

risk frames. However, these frames are unequally mobilized through the case studies, and differently introduced and justified. Determinants related to the context, occurrence of extreme events, availability of resources to adapt or socio-political history of the country are pushing towards the use of one of the frame rather than the other. Conversely, the use of the same frame in two different contexts can be explain by a different set of determinants related to the context. This study highlights how adaptation reflects both how different stakeholders diversely interpret information about global change and adaptation, but also how these rationales are strongly context-dependent, leading to diverse cognitive and non-cognitive barriers and opportunities for renewed responses in the face of global change along coastlines.

Contributed session oral presentation:

In role in a rolling landscape: Re-thinking multi-scale vulnerability transfers in the Anthropocene

Raphaël Mathevet¹, Olivier Barreteau², Bruno Bonté², François Bousquet³, Pauline Bremond², Sandrine Dhenain², Frédéric Grelot², Clara Therville^{1,2,3}

¹ *CNRS UMR 5175 CEFE, Montpellier, France*

² *IRSTEA UMR GEAU, Montpellier, France*

³ *CIRAD GREEN, Montpellier, France*

To explore transfers of vulnerability and their consequences with local stakeholders in southern France, a role-playing game session with 50 elected representatives and experts coming from various sectoral organizations was organized. The role-playing game involved 4 different landscapes of a coastal region: a littoral area, an agricultural plain, an urbanized area, and a river valley—with each landscape set up on a separate table. The participants were positioned either as land managers in different sectors (urban, agricultural, biodiversity conservation, green tourism, mass tourism) or elected decision-makers in charge of collective decisions and negotiation with other territories. For each round, the players had the option of placing infrastructures (dikes, irrigation networks, labelling, nature reserves) in management units under their responsibility in order to influence development trajectories. Based on their decisions, the land cover and use of these areas were updated (resident and tourist populations, agricultural crops, biodiversity). Different events, e.g. coastal erosion, river flooding, salinity change, droughts, and population growth affected the different territories. Participants had to meet their individual goals and collectively address the various pressures associated with changes in their territory. This experiment and its collective debriefing showed that adaptations at the local scale enabled players to temporarily cope with the pressures of global change by transferring these pressures to other territories. Overall, the weight of urbanization in short-term decision-making remains crucial. Protecting farmland and biodiversity remains challenging in the face of demographic pressure. Financial resources and coordination are not enough, it is key to have trust and flexible regulations in order to be able to innovate and adapt. Sensitizing land users to the processes of vulnerability transfers may improve social-ecological solidarity between them and gives meaning to their actions and their consequences. We assume that through this learning experiment, participants reinforce their resilience to future changes.

Contributed session oral presentation:

Stewardship in nature and the biosphere not always the pathway to sustainability

Lisa Heider, Christo Fabricius

Nelson Mandela Metropolitan University, South Africa, George, South Africa