A RELATIONAL TURNAROUND THEORY OF COMPLEX SYSTEM TRANSFORMATION

""With all that we have in Stellenbosch, if we can't get it right here, where can we get it right?"" (Conrad Sidego, Mayor)

Increasingly drawn into the negative spiral of economic and environmental crises, communities are searching for alternative governance solutions to intractable problems. This study offers an ethics of responsibility lens to such intractable problems, explaining how communities experiencing temporal, spatial and/or spiritual breakdowns can repair and regenerate broken relationships among stakeholders and towards the natural eco-systems they inhabit and depend on.

The Eerste River Catchment in the Stellenbosch region in South Africa (Figure 1, Appendix) has overshadowed a long-term decline in water quality with a protracted and embittered stakeholder conflict over watershed management issues. The once cherished connection between society and environment has been lost and memories of what worked stand in stark contrast to the deep societal divides that are increasingly blamed for the worsening of the situation.

The principal polluter is the Stellenbosch municipality whose responsibility is to deal with regular pollution caused by effluents from its waste-water treatment plant, informal settlements and townships and unlawful direct industrial discharges in the river catchment, and the more occasional storm water and agricultural run-offs which exacerbate the visibility and harm caused by a polluted river.

The decline in water quality jeopardizes the region's environment, economy and water and food security. There is growing concern that the region's fresh produce and wine products destined for export no longer meets standards set by the European Union (EU). As pollution worsens, the quality and supply of water have a major impact on community health and safety, agriculture and business operations on the river, especially harmful to those stakeholders most dependent on the river and environment.

When the relationships within the community itself have been broken for so long, several distinct theories suggest a stalemate, but none explore whether or how the broken relationships may be repaired in preparation for collective action A gap also remains in our understanding of multi-stakeholder interactions, and more broadly organizing across multiple and persistent boundaries: these accurately predict the decline in relational quality with repeated shocks and embittered conflict, yet remain conspicuously silent about possibilities or actions that can help remedy and even reverse the stalemate.

Since 2012 I have immersed myself in the problem to understand, observe and document the eventual emergence of transdisciplinary action to remedy the water quality challenges all stakeholders have in common – and have to live with.

As stakeholders made multiple attempts to resolve the issue, their differences resulted in repeated frictions, fractures and failures, which kept aggravating the already deeply-rooted social, historical and cultural inequalities. Stellenbosch is a society with remarkable and unique concentration of capabilities, resources and opportunities, but power and legitimacy

dilemma obscure the real constraints of an over-taxed natural ecosystem, aggravating conflict and getting in the way of a constructive resolution as past events are vividly, negatively, yet differentially recalled by different stakeholders.

This paper draws on my first person account of the social (re)assembly process I witnessed unfolding in the Eerste River Catchment to articulate a relational turnaround theory of complex system transformation as multiple parties and voices began to identify and illustrate progress, and a structural solution has been collectively championed since.

I borrow, define and illustrate three different dimensions that helped (re)set boundaries for social-ecological interaction (nature, history and spirituality) to first convey the multilayered complexity of the issue.

Drawing on narrative for social transformation, I focused on developing a shared understanding through emotional reflexivity and a collective aesthetic engagement with the river to co-initiate collective awareness and sense making of the complex web of relationships in need of repair. The emphasis falls on how to interact and relate differently to the river and environment, and as a community to each other to co-create a trustful, open and enabling environment to interact with oneself, the community, society and the river and its environment.

I then use rich observational, auto-ethnographic, narrative and visual representations (Figure 2, Appendix) to show how these three dimensions were creatively and collaboratively combined along the way to create several turning points that allowed and accelerated the transformation of this complex system.

My findings are based on real-time interactions over a 21-month period with thirty-nine one-on-one and three parallel series of twenty-two small group preparatory conversations (with corporations, with governance agencies, and a stewardship committee bringing together WWF with the core South African parties). On four separate occasions I convened multi-stakeholder events that brought together multiple constituencies many of whom had not previously engaged with one another directly. Two of these events occurred in the immediate aftermath of real-time prosecution and litigation of the municipality for noncompliance with its water use license requirements, and became occasions for broad and active engagement despite legal instructions not to share their position with the other.

The two year process culminated in the formation of an action collaboratory, with broad-based support from all stakeholders, which attracted and now includes the focal culprit, the municipality, universally blamed for dropping the ball before this process started – even sued for its inability to manage the issue half-way through the process. This action collaboratory is a community driven platform with a shared governance process which entrusts the municipality to enable collective action moving forward. A secretariat has been funded, and my research has been formally endorsed as part of the process of solution implementation going forward.

Understanding how this reversal from culprit to enabler was gradually negotiated and eventually accomplished in partnership with the municipality by stakeholders with initially radically different memories of the river and distinct objectives, resources and capacities for its remediation is the main contribution of this paper. I explain that this reversal occurred non-linearly and reflect on my own role as a convener in helping parties recognize and

navigate their frictions and fractures as they searched and found their own ways to heal previously broken relationships.

This paper puts forth a preparatory lens for collective action, that is new beginnings of partnerships to solve intractable situations, especially in unfavorable even overtly adverse and uncertain situations. I build on, and extend, a critical complexity perspective on existing frameworks and context to explain how the development of self-reflexive frames enables different parties to engage with different others (different disciplines, knowledge systems, and types and forms of governance). The pulsation between expanding the complexity to more fully flesh out the natural, spatial and spiritual dimensions of the issue and then iteratively reducing and even containing the newly found complexity to aspects that are communicable and acceptable at any given point in time can gradually prepare large and often conflicting multi-party systems to find points of temporary convergence and to jointly device a collective action process that can sustain long term collaboration.
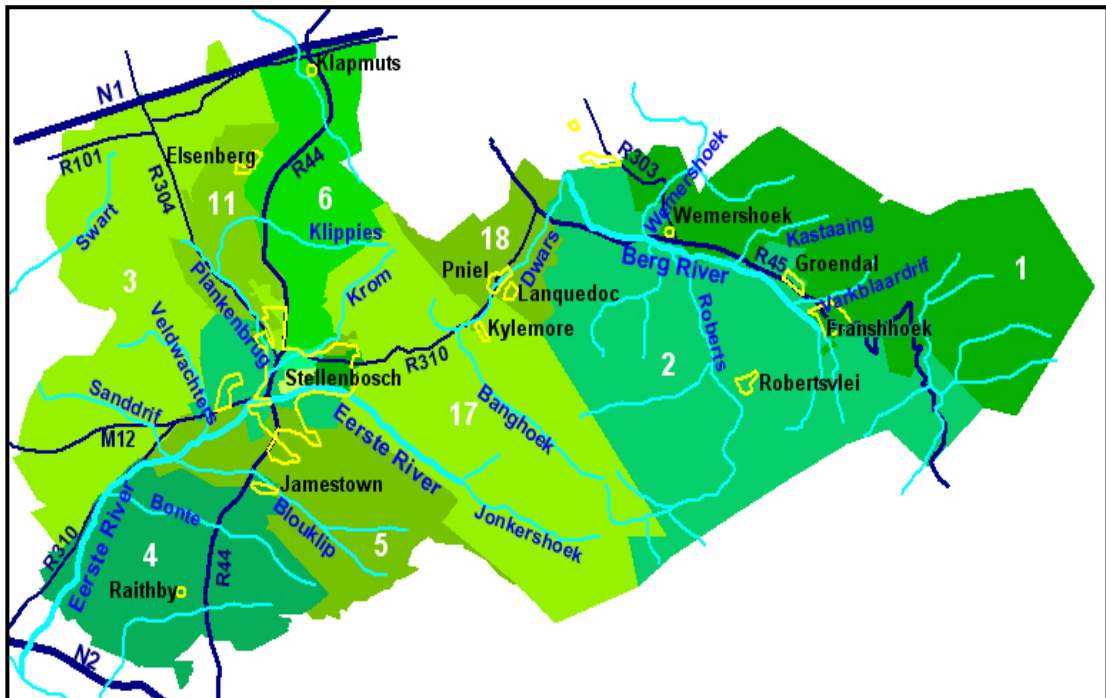
Appendix

Figure 1: The Eerste River catchment

Figure 2: The Eerste River catchment June 5, 2013