

Developing an Eco-social Enterprise

Session 4

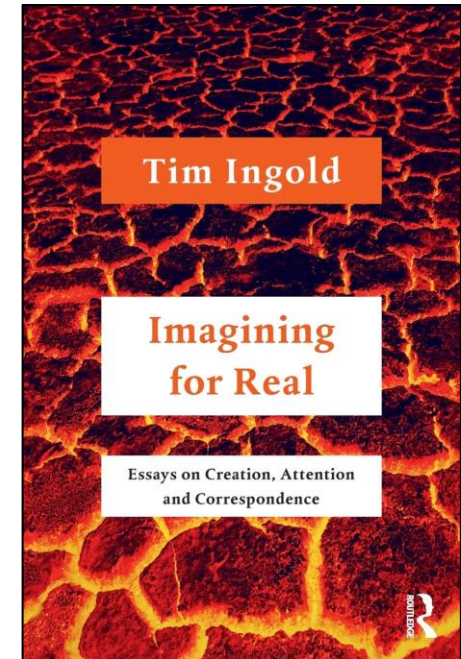
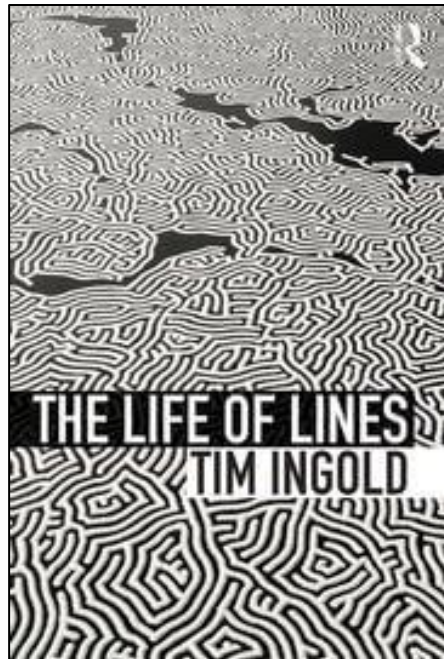
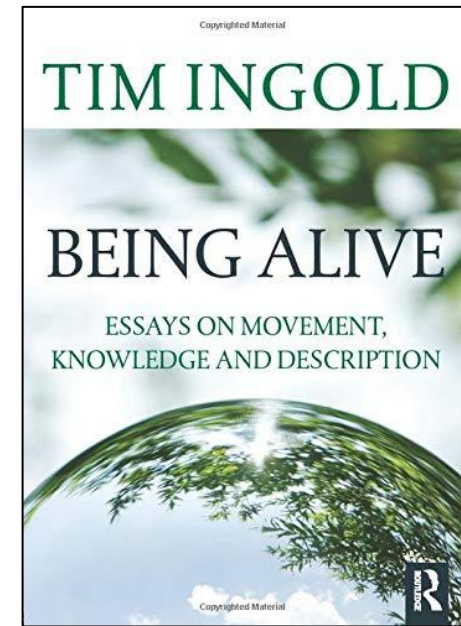
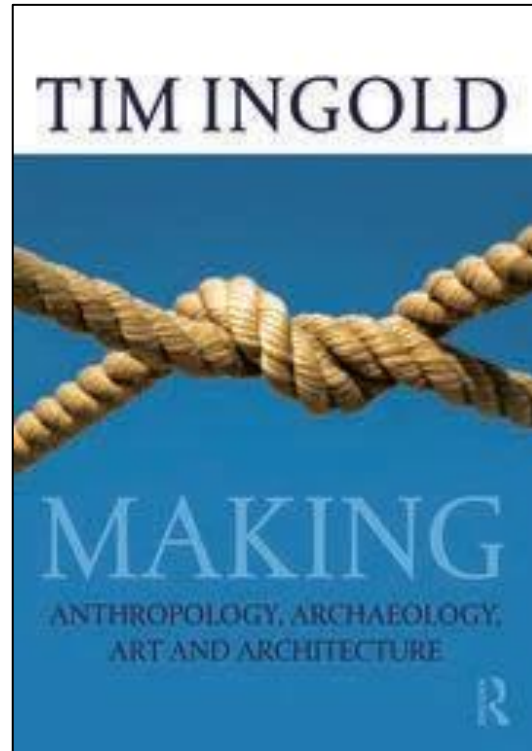
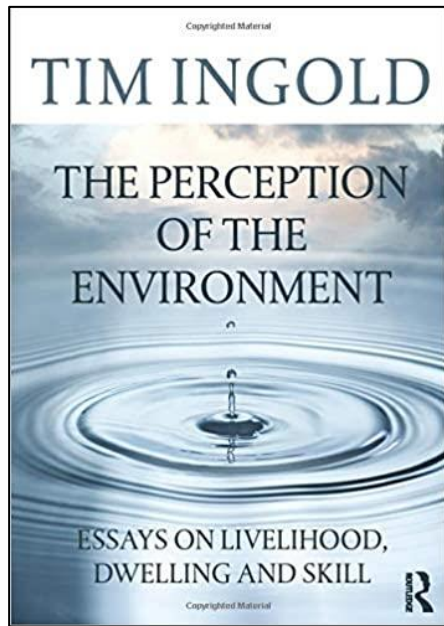
Thursday, 27 April, 2023

Tim Crabtree, Wessex Community Assets & Plymouth University

To create any thing, Aristotle reasoned, you have to bring together form (morphe) and matter (hyle).

In the subsequent history of Western thought, this *hylomorphic* model of creation became ever more deeply embedded. But it also became increasingly unbalanced.

Form came to be seen as imposed by an agent with a particular design in mind, while matter, thus rendered passive and inert, became that which was imposed upon.



Ingold suggests that:

skilled practice ... is a question not of imposing preconceived forms on inert matter but of intervening in the fields of force and currents of material wherein forms are generated.

Practitioners, I contend, are wanderers, wayfarers, whose skill lies in their ability to find the grain of the world's becoming and to follow its course while bending it to their evolving purpose.

(Ingold 2010: 92)

Material approach

(Co)design and prototyping through digital fabrication









Ingold: Materials are substances-in-becoming

In a world of materials, nothing is ever finished: everything may be something, but being something is always on the way to becoming something else.

Ethical & political
decision-making

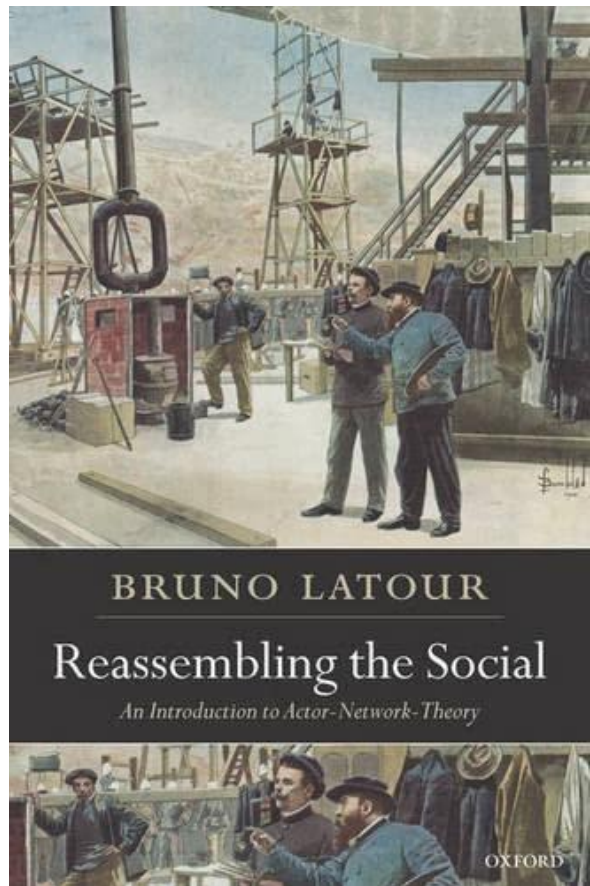
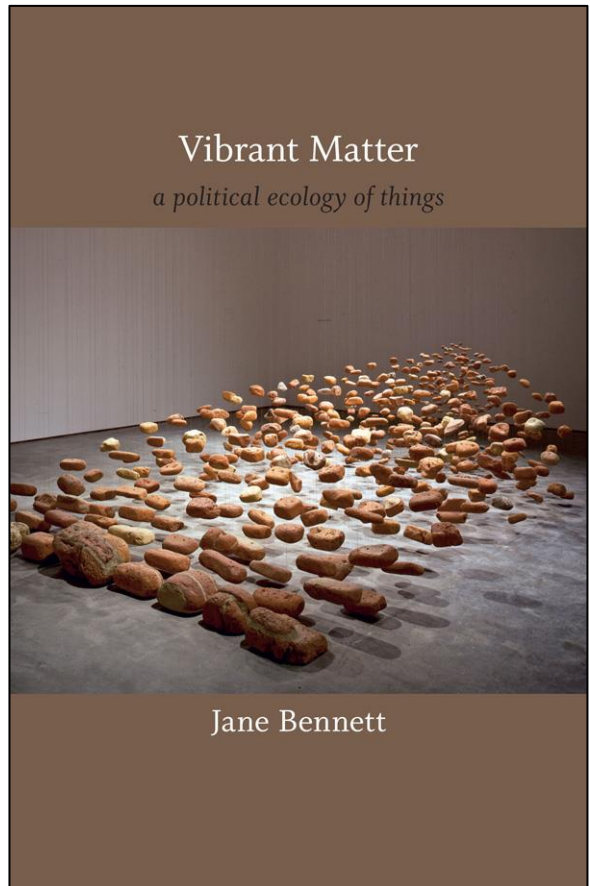
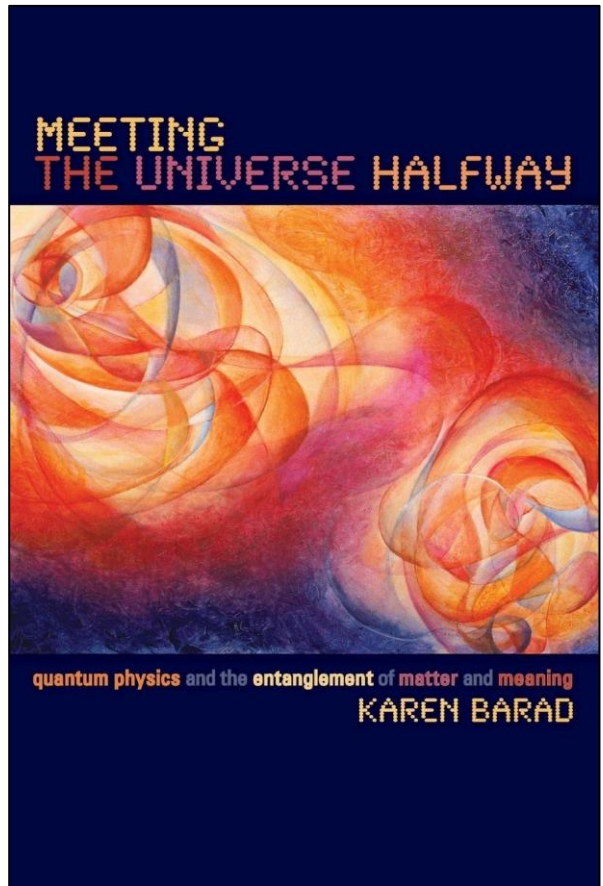
Our relationships with
materials, tools, the
environment, etc



We can refer to a “hybrid research collective”:

in which the interdependence between humans, and humans and the non-human world is foregrounded and concerns for co-existence are ethically negotiated. In this heterogeneous grouping, human and nonhuman actants exert influence, pushing and pulling the research process in various ways.

Cameron, J., Gibson, K. & Hill, A. (2014). Cultivating hybrid collectives: research methods for enacting community food economies in Australia and the Philippines, *Local Environment*, 19:1, 118-132.



Ethical & political
decision-making

Our relationships with
materials, tools, the
environment, etc



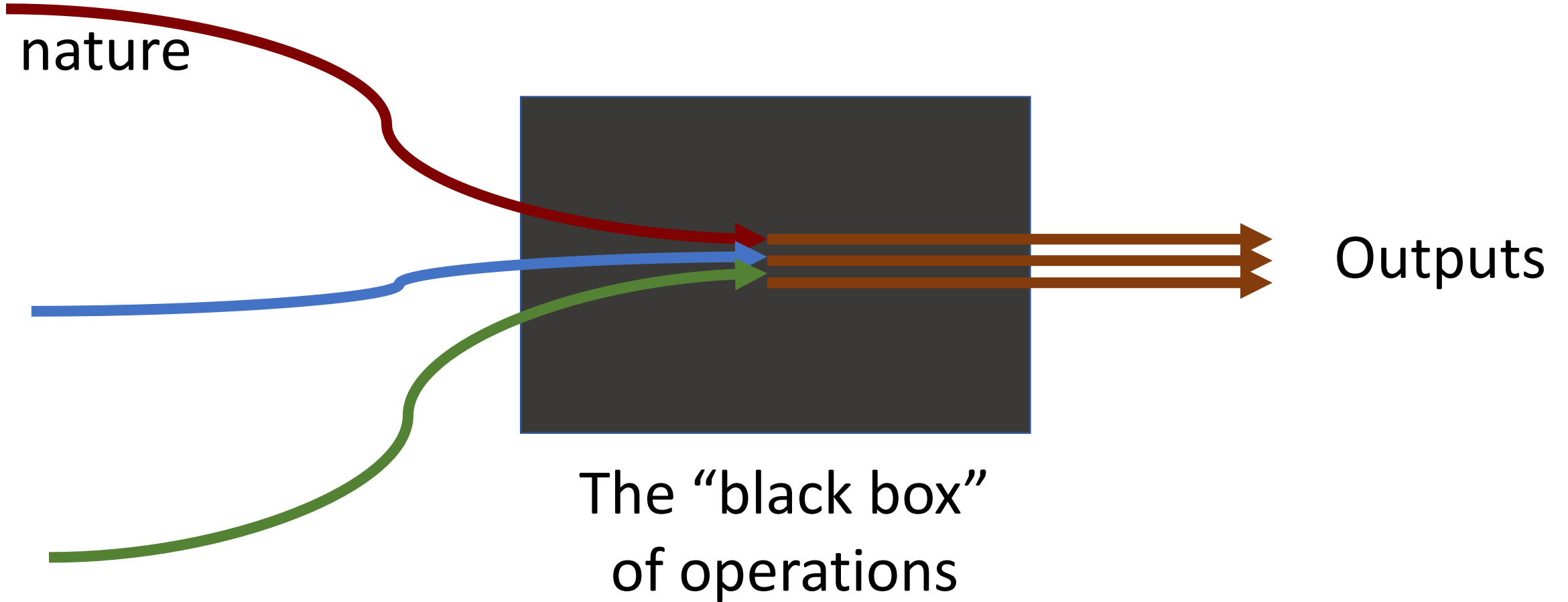
Ingold: processes of
“correspondence”
or “becoming”

... in practice, making is less a matter of projection than one of gathering, more analogous, perhaps, to sewing or weaving than to shooting arrows at a target.

As they make things, practitioners bind their own pathways or lines of becoming into the texture of the world...

Thus the creativity of making lies in the practice itself, in an improvisatory movement that works things out as it goes along.”

“Inert” inputs
– including
materials
extracted from
nature



The “black box”
of operations

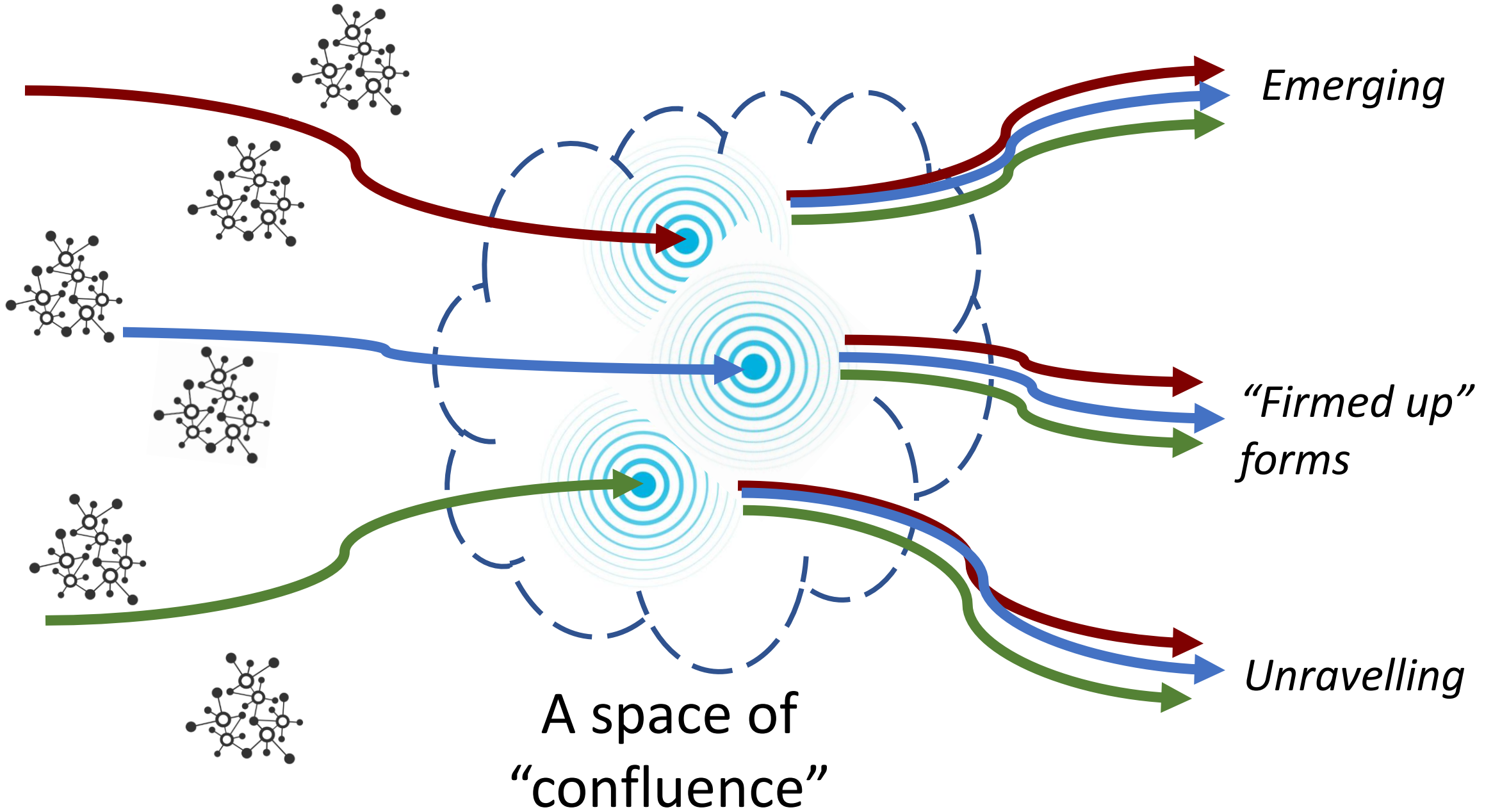
Outputs

“What we traditionally view as ‘independent’ elements – the person with the bat, the bags, the people in the field – are not truly independent. They are all mutually defining... Alone they would [all] be virtually without meaning. It is when we bring all these elements into a mutually defining relationship that we can speak about ‘playing baseball’. Let us then speak of the baseball game as *a confluence*, a form of life in this case that is constituted by an array of mutually defining ‘entities’”

(Gergen, K. (2009). *Relational being: beyond self and community*. Oxford: Oxford University Press. p.54).

Inputs

Outputs



A space of
"confluence"

Emerging

*"Firmed up"
forms*

Unravelling

Matter as history and becoming

Heidegger:

“Everywhere, everything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing. We call it standing reserve”.

Or?

- Natural capital
- Natural resources
- Eco-system services

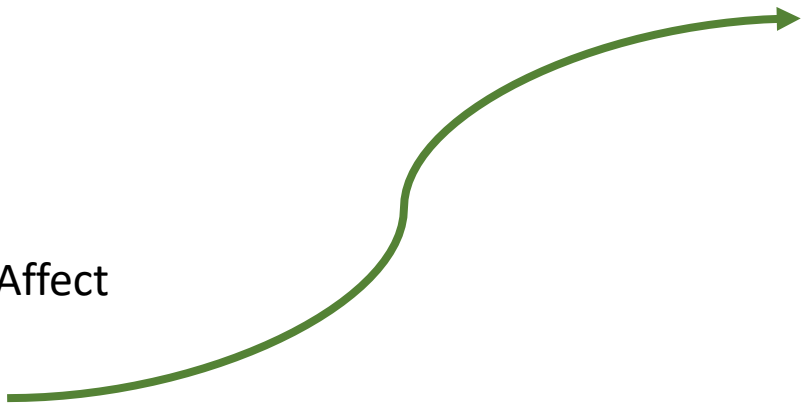
Political influences



Ecological influences



Affect



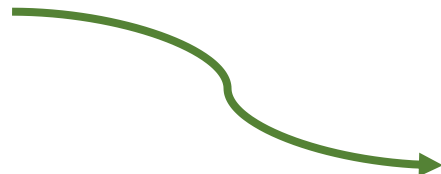
Zero carbon housing



Circular economy



Shift to regenerative farming culture



Latour: learning to be affected

Latour (2004) introduced the idea of “learning to be affected” to explore the process by which bodies learn to become more and more receptive to the world around, and to be “moved, put into motion by other entities, humans or non-humans” (p. 205).

Latour illustrates the process through the training of noses for the perfume industry.

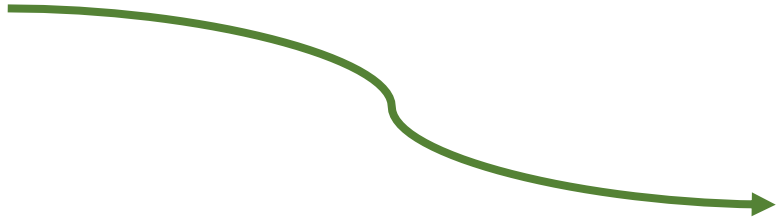
Pupils start with “a dumb nose unable to differentiate much more than ‘sweet’ and ‘fetid’” but with the use of odour kits pupils develop – become – a nose that can distinguish more and more subtle differences in odours (p. 207). Thus, the body is “an interface . . . by which we learn to register and become sensitive to what the world is made of” (p. 206).

Latour, B., 2004. How to talk about the body? The normative dimension of science studies. *Body and Society*, 10 (2/3), 205–229.





Political & ethical dimension



Metal



?

Ecological dimension

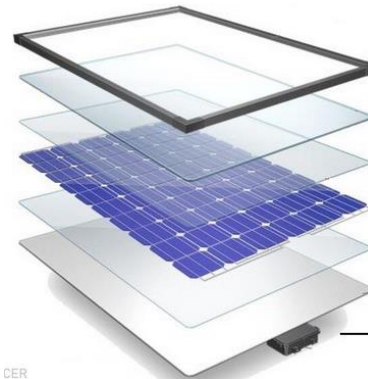
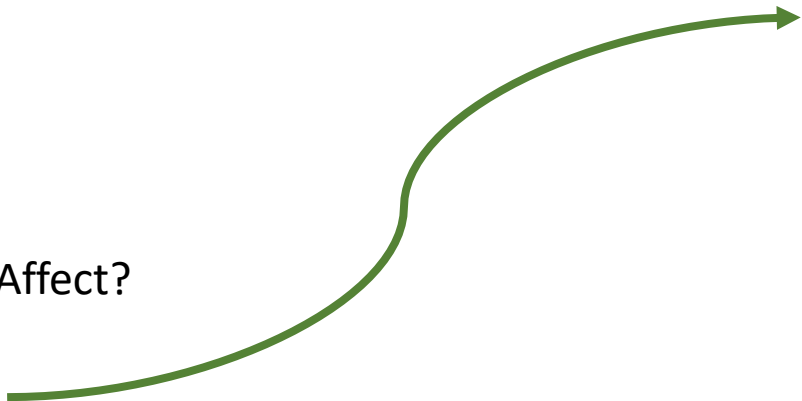


Plastic



?

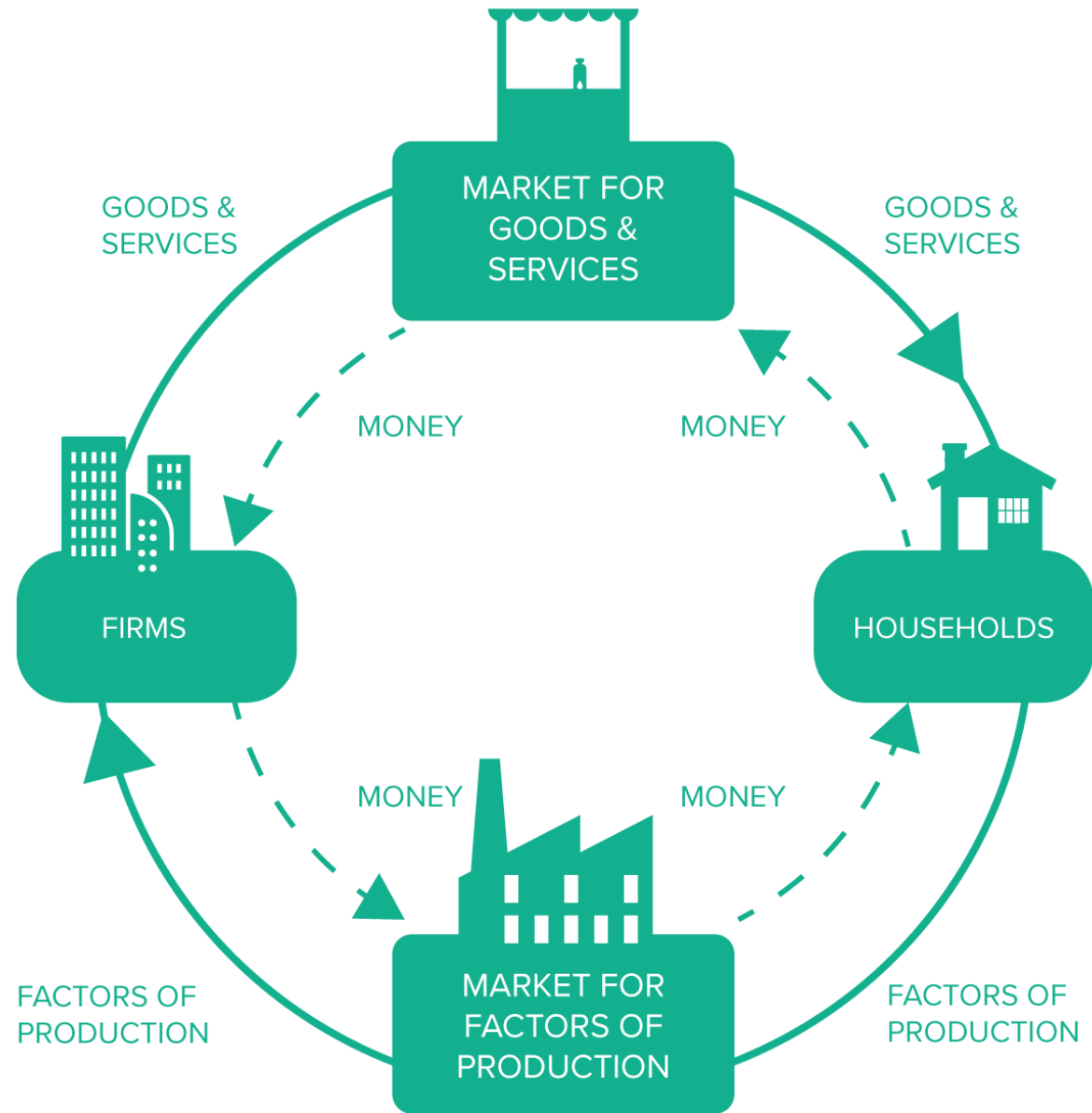
Affect?

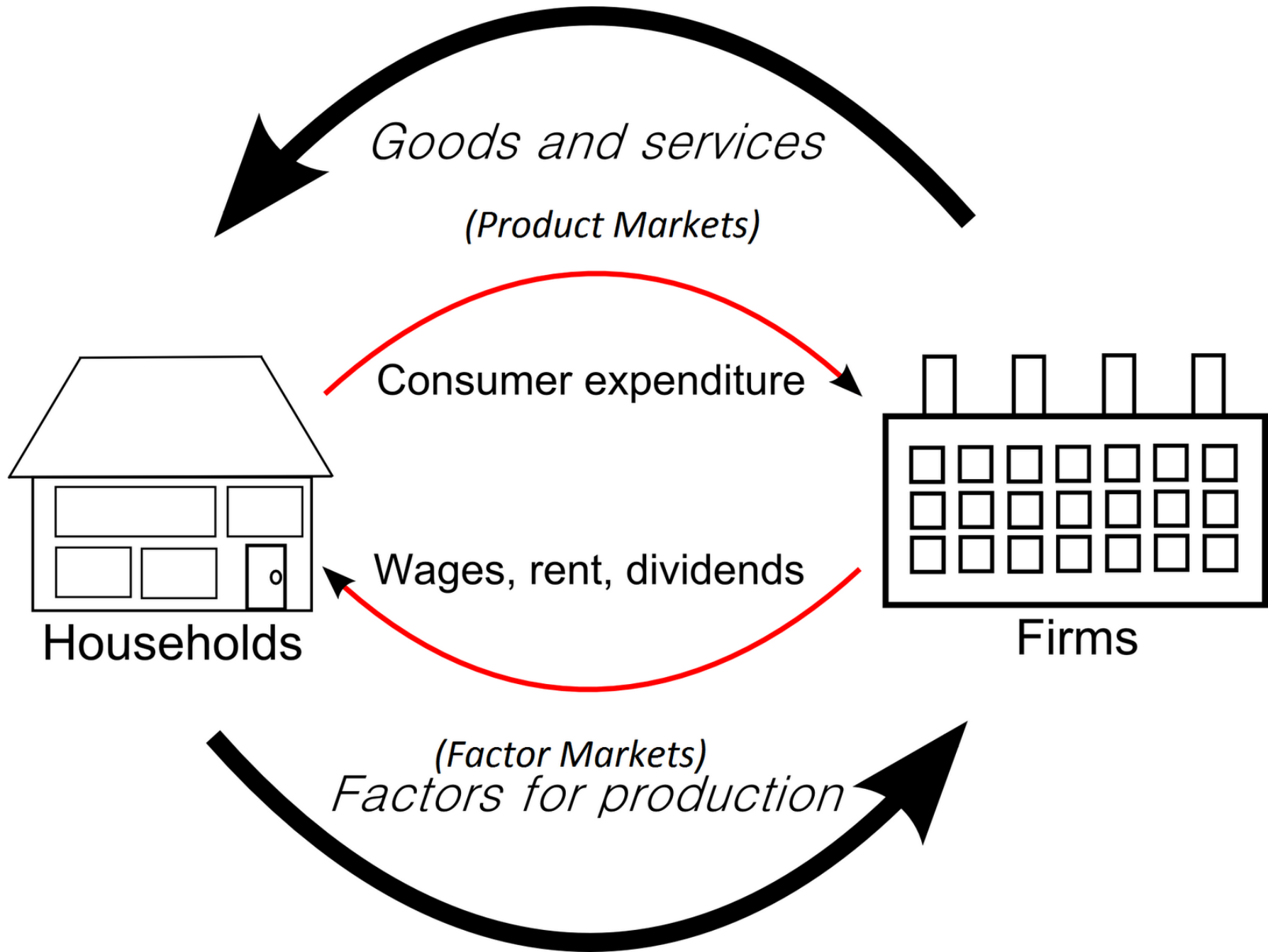


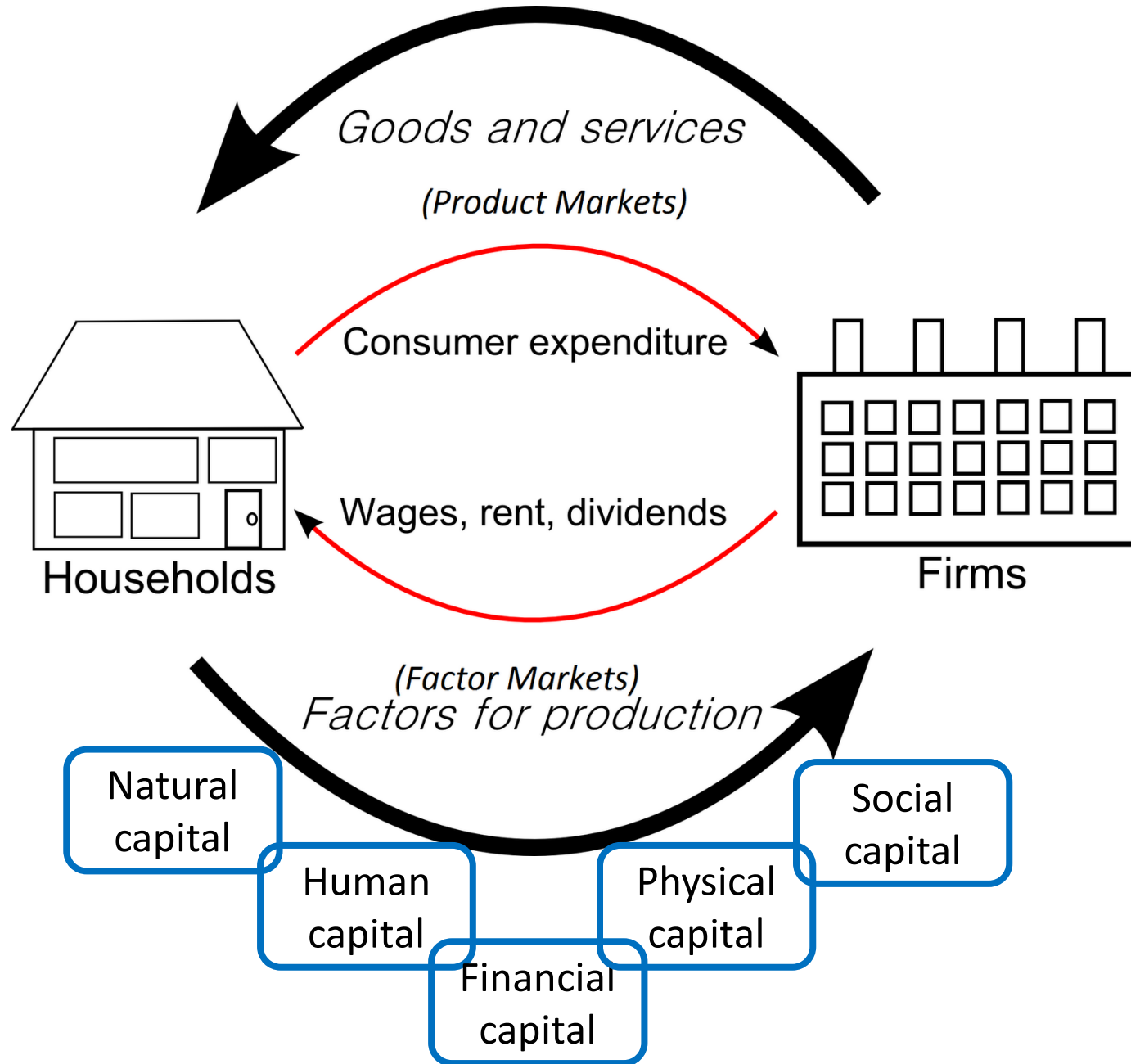
Silicon



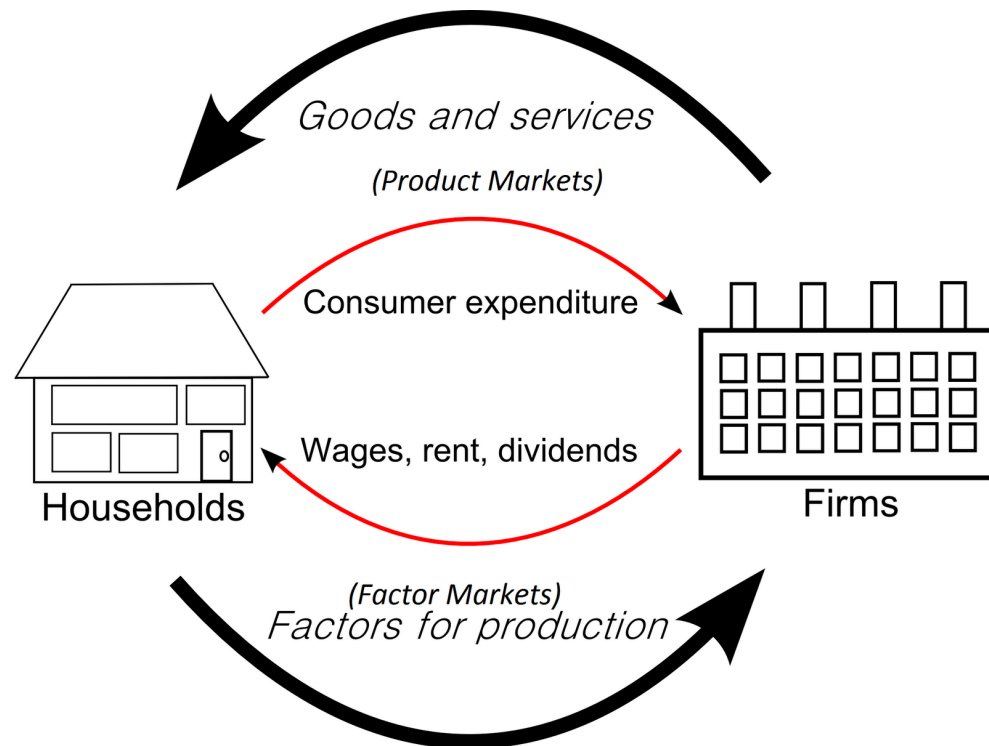
?







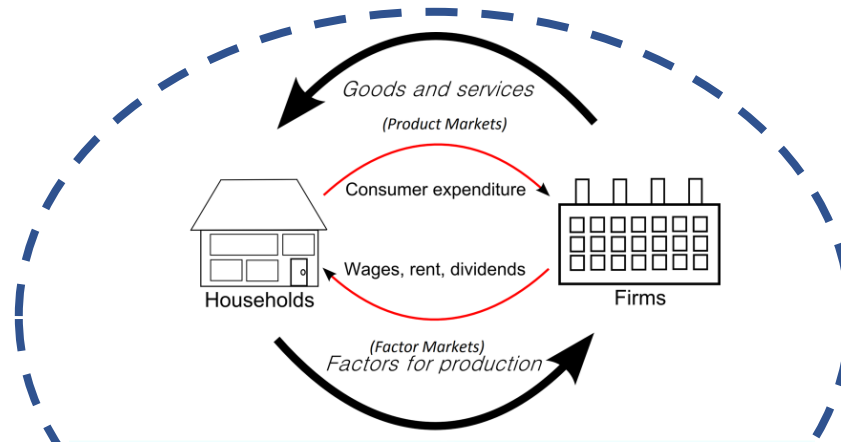
Why does this diagram not represent the economy? How would you amend it to include the diverse economy and the environment?





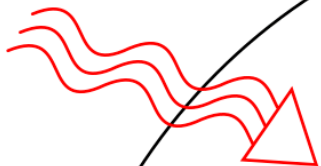
capitalist enterprise
commodity markets
wage labor

language
compost
community gardens
barter
soil nutrition
informal loans
love
occupation
respiration
free schools
parenting
worker cooperatives
gifts
oral traditions
gathering
metabolism
community supported agriculture
farmer's markets
housework
self-employment
intentional communities
DIY
community land trusts
grow-your-own
gleaning
housing cooperatives
credit unions
photosynthesis
non-profit
sliding-scale pricing
theft (re-appropriation)
barnraising
community financing
commons
hunting
lending & borrowing
elder care
community currency
collective ownership
breastfeeding
hunting & gathering
fair trade
open-source
childbirth
family
scavenging
consumer cooperatives
libraries
imagination



The Earth's biosphere

Solar energy



Natural resources

Waste assimilation

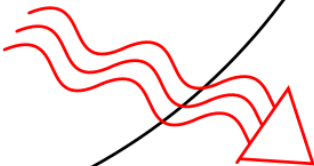
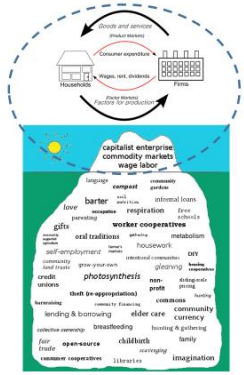
Energy

Degraded energy

Materials

Degraded materials

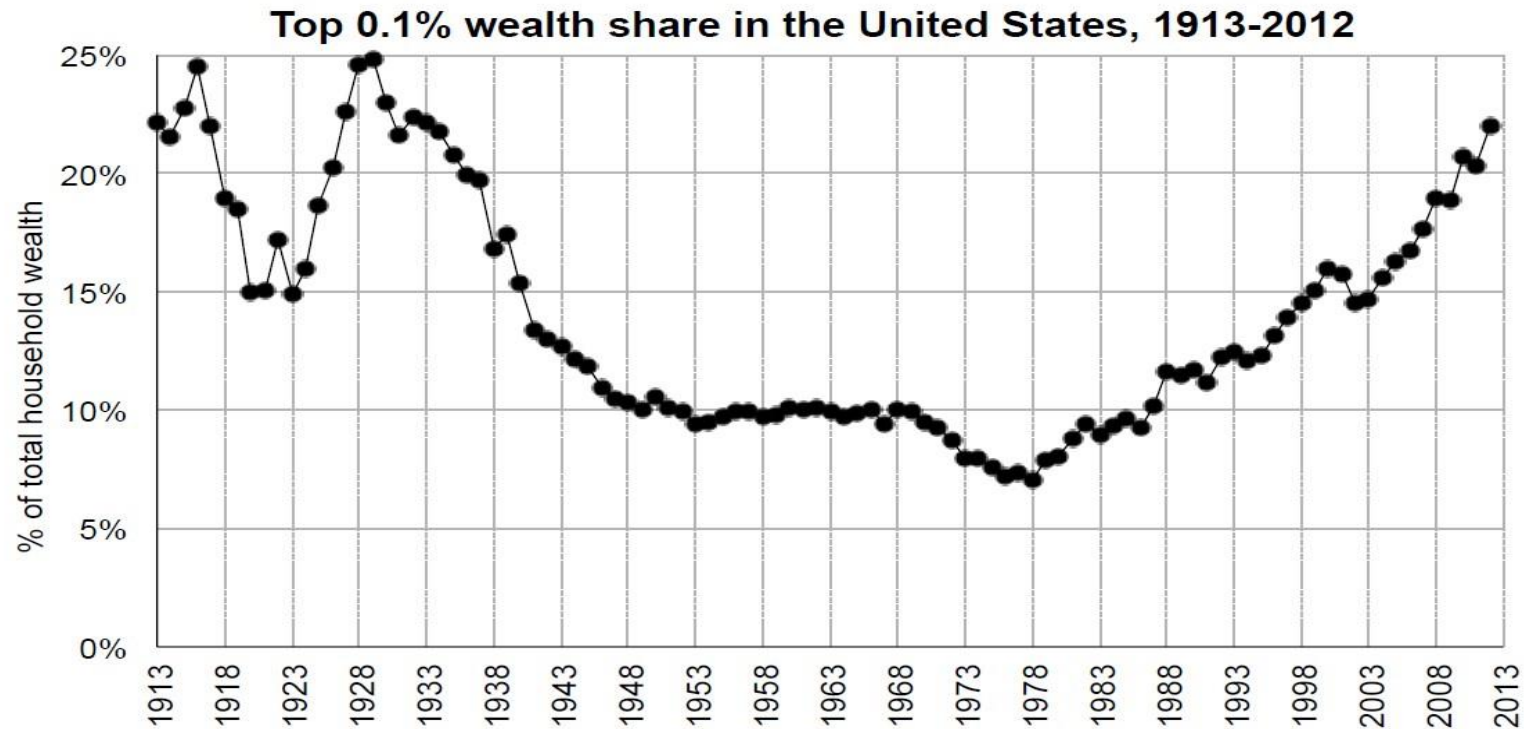
Recycled materials



Low-grade thermal energy

Piketty on wealth v. income

U-Shaped Wealth Concentration



This figure depicts the share of total household wealth held by the 0.1% richest families, as estimated by capitalizing income tax returns. In 2012, the top 0.1% includes about 160,000 families with net wealth above \$20.6 million. Source: Appendix Table B1.

Income Share of the Top 1 Percent, 1913-2012 (annotated)



Income data from World Top Incomes Database; Colin Gordon, Sept. 2013

2 types of household










- The 99% - sell their labour and rely on *income*
- The 1% - own the other factors of production and their livelihoods are based on *wealth*

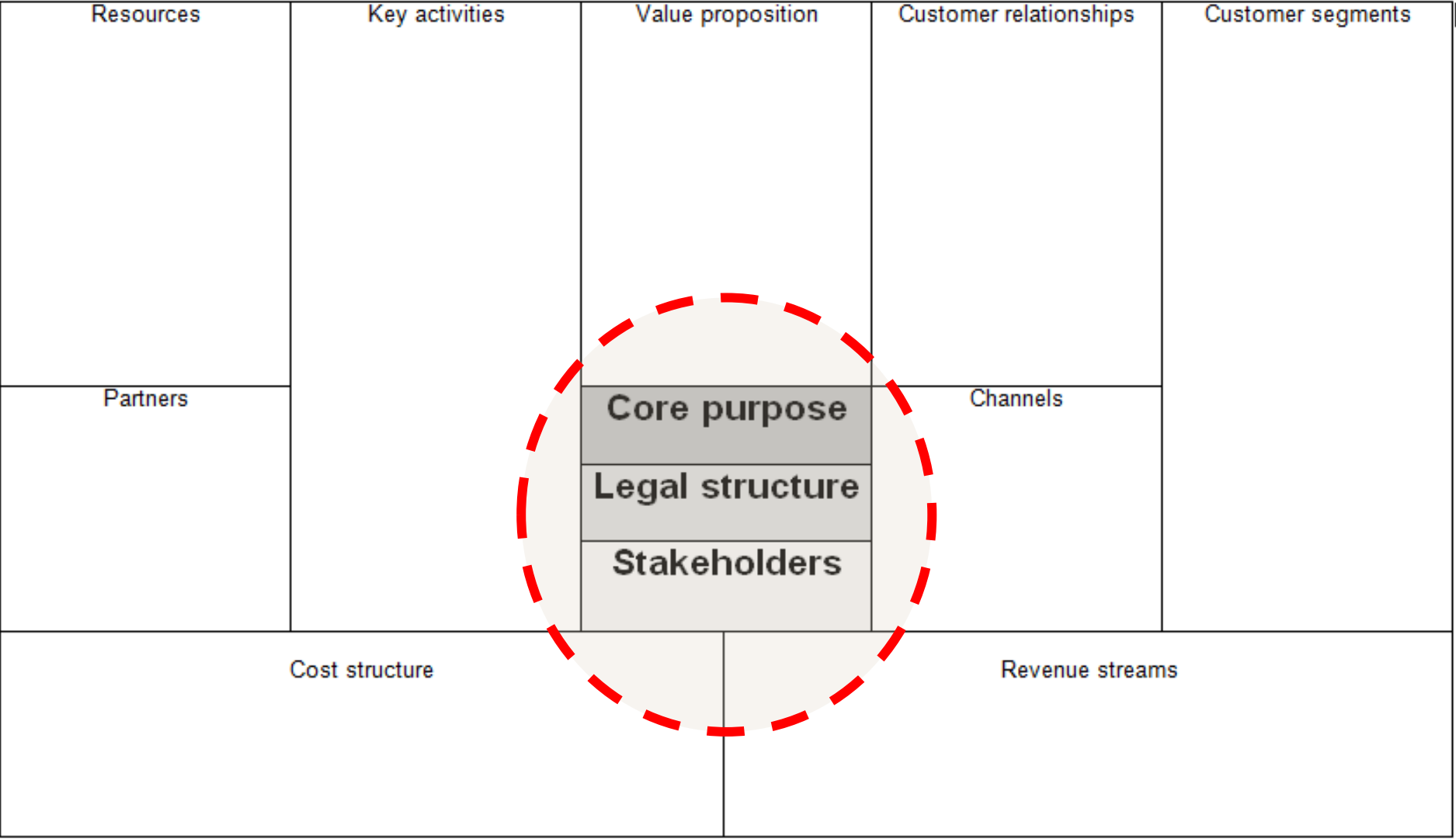
Four types of “wealth”

Ownership and control of:

- Land (& natural resources)
- Physical capital
- Natural capital
- Data

How would you amend your diagram if you have 2 types of household?

<p>Key Partners </p> <p><i>Main partners: Solar panels and inverters manufacturers</i></p> <p><i>Master contractual agreements with major suppliers</i></p>	<p>Key Activities </p> <p><i>Communication and marketing</i></p> <p><i>Installation and maintenance of solar system</i></p> <p><i>Energy advisory</i></p>	<p>Value Proposition </p> <p><i>Integrated solutions for lower energy costs</i></p> <p><i>Renewable energy at prices below utility rates</i></p> <p><i>Better Energy concept - renewable energy + energy efficiency products and services</i></p>	<p>Customer Relationships </p> <p><i>20-year contract term including ongoing service and repair, as well as further cost savings through constant monitoring of energy spendings</i></p>	<p>Customer Segments </p> <p><i>Residential customers</i></p> <p><i>Commercial customers</i></p> <p><i>Government entities</i></p>
<p>Cost Structure </p> <p><i>Installation and maintenance of solar panels</i></p> <p><i>Design of energy-efficient solutions</i></p> <p><i>Production of solar energy through solar farms</i></p>	<p>Revenue Streams </p> <p><i>Predicted revenues from long-term customers:</i></p> <p><i>Fixed monthly fees from lease customers</i></p> <p><i>Fees based on the electricity spent from PPA customers</i></p> <p><i>Additional revenues from energy-efficient solutions</i></p>			
<p>Key Resources </p> <p><i>Innovative technology</i></p> <p><i>Real time softwares for energy evaluation</i></p> <p><i>Human resources</i></p>	<p>Channels </p> <p><i>Direct outside sales force</i></p> <p><i>Call Center</i></p> <p><i>Channel Partner Network</i></p> <p><i>Customer Referral Program</i></p>			



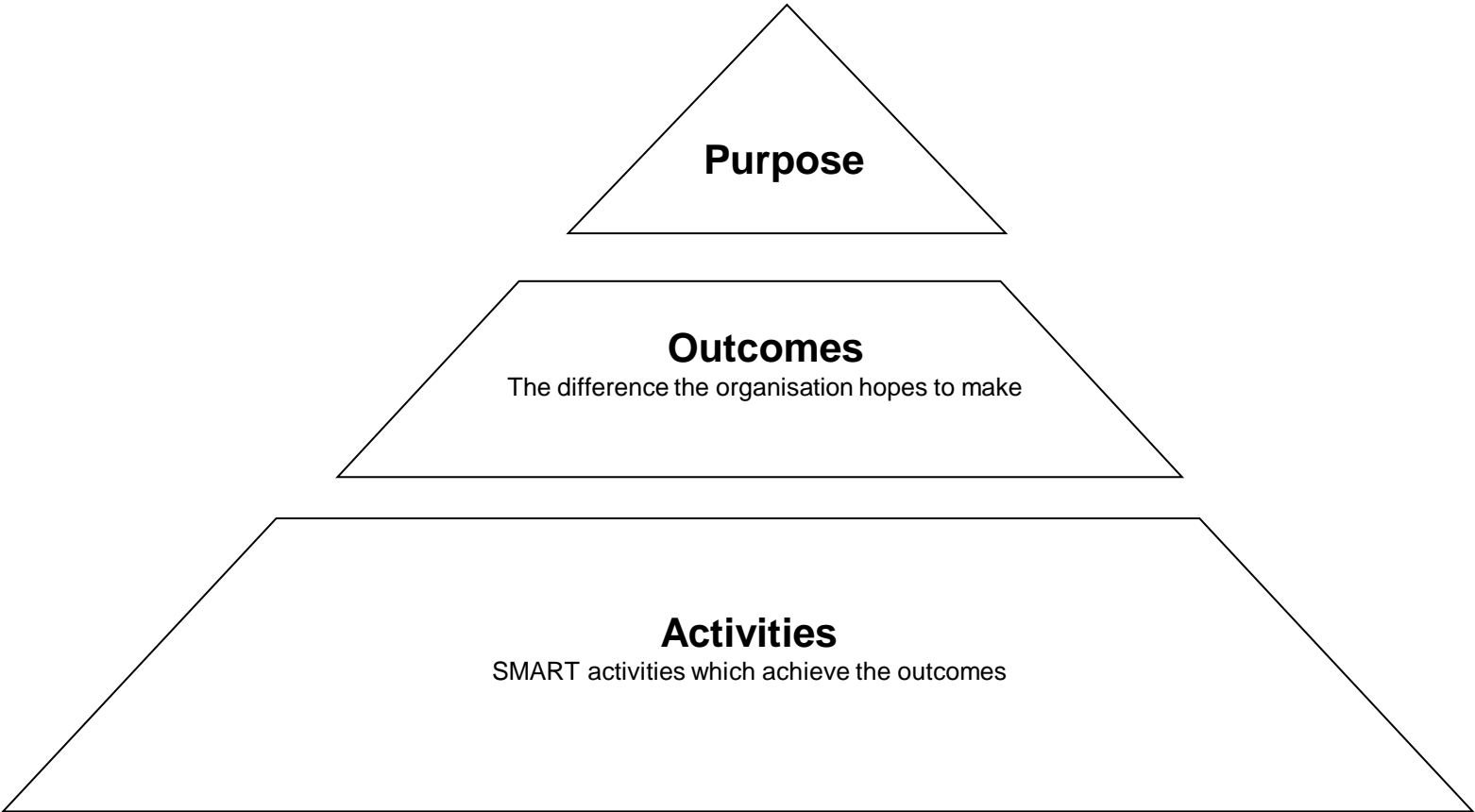
In any system, identifying the purpose or goal is critical

“A system isn’t just any old collection of things. A system is an interconnected set of elements that is coherently organised in a way that achieves something.....

a system must consist of three kinds of things: *elements, interconnections, and a function or purpose.*”

Local Food Links' intention or purpose

“Creating affordable, user-led food services which support health & well-being, stronger communities and a better environment”



Purpose

Outcomes

The difference the organisation hopes to make

Activities

SMART activities which achieve the outcomes

Marjorie Kelly

*There are many changes needed to get us to a new economy – political, cultural, technological. We'll need changes in regulation, changes in personal values system. But I would suggest there's a critical element we aren't talking about enough, and that is ownership design. As one colleague put it, **"Ownership is the original system condition."** Ownership is how wealth is created, and it determines who gets that wealth; it determines who controls the economy.*

Paradigm:

- Nature is a stock of resources to be converted to human purposes
- The market is the ideal organising mechanism for everything
- Money measures value
- Growth is good
- Self-interest is good

MONSANTO



Goals:

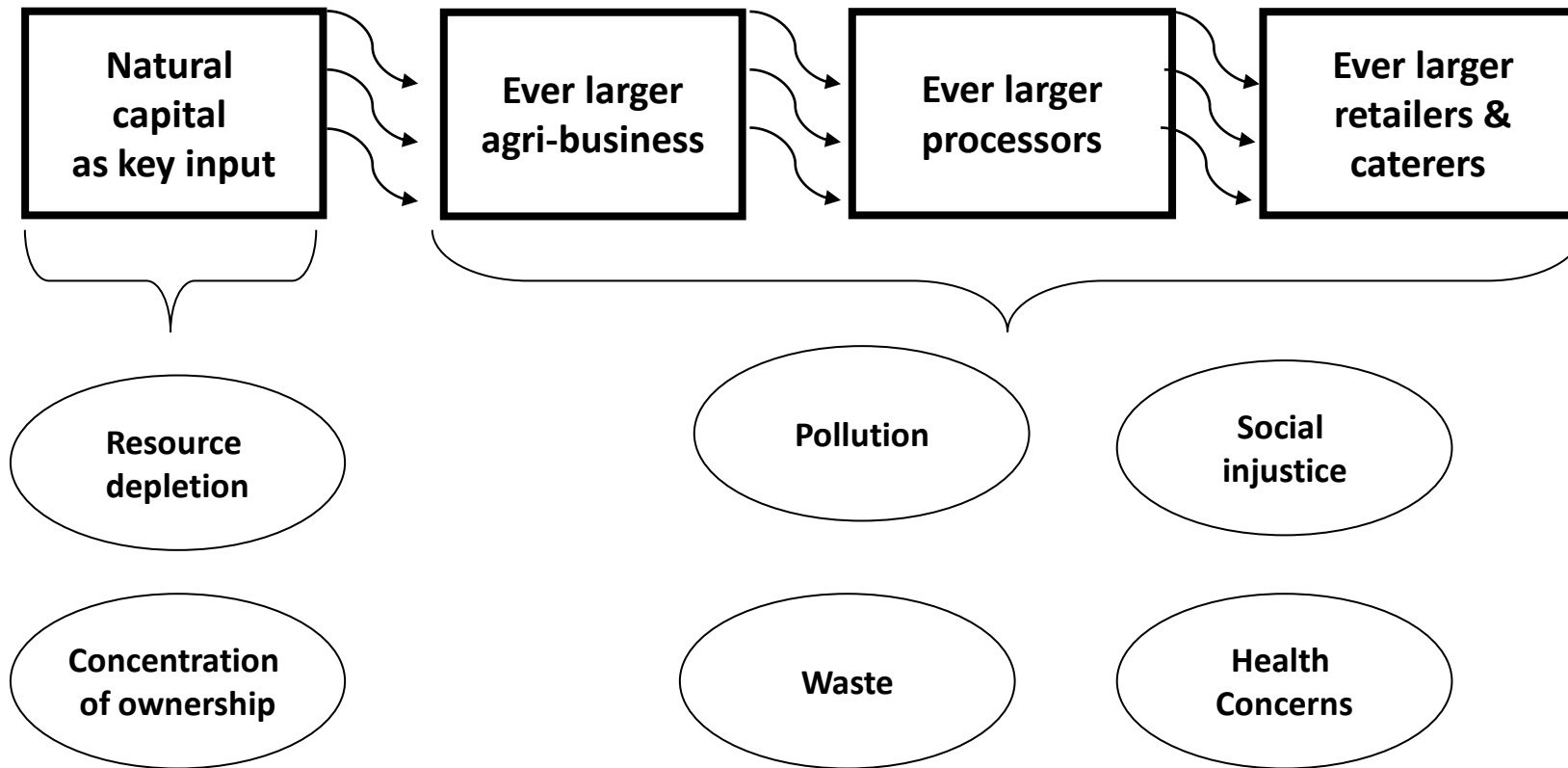
Profit, growth,
competition

Rules/structure:

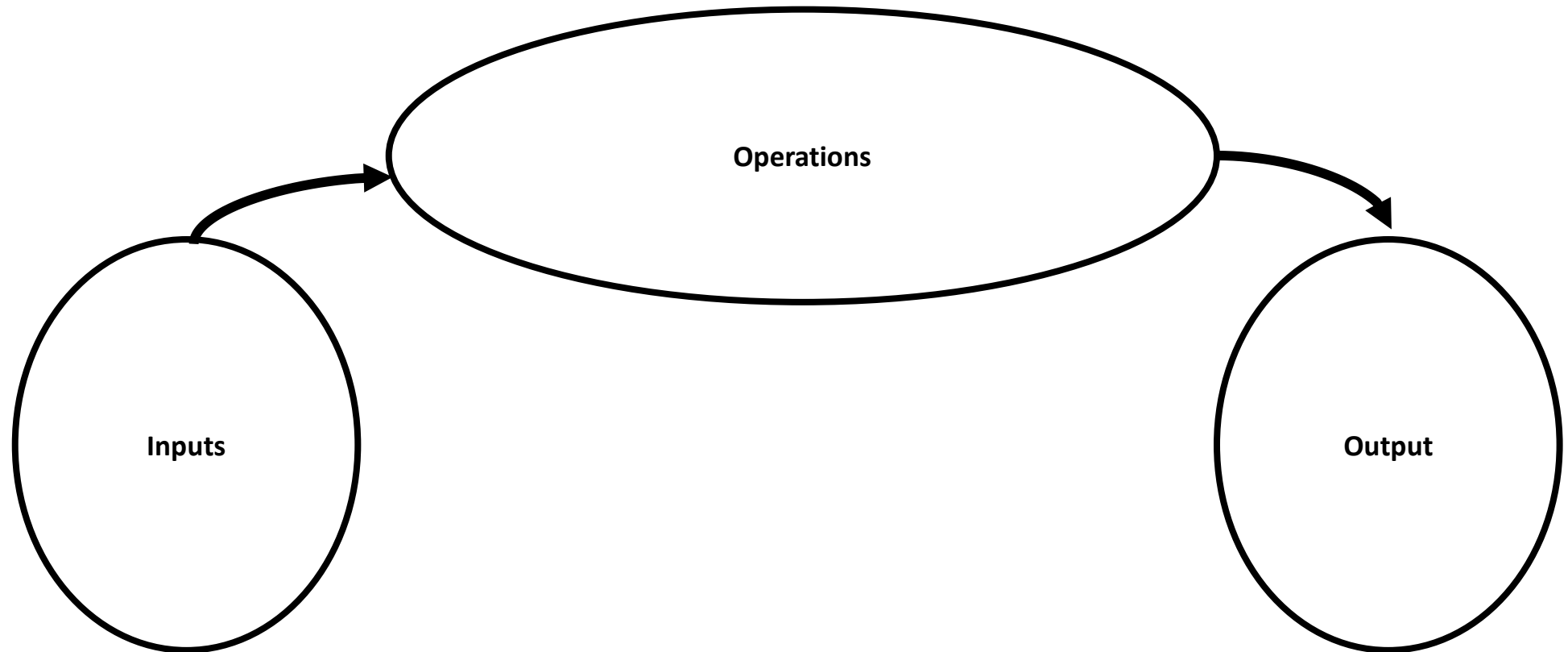
Share company
maximising shareholder
value



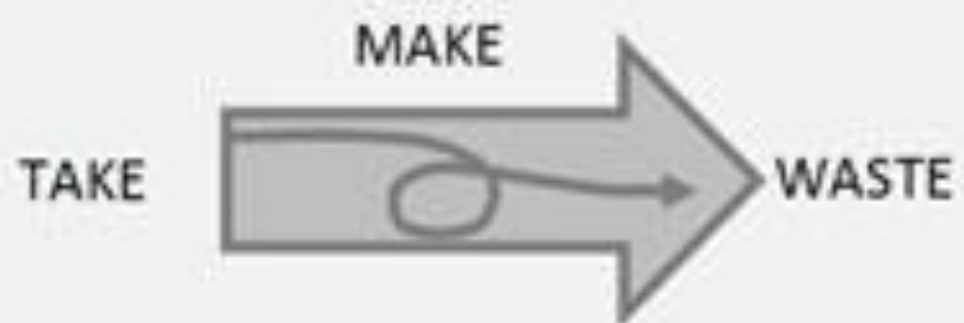
The dominant food system



A simple systems model of a firm

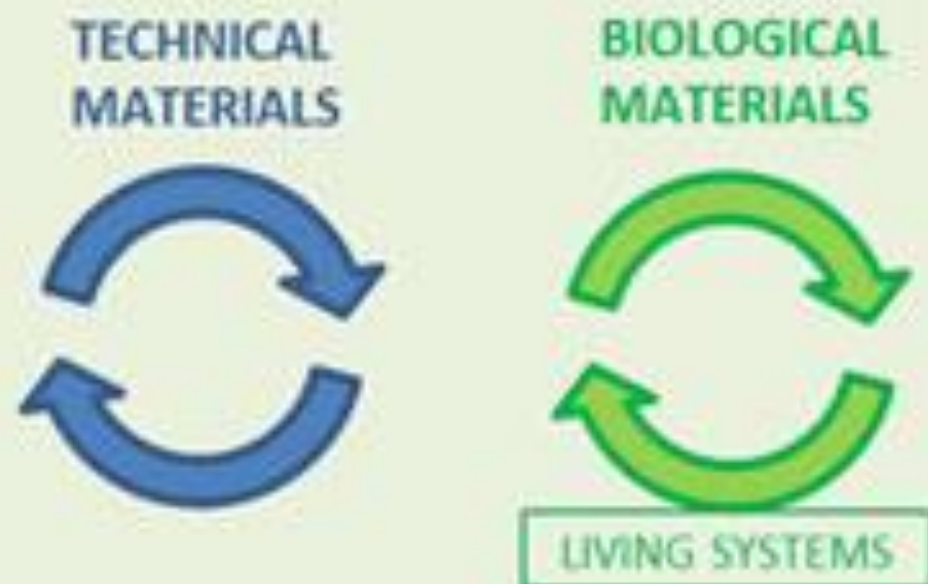


LINEAR ECONOMY



LOSE VALUE

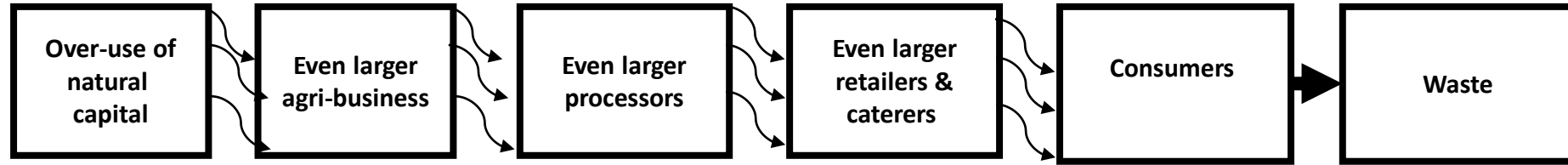
CIRCULAR ECONOMY



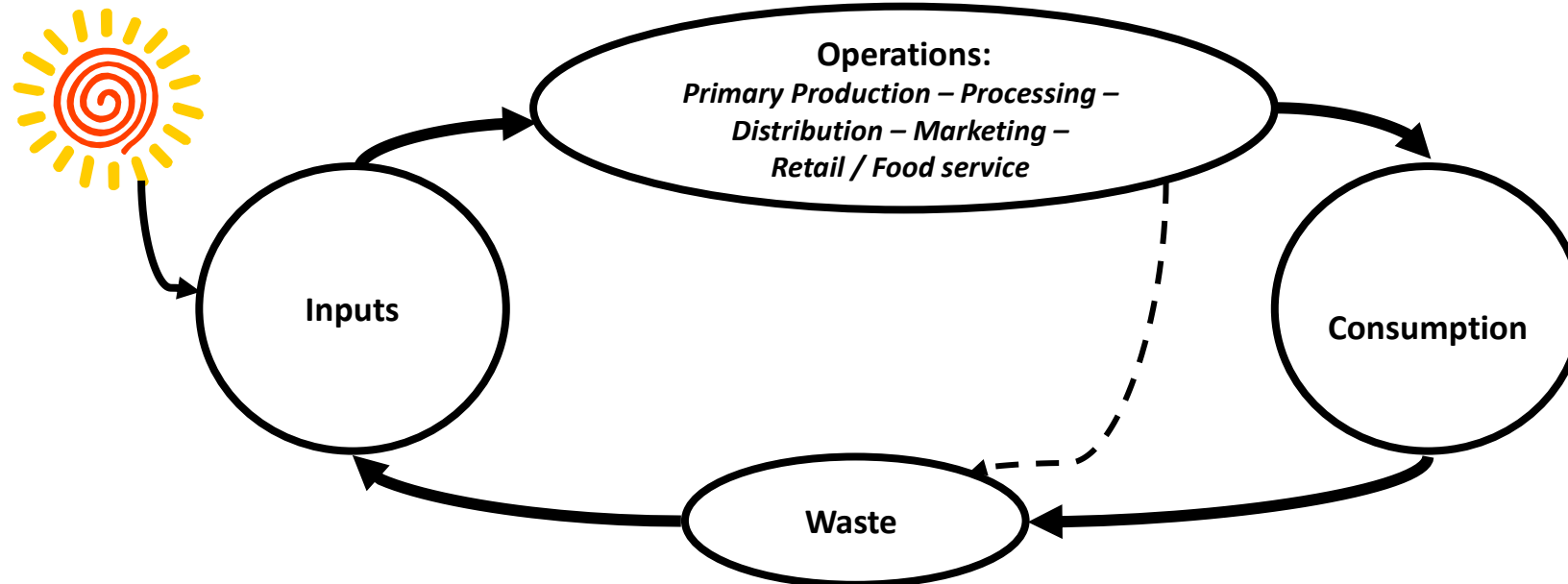
RETAIN VALUE

Two types of food system

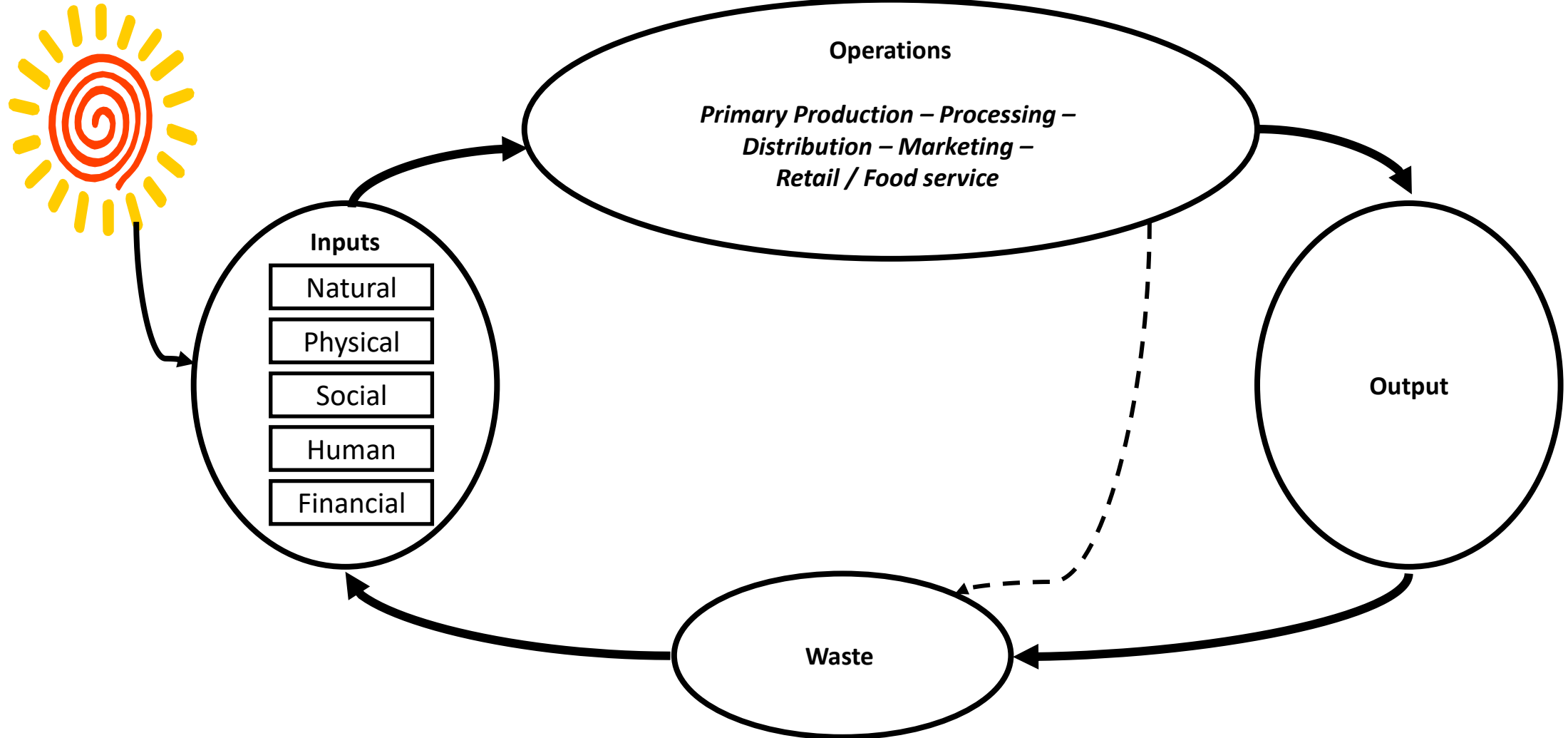
“Linear” food systems



“Circular” food systems

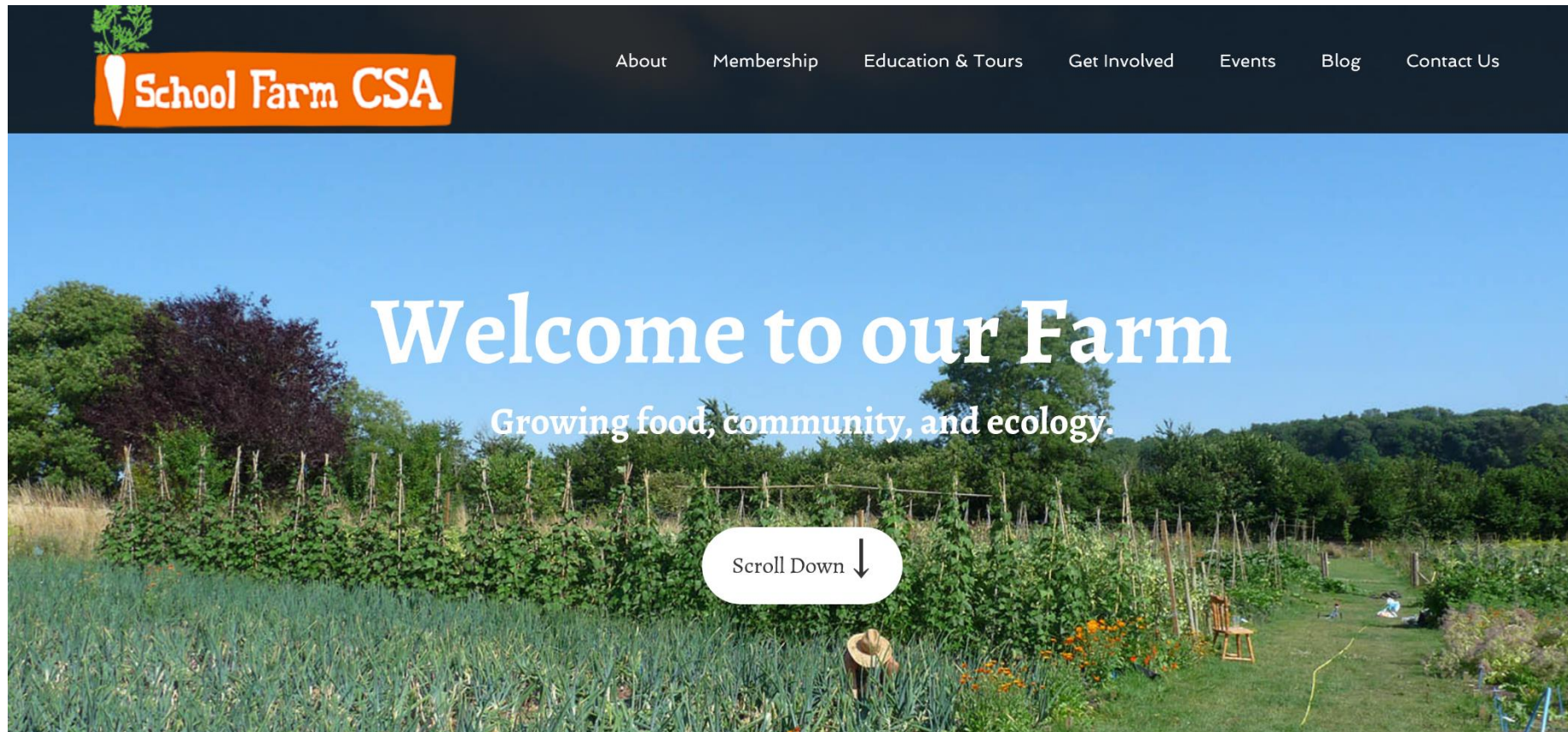


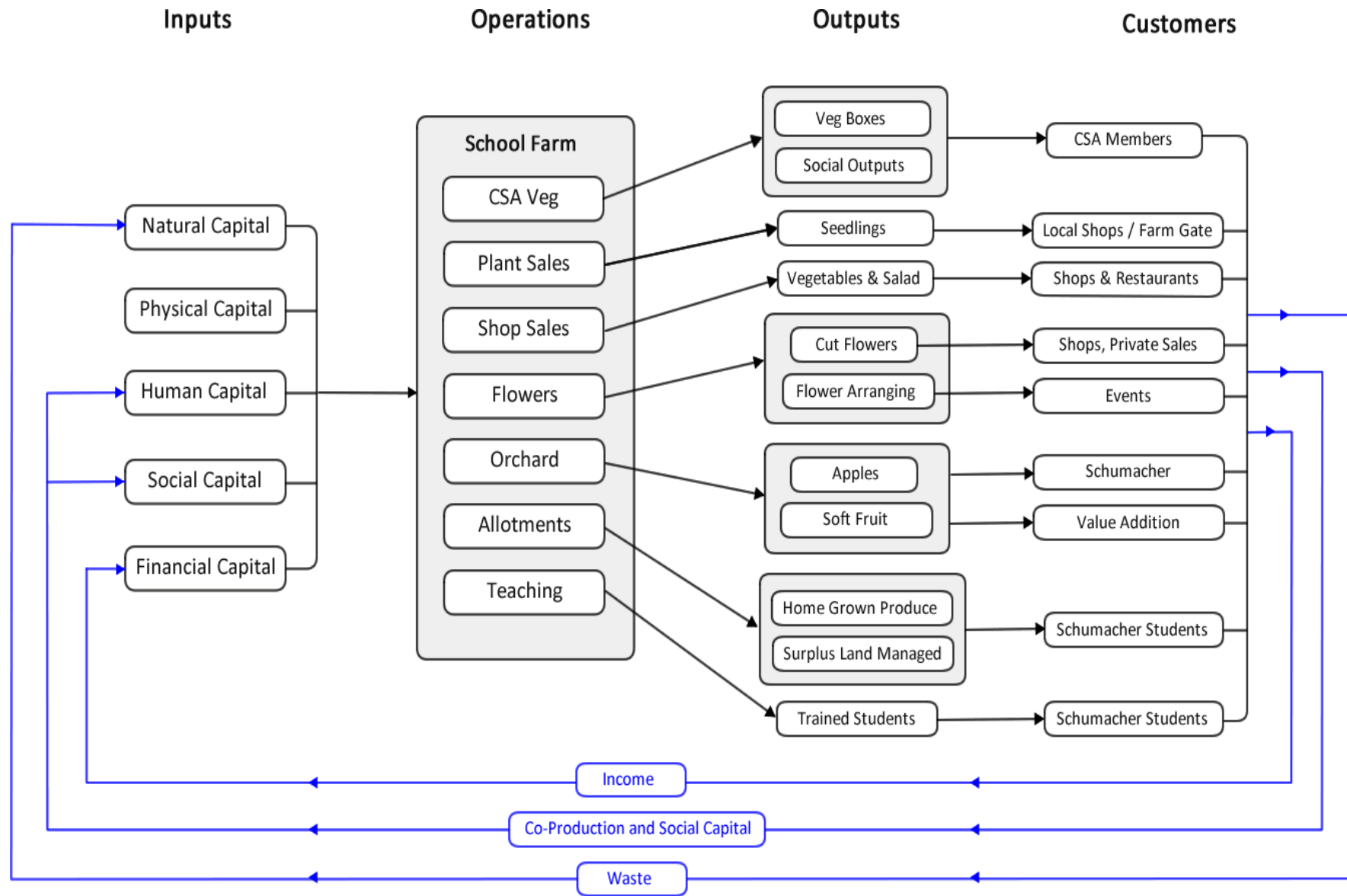
A simple systems model of a firm



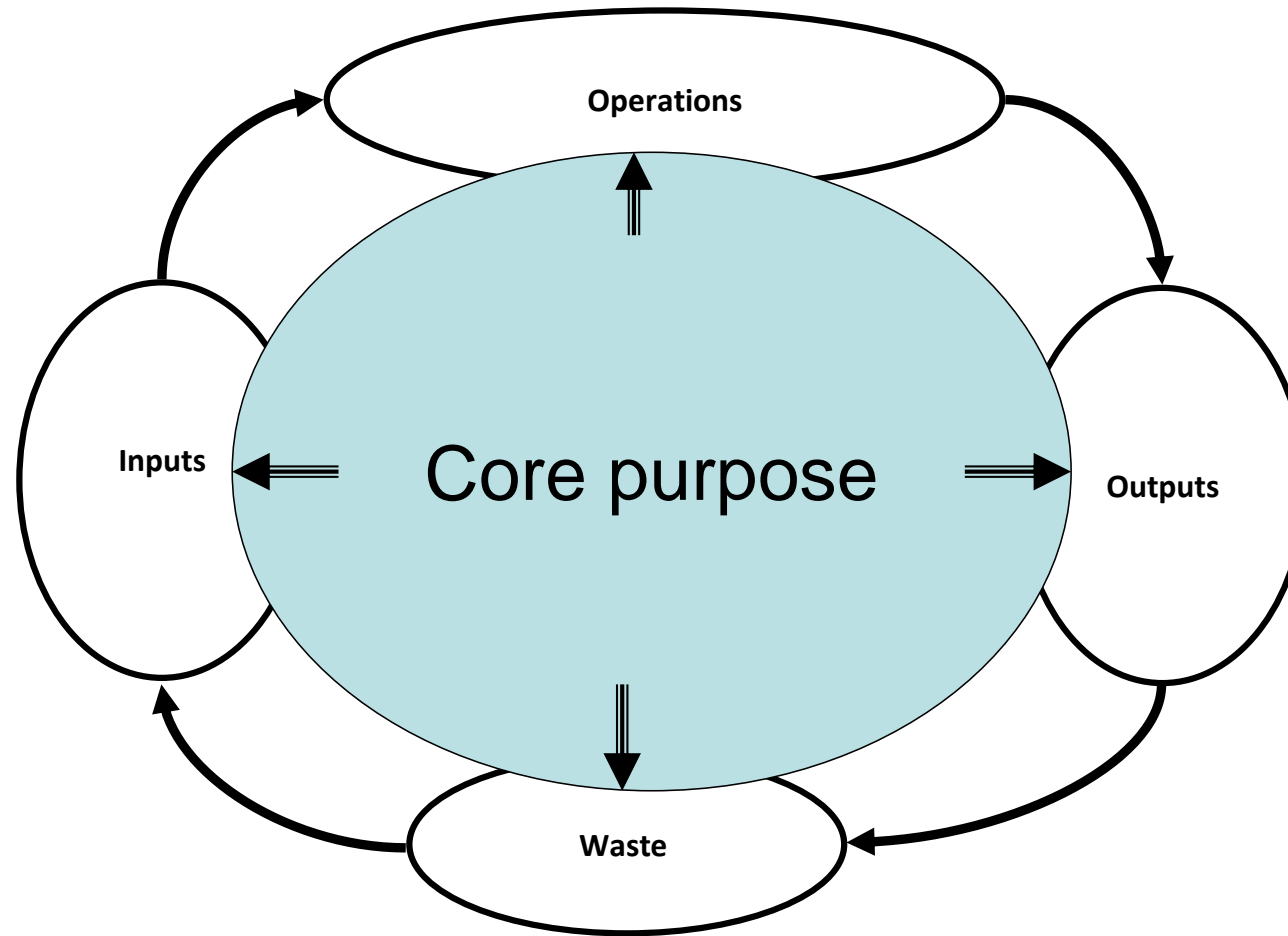
School Farm CSA

- A community supported agriculture enterprise
- Run by ex-students of Schumacher College

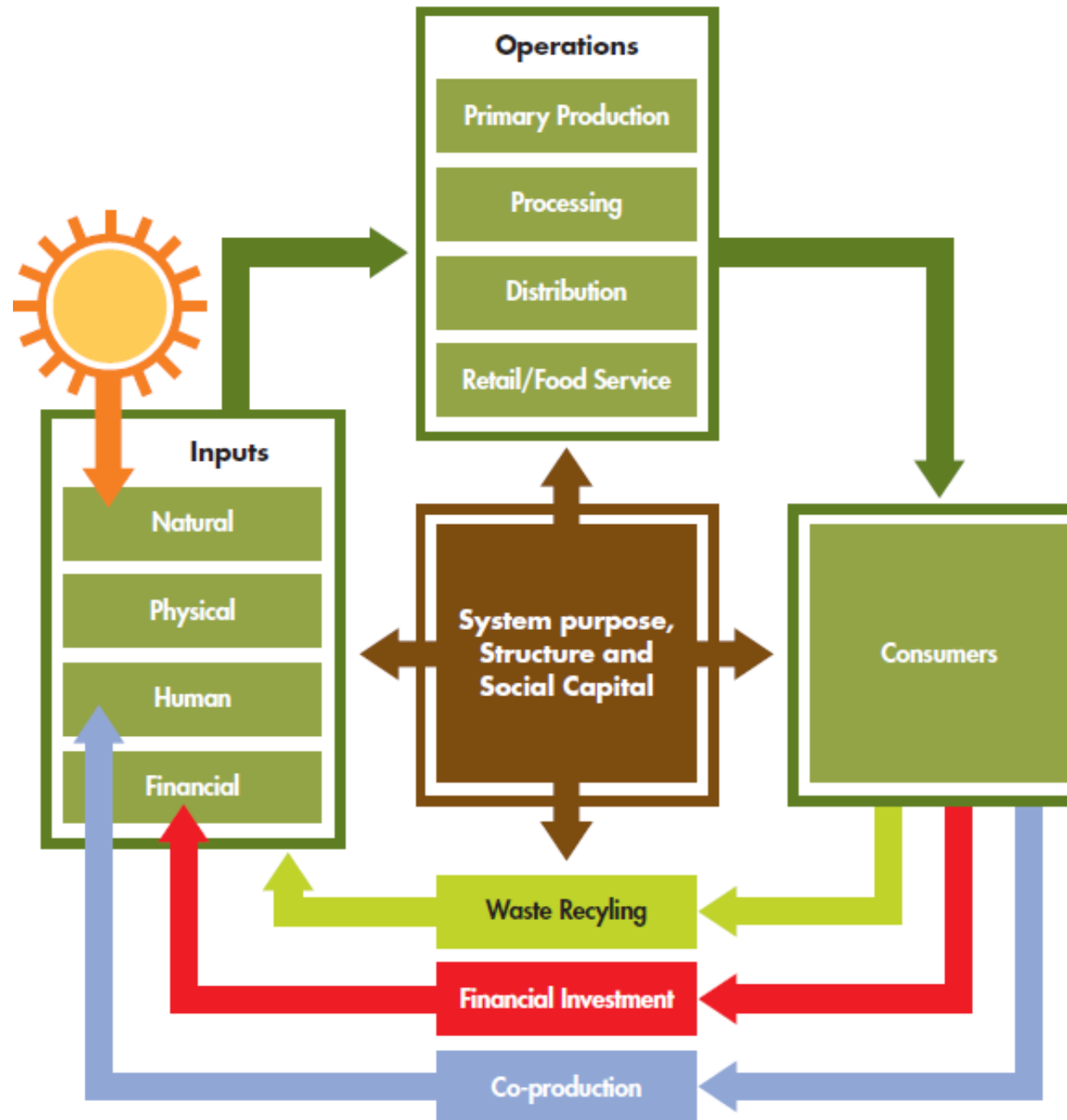




Source: Damon Steed



According to Meadows *“the least obvious part of the system, its function or purpose, is often the most crucial determinant of the system’s behaviour.”*



Ethical Paradigm:

- Sustainable
- Ecological
- Connected to place
- Democratic
- Fair and just

