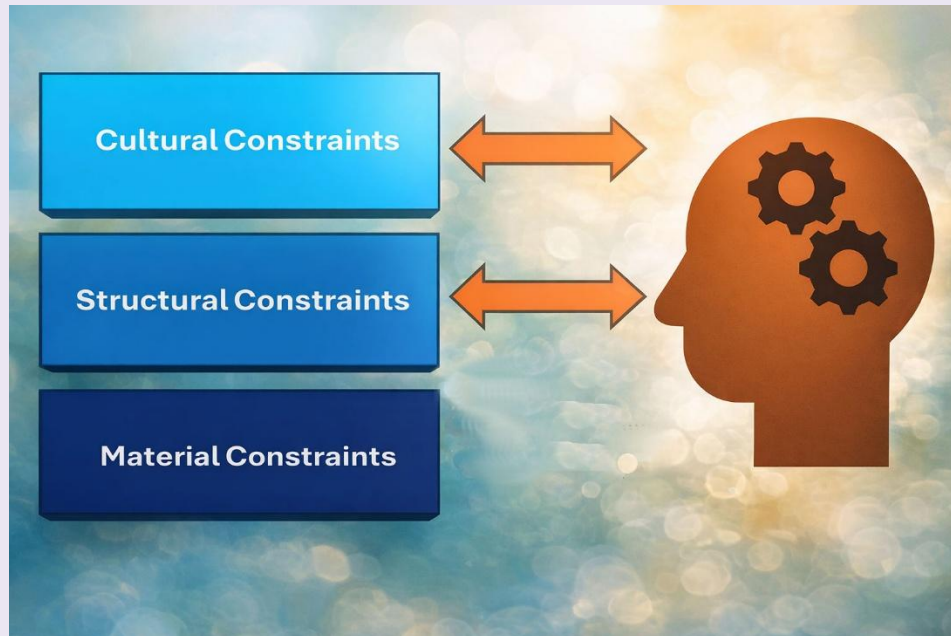




SST-19 The Morphogenetic Cycle in Evolutionary Context



A government is considering a new policy.

Economic conditions are difficult. Resources are limited. Certain options are simply not feasible. These are material constraints.

At the same time, existing institutions and laws shape what can be done. Some actions are permitted, others are not. These are structural constraints.

There are also expectations. Public opinion, values, and beliefs influence what is considered acceptable or appropriate. These are cultural constraints.

Decision-makers must navigate all of these at once.

They assess the situation, consider alternatives, and choose a course of action. Their decisions lead to changes; in policy, in institutions, and sometimes in cultural expectations.

Over time, these changes alter the conditions under which future decisions will be made.

This is not a one-off process. It is continuous.

It is the morphogenetic cycle in action.

Formal Description

The morphogenetic cycle is the process through which material, structural, and cultural constraints condition the actions of agents, and agents reproduce or transform those constraints over time.

In reflexive social systems, agents are capable of recognising and responding to these constraints, and of deliberately modifying them through their actions.

The morphogenetic cycle represents the integrated operation of constraint regulation across material, structural, and cultural domains.

It is the latest evolutionary expression of constraint regulation in viable systems.



Plain English Explanation

We can now bring everything together.

In earlier modules, we saw that:

- systems survive by regulating constraints
- new capabilities emerge that improve this process
- increasingly complex forms of organisation develop

In human societies, all of these processes come together.

At any point in time:

- material conditions define what must be satisfied for a system to be viable
- structural conditions define what is possible
- cultural conditions define what is appropriate

These constraints shape what people do.

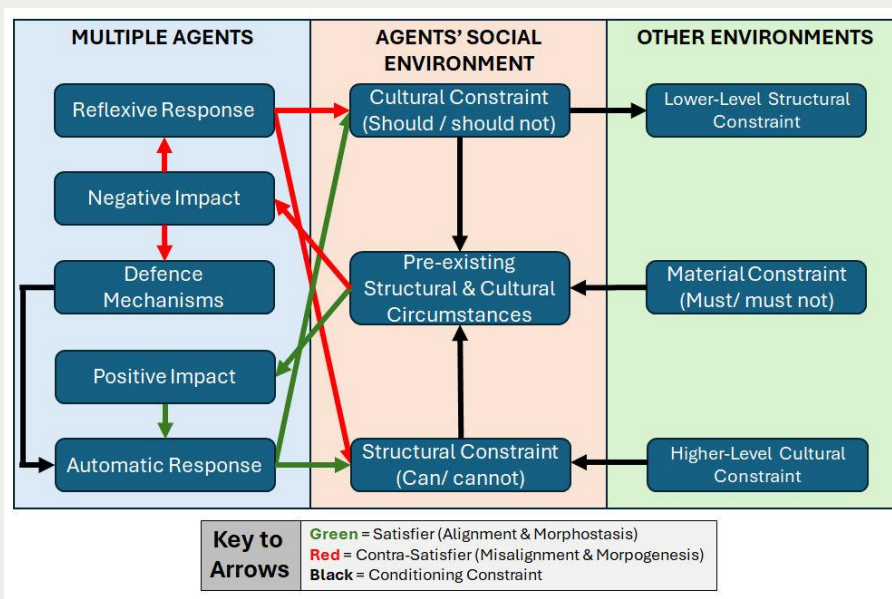
People then act:

- they make decisions
- they interact
- they organise

Through these actions, they either:

- reproduce existing conditions (stability)
- or change them (transformation)

The results of these actions become the new conditions for future behaviour. This ongoing process is the morphogenetic cycle. It is not separate from evolution; it is the most advanced form of it.





Example 1 (Policy)

A government responds to economic constraints by introducing new policies. These policies change institutional arrangements and influence behaviour.

Example 2 (Organisation)

A company restructures in response to market conditions. New roles and processes emerge, altering future possibilities.

Example 3 (Social change)

Changing cultural attitudes (e.g. towards technology or environment) influence behaviour, leading to new institutions and practices.

Provenance and Links

This module draws on:

- The morphogenetic approach developed by Margaret Archer, which distinguishes between structural and cultural conditioning and social interaction over time.
- General systems and evolutionary theory, which explain how systems persist and change through the regulation of constraints.
- The broader framework developed in this paper, which situates the morphogenetic cycle within a continuous evolutionary process of constraint regulation.

This module integrates these perspectives by showing how the morphogenetic cycle represents the most advanced form of constraint regulation in reflexive social systems.

Practical Exercise

Choose a real-world example (e.g. a policy change, organisational change, or social movement).

Explain:

1. What material, structural, and cultural constraints were present?
2. How did agents respond to these constraints?
3. Did the outcome reproduce or transform the system?

👉 Write a short paragraph (6–8 sentences).