

Doctoral Programme LIVES
Resources and well-being in a life course perspective
February 12-15, 2024

Session on Feb 12, 2024; 9:00 – 10:30

The Life Course Cube
Life course research as an interdisciplinary enterprise

1. Disciplines involved in Life Course Research
2. A theoretical basis: A model of life course behaviour
3. Bringing things together: The Life Course Cube

In between, I will ask questions to the plenum and I will ask you, divided into three groups, to look for examples that illustrate certain points I am making (group work). We discuss them in the plenum.

1. Disciplines involved

- Anthropology (Life history theory)
- Biology (Life cycle of organisms)
- Criminology (Delinquency careers)
- Demography (Cohort analysis)
- Economics (Intertemporal choices and life cycle)
- Epidemiology (Pathways to later health)
- History (Oral History, Biographies, Prosopography)
- Political Science (Life course politics)
- Psychology (Life span development)
- Sociology (Individual life course and social change)

**Question to the Plenary:
Is anything important missing?**

What disciplines are involved in your project?

Added:
Natural Science
Geography

2. Theoretical Basis: A model on what doing next in life

The life courses can be perceived as a process of *individual welfare production and maintaining* homeostasis in a changing environment (*allostasis*).

Our task: Explaining individual behaviour or actions over time time which are supposed to fulfil this requirement
– e.g. in the life domains of education, work career, family

Life course research: Theory

More generally one could assume:

Individual behaviour is determined by a (still not very well understood) algorithm A (in the brain) with a biological- und cultural-evolutionary moulded functional structure.

Its differently stable parameters are determined by

- *the biological/genetic and cultural inheritance of human evolution, e.g. ingroup/outgroup moral*
- *the individuals' socialisation and life experiences, e.g. personally acquired attitudes and convictions*
- *situation related circumstances, e.g. time pressure to act*

Life course research: Theory

What to do next ?

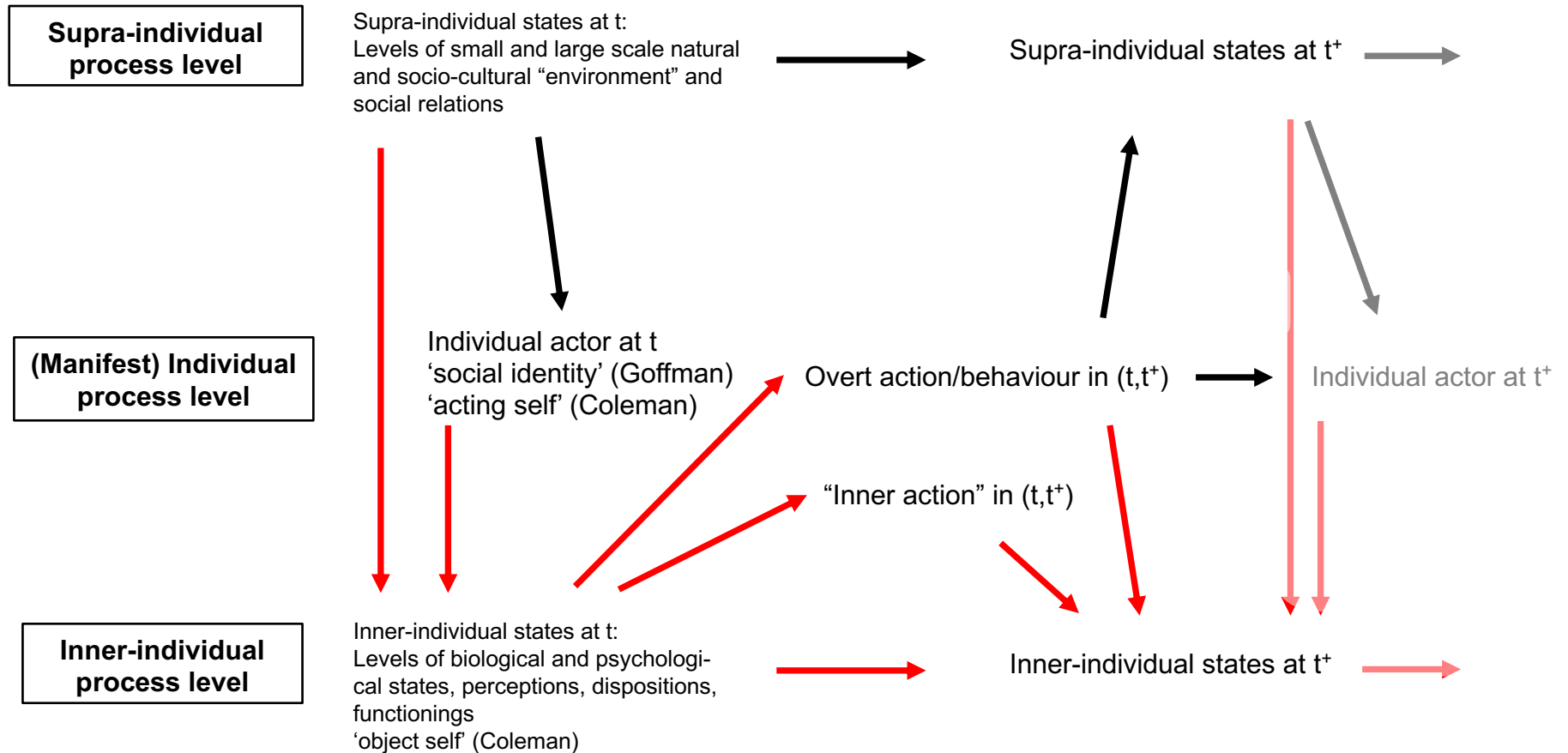
What to do next ($V(t)$) for an individual — so a possible approach — is determined due to the principle of an according to A “optimal” balance between investment and outcome in order to maintain individual welfare W

$$E_A(W_{t+\Delta t}(V(t))) \stackrel{!}{=} \max$$

This “rule” applies to *conscious* action or *unconscious* behaviour.

Missing the optimum from an “objective” perspective is possible because of the subjective biases in A (due to “Maladaptation”).

Life course research: Theory



**Do we as social scientists need such a
detailed model with three process levels?**

Think of your own project or beyond

3. Bringing things together: The Life Course Cube

A simple, coherent model of the life course as a conceptual basis

The life course is a multidimensional behavioural process (of welfare production and maintenance) performed and experienced by individual actors in their natural and social environment.

It is shaped by interdependencies

- across time $t = x + c$ (age x , date of birth c)
- in different life domains or fields of behaviour d
- influenced by and influencing processes on different levels l of aggregation.

Life course research: Idea for a model

It can then be modelled as a multidimensional stochastic process

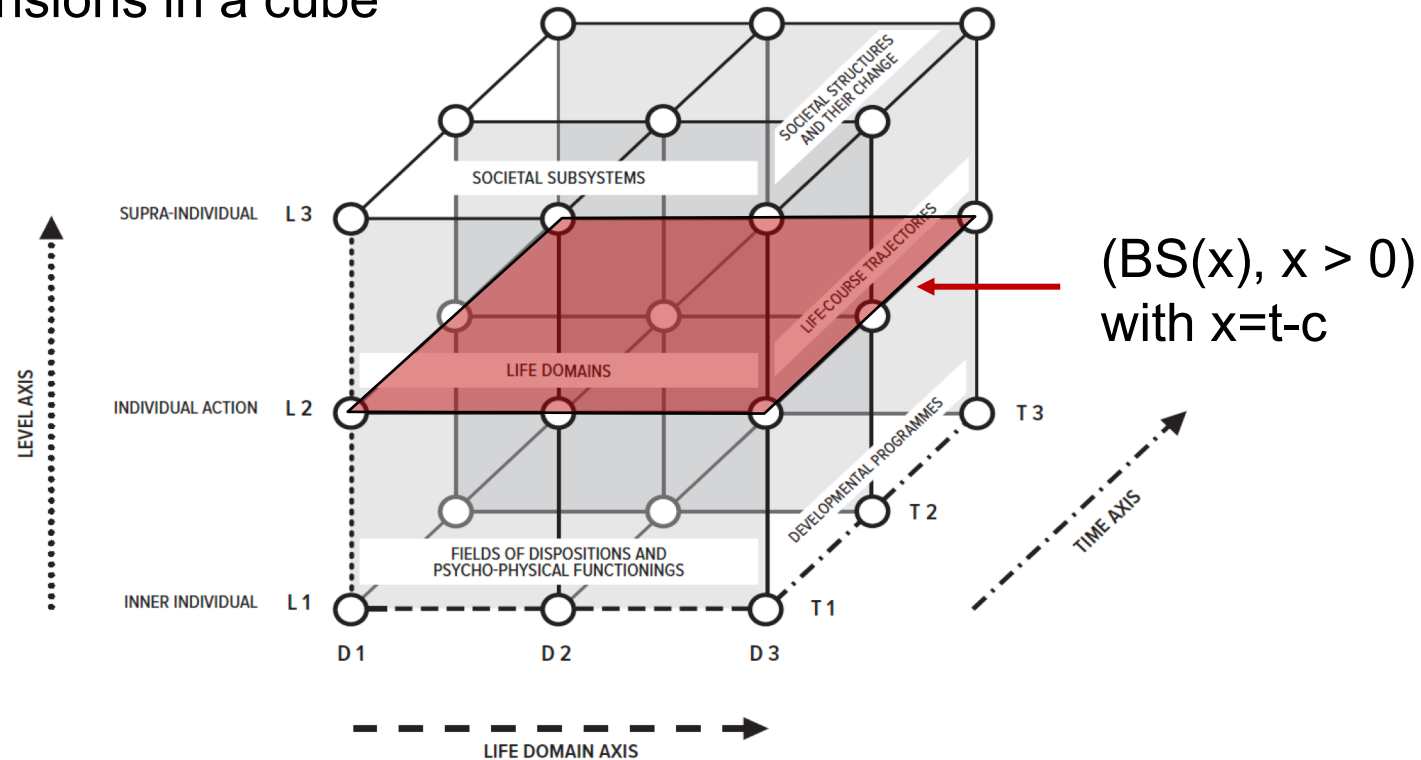
$$BS(x) = (Z_k(l,d;x): l=1,...,L; d=1,...,D; k=1,..., K_{l,d}, x > 0)$$

The *biographical status* at age x , $BS(x)$, is a multidimensional vector of attributes $Z_k(l,d; x)$ on levels l , in life domains d , and at age x or at $t=x+c$.

The $Z_k(l,d;x)$ span a multidimensional state space (Σ) of $BS(x)$ at age x – which changes over time due to *life events*.

The Life Course Cube

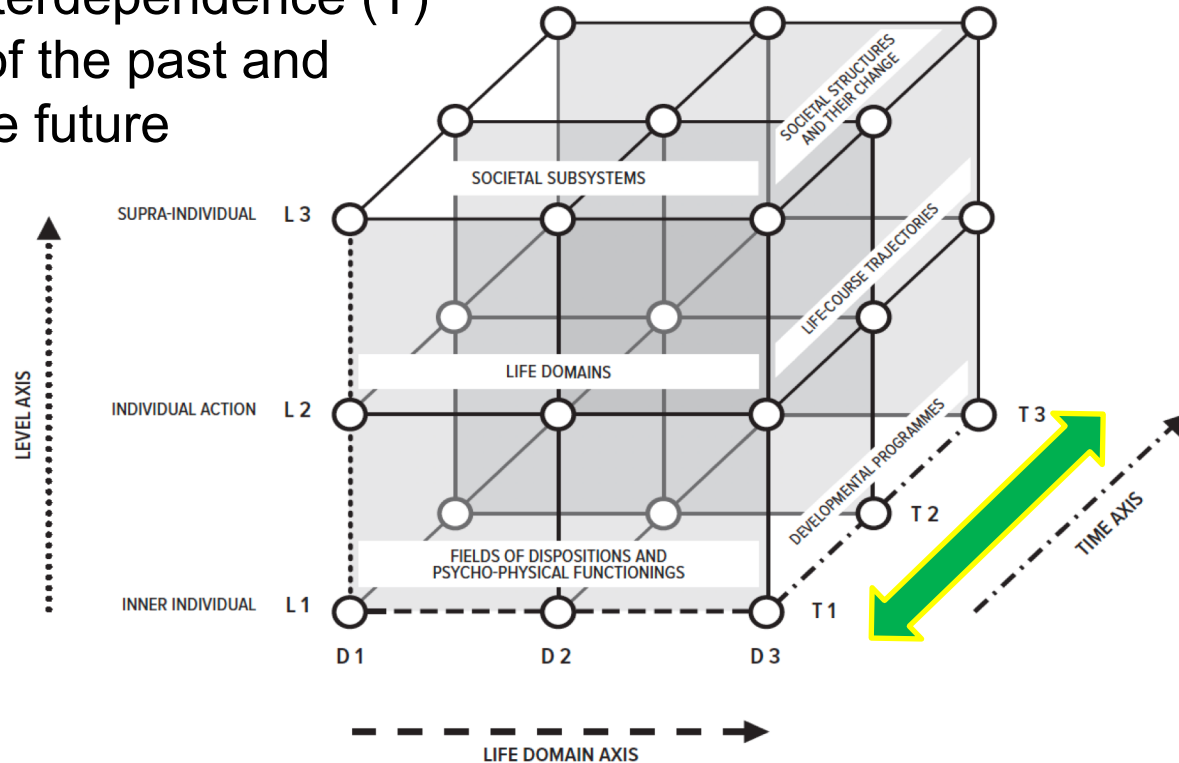
The three dimensions in a cube



→ Three kinds of “First Order Interdependencies”

The Life Course Cube

Time related interdependence (T)
The „shadow“ of the past and
the “glow” of the future



Concepts:

Path dependence, anticipation; turning points

Group work: Please think of examples regarding

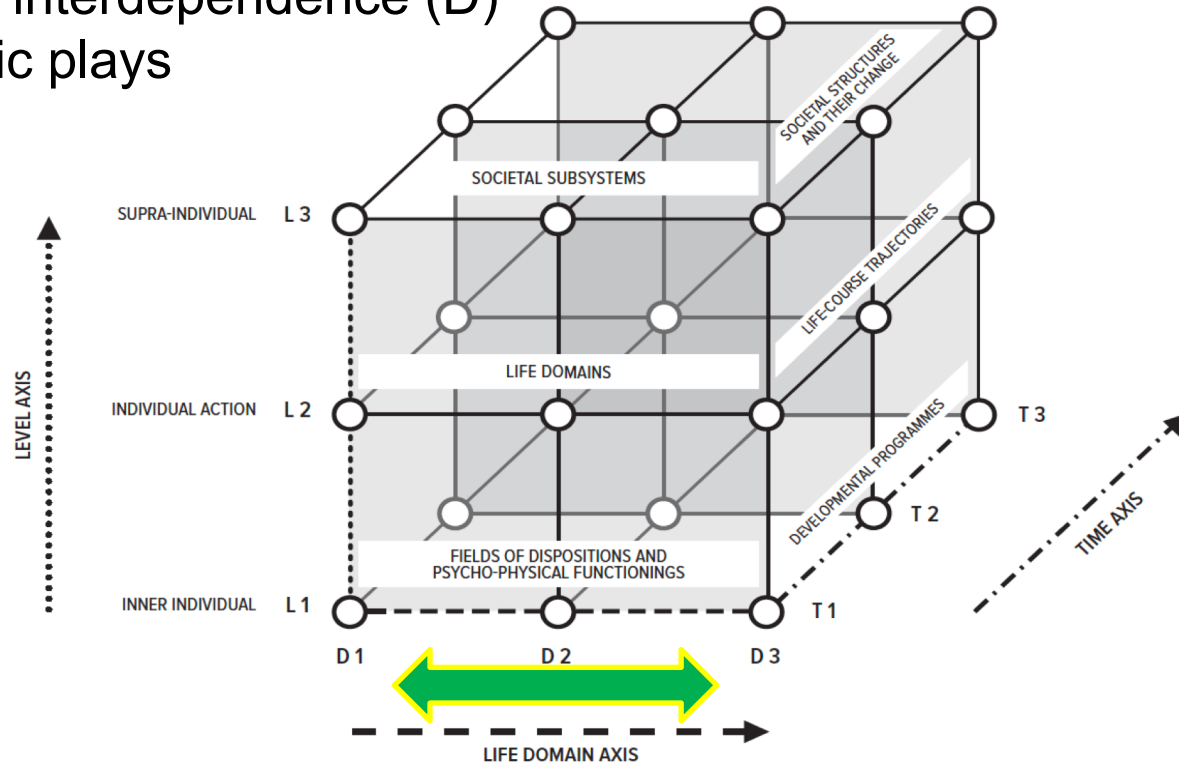
Time related interdependence

(path dependence, anticipation, turning points)

(Think of your projects)

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Domain-related interdependence (D)
Where the music plays



Concepts:

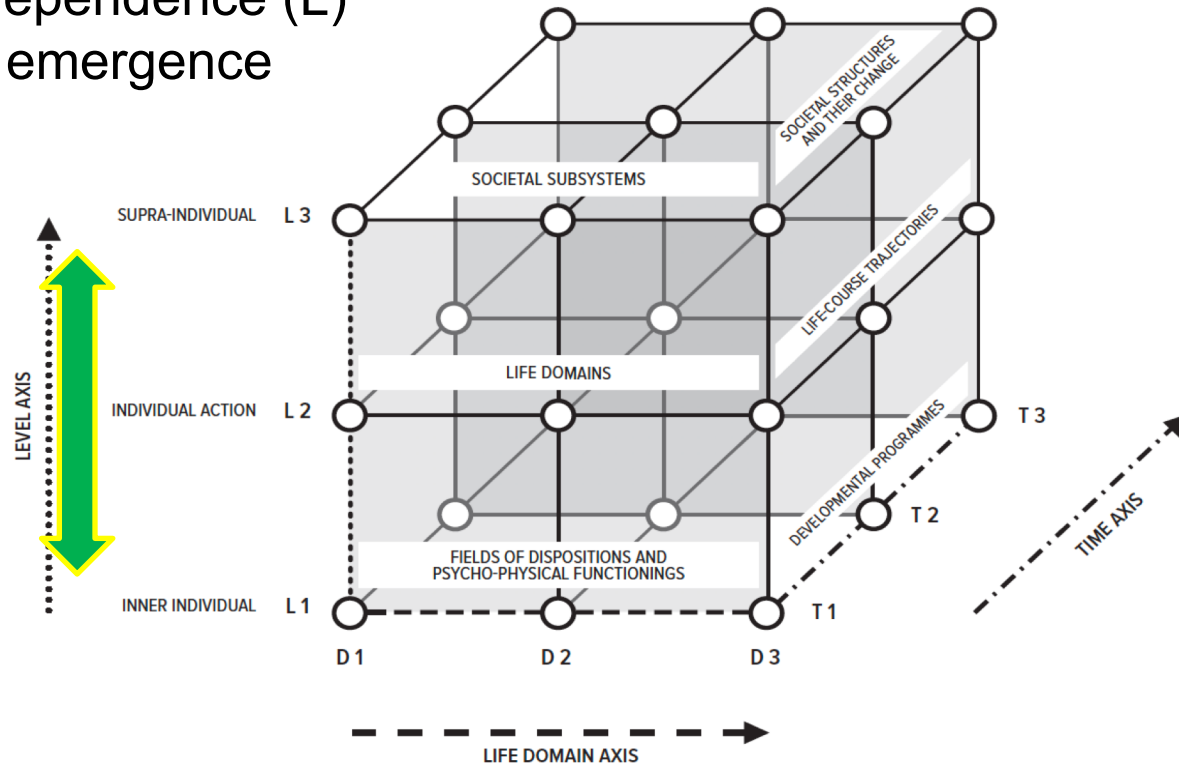
In regard to *resources*: competition, supportivity, compatibility; “coupled production”
In regard to *outcomes*: compensation, substitution, spill-over, complementarity

Group work: Please think of examples regarding
Domain-related interdependence

(*Resource* competition, supportivity, or compatibility)

(*Outcome* compensation, substitution, or spill-over/complementarity)

Multilevel-interdependence (L) The ‚miracle‘ of emergence



Concepts:

Socio-cultural environment → inner-individual states/processes; overt/inner behaviour

Neuro-psycho-physical resources/dispositions/functionings → overt/inner behaviour

Overt individual behaviour → inner-individual states/processes; societal change

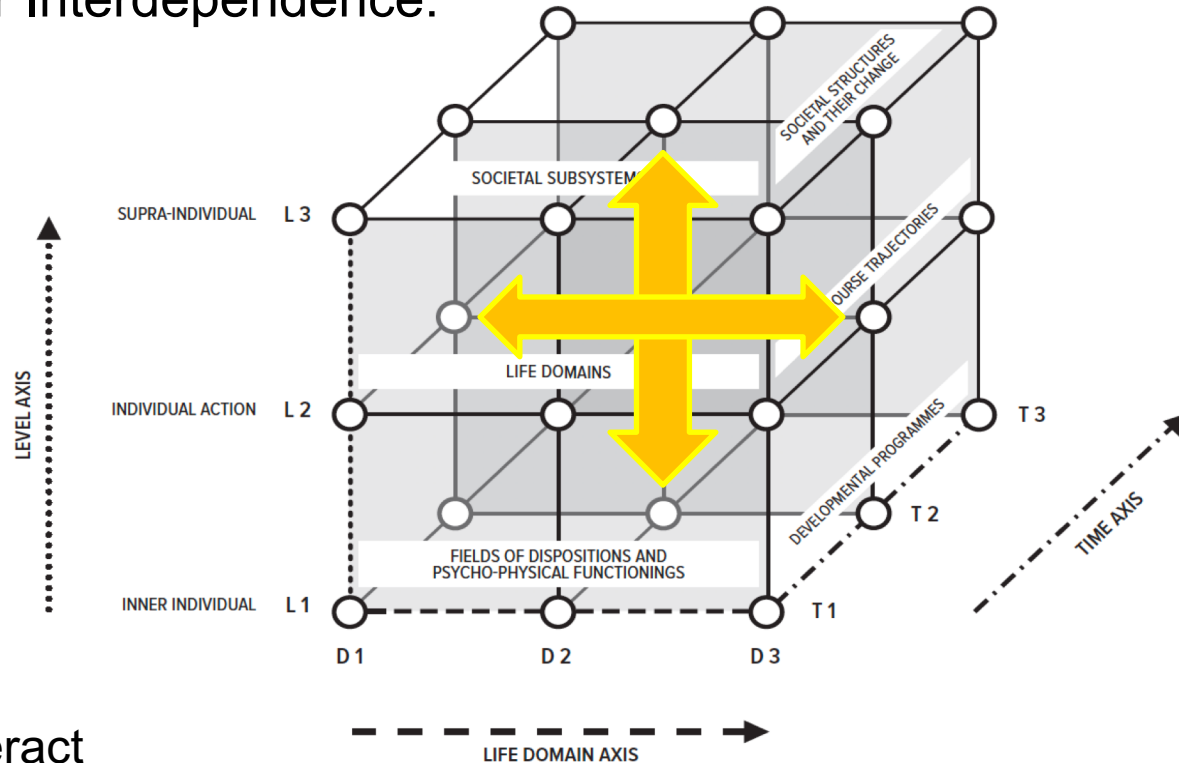
Group work: Please think of examples regarding Multilevel-interdependence

(Supra-individual process level → inner-individual and individual process level)
(Inner-individual process level → individual process level)
(Individual process level → inner- and supra-individual process level)

Second Order Interdependencies

- The connection between the multi-level structure and multiple life domains (L^*D)
- The connection between time-related interdependence and the multi-level structure (L^*T)
- The connection between time-related interdependence and multiple life domains (T^*D)

Second Order Interdependence: L und D



Level and domain
specific states interact

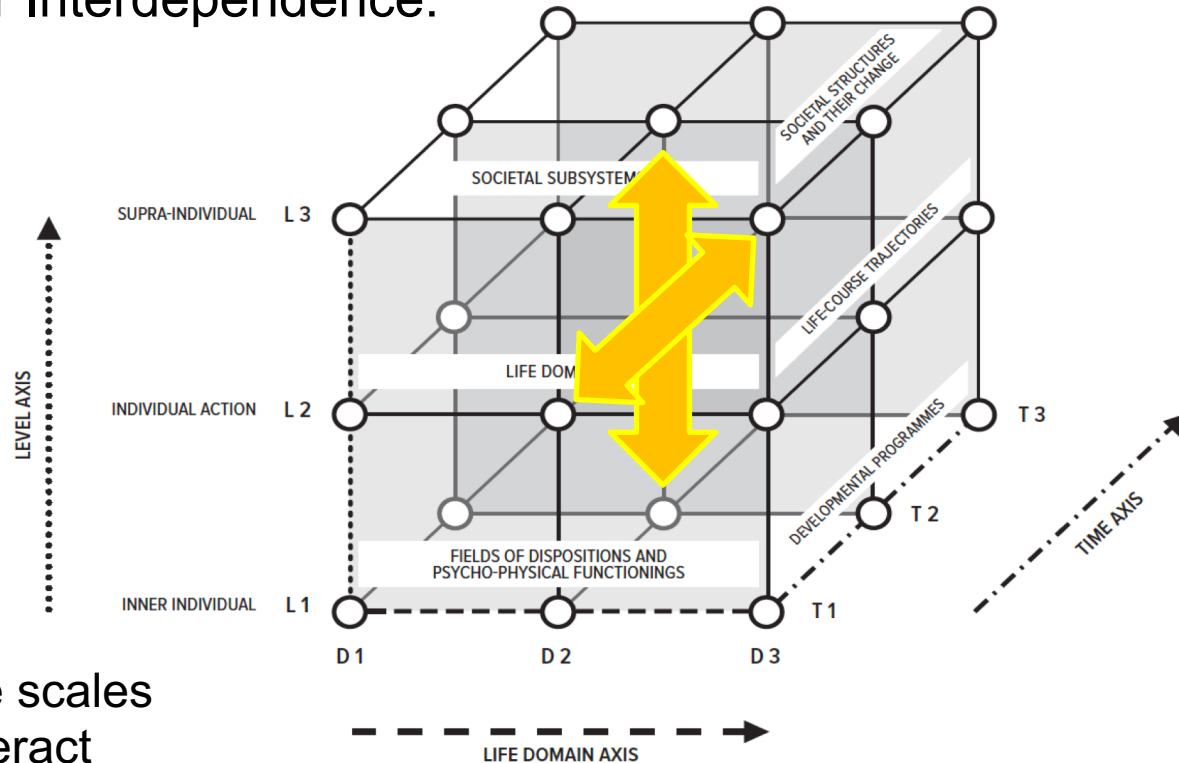
Biological/mental subsystems $\longleftrightarrow$ *life domains* $\longleftrightarrow$ *societal subsystems*
→ different organizational principles guiding life domain-related regulations
and activities at different levels and the question of how they fit

Question to the plenum

What might be differences in dealing with health problems at the inner-individual, the behavioral, and the societal level (healthcare system) – and how do they fit

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Second Order Interdependence: L and T



Level specific time scales
and schedules interact

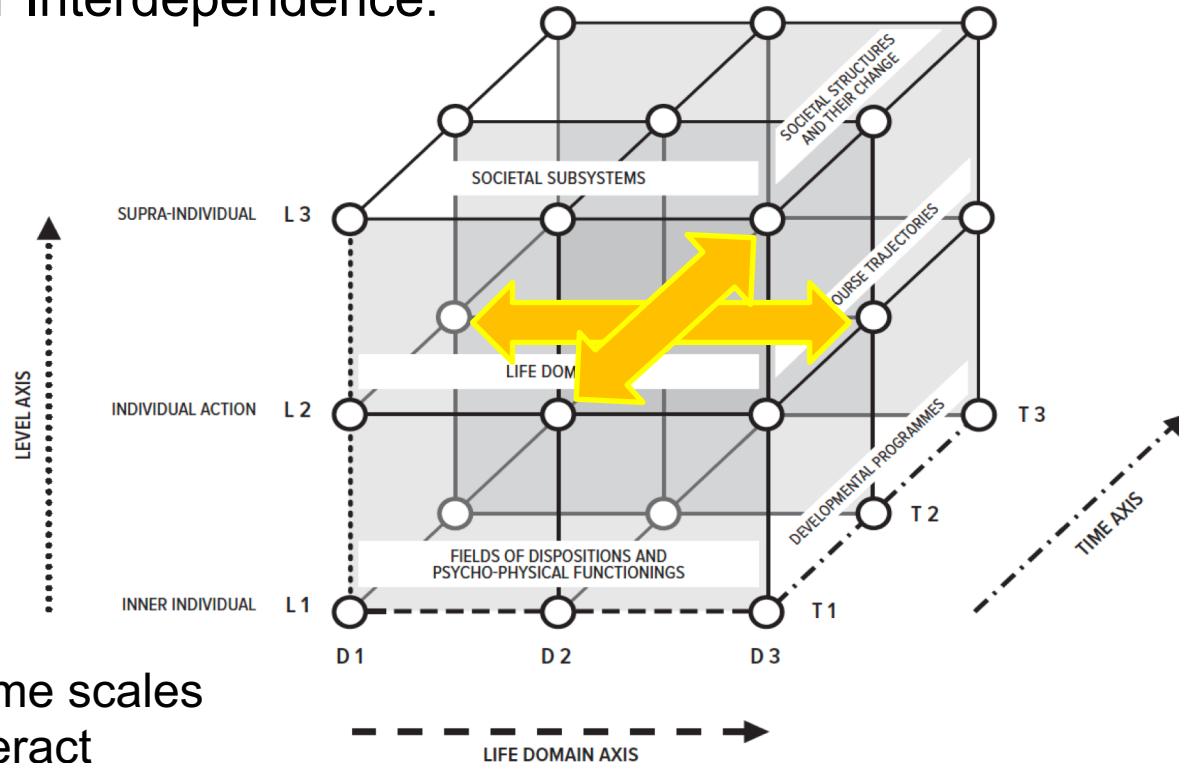
Inner-individual levels: developmental programmes, effects of socialisation;

Individual level: the realized life course and experiences

Supra-individual levels: context and social change, life course “shaping” institutions

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Second Order Interdependence: T and D

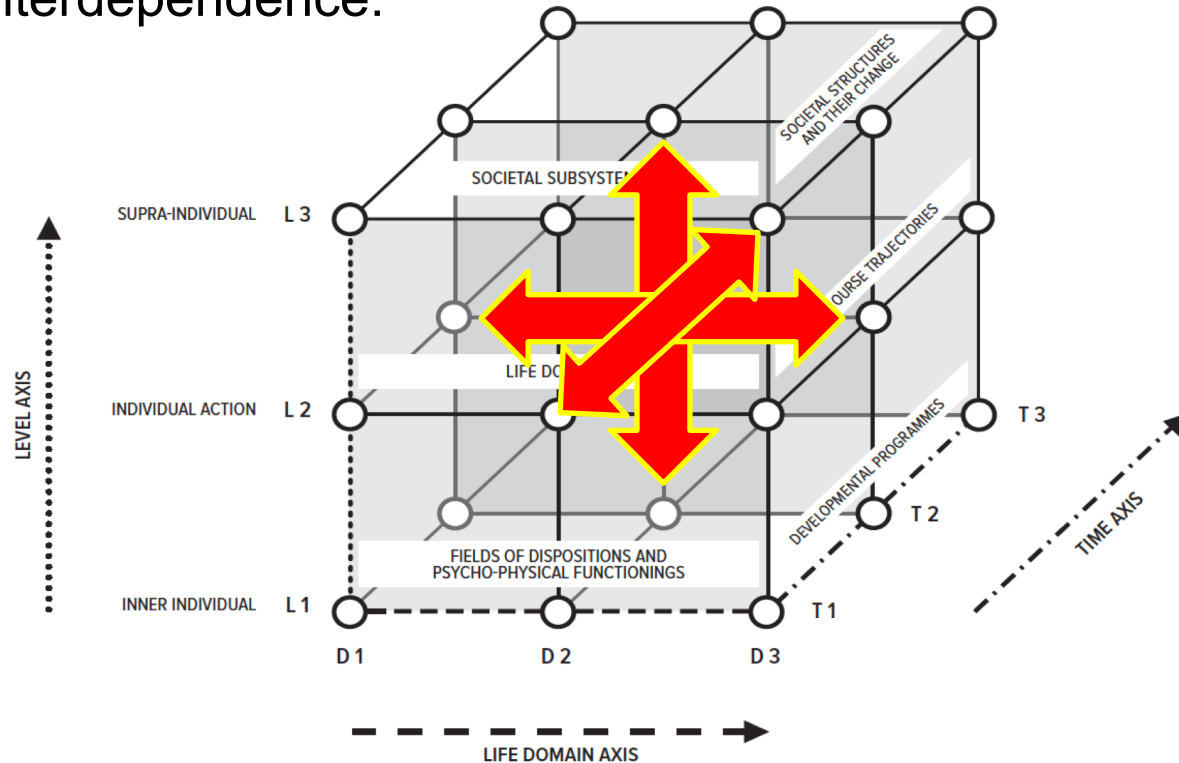


Domain specific time scales
and schedules interact

„Multiple clocks“ driving the life course in different life domains

→ different timing of life events, changing relevance and variation in the relative contributions of life domains; changing impact of life domains on each other

Third Order Interdependence: T, D and L



Interplay of all three dimensions usually has to be considered

→ e.g. (anticipated) impact of work and family life on each other ↔ timing of work and family specific events ↔ institutional support to reconcile work and family.

A Process Pattern

Canalisation (Heckhausen and Buchmann 2018)

Developmental (Inner-I)

- accumulated perceived control,
- specialization,
- selective goal commitment,
- social network selection,
- entrapment

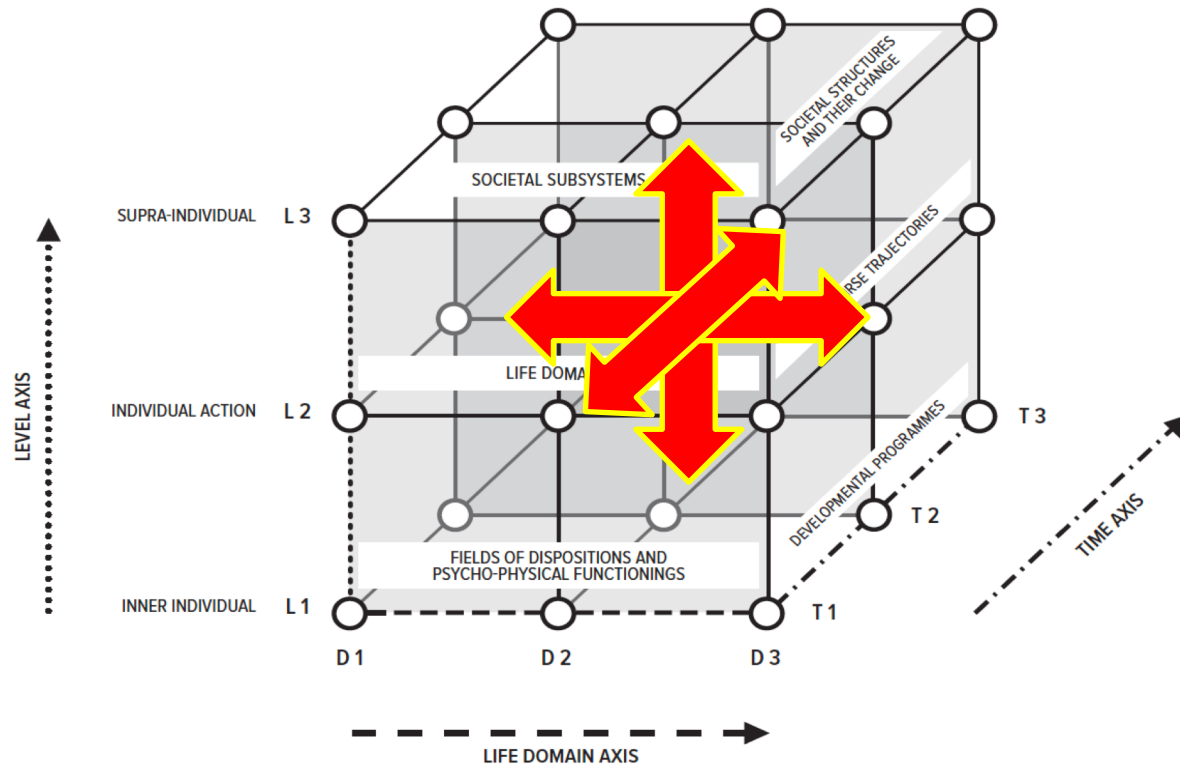
Societal (Supra-I)

- expected constraints,
- cumulative disadvantages,
- intergenerational status maintenance,
- compensatory advantage

Interplay of canalisation types in and between life domains

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- compensatory agency overcoming social constraints
 - echo-chambers of social segregation
 - playing safe versus, risk taking
- 

Finally...



Group work: Please think of examples
(Again: think also of your projects)

Thank you !

Special Issues of “Advances In Life Course Research”

Fertility Over The Life Course
Edited by Petra Buhr & Johannes Huinink

Theoretical And Methodological Frontiers In
Life Course Research
Edited by Laura Bernardi, Johannes
Huinink, & Richard A. Settersten, Jr.

