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Historical Development Paths, Socio-Economic and Cultural Issues in Risk Approaches in Two Coastal Communities

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Content

- I. Framework of the Research
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- III. Influence of History on Risk Approaches: Contrasting
Example from Two Coastal Communities



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Framework of the Research

2008 German Strategy for Adaptation to Climate Change (DAS) adopted

2011 Action Plan for Adaptation of the German Strategy for Adapting to Climate Change:

“Municipalities are among the central actors of adaptation to climate change. Many consequences of climate change manifest themselves locally, and many adaptation measures need to be developed and implemented together with local communities.”



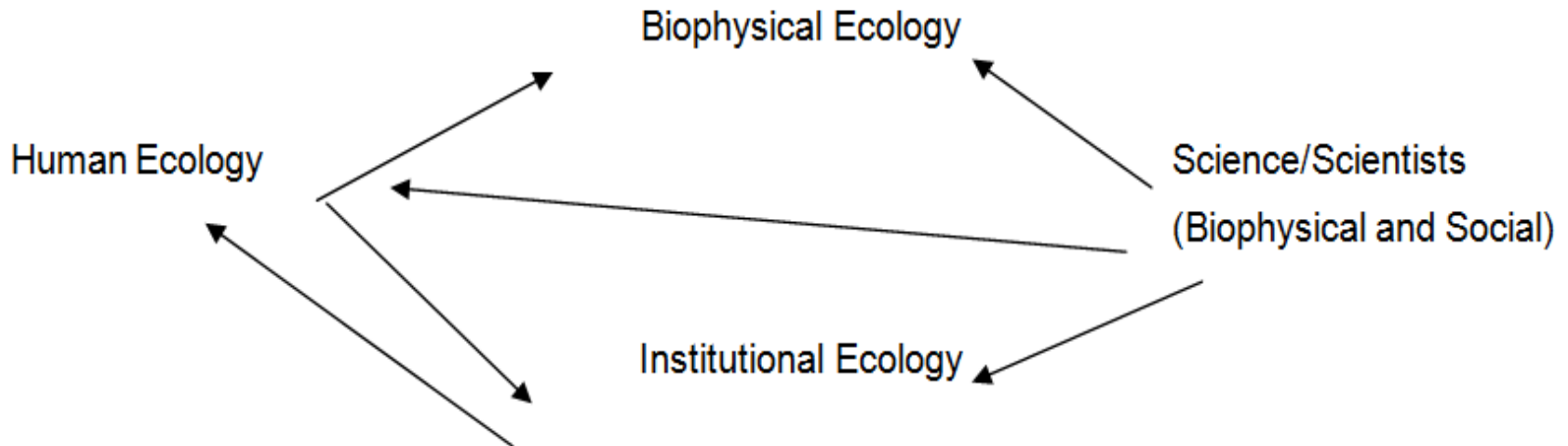
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Risk approaches are about people & places and their history & culture

‘Total Ecology’:



Source: Mike Orbach, Duke University/ Nicholas School of the Environment (unpublished)



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Study region: Two communities at the southern Baltic Sea Coast in Germany (distance 300 km)

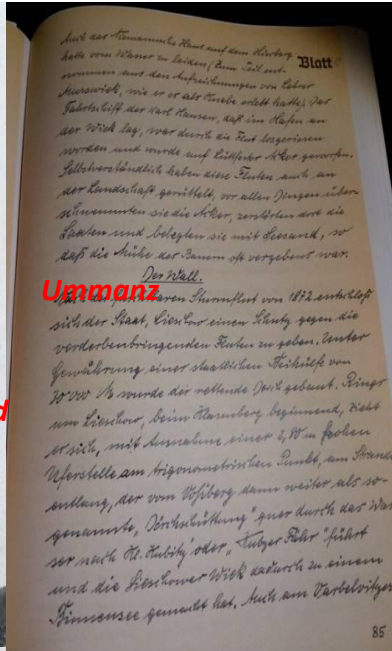




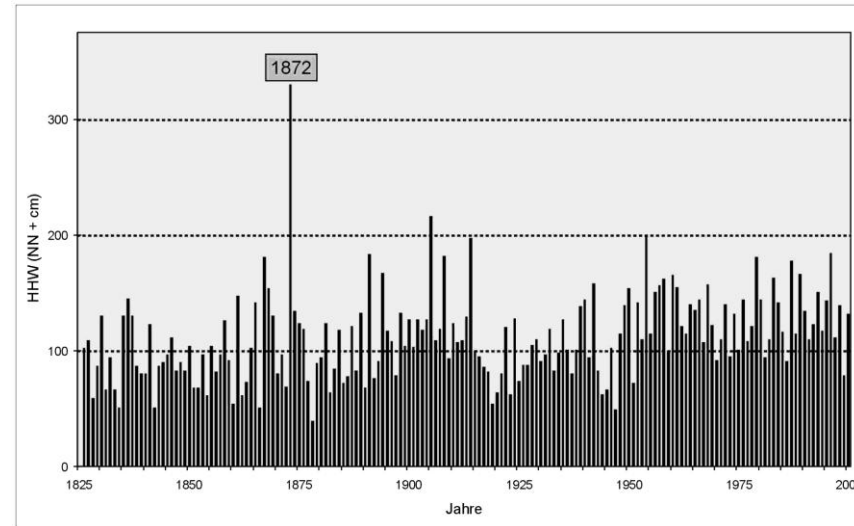
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- Comparable bio-physical conditions/ vulnerability (3m above SL, identical exposure to storm surges/ SLR/ bathtub effect)
- Similar SSL projections
- Identical experiences with historic storm floods (1872): Equivalent reconstruction aid out of the funds of the German empire



Risk of flooding – historic records

- Storm surge levels (SSL) higher than 3,0 m above Mean Water = one event
- SSL higher than 2,0 m above Mean Water = rare
- SSL higher than 1,5 m above Mean Water = infrequent
- Storm surge levels higher than 1,2 m above Mean Water = frequent



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Methods

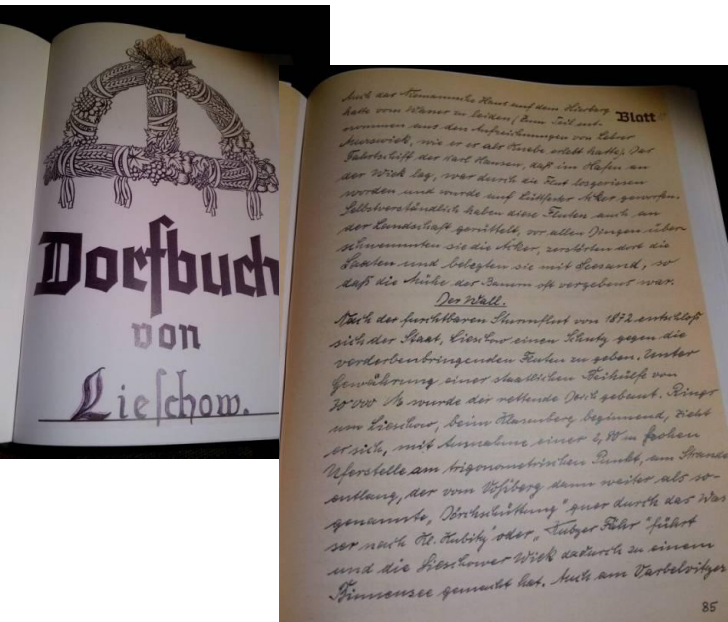
- 17 Semi-standardised narrative interviews (2012/2013 average duration: 2- 3 hours) with residents (village chronicles, heads of regional and “Heimat” (homeland) associations, local decision-makers, entrepreneurs.
- Complemented by 30 interviews with passers-by (standardised questionnaire) at central locations in both communities.
- Background research: village chronicles, diaries, local novels/ photographs...



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Development paths after the 1872 storm flood



Explanation about the erection of a dyke in 1873 („Der Wall“) in the chronicle of Ummanz (Mecklenburg -Pommerania), Source: Mursewiek: 1947)



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Further separations after WW II





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Key messages

- Historical natural events, socio-economic developments and cultural values drive risk perception, response and preparedness to environmental challenges.
- Historical development paths lead to particular material and immaterial value sets which find expression in differing views of “Heimat” (“Homeland”). These lead to different demands placed e.g. on coastal protection and adaptation measures.
- Risk management strategies need to be anchored in development traditions. Reference is necessary to local interests, values and attitudes – in this case to the coast and sea.
- More empirical investigations on the history of human and institutional ecology/ understanding the underlying reasons why communities or regions are vulnerable and why they act they way they do are needed in the policy arena.