

MAPPING

# Draw instructions for making toast.

## **Create an ecosystem map** for your project.

Include: Comparators / existing work Literature / theory Methods Audience / Actors Collaborators Current debates

Which areas might need more development, what are the priorities?

Continue to develop maps based on feedback and insights from the group. Consider the interdependencies.

# RELATIONSHIP MAPPING

"Of all the wise teachers who have come into my life, none are more eloquent than these, who wordlessly in leaf and vine embody the knowledge of relationship. Alone, a bean is just a vine, squash an oversized leaf. Only when standing together with corn does a whole emerge which transcends the individual. The gifts of each are more fully expressed when they are nurtured together than alone. In ripe ears and swelling fruit they counsel us that all gifts are multiplied in relationship. This is how the world keeps going."

Robin Braiding Sweetgrass/ Knowledge, and

- Robin Wall Kimmerer
- Braiding Sweetgrass/ Indigenous Wisdom, Scientific
  - Knowledge, and the Teachings of Plants

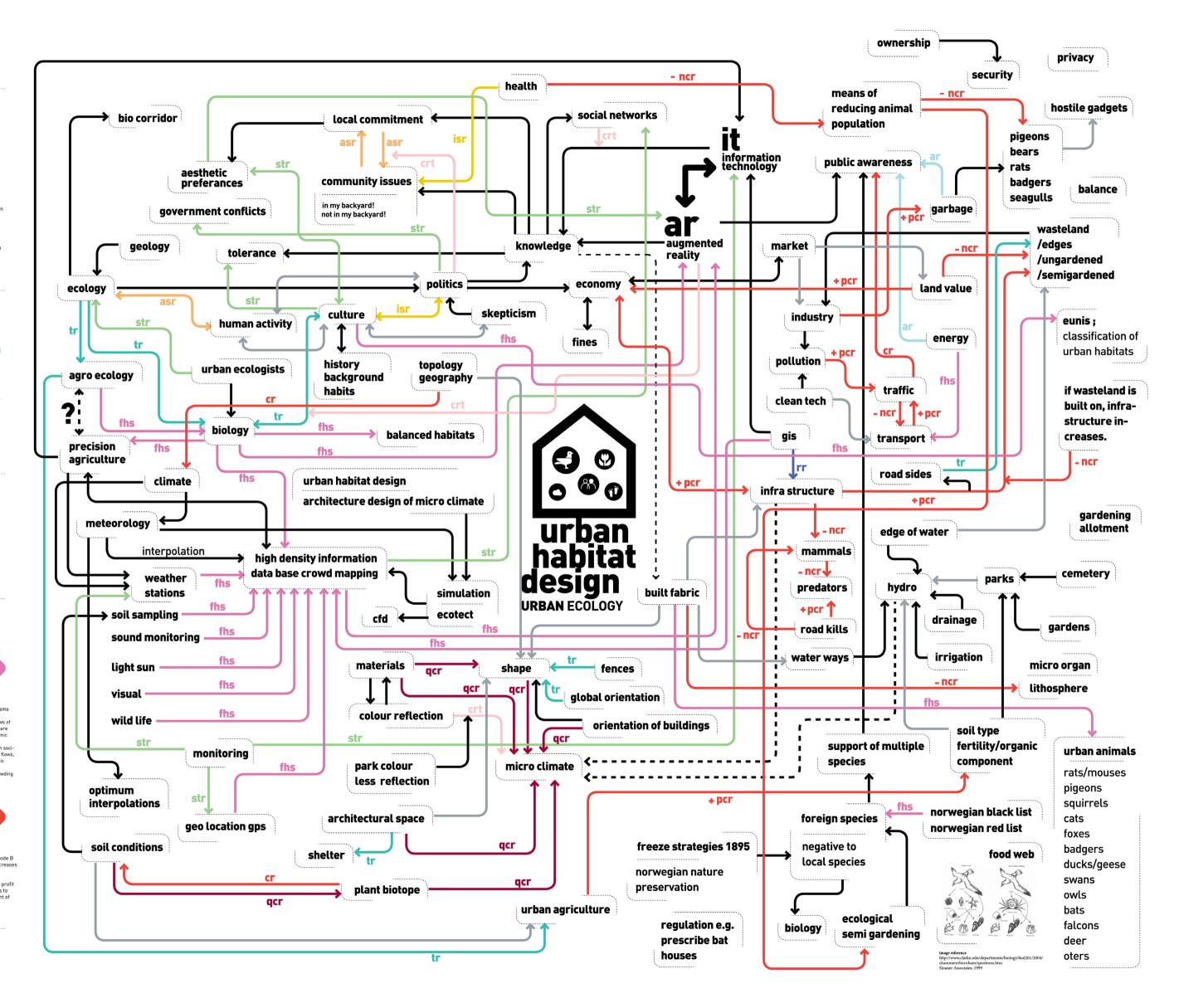
#### Types of Systemic Relations Birger Sevaldson

#### For a high resolution version visit: https://systemsorienteddesign. net/library-of-systemic-relations/

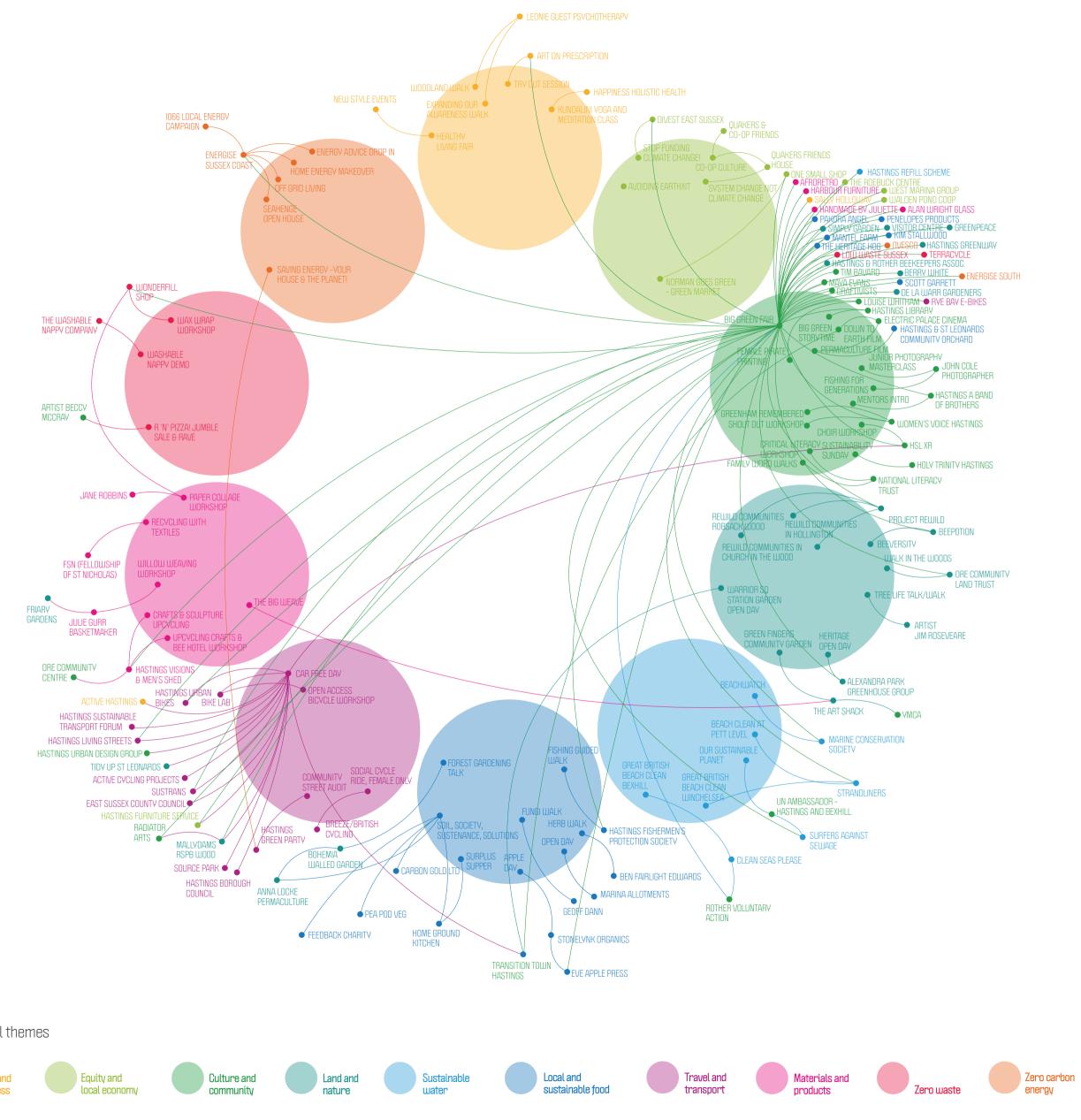
types of the second set of the suggestions for colour cod-ing arrows or lines in a diagram. In addition to these one should use differentiation of fonts for lines and one should also label rela-tions with description. more attnetion to the relations. A simple line or arrow or a plus or minus like in casual loop diagrams is not sufficient. Therefor i developed this list of possible types of relasystemic relations greens: structural relations hierarchical supra & sub systems misr msr str Micro systemic relation Structural relations (F Macro systemic relation Systems that are related because they share a relatio through a sub system: Example: The rubber in the tires of the cars and the bikes come from the same Relations that are caused by the enti-ties being subsystems in the same "supra-system" but without neces-sarily being inn direct contact with each other.
Example: Bikes and cars are related because they are sharing the same macro system: the roads. (They are related in additional ways than this)
Example: The winter coat and the bikini are both part of the clothing wardrohe of the same neceson a surplus output. The whole is more than the sum of the Example: The relation in the air traffic system between the planes and the control an its parts. This is not a bikes come from the same producer. Example: A Mixmaster and a hair dryer can share similar electronic parts from the same manufacturer. ample: there is not a blues: associative semantic & thematic relations rr ar Associative relation Example: Genres of music. There are many possible relations between genres of music but if we think of the relation between the music of the Australian aborigines and a symphony by Bach we can only think of very few like biological (music being programmed in our genes) and thematic relations (hord Metaphors and analogies: These are the types of rela tions that pop up in brain storms by associations. Images, representation, videos, simulations, AR Example: The relation between a map and a landscape ing devices and there needs not necessarily to be e.g. a causal relation between members of a theme. Example: If two people are very similar to each other in their look there is an as-sociative relation. Example: If I say bird, you say fish Example: the relation be tween Universal Design a Ergonomics yellows: social relations ssr isr Structural social relations Institutional social relation Actions Example: Family, friends etc Example: Work, municipality, nation, culture, language etc. Social relations Example: Sharing political interests. reds: hard relations casual relations, flows etc fhs acr Causal relatior The amount or intensity will not be influenced but the quality will be changed Cause and effect models 1.3.2. Flows in human systems les in our society. They are Example: The relati driven by needs and economic forces. Example: AR used to increa Examples related to human soci ty: Material flows, Energy flows Example: If the heat is t Information flows, Economic flows. Stock markeds. Examples: Traffic flow. crowd n the kettle starts to boi xample: If the tolls for e ig the city by car increas **C** fns ncr pcr Positive relations Flows in natural system If node A increases, the node B increases or if node A decreases node B decreases: lf node A increases, node B decreases hese are driven by pro entiation of pressure, but the shapes of the flows themselve are generated by internal cha-tic principles resisting similar Examples: The fox and rabl example, (this tends to be a self stabilizing system) Example: The increase of profit on the stock market leads to the increase of the amount of ons, but on a det Examples related to natural phenomena: water, air, mag ma, cosmic particle flows et

SYSTEMS ORIENTED DESIGN





#### Mapping festival actors



Bioregional themes

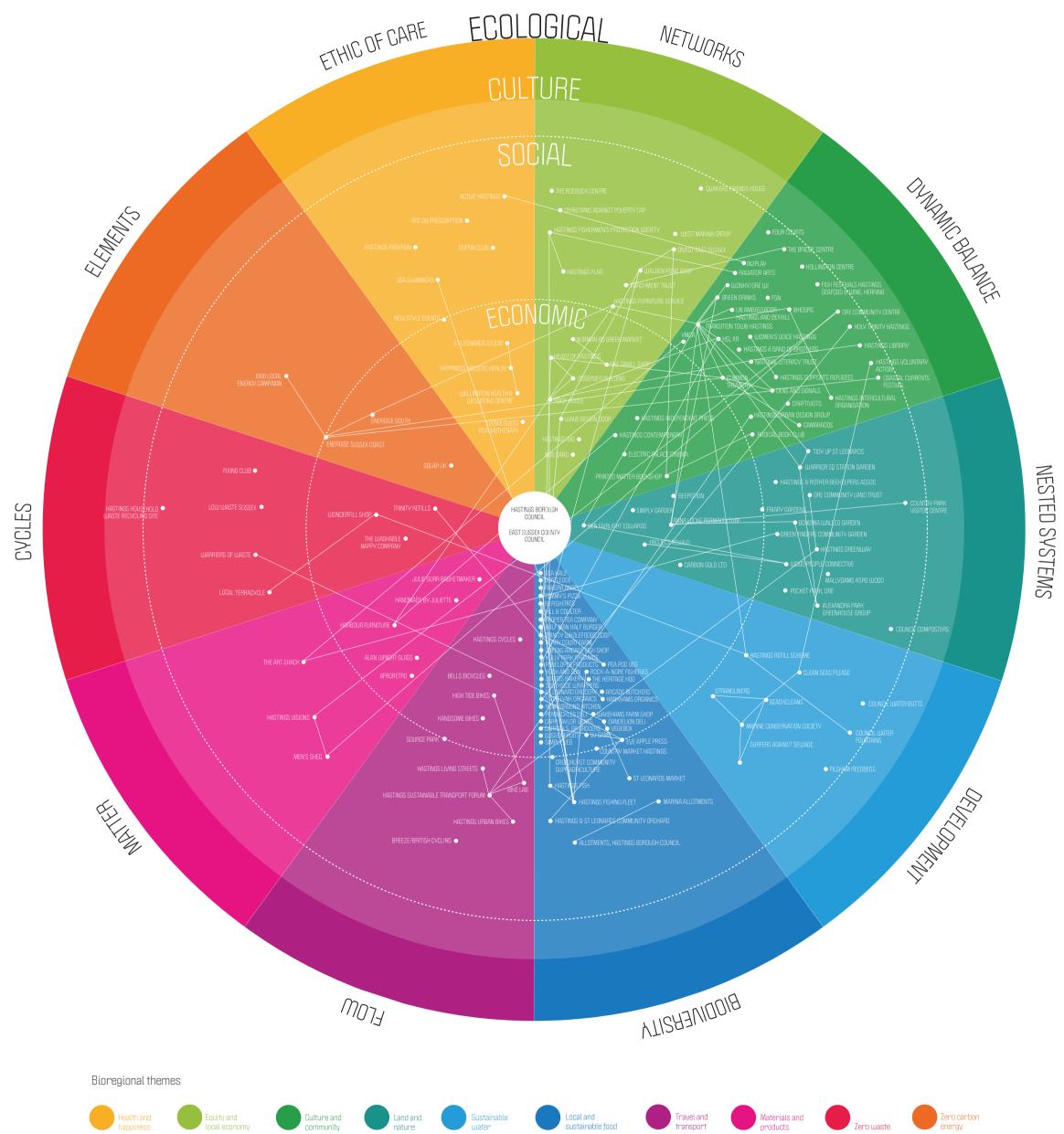








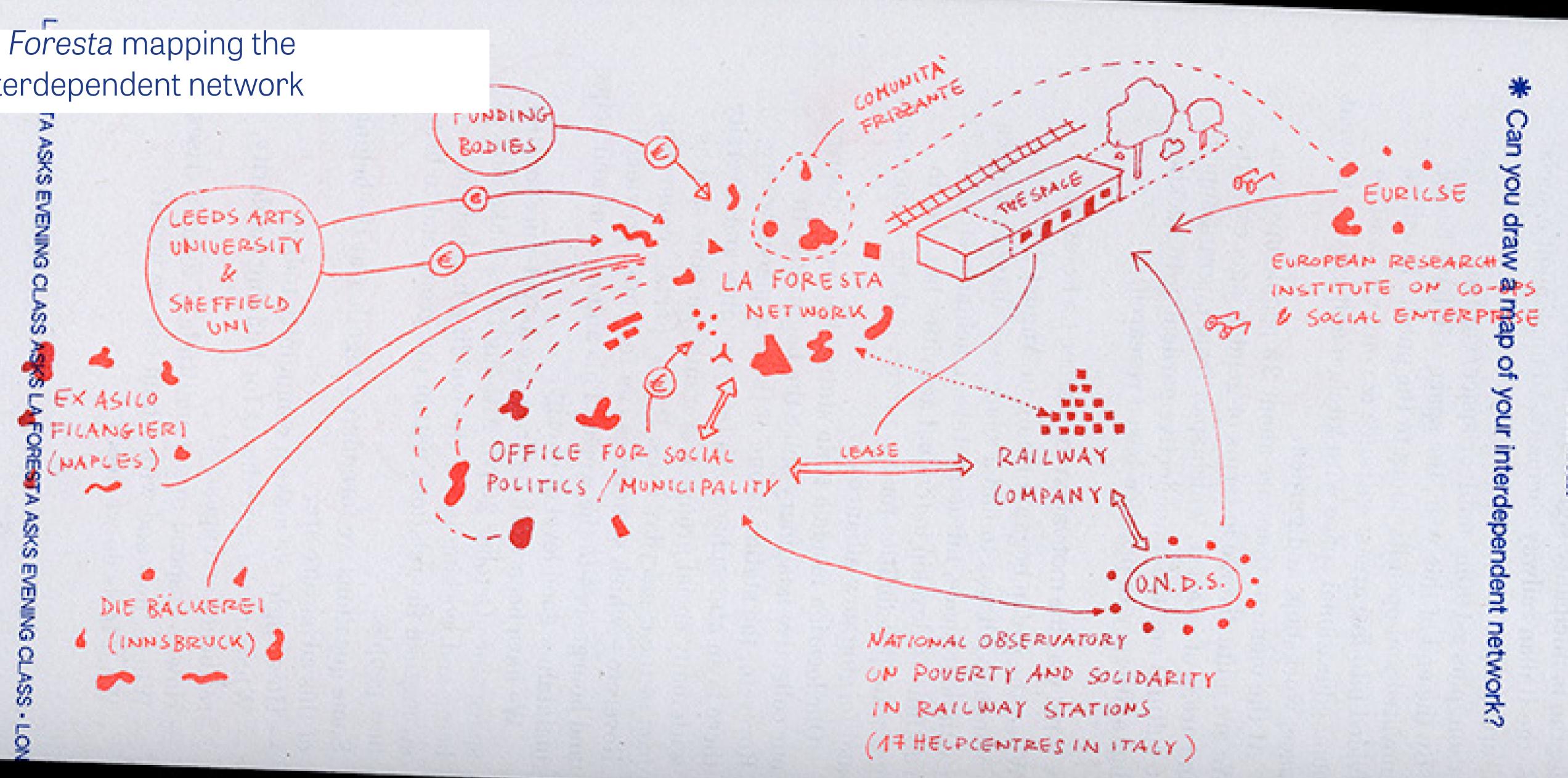
Mapping a network







### La Foresta mapping the interdependent network



### Map the relationships that are necessary in your project work.

- Write a goal or purpose of your system or creative proposition at the top.
- Write 'actors' within this work on separate post its.
- Who is important? Who is missing e.g. comparators, non human actors? Add any new actors you want to include.
  - Cluster actors and also draw 'casual' links to indicate connections or relationships.

Observations or insights? Where are the strong relationships and where there are gaps? Opportunities? Challenges? Barriers?

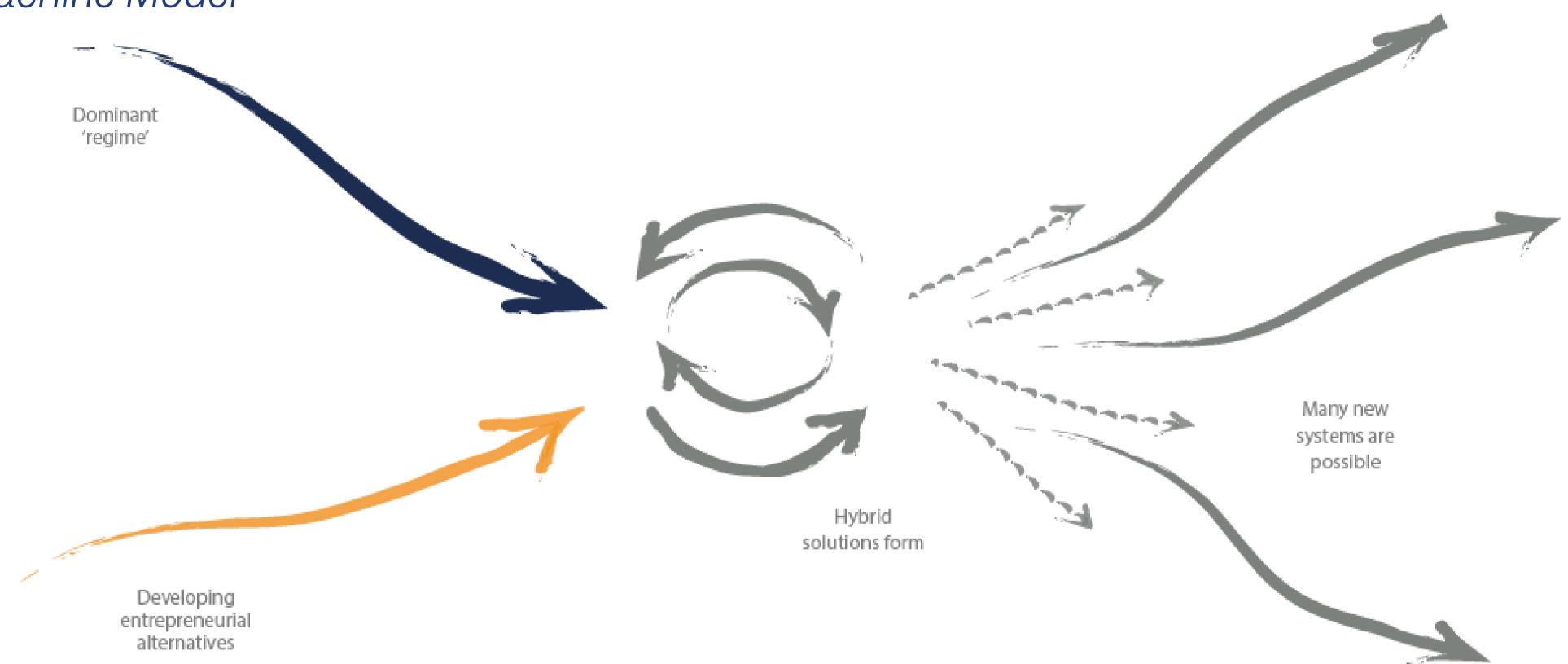
Formulate a plan to address where you might develop relationships, who you might need to communicate with, and where you may need to invite others to participate.

SYSTEMS SHIFTING DESIGN

Fixing or optimising an existing system is different to the possibility of creating something different and better. The new system might initally look like a series of new systems or **system shifts**.

Systemic opportunities require collaborative innovation because they require new connections to be made.

### Systems Innovation: Washing Machine Model



Systems Innovation, Charles Leadbeater & Jennie Winhall https://www.systeminnovation.org/



purpose, power,

Charles Leadbetter and Jennie Winhall suggest that system shifts are unlocked by working with **four keys**: resources and relationships.

### Draw a multi-level system map

**BIO-ECOSYSTEM -** BIOREGIONS, WATERSHEDS, ECOTONES

**MACROSYSTEM -** GOVERNMENT, NATIONS, CULTURE

**EXOSYSTEM -** COMPANIES, INSTITUTIONS, ORGANISATIONS

**MESOSYSTEM -** WORKPLACES, SCHOOLS, RELIGIOUS CENTRES

MICROSYSTEM - LOCAL COMMUNITY

**CENTRE -** PERSON, FAMILY, FRIENDS

Social Ecosystem map from Design Journeys Through Complex Systems Practice Tools for Systemic Design Peter Jones, Kristel van Ael

Take the same 'actor' postits (or write new ones) and place them within the circles where you think they sit in the ecosystem.

Are there new actors that you want to include now?

- Where is the power in this system?
- Can you see ways in which you might shift this power?
- Where are the resources in this system?
  - Can you see ways to shift resources?
- What shifts in relationships might be necessary to achieve changes in power and resources?