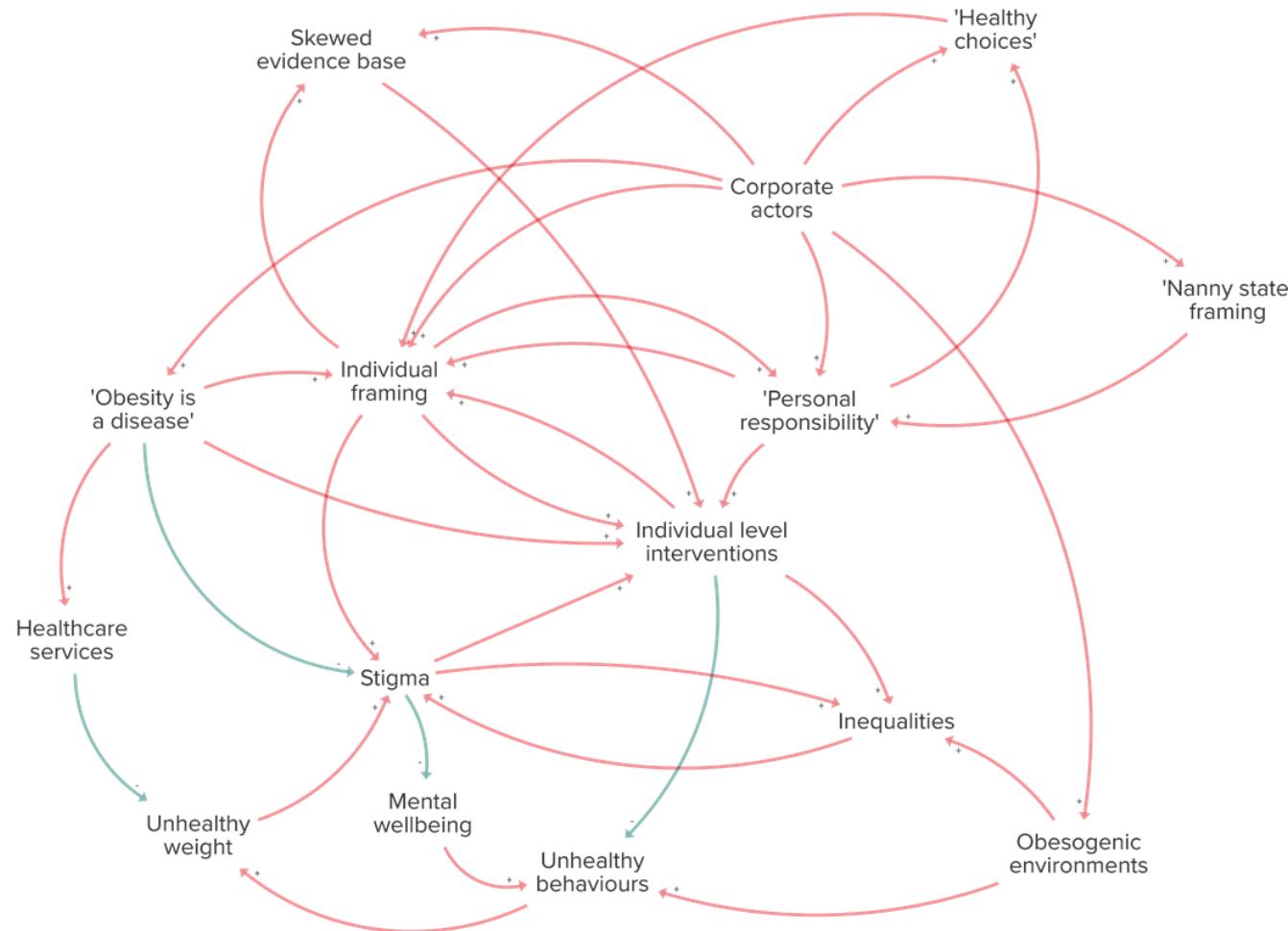
Evidence

The dangerous olive of evidence...





Factors shaping obesity

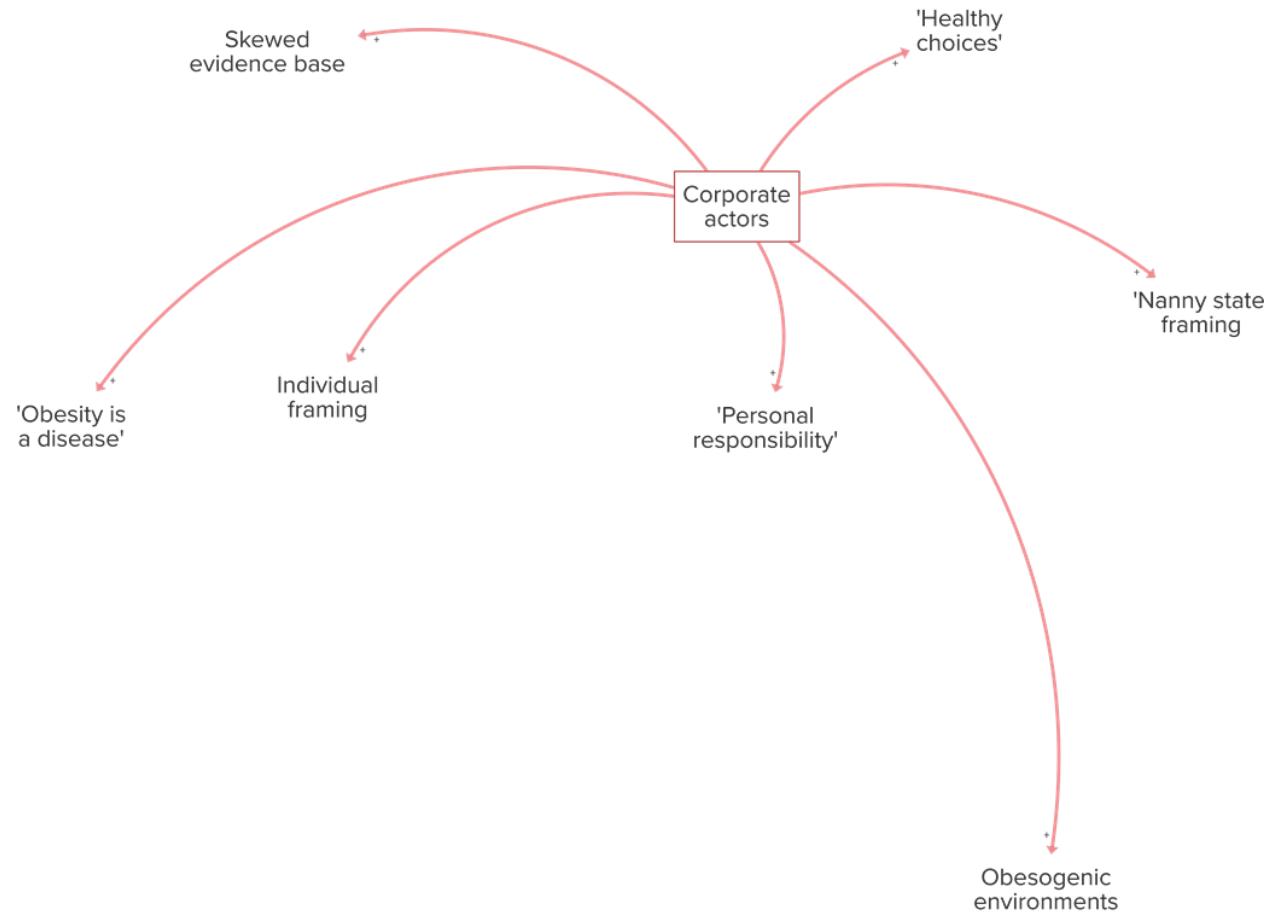


Legend

Legend

—	Reduces
—	Increases
—	Neutral

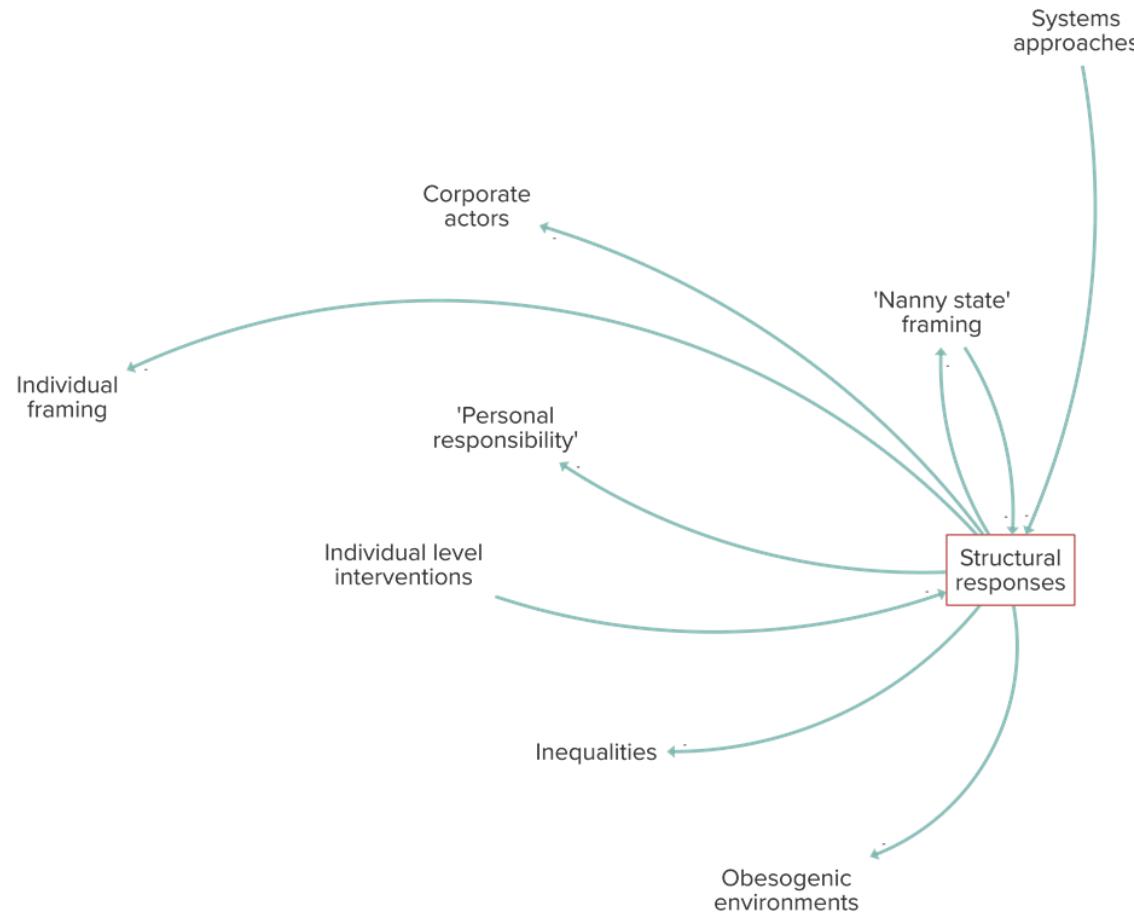
Corporate actors



Legend

- Reduces
- Increases
- Neutral

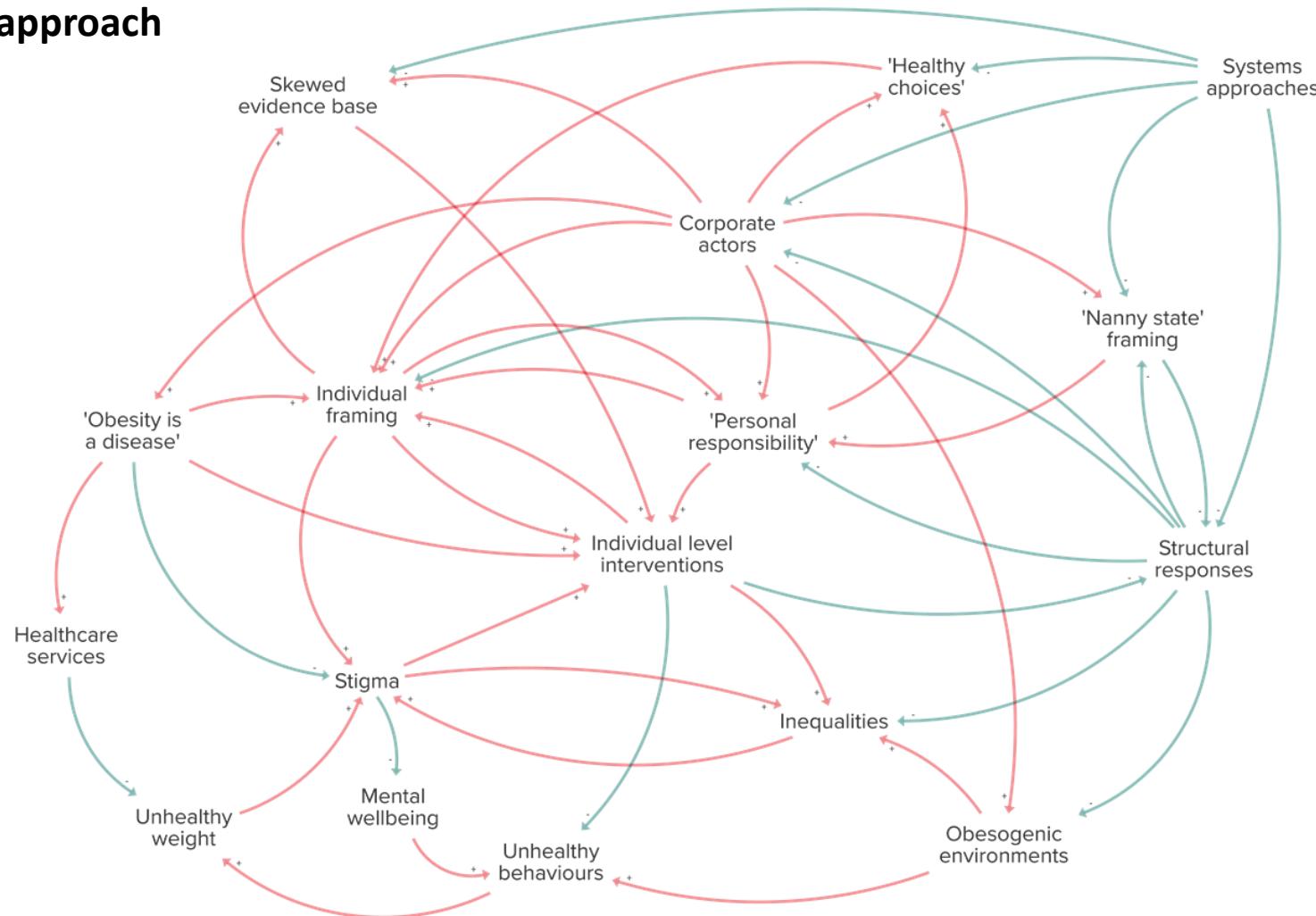
Structural responses



Legend

- Reduces
- Increases
- Neutral

Systems approach





Conclusions

- Simple responses grounded in linear models of cause and effect, focused on individual level behavioural change, have largely failed
- Effective action requires a shift away from this narrow emphasis on individuals towards actions to reshape systems over the short, medium and long term
- This entails acting on levers to reshape systems at different levels over time; interventions are a means to an end, not the end in itself
- Engaging meaningfully with complexity requires new approaches to the generation and application of evidence in research, policy and practice
- Instead of only asking ‘what do I do now’ we should first agree long term vision and define medium term strategy before *then* identifying short term actions

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- **Det er ikke rakettvitenskap - bare spill sjakk, ikke dam**