

# FROM A TYPOLOGY OF ADAPTATION STRATEGY TO ADAPTATION PATHWAYS

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## Adaptation: a semantic blur, few integration of political dimensions

Adaptation is now currently used and emphasized among the climate change community, but it brings some confusion. Some says it develops like a virus. At the origin, adaptation was coming from natural sciences, it was used to describe the behavior of species facing changing conditions in their environment: or they die, either they move or they adapt in the face of change.

Now adaptation is a political injunction. National and international institutions (IPCC, IMF, etc) present adaptation as something obvious: to survive local societies have to adapt. But at local level, decision makers meet difficulties to implement it and this top-down injunction leads to many challenges for local authorities.

My aim is to clarify the concept thanks to a typology that highlights political implications of adaptation actions and policies. First, I show the different ways adaptation is considered in the literature related to resilience, vulnerability and climate change and the added value of considering it as a process. Secondly, I propose a typology of adaptation actions that takes into account potential effects of actions. Finally, I discuss the concept of pathways as a useful concept to describe political aspects of adaptation.



## Speeches and discourses: a good basis for analysis

- ✓ There are few adaptation actions implemented,
- ✓ Yet there are national, regional and local strategic plans ; many documents, institutional reports and guidelines are related to adaptation, and give some explanations why and how local societies need to adapt.
- ✓ Those speeches and rhetoric represent a good material to analyse

## A qualitative methodology

- ✓ Study of local actions and strategic plans related to climate but also to urban planning and water management on a large and coastal territory in the region of Languedoc Roussillon in the south of France
- ✓ Study of a corpus of discourses (plans, seminars, workshops, research programs)
- ✓ 20 interviews of institutional decision-makers

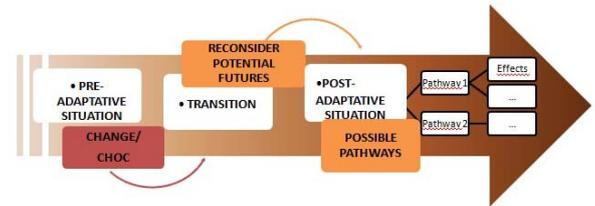


## To renew the definition of adaptation

- Case study considered as a Socio-Ecological system, facing shocks and changes
- Adaptation defined as a characteristic of a SES ("adaptability"), a capacity ("adaptive capacity") to reduce vulnerability, a function of resilience



## Adaptation as a mark of evolution and change in the SES



**SPAN OF ADAPTATION**  
Resistance - Accommodation - Adjustment - Transformation

TYPE	WAIT AND SEE	CONTROL and MAINTAIN	REGULATE	RETREAT
<i>Policy Instruments</i>	Observatoires, Vulnerability assessment « Porter à connaissance »	Technical solutions for building Aquadomia Dykes More strict limitations in plan for urban sprawl	Change in the way water / land is shared, new legislation (new type of zone in risk management plans)	Strategic retreat, remove roads, houses
<i>what do we adapt?</i>	Knowledge Representation	Infrastructures Techniques Rules and legislation	Way of life, way of consumption, management	Way of life, way of consumption, Economic activities Governance
<i>Adaptation to what?</i>	Gradual trends (climate, consumption, space...)	Extremes	Gradual trends	Gradual trends and extremes
	To make changes visible, to rise awareness	To protect way of life and economic sectors, to avoid thresholds and raise limiting factors	To address trade-offs To renew ways of life	To address trade-off and find new compromises, to renew ways of life
<i>Spatial scale</i>	Metropole Regional, State	National scale	Local	Multi-scale
<i>Temporal scale</i>	2030 - 2040 - 2100	2030 - 2100	Short-term	2030 - 2050-2100
<i>Effects - potential vulnerability</i>	High expertise Everybody is responsible, but who is responsible?	Spatial shift, temporal shift and risk of positive feedback loops	Social and economic vulnerabilities Tensions and conflicts	Social and economic vulnerabilities Tensions and conflicts
<i>Type of public policy</i>	No decision - statu quo Or incitative policies	Regulatory policies	Regulatory policies Incitative policies	Redistributives policies

## Proposal for an interdisciplinary typology of adaptation

- ✓ To qualify adaptation more precisely (who/what adapts? To what? And how?)
- ✓ To highlight how much the SES re-organized and is renewed
- ✓ To highlight the political dimensions of adaptation process.

## From the typology to adaptation pathways: a way to take into account the political dimensions of adaptation

- ✓ Adaptation can be considered as a process to explore and precise its diverse dimensions
- ✓ Adaptation is not only technical but is also intertwined with political process and has to do with politics
- ✓ Adaptation as a process can help us to understand social and economic vulnerabilities, and social and political choices decision-makers have to face.

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