Can designing 'spaces for learning' inform collective learning in transboundary river management processes?

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Abstract

In transboundary river basin management, social learning is relevant to support collective understanding and problem framing, addressing conflicting perspectives, and in co-production of knowledge. Still, little is understood about the relational dynamics of social learning processes. This paper examines the relational dynamics of social learning processes in transboundary water management processes. We argue that learning occurs in learning spaces and within these learning spaces, actors navigate relational features. We categorise relational features as: trust, power, identities and conflicts. Understanding these features contributes to understanding what is needed to foster collective learning within transboundary river basin management. Practically it could also contribute to designing learning processes that support collective learning, co-production and reframing.

Keywords: Social learning, Transboundary river management, Collective learning

Introduction

Transboundary river resources are not only challenging to manage due to the vastness of the resources, but equally due to the diversity of actors with competing or conflicting interests (Pahl-Wostl, 2015). Processes that enhance collaboration, ownership, representation and responsibility for all are popular within transboundary river management (Evely et al., 2011). Yet transboundary river management is challenging due to varying management practices, competing interests, conflicting perspectives, cultural values, institutional frameworks and political histories (Cundill & Rodela, 2012; Reed et al., 2010). This inherently makes it difficult for actors to develop a shared understanding on the issues at stake.

Social learning processes have thus become popular in trying to address complex management challenges, with the idea that if actors are able to learn together, they can inherently support

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each other to develop a shared understanding and hence manage the resources together (Ridder, Mostert & Wolters, 2005). For example, in natural resource management, social learning can be useful to support actors when they differ on resource use, address conflicting interests by building relational capacities, overcoming power asymmetries, supporting problem framing by questioning the underlying values and perceptions; and providing spaces for perspective taking among actors. Studies have shown that social learning is best facilitated in environments that stimulate deliberation, interaction and representation (Muro & Jeffery, 2008). These environments act as 'learning spaces' in which learning is fostered. While this seems to be the case, little is understood about the 'learning spaces', as well as the relational dynamics of learning processes. Therefore, this study aims at evaluating 'learning spaces' and relational dynamics of social learning in transboundary water management processes.

Methodology

Using qualitative interviews, we analysed transboundary river basin management processes in two river basins in Africa; Omo basin and Zambezi basin. In both basins, we used in-depth interviews and analysed project reports, river basin management protocols, plans and technical reports. Interviews focused on actors within transboundary river basin processes such as scientific researchers, boundary organisations and national actors within key sectors such as water, energy, food and environment. In both case studies, social learning in transboundary river basin management could support problem framing on water-energy-food nexus integration, developing joint basin planning, and developing joint basin development projects.

Discussion

Conceptual framework

We understand social learning as '*learning by all stakeholders to manage the issues in which they have a stake*' (Ridder et al., 2005). As learning is a relational process, we understand that actors learning together requires actors engaging within their relational capacity in a learning space. A learning space is thus defined as an *'arena where diverse actors with multiple frames and knowledge plurality interact and deliberate on a shared understanding of the issues or potential solutions thus providing an opportunity for reframing'.* Actors within these learning spaces navigate through relational features such as trust, power asymmetries, shared identities and addressing conflicting views and perspectives. These processes are important aspects of learning and they influence how actors interact and deliberate in a learning space (Sol et al., 2012).

Relational dynamics in a learning space

Trust acts as the backbone for learning and impacts the level of actor's interaction and learning within learning spaces (de Vries et al., 2017). Trust can shape actors' interaction and ability to transfer knowledge and also in interpersonal relationships. While power asymmetries have a direct relationship with learning experiences, they impact decision making processes (Albert et al., 2012). Identity influences not only how actors view themselves and others, but equally how they interact and make decisions (Wenger, 1998). Within these processes conflicts may arise. Conflicts could incorporate conflict of interest, conflicts of problem framing or conflicts of opinions; these could either stimulate learning by providing space for these conflicts to be addressed or could be an indication of the state of the process. Either way, conflicts play a critical role in understanding social learning processes (Beers et al. 2016).

These four relational features, embedded in a cultural, historical or institutional context, form the basis of actor interaction and deliberation within a learning space. This interaction would, in the long-term, lead to three main groups of outcome: relational outcomes which result from improved relationship and trust building, which in turn supports cognitive outcomes, such as improved knowledge in basin management as actors are open to share and co-create knowledge, eventually leading to changes of values and underlying governance norms in water management. This is represented in **Figure 1** below.
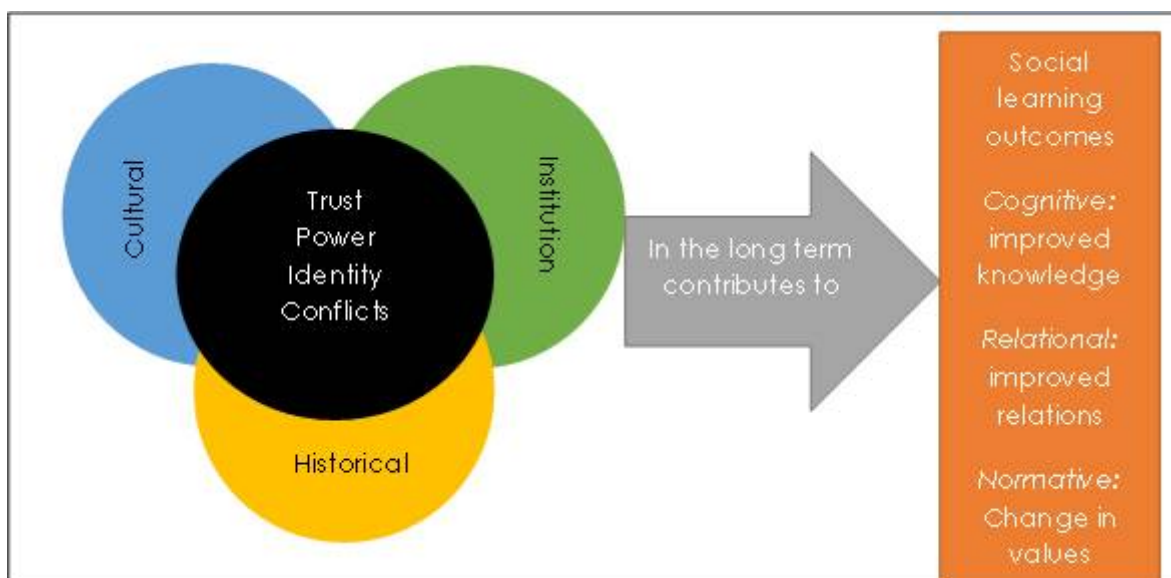

Figure 1: Relational features in a learning space are embedded in a context of culture, histories and institutions that stimulate or hinder social learning (Source: Authors own).

From our case studies, it was noted that shared identities were based on actors shared culture and mutual engagement in transboundary processes. Actors shared identities shaped trust relations and impacted on knowledge sharing.

Conclusion

For effective collective learning among diverse actors in transboundary processes to occur, there is need to understand learning spaces and how actors navigate relational features within these learning spaces. Transboundary river basin management processes should pay attention to the features that could stimulate or hinder learning. Understanding these dynamics could support designing effective collective learning processes within transboundary river basin management processes.

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