



Institute for
FUTURES STUDIES

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Trends and some future for the welfare states

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The wicked problems of tomorrow

are very old



Poor quality and productivity

Labour market (matching)

Housing shortage

Traffic jams

3,000 people die prematurely in healthcare

100,000 injured

10 percent get infection after surgery

17 percent of primary school students become drop outs

Drug addicts continues abuse

Patients - Patients fall between chairs and Organizations

Mental health problems has increased for decades

IT systems, worst of all industries

This has lasted for decades

At the same time, we become better at point productivity, measured as the five-year survival rates in different diagnoses, especially cardiovascular



None of the daily political discussions solves these issues

Private - public

State - municipal

More - less resources

More - fewer counties / municipalities/ reorganisations

Laws, rules and policies

Clinical guidelines

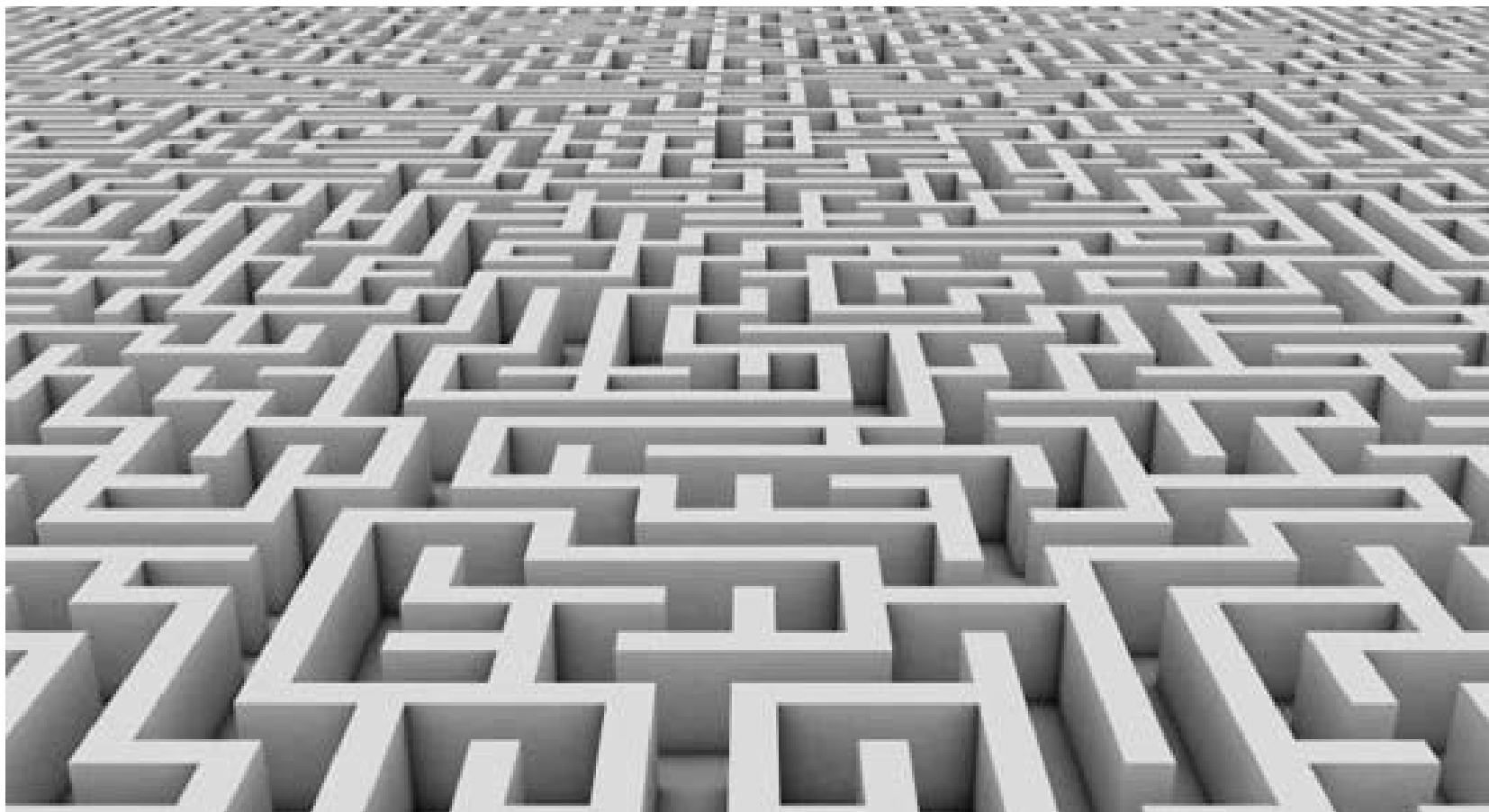
freedom of choice

All of these have little or no impact on quality or productivity, (except under certain special circumstances)

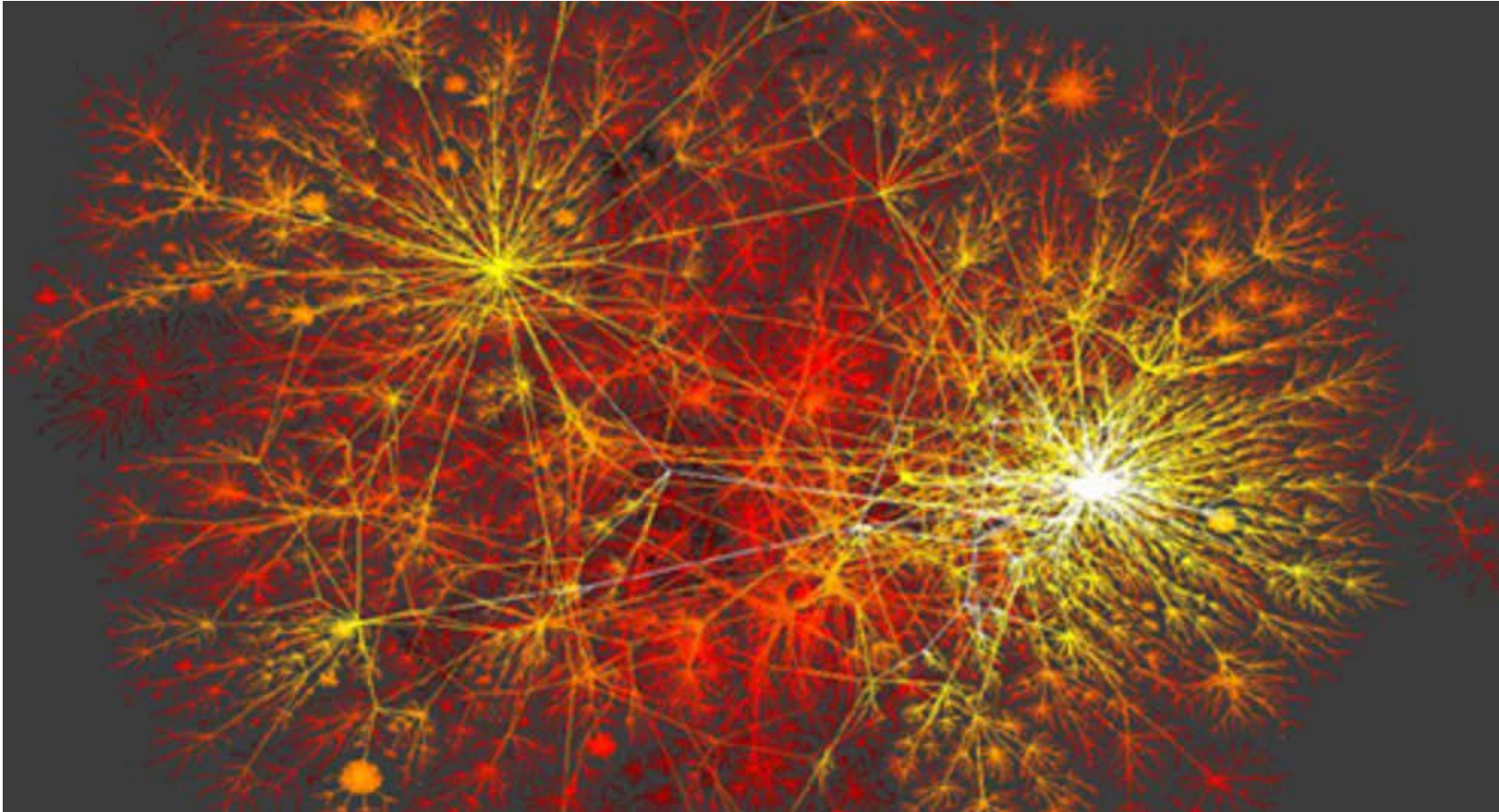
Competition seems to have some impact, however, may perhaps go through size - small size is better than large



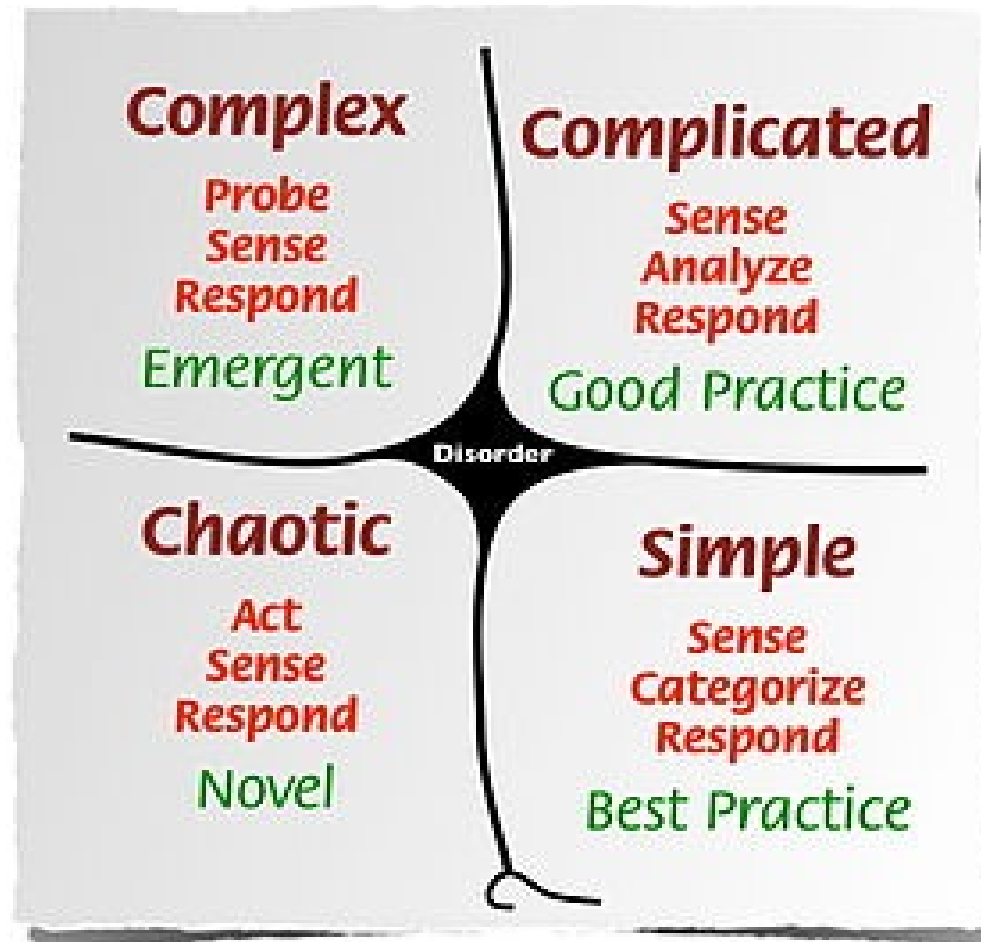
Complicated systems



Complex self-organized systems



Dave Snowden's Cynefin framework



Today: the complicated society

We can relatively well handle simple deterministic citizens

Some complicated matters like taxation works really well in Sweden.

Complex problems, like mental health, crimes, bad school results, population health etc., can not be handled with the same methods. That's why all countries have these problems. Since it's complex adaptive systems they will from time to other fare well, and the sitting cabinet will boast that they did it.

Complex problems can only be handled via real time big data driven systems,

Ashby's Law (1947) implies that the degree of control of a system is proportional to the amount of information available. This means you need an appropriate amount of information to control any system, whatever it is.



The next level: the biological society

- We can handle our biology, CRISPR/CAS9 or CAR-T
- Gene sequencing is “cheap”

- We understand that the wicked problems are complex ie biological
- We have new methods to handle complexity, ie simulation / AI

We have to redesign our institutions and our way of thinking



Singularity 2045

Ray Kurtzweil, futurist, inventor and head of GOOGLE:s development

2023 1000 \$ buys a computer with the same capacity as a human brain

2029 1000 \$ buys a computer with the same capacity as 1000 human brains

2045 1000 \$ buys a computer a billion times the capacity of all human brains



Thank you!

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