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NEGATIVE EFFECTS OF DESIGN-BID-BUILD PROCUREMENT ON CONSTRUCTION PROJECTS

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**DREES &
SOMMER**



Poor
performance

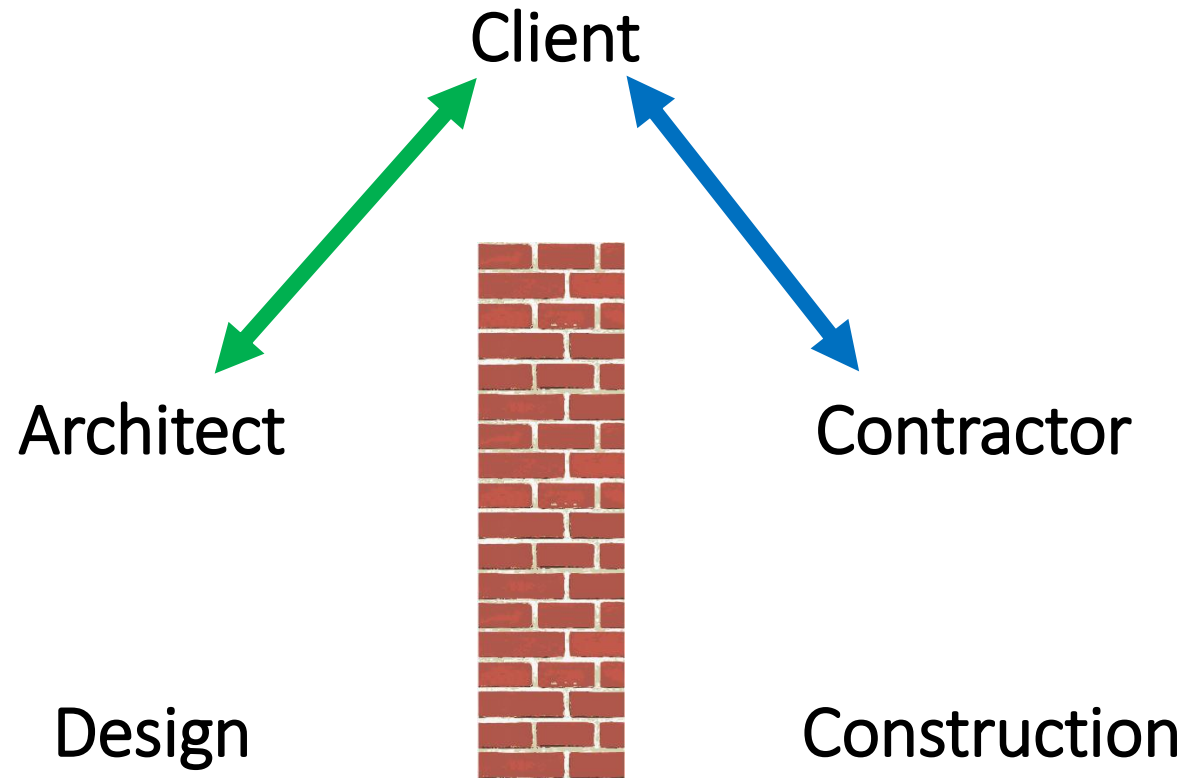
Multi-party
arrangements

Design-bid-build
(DBB)

Negative
effects



Design-Bid-Build (traditional, „stage-gate“)



Why do clients, architects and consultants choose DBB?

- Transparency, efficiency, equity.
- Preventing corruption and favoritism.
- Strict allocation of responsibilities and risks among the entities.
- Industry culture values tradition and familiarity.
- Architects remain remote from the submitting and awarding of tenders.
- Clients are cost focused.



DBB leads to flow interruptions:

- Unnecessary constraints for subsequent phases are set in the design phase.
- Little feedback for specialists.
- Lack of leadership and responsibility for the total project.

These factors lead to:

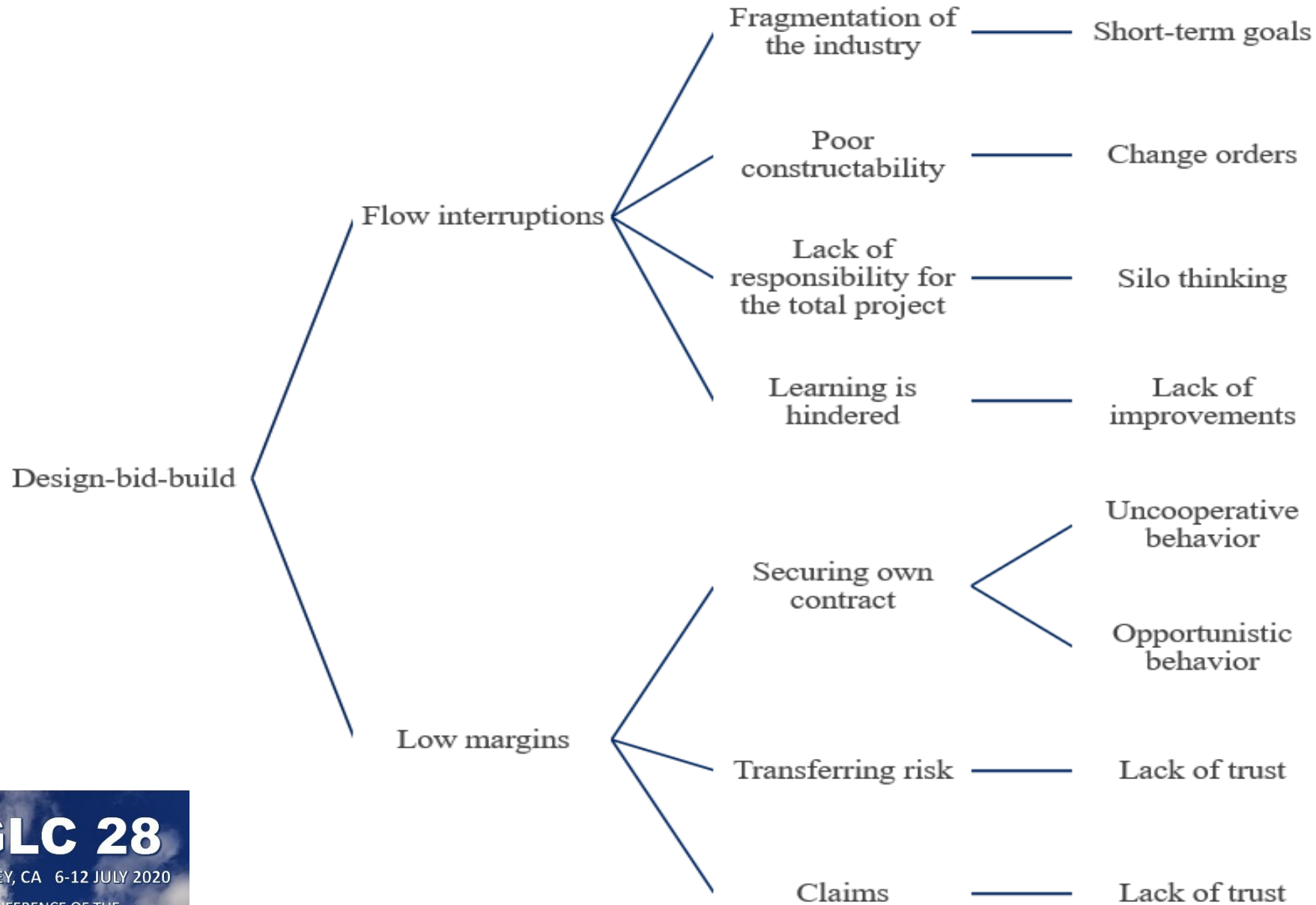
- Suboptimal solutions.
- Poor constructability and operability.
- Large number of change orders.
- Lack of innovation and improvement.



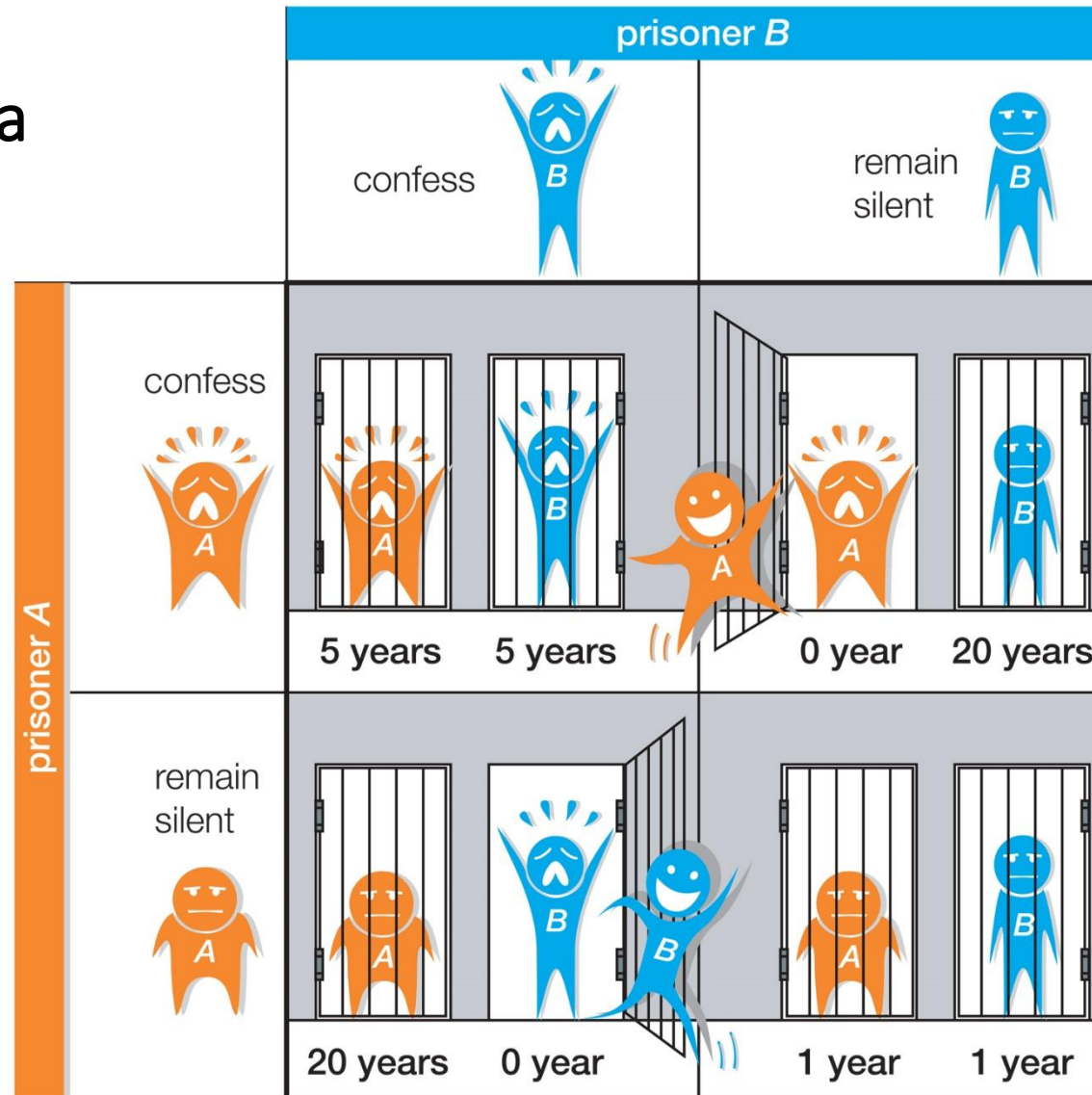
Claiming culture and opportunism:

- Parties tend to maximize their own interests and to transfer risks.
- Uncooperative behavior, non-collaboration.
- Planning for claims at tender stage.
- Conflict between the client and the contractor regarding the long-term objectives versus the short-term.





Prisoner's dilemma



Integrated forms of contract?



DBB prevents collaboration



Silo thinking



Prisoner's dilemma



**Encourage
to cooperate**

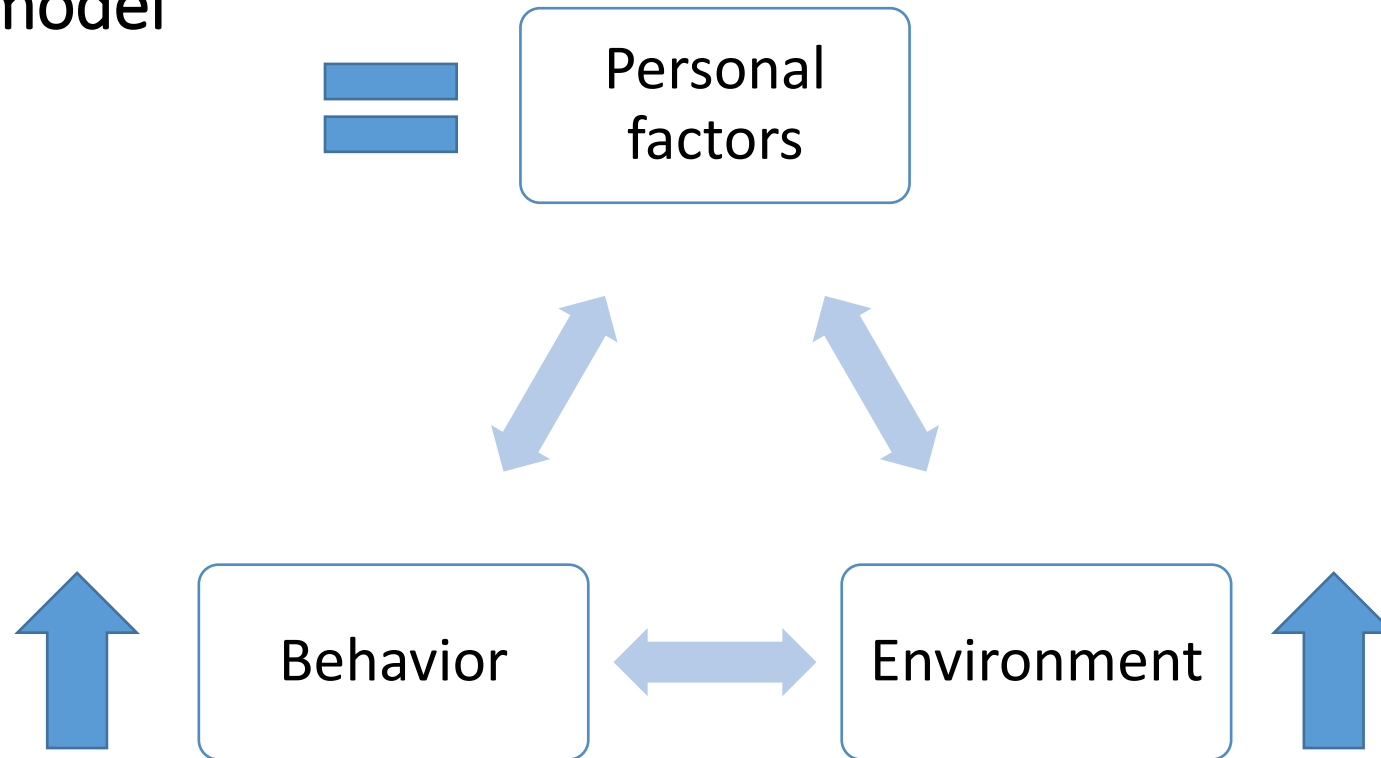
**Admit
DBB**

**Change
the behavior**

**Influence
the industry**



Bandura's reciprocal determinism model



(Wood and Bandura, 1989)



Conclusions:

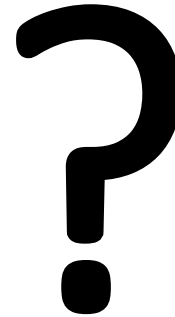
1. DBB will be prevalent in the construction world in the foreseeable future.
2. DBB has negative effects on construction industry.
3. DBB creates constraints for the implementation of lean construction.
4. Can LPS help to fix the DBB problems?

Hypothesis: if personal factors can be determined and the behavior of project participants can be positively influenced by LPS, the situational context in which project participants operate can be influenced too.





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