Faculty of Design

2022

Leverage Is Fractal, Relative… And What Else? We need a theory of leverage in systemic design

Murphy, Ryan J. A.

Give me the wrong place to stand, and I won't necessarily know *why* I can't move the Earth.

Not Archimedes

OUR LEVERS ARE LONG ENOUGH!

We just don't know where to put them.

Leverage Is Fractal, Relative... And What Else? → RSD11 | **fulcra.design**

How does leverage *actually work* in systemic design?

→ **We need a modern theory of leverage.** ←
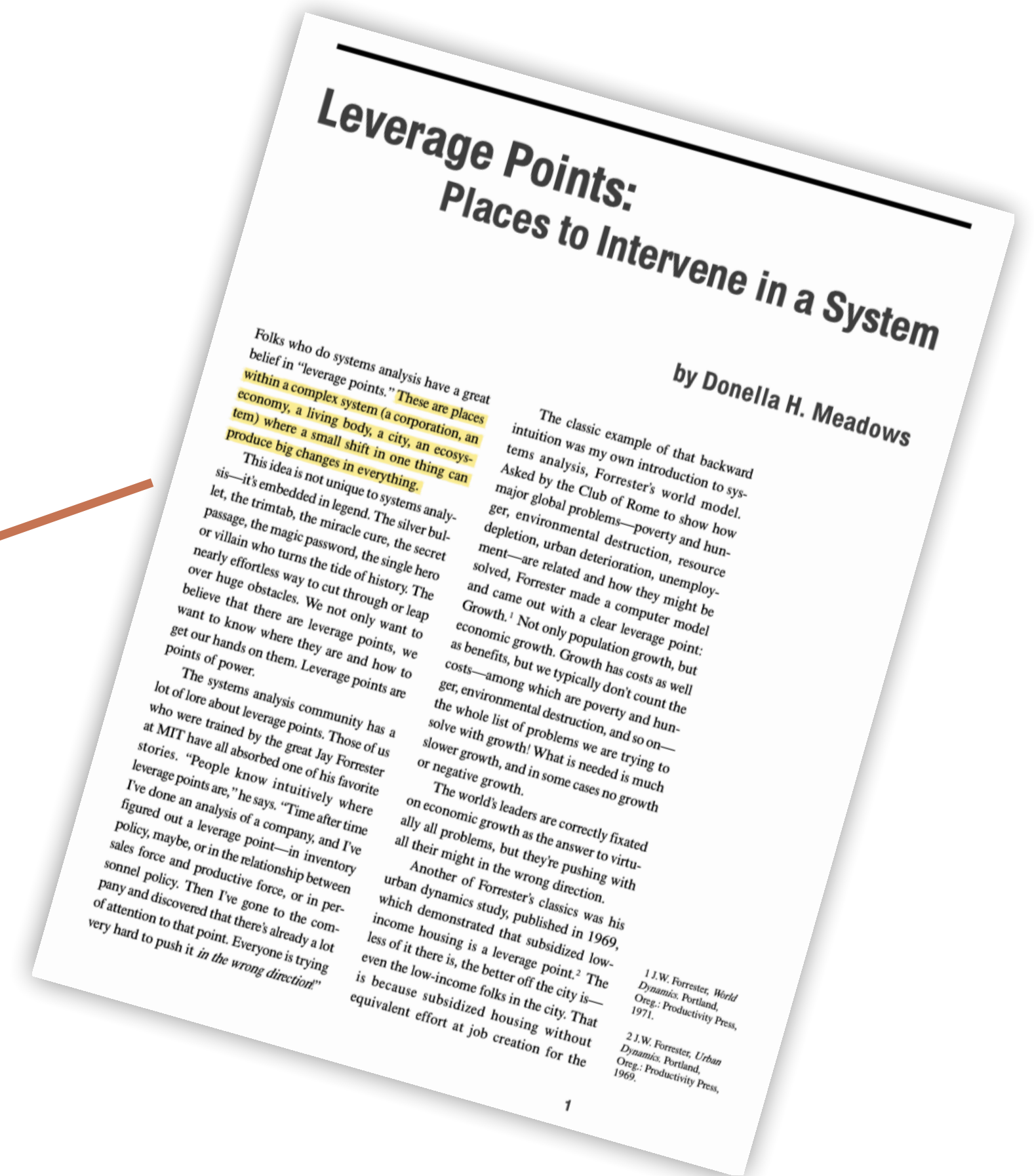
Leverage Is Fractal, Relative… And What Else?
We need a theory of leverage in systemic design

Ryan J.A. Murphy

4

What do we already know?

Meadows, D. (1997). Leverage Points: Places to Intervene in a System.
***Whole Earth**.*

"These are **places within a complex system** (a corporation, an economy, a living body, a city, an ecosystem) **where a small shift in one thing can produce big changes in everything.**"

What do we already know?

Meadows, D. (1997). Leverage Points: Places to Intervene in a System. *Whole Earth*.
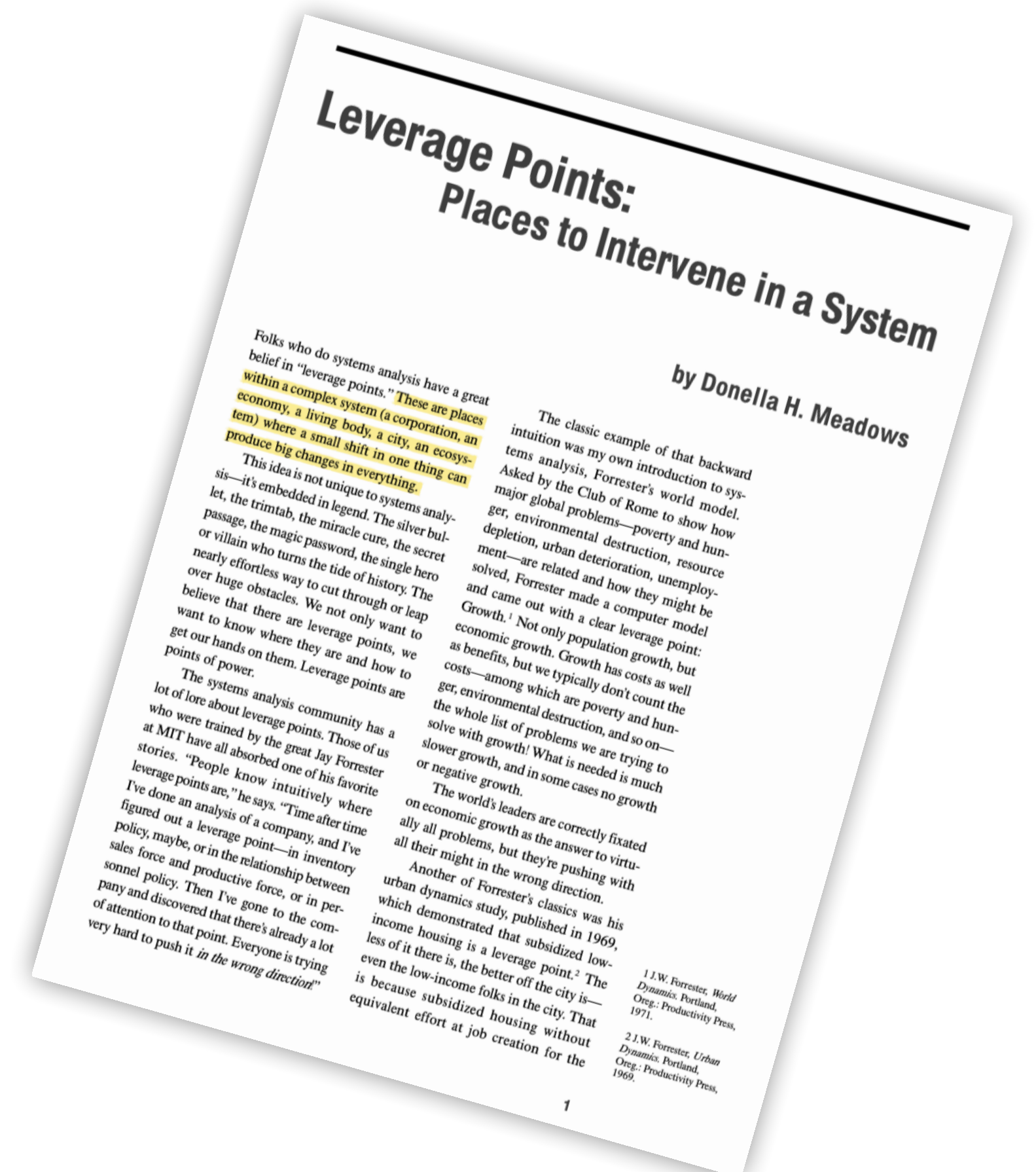
Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, *46*(1), 30-39. 10.1007/s13280-016-0800-y

Kania, J., Kramer, M., & Senge, M. (2018). The Water of Systems Change. https://www.fsg.org/resource/water_of_systems_change

Fischer, J., & Riechers, M. (2019). A leverage points perspective on sustainability. *People and Nature*, *1*, 115-120. 10.1002/pan3.13

Birney, A. (2021). How do we know where there is potential to intervene and leverage impact in a changing system? The practitioners perspective. *Sustainability Science*, *16*(3), 749-765. 10.1007/s11625-021-00956-5

Murphy, R. J. A., & Jones, P. H. (2020). Leverage analysis: A method for locating points of influence in systemic design decisions. *FormAkademisk*, *13*(2), 1-25. https://doi.org/10.7577/formakademisk.3384
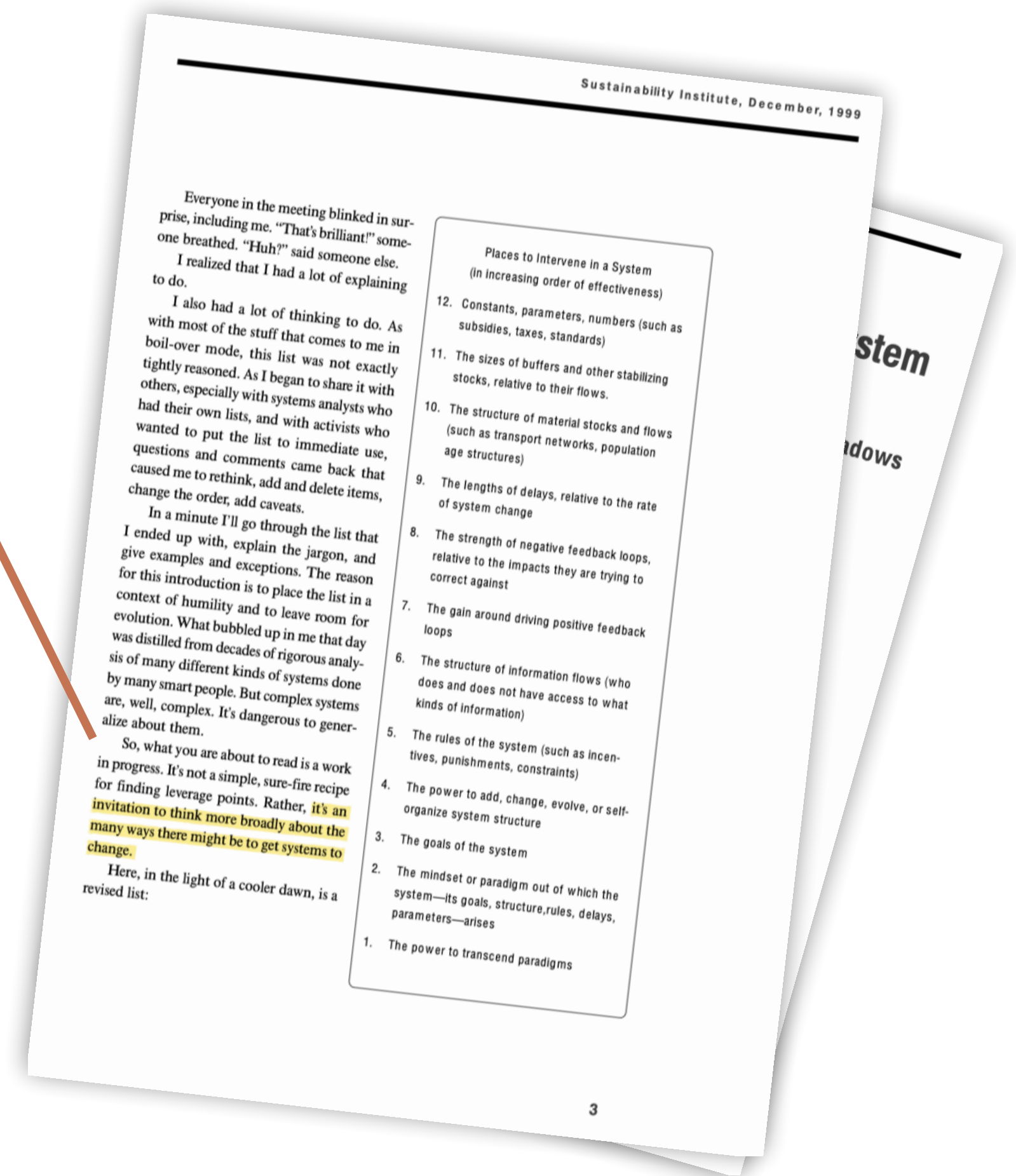
Yet, "Leverage Points: Places to Intervene in a System" …

… lacks substantive evidence and justification.

… depends on non-actionable metaphysics.

… was a work in progress!

This presentation is therefore an echo of that 25-year-old invitation — a call to again **"think more broadly about the many ways there might be to get systems to change."**

Ways forward:

Rethink leverage in the context of systemic design, not systems dynamics

Developing actionable design principles for the "design" and "intent" types of leverage (Abson et al., 2017)

Systemic design for high-leverage strategies

"If no paradigm is right, you can choose whatever one will help to achieve your purpose. If you have no idea where to get a purpose, you can listen to the universe (or put in the name of your favorite deity here) and do his, her, its will, which is probably a lot better informed than your will"
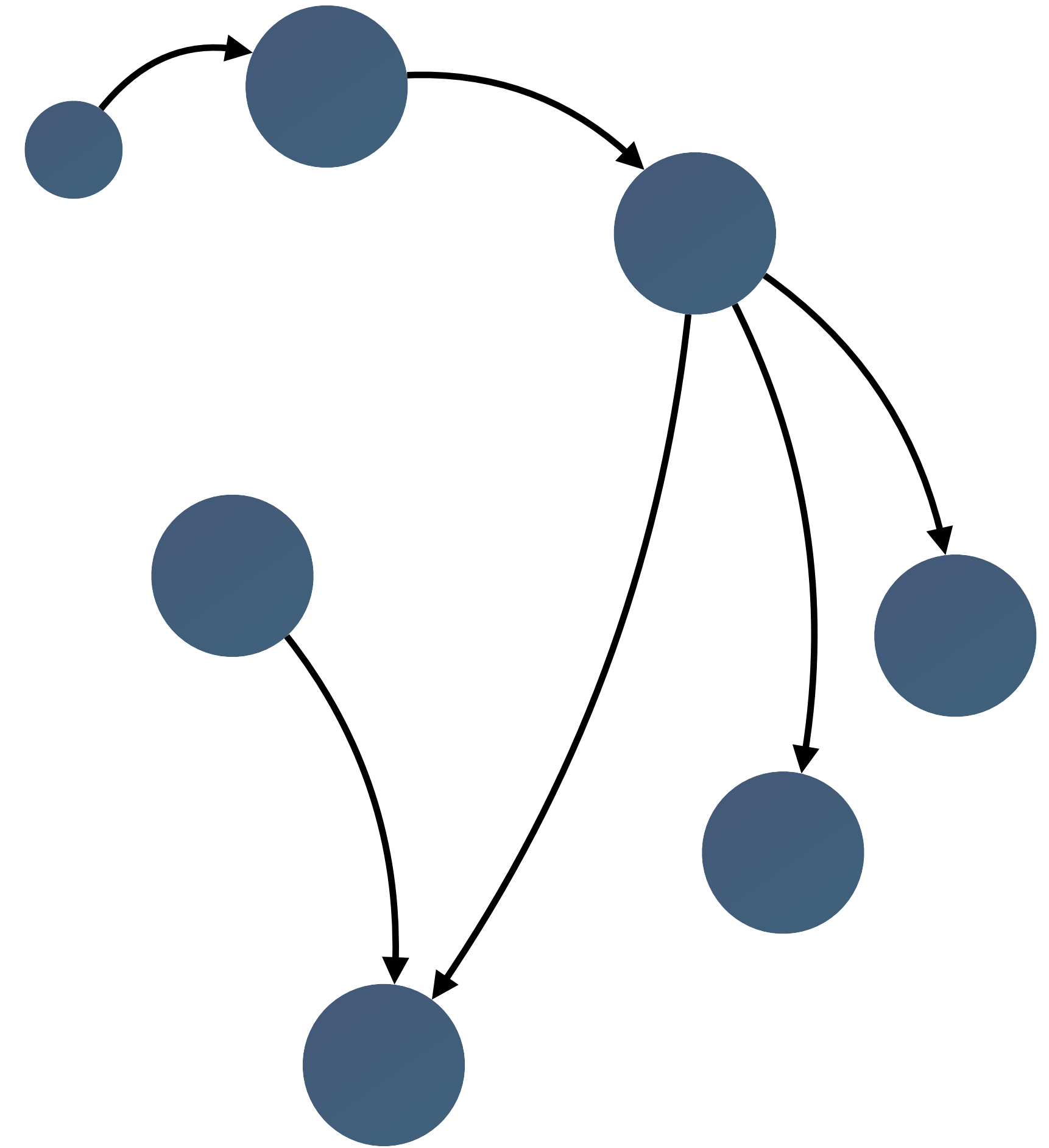
Murphy, R. J. A., & Jones, P. (2021). Towards Systemic Theories of Change: High-Leverage Strategies for Managing Wicked Problems. *Design Management Journal*, 16(1), 49–65. 10.1111/dmj.12068

Signals of possibility

Leverage is fractal

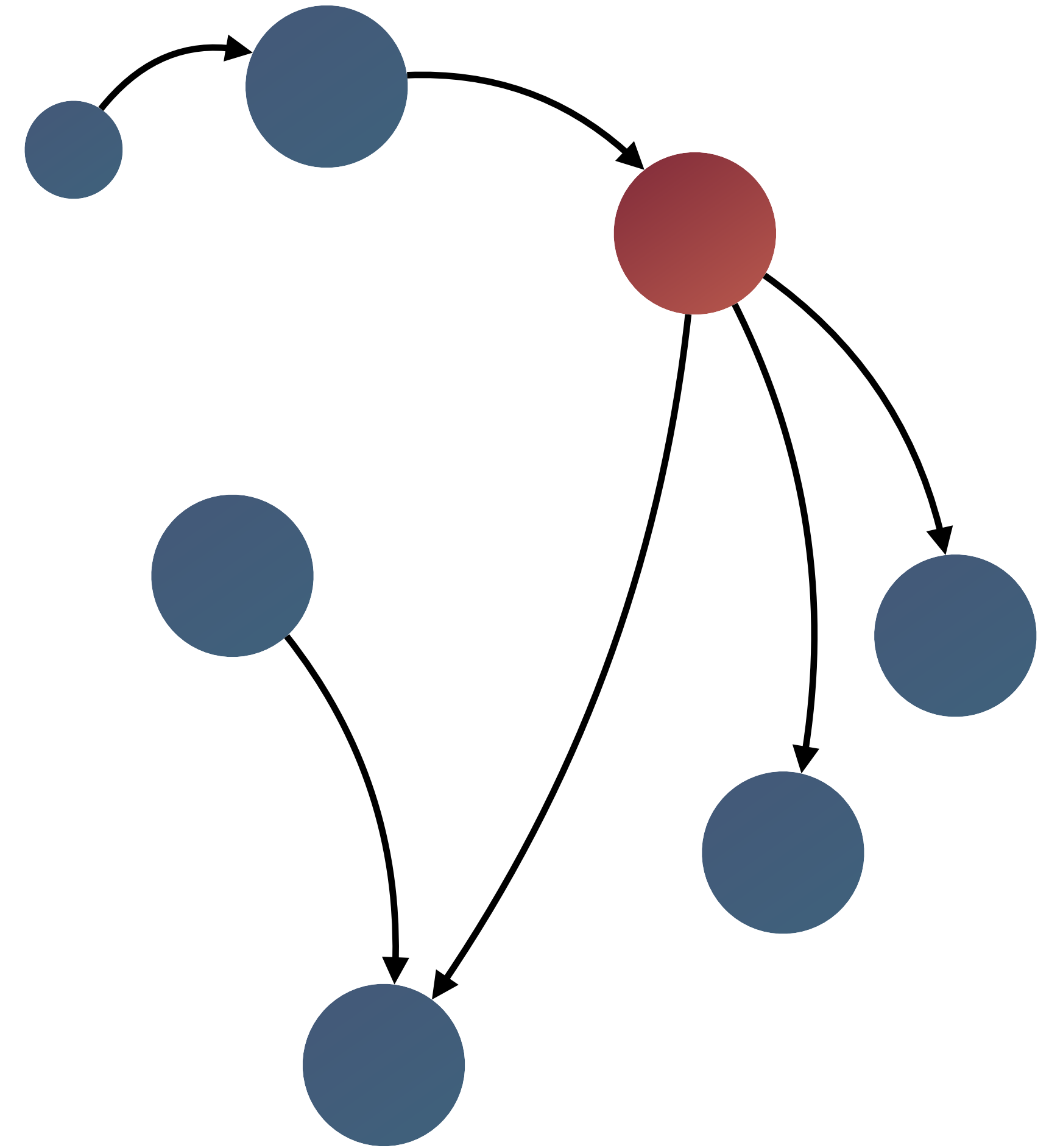**Leverage is relative**

Beyond leverage points

Signals of possibility

Leverage is fractal
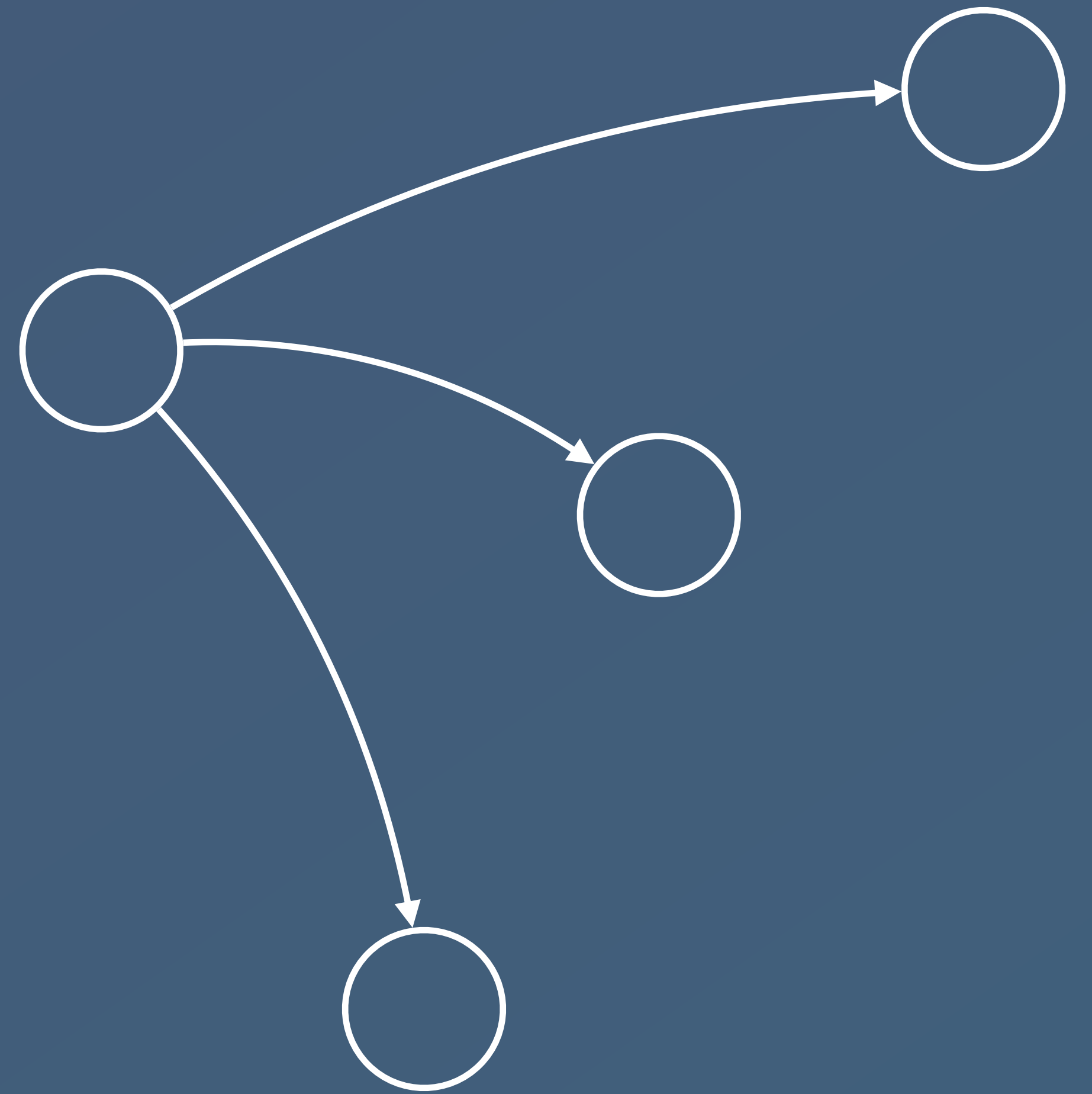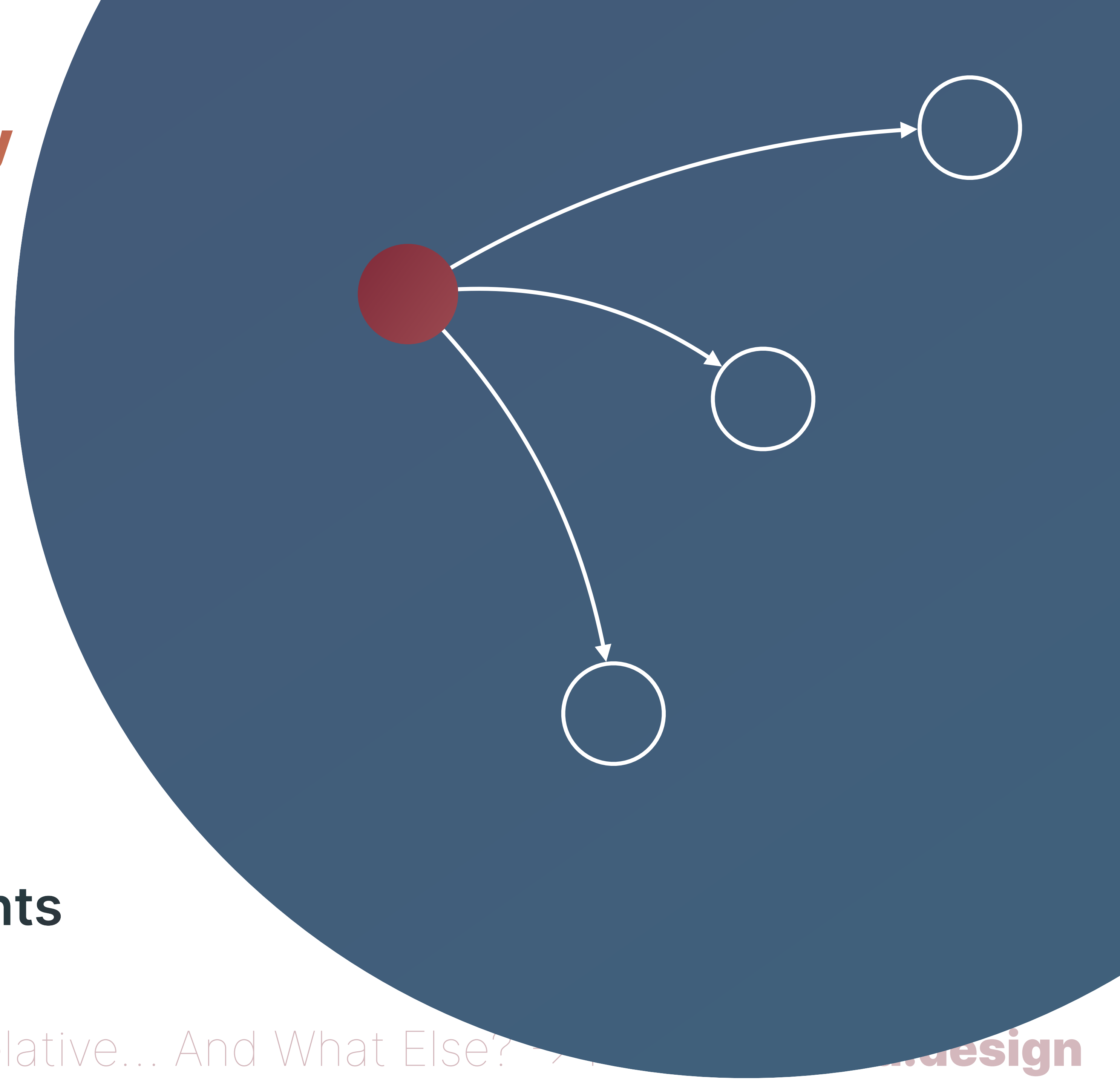
Leverage is relative

Beyond leverage points

Signals of possibility

Leverage is fractal

Leverage is relative

Beyond leverage points

Leverage Is Fractal, Relative… And What Else?

t.design

Signals of possibility

Leverage is fractal

Leverage is relative

Beyond leverage points

Leverage Is Fractal, Relative… And What Else?

Signals of possibility

Leverage is fractal

Leverage is relative

Beyond leverage points

Signals of possibility

Leverage is fractal
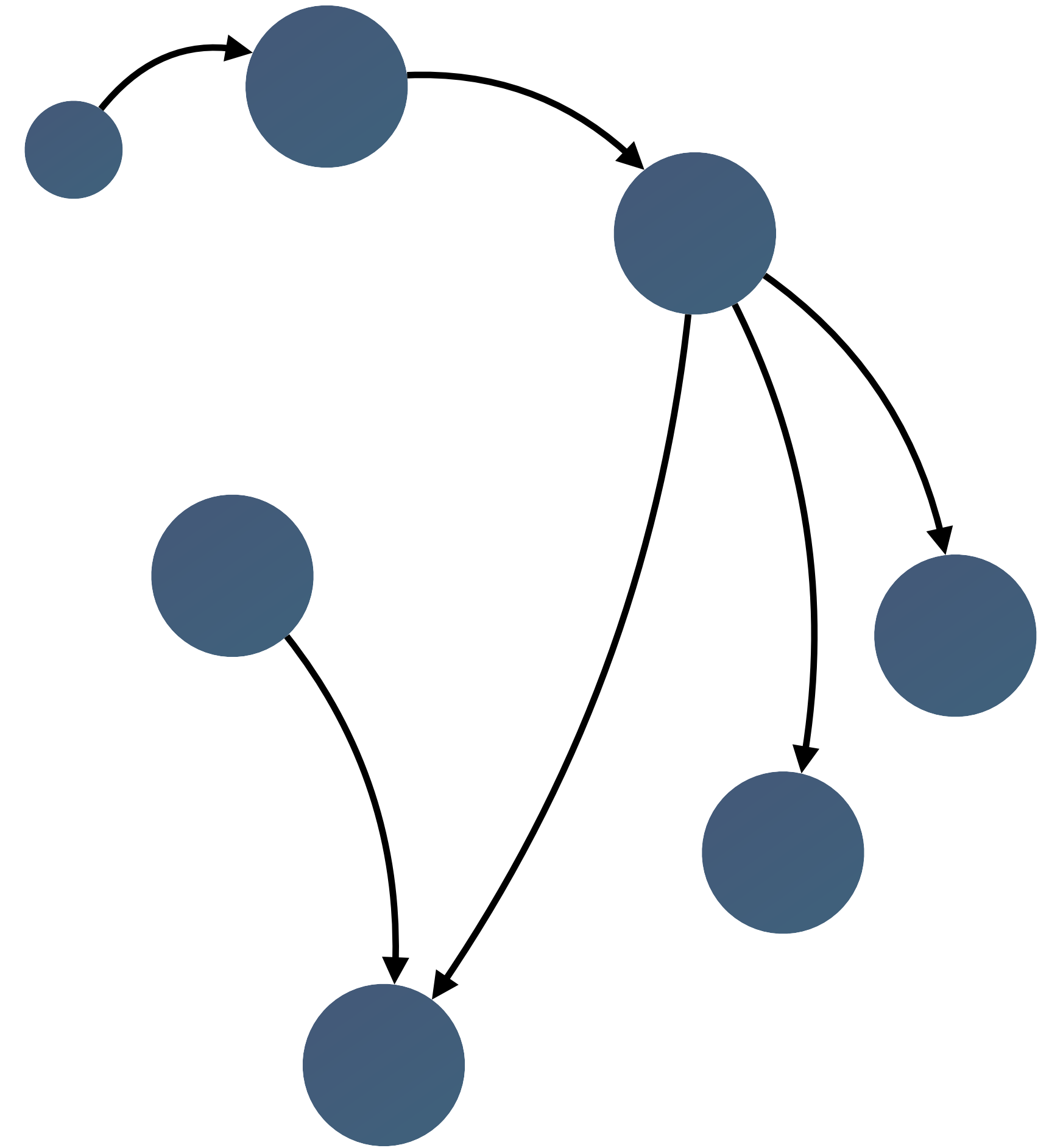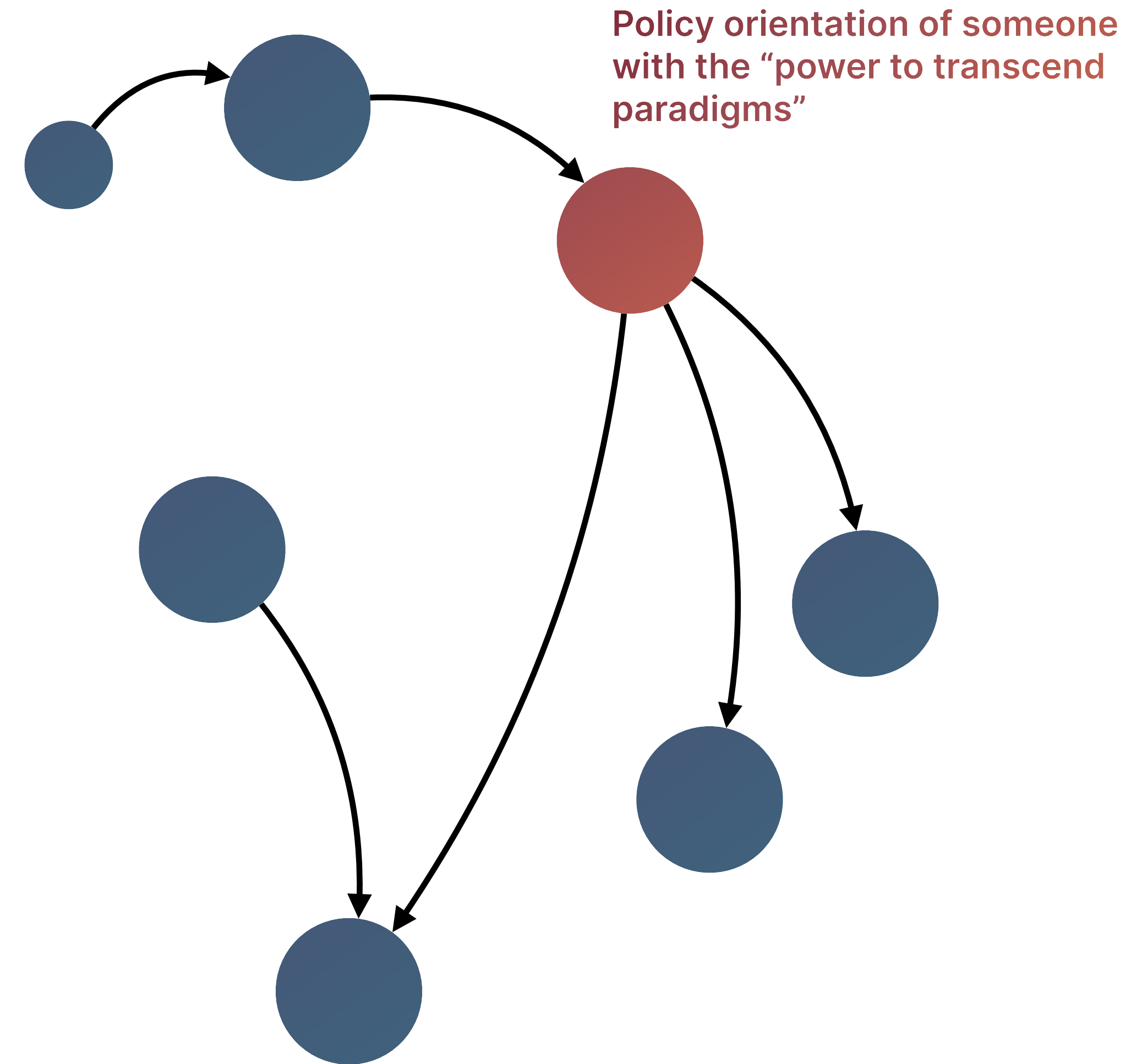
Leverage is relative

Beyond leverage points

Policy orientation of someone with the "power to transcend paradigms"

Signals of possibility

Leverage is fractal

Policy orientation of someone with the "power to transcend paradigms"

Empowerment and education of youth about the policy

Leverage is relative

Beyond leverage points

Signals of possibility

Leverage is fractal
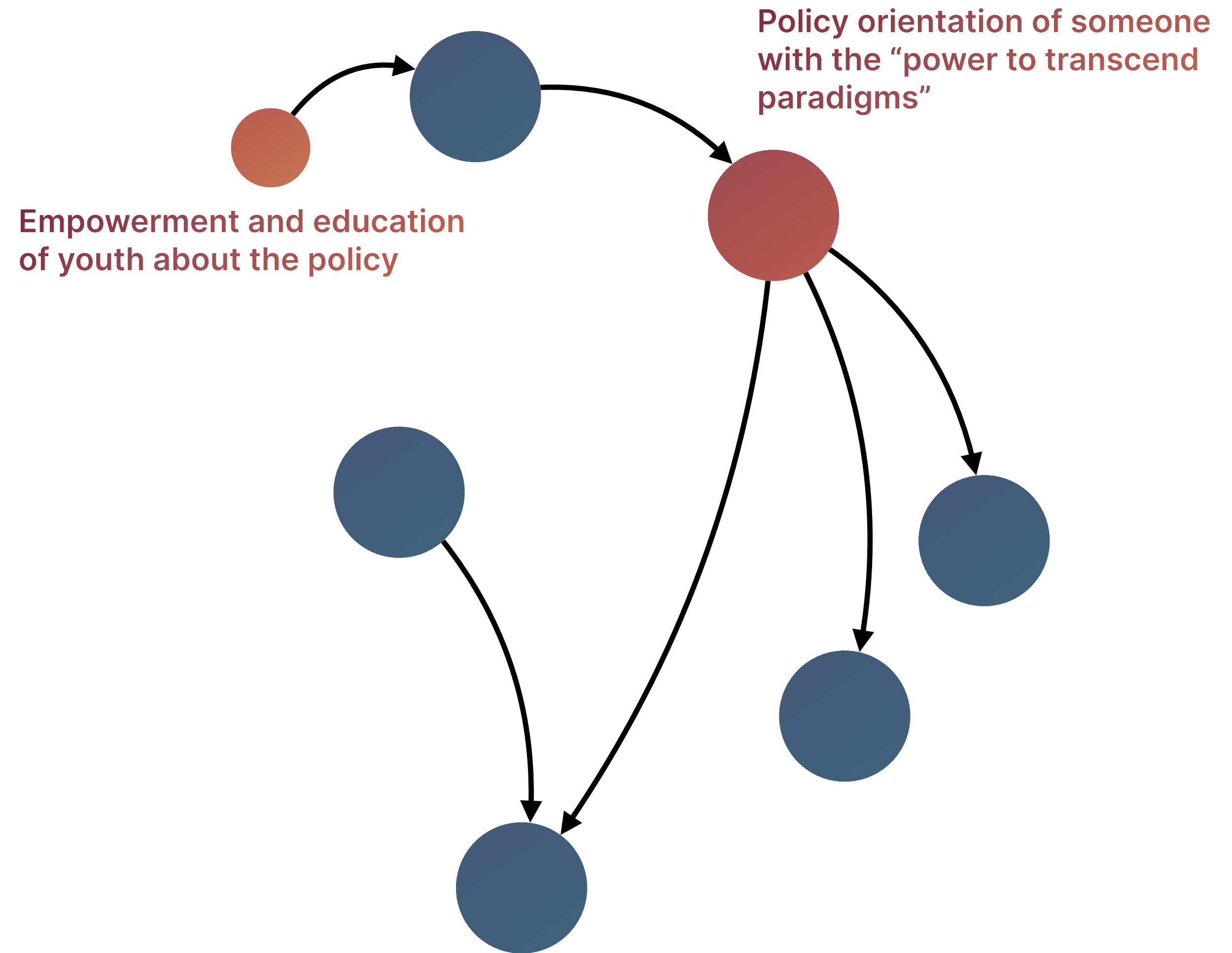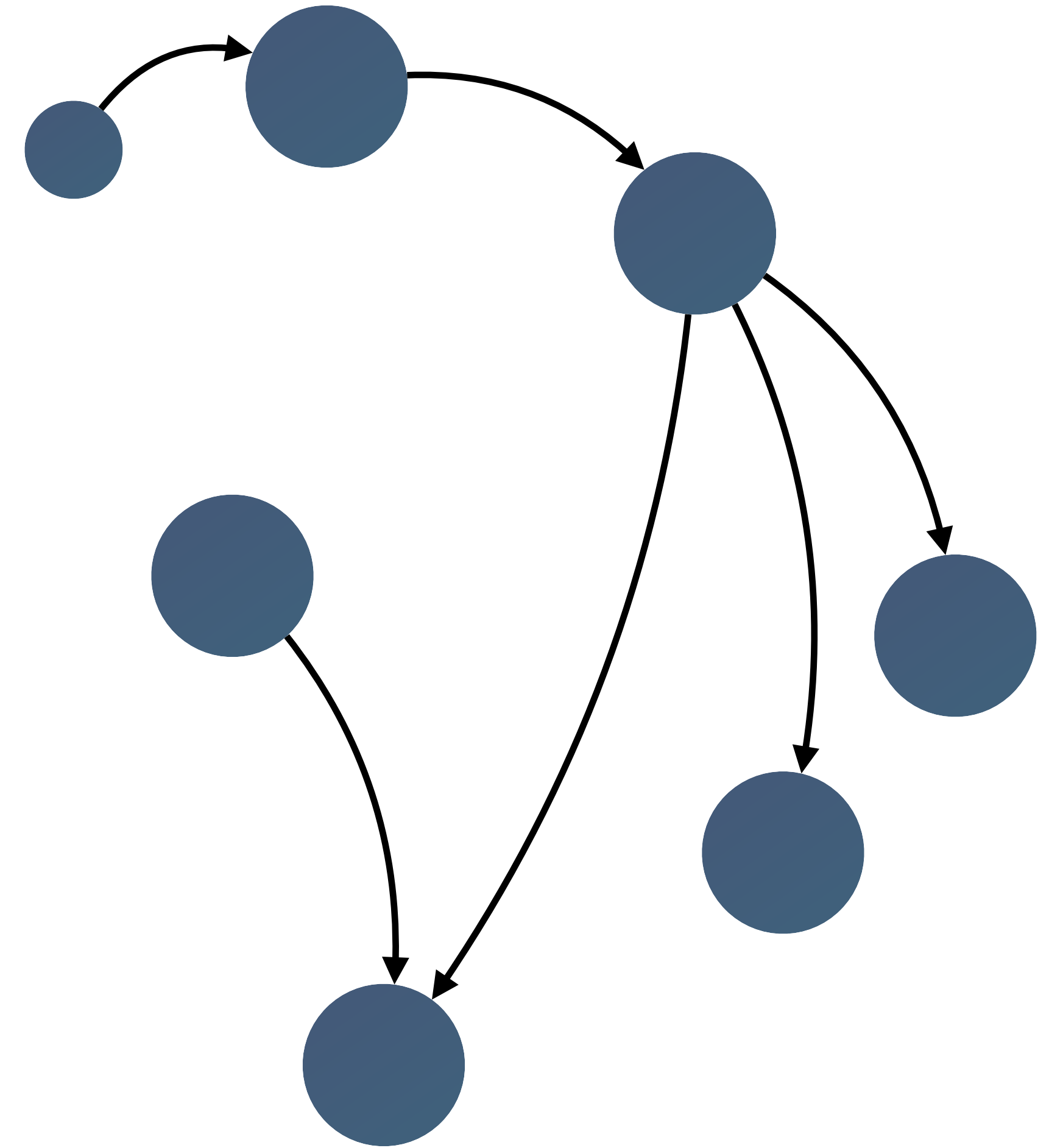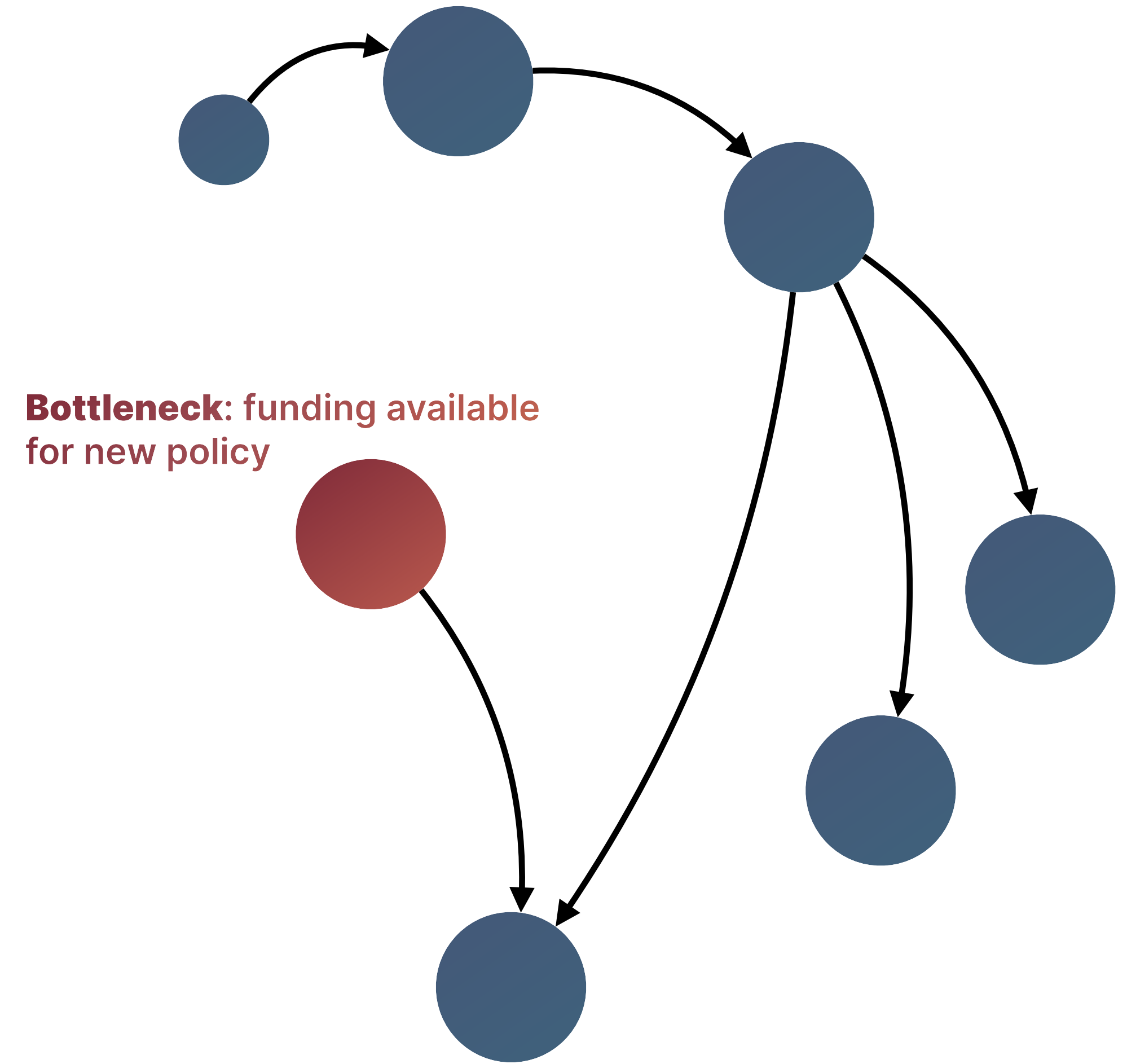
Leverage is relative

Beyond leverage points

Signals of possibility

Leverage is fractal

Bottleneck: funding available
for new policy

Leverage is relative

Beyond leverage points

Let's get to work:

ryan@fulcra.design