

Introducing *Transboundary Waters Interaction Nexus (TWINS):*

Model of Interaction Dynamics in Transboundary Waters

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Conflict, cooperation and in between

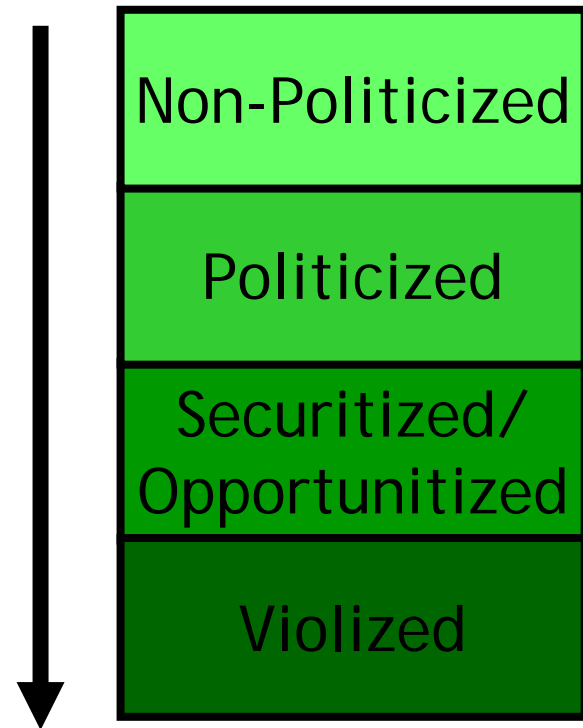
- Framework of HH usefully shows that there is conflict in basins, despite there being no acute conflict.
- Analysis of cooperation has lacked robust theorization in dealing with transboundary waters.
 - Many basin negotiations seem to be in stalemate situations, making it hard to qualify the basin relations as conflictive or cooperative
 - Single-case study findings are hard to generalize; ‘cooperation’ becomes highly contextual
 - There has been analysis of cooperative aspects of basin management
 - ‘benefit-sharing’, ‘problemshed’, RBOs

Central questions to this presentation

- What is the relation between conflict and cooperation in transboundary waters?
- How do we differentiate conflict and cooperation?
 - Definitions and categorizations required
- How does power influence the relationship of basin states?

Characterizing conflict

- Levels of conflict identified by Warner (2004) and Zeitoun (2007) based on Buzan et al., 1998 and Neumann, 1998
- “politics and war as different nodes on a *continuum* of conflict” (Warner, 2004b: 8)



Characterizing cooperation

- International Relations approach to cooperation
 - Cooperation occurs “when actors adjust their behavior to the actual or anticipated preferences of others, through a process of policy coordination” (Keohane 1984)
 - Components of cooperation: goal oriented behavior, mutual gains (Milner, 1992)
- Various theories of cooperation within IR
 - Game theory, absolute/relative gains, rational choice, regime theory etc.
 - Emphasis on *conditions* of cooperation (i.e. how cooperation can ‘emerge’ (Axelrod, 1984))

Characterizing cooperation

- Negotiation science gives a holistic view in how conflict and cooperation is part of bargaining; conflict/cooperation is not an “either or” problem (Sebenius, 1992)
 - However, it is unclear how the conflict/cooperation continuum functions; how are the two differentiated?

Some hints from sociology

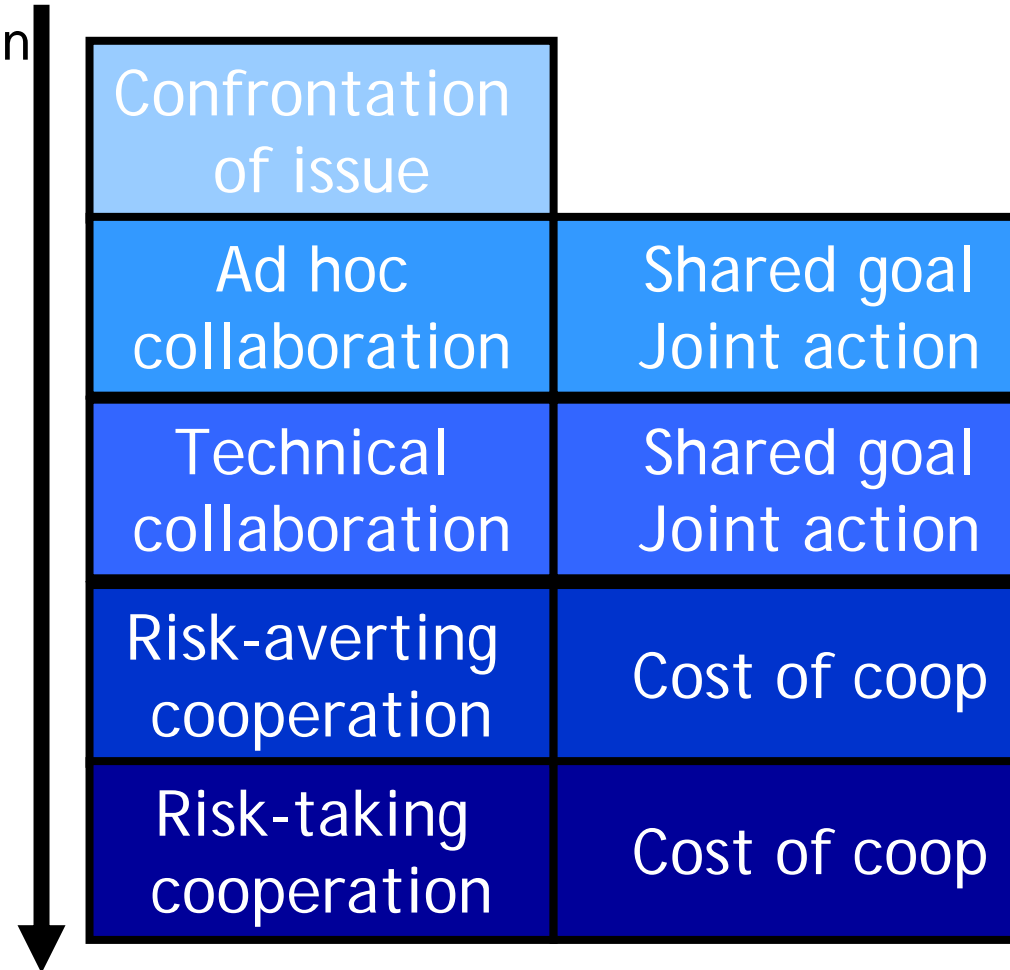
- “Conflict is a concept that is independent of co-operation; not always opposite to it” (Craig, 1993)

		Conflict	
		Low	High
Cooperation	Low	Little interaction	Unstable relations
	High	Stable and comfortable	Unstable, intense, sometimes creative

Source: Craig(1993) p.16

Intensity levels of cooperation

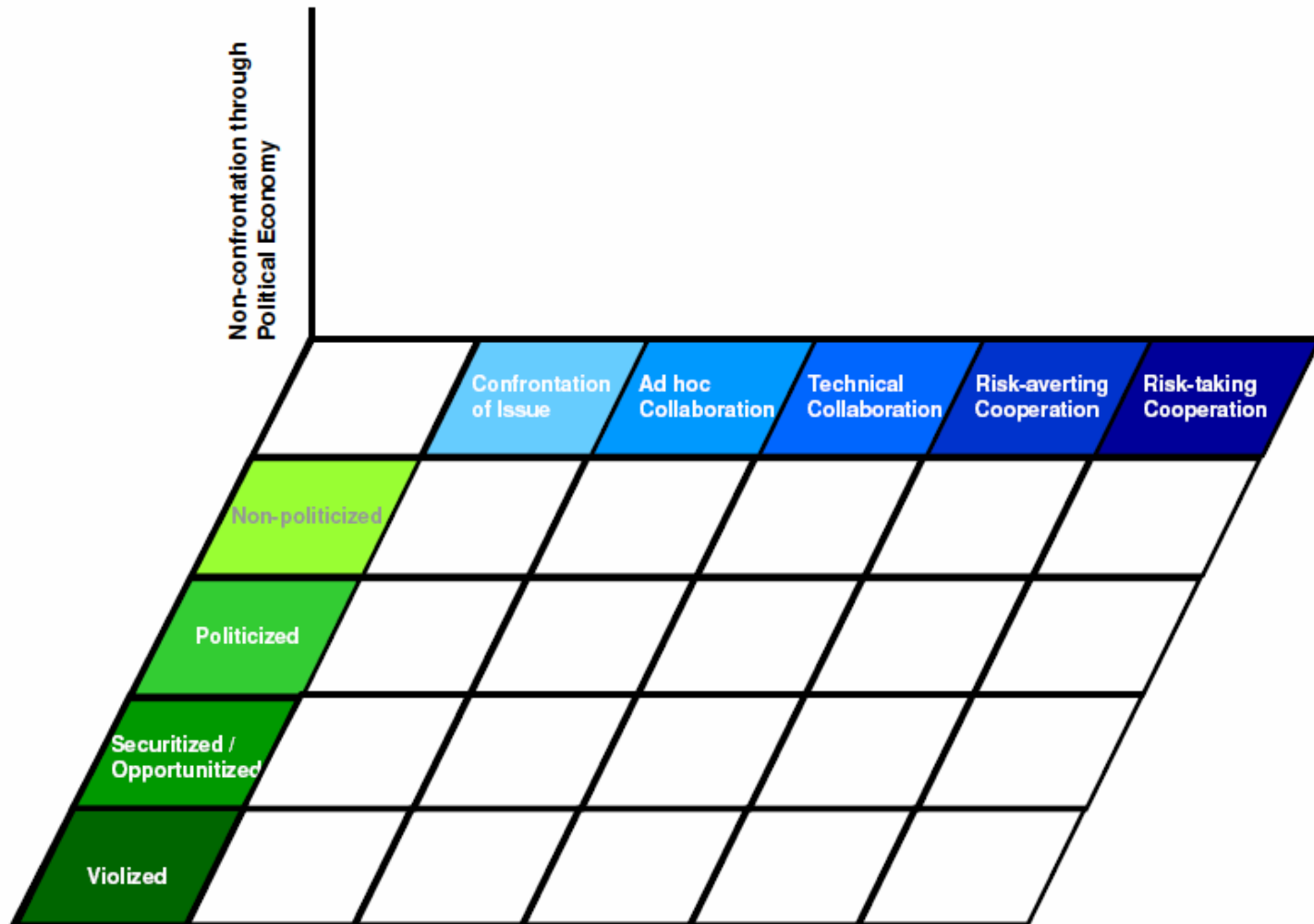
- “cooperation is the social action requiring the contribution of several people towards a shared goal or purpose” (Tuomela, 2000:vii)
- Shared goals, joint action and intentions as components of cooperation
- Narrower definition of cooperation compared to Keohane (2000) helps differentiate the levels of intensity



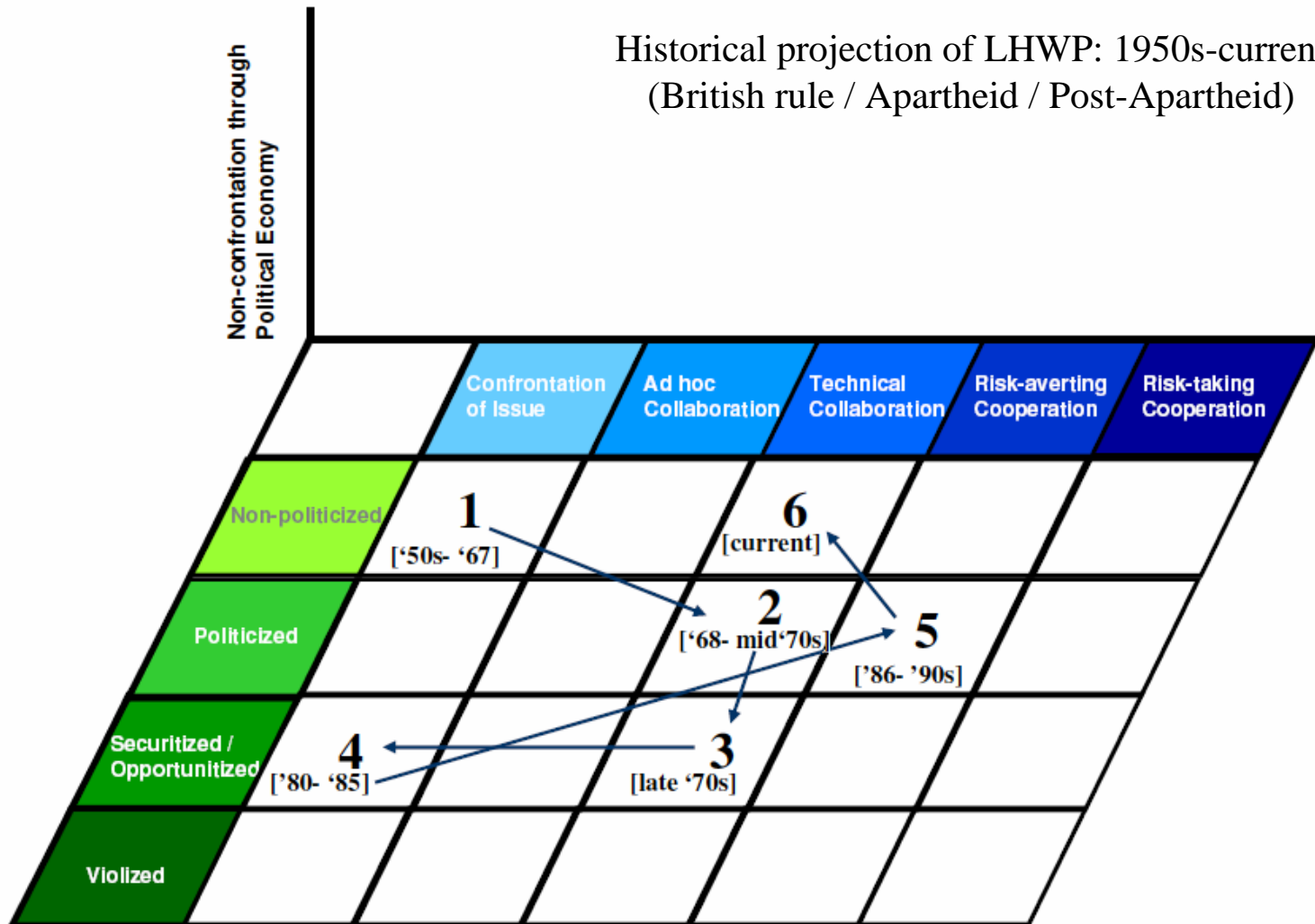
Confrontation and non-confrontation

- Conflict or cooperation requires states to confront the issue at stake
- States also have the possibility to evade confrontation of the issue
 - The development of political economy can function as a way to potentially ‘solve’ water management problems (i.e. virtual water by Allan 2000).
 - Rhine water pollution problem was facilitated in large part by the business sector of the riparian countries (Verweij 2000).

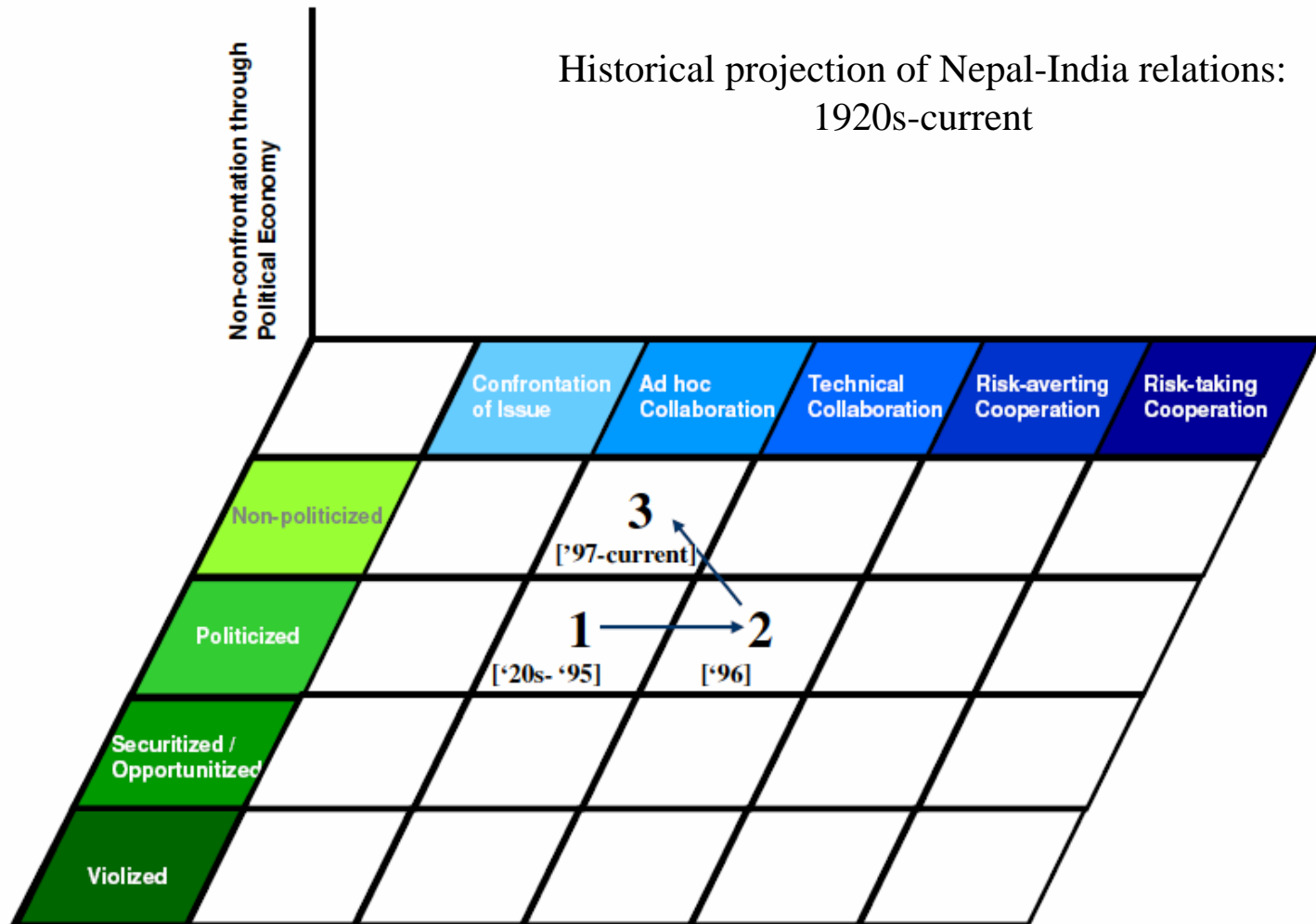
Transboundary Waters Interaction NexuS (TWINS)



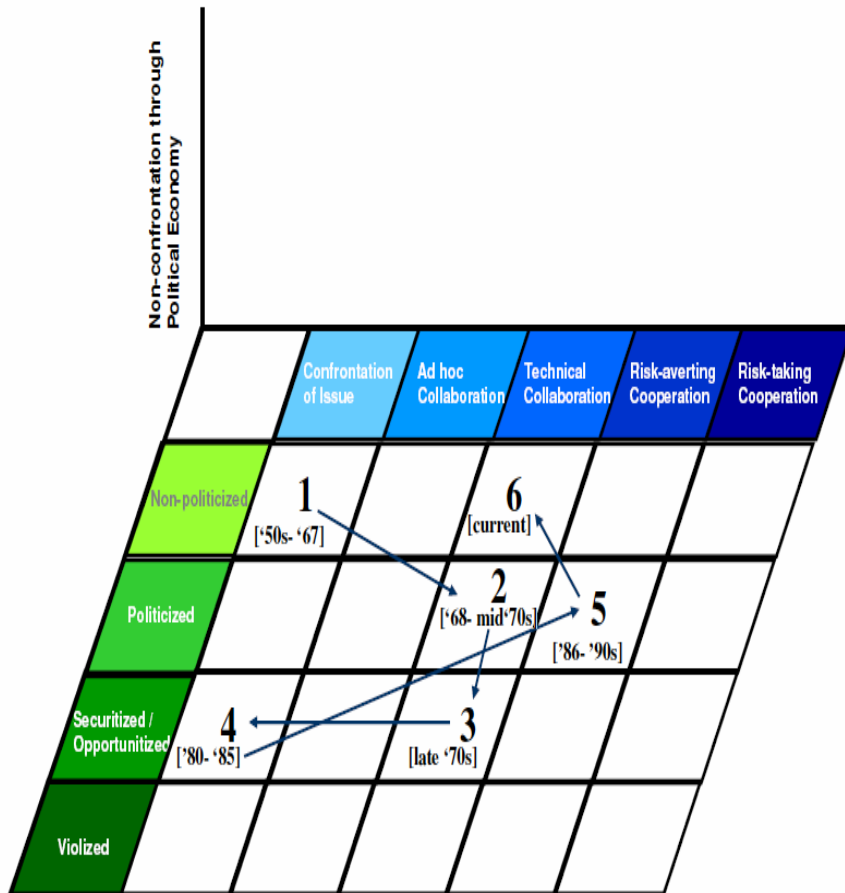
TWINS applied to the upper Orange



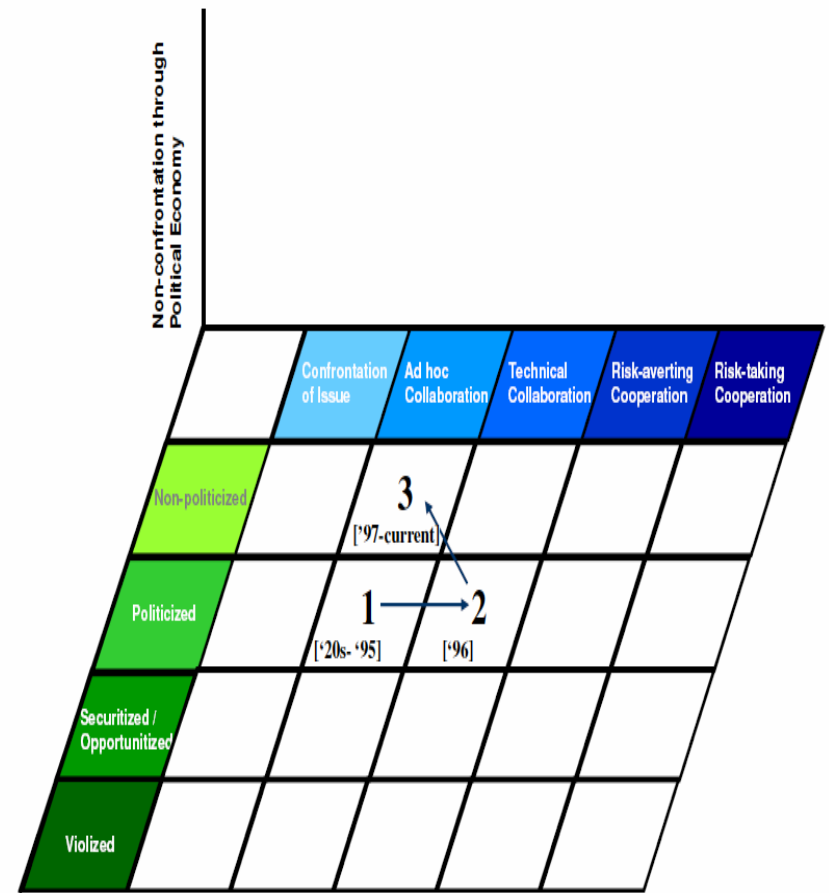
TWINS applied to the upper Ganges



Historical projection of LHWP: 1950s-current (British rule / Apartheid / Post-Apartheid)



Historical projection of Nepal-India relations: 1920s-current



Conclusions

- Conflict and cooperation co-exist to make up the range of actions a state can take
- Risk and cost tend to increase as conflict and cooperation intensity increases.
 - Change of status quo is risky and costly (i.e. upper Ganges)
- Power seems to exist at all levels of intensity
 - Further evidence towards how hydro-hegemons have the capacity to influence riparian relations
- TWINS approach shows the trajectory of the riparian relationship and basin development
 - Dynamic or contracted relationships
 - Analysis can be done for sub-national actors
 - Differing interpretations of the basin is possible depending on one's positionality
- Further refinement of the levels of intensity for cooperation