

There are two non hierarchical modes of system interaction when talking about *de rerum ordine*.

Quatenus ad universum spectat
(Insofar as it concerns the Whole)

Quatenus ad partes spectat
(Insofar as it concern the Parts)

The consistency of states is to be considered both with respect to the whole state and with respect to its parts.

Incoherence is the failure of constraint-consistency across scopes of a system

This failure of constraint-consistency is *ibidem* the case in which a constraint is respected at the level of the meta-system, but not followed within the intra-system, the inter-system, or the supra-system.

Grammatica Universa

De Transitu Sine Regressu et Compensatione

(On Irreversibility and Compensation)

Auctor Rerum

Structural Consequences

Ex repetitione status mutatur.

- **Iteration:**

A single constraint state transition:

State_(System A) →

Constraint →

New State_(System A)

- **Interaction:**

Occurs when the constraint-driven state changes emerges outside the originate system.

State_(System A) →

Constraint →

New State_(System A+B)

De Transitu Sine Regressu:

- When an iteration or interaction causes a state change in a system, the system cannot go back to its previous state *sine mutatione*.
- Even if the new state is – *indistinctus a priore* – from the old one this new state cannot be considered the same as the old state.
- Iteration preserves the system boundaries; interaction redefines them. That redefinition is irreversible - *sine regressu*.

Compensation:

- Given persistence, the system compensates for the state change, whether this compensation is interpreted as positive or negative it's irrelevant for the system's persistence *praeterquam terminatione*.
- Compensation can not happen in the same layer as the iteration or interaction. For compensation to happen, it needs to be integrated respecting the level of the iteration or interaction.