DISASTER MEMORY AND “BANISHED MEMORY”. General considerations and case studies from Europe and the United States (19th-21st centuries)

Christian Rohr
University of Bern

International Conference

“Dealing with Disasters: Cultural Representations of Catastrophes”

Nijmegen/Soeterbeeck
17-18 June 2021
Introduction
- From natural hazards to natural disasters
- Cultures of risk management and societies of “banished disaster memory”

Examples from Europe
- River floods
- Avalanches

A comparison with the USA
- „Rise up and never look back“
- Hurricane Katrina 2005

Conclusions
“Only human beings can recognize catastrophes, provided they survive them; nature recognizes no catastrophes”

Max Frisch, Man in the Holocene (1979/1980)
From natural hazards to natural disasters

- Specific factors responsible for disaster perception in past and present societies
- Parameters to perceive a natural hazard as disaster
  - The helplessness of the people trying to cope with the damage with the available means
  - The inability of individuals to explain and understand the event
  - The material and personal suffering
  - A series of natural hazards within a short period of time, which can raise the vulnerability of the afflicted people
  - The symbolic connotations and patterns of interpretation, such as connections to natural disasters described in the Bible
  - The general predicament, such as a simultaneous economic, religious and climatic crisis
  - The unexpectedness of the event, which depends on how prepared a society is for one-time or recurrent threats
Unexpectedness

- Natural hazards occurring unexpectedly rather experienced as disaster than those people can prepare for
  - Earthquakes (including tsunamis), storm surges, but also sudden local thunderstorms
  - People do not have time to undertake actions of short-time prevention
  - Relatively high number of victims
  - Sometimes related to carelessness in choosing settling places, building material, etc.
- Vulnerability of the society significantly higher
**Expectedness**

- Frequently recurring hazards perceived as disasters only if they are extremely destructive
  - Hot spots of frequently recurring natural hazards in southeast Asia (Philippines, Indonesia)
  - Cultures of earthquake management in Japan and southern Italy
  - Cultures of risk management (floods, avalanches) in pre-modern Alpine areas
- Signs for the upcoming event are well known in the societies affected
  - Strategies of prevention undertaken also in times without major hazards
- Resilience of a society is relatively high
From cultures of risk awareness to societies of “banished disaster memory”

- **Cultures of risk management (“Risikogesellschaften”)**
  - Term “Risikogesellschaft” introduced by German sociologist Ulrich Beck (1986)
  - “Cultures of disaster” in the Philippines (Greg Bankoff, 2003)
  - Adaptation of daily life (socioeconomic setting, mentalities) to a frequently recurring threat

- **Societies of “banished disaster memory”**
  - “Erdbeben als dauernde Erfahrung der Gesellschaft und der Geschichte anzunehmen, widerstrebt dem modernen europäischen Selbstgefühl zutiefst. Es isoliert Katastrophen in der Gegenwart und eliminiert sie aus der Vergangenheit, weil sie die Zukunft nicht definieren sollen.” (S. 532)
Floods
Adaptation strategies and memory cultures

- Life close to water ways between benefit and risk
  - Risk of flooding integrated into daily socioeconomic life (e.g. continuous acquisition of timber to maintain bridges and constructions for flood prevention)

- Structural adaptation strategies
  - Settlements erected in the more secure inner side of river loops
  - Historical city centres mostly on elevated places
  - Crafts dependent from water power and water supply necessarily exposed to flood risk
  - Adaptation of buildings (position of windows, storage rooms etc.) to the worst case

- Flood marks as signs of a vivid memory culture
  - Affixed to public buildings and/or other well visible places
  - Useful only to some extent for hydrological reconstruction
  - Memory by flood marks partly vanishing during the last decades
Flood mark of 1501
Mittich am Inn, Lower Bavaria

[was] das nit an grosse slag an vnser frauen tag als in himel baid enpfanen ist die güss daher gangen als man zalt 1501 jar mügt ir glauben für bar

(Wasn’t this a big blow on the day of the Ascension of Mary? The water reached this mark in the year of 1501. You may believe that.)

Photograph: Christian Rohr
Flood mark of 1501
Mittich am Inn, Lower Bavaria

Position of the flood mark in 2006
(Photograph: Christian Rohr)

... and 1908 (Photograph: Hydrographie Österreichs 1908: 7)
Adaptation to the worst case
The toll houses of Engelhartszell, Upper Austria

Photograph: Siegfried Schwarzl, 1954
The increase of flood risk

- Former flood plains become attractive, but endangered and partly not suitable settlement places in the late 19th century
  - Soft soil causes rifts in the houses
  - Ground water problems
  - Flood protection sometimes erected much later than the houses

- Floods
  - Two consecutive and destructive floods in the Bavarian and Austrian catchment area of the Danube river
    - July/August 1897
    - September 1899
  - Floods in France and Switzerland
    - June 1910
Salzburg in the 19th century
Sattler panoramic view of Salzburg (1825/1829) (Salzburg: Museum Carolino-Augusteum/Panoramamuseum)
Salzburg in the 19th century
Coloured picture postcard (lithograph), around 1900
Salzburg in the 19th century
The flood of 1899, photograph by Fotoatelier Würthle
(Salzburg: Municipal Archives)
The so-called *disaster gap* (Christian Pfister)
- Technical flood protection and straightening of rivers avoids small- and medium-scale floods
- Relatively few severe large-scale floods in the foothills of the Alps
  - Swiss Plateau: 1910-1987
  - Bavaria, Austria: 1954-2002

Carelessness concerning suitable settlement places after World War II (in particular in the time of the “economic miracle”)
- Trend towards single-family houses in historically endangered areas
- Conversion of use of historical buildings

Vulnerability raises significantly during “centennial floods” (HQ100 and higher) occurring since the 1980s
- Integral flood protection measures discussed by experts since the 1970s, but politically enforceable only after the disastrous events
The flood of 1899
Oberndorf (Salzburg, Austria) and Laufen (Bavaria, Germany)
The flood of 2013
Oberndorf (Salzburg, Austria) and Laufen (Bavaria, Germany)
The flood of 2005 in Bern

Evacuations

All photographs (slides 19-20): Der Bund online, August 2005 (today not available any longer)
The flood of 2005 in Bern
Damage
Avalanches
Basic types

Slab avalanche

Powder snow avalanche

Photographs: SLF
Local knowledge of endangered zones
Vallée des Ormonts (Vaud, Switzerland)
Local knowledge of endangered zones
Vallée des Ormonts (Vaud, Switzerland)


Google Maps, 07.04.2014
Avalanches in the Alps
Ebenhöch houses in the Cantons Grisons and Valais

Ebenhöch houses in St. Antönien im Prättigau (Grisons, Switzerland).
Photograph: SLF
Avalanches in the Alps
Splitting chocks, protective walls

Davos (Grisons), splitting chock of the Frauenkirche (after 1602). Photograph: Christian Rohr

St. Antönien (Grisons), protective wall against avalanches. Photograph: SLF
The protective forest of Andermatt
Documented and protected since 1397

Andermatt around 1900, coloured photograph

New development area for luxury tourism
Structural protective measures
Avalanche protection in the fracture zone, St. Antönien

Source: Bern: Alpine Museum of Switzerland.
Photographs: Kaspar Thalmann

17 June 2021
Memory cultures
*Ex voto*-commemorative tablets

Rüti chapel near St. Gallenkirch, Montafon (Vorarlberg, Austria), 1793/1830.
Memory cultures
Sale of picture postcards and photographs

- Picture postcards and photographs sold after disasters to gain money by donations
- Example: Avalanche disaster on 31 January 1907 in the Kleinwalsertal valley (Vorarlberg)
- Text on the back of the photograph:
  - „Menschenfreunde bittet das gefertigte Pfarramt, die Bilder aus der schrecklichen Lawinenkatastrophe (31.1.07) Schaden 200.000 Mark, im Weiler Ahorn Kleinwalsertal, zu 15 Pfg. a Stück zu erwerben. Der Erlös für die 5 geretteten, ihrer Ernährer und ihrer ganzen Habe entblößten Kinder. Das Pfarramt Riezlern.“

Source: Walsermuseum Riezlern
Photograph: Verlag J. Heimhuber; Max Kessler
The avalanche disaster of Galtür (1999)  
Learning from the catastrophe?

- Memory culture vanishes in the 20th century
  - Inscriptions removed
  - Knowledge about endangered settlement places neglected
- 23-24 February 1999: two disastrous powder snow avalanches in the Paznaun valley (Tyrol)

Source: dpa
The avalanche disaster of Galtür (1999)
Learning from the catastrophe?

- Galtür (1584 m above sea level)
  - Several victims after avalanches in early modern times
    - 9 people killed in 1613, 9 in 1622
    - 19 people killed during the 18th century
  - High vulnerability
    - Hardly any forests to protect the village from the North
    - Popular skiing resort
    - Numerous hotels built in the so-called red zone

Source: dpa

Source: www.droessler.at
The avalanche disaster of Galtür (1999)
Learning from the catastrophe?

- What made Galtür such a disaster?
  - Unpreparedness and carelessness
  - Historical local knowledge neglected
  - High vulnerability: large amount of victims and destroyed houses
  - Help from outside was difficult: road through the Paznaun valley blocked for five days
  - Worldwide media event

Source: dpa
Source: Associated Press
The avalanche disaster of Galtür (1999)
Learning from the catastrophe?

- Protective buildings and the emergence of a new culture of disaster memory
  - Protective buildings made of steel on the avalanche endangered slope
  - New protective wall (345 m long, 19 m high) on the bottom of the slope to protect the village
  - Alpinarium, a new museum about daily life in high Alpine areas and about the catastrophe of 1999, integrated into the protective wall
- However, still some examples for banished memory: Wikipedia on Andermatt

Source: Associated Press
Basic assumption: European colonization of the USA in the 19th century begins parallel to the emergence of “disaster banishment”
- New settlers often lack long-term local knowledge of natural hazards
- „Rise up“ mentality: After every disaster, a city emerges larger and more spectacular than before
- Active preventive measures are mostly inadequate because legal requirements contradict freedom of acting
- Hardly any forms of active memory culture of extreme natural hazards (monuments, etc.)

Example: the 1906 San Francisco earthquake and fire
- worst case scenario due to a lack of preparation and numerous adverse breakdowns
- Reconstruction as “resurrection like a phoenix from the ashes”
- 1915: Panama-Pacific International Exhibition
- Up to now hardly any noteworthy memory culture
The earthquake and fire of San Francisco on 18 April 1906
“Re-erection” of the city

The earthquake and fire of San Francisco on 18 April 1906
Panoramic photograph by George R. Lawrence

The earthquake and fire of San Francisco on 18 April 1906
Hidden traces of a memory culture

San Francisco: Lotta’s Fountain. Erected in 1875, one of the very few monuments withstanding the 1906 earthquake and fire. Place of an annual remembrance of the event (18 April, 5:12 a.m.) for the surviving people. Photograph: J.D.L. Robson
The Galveston hurricane 1900
Hidden traces of a memory culture

Galveston, TX: Memorial remembering the Hurricane of 1900, erected in 2000.
Photograph: G. Allen
The flood of 1937 of the Ohio river
Lost traces of a memory culture

Hurricane Katrina 2005

- One of the most devastating natural disasters in US history
- 23-30 August 2005
  - Gusts up to 344 km/h
  - Affected areas: Florida, Louisiana, Mississippi, Alabama, Georgia
  - 1836 dead, plus numerous other missing persons
  - Damage estimated at around 100-125 billion USD
  - Inadequate individual prevention measures

- Situation in New Orleans
  - After dike breaches, up to 80 percent of the urban area up to 7.60 meters under water
  - More prosperous classes can mostly flee
  - Poorer population stays in their houses or flees to the Louisiana Superdome
  - Looting
Christian Rohr: Disaster memory and ‘banished memory’

Hurricane Katrina 2005
Situation in New Orleans

Source: Wikimedia Commons

17 June 2021
Hurricane Katrina 2005 and its aftermath

- Guides for Hurricane-proof building exist for most of the affected States
  - Mostly published by insurance companies
- Building Codes in the affected States of the USA
  - Existing, but not executable for private houses
  - Public buildings, hotels, etc. built generally less affected anyway
  - Detailed reglements contradict the American mentality
- Memory cultures?
  - Only very fragmentary in den USA
  - Hardly any museums or commemorative tablets dedicated to natural disasters (contrary to events such as 09/11).
  - Short-term “remembrance” via Youtube, etc.
  - Mentality of “Rise up!” also related to hurricanes
  - First signs for a more conscious memorial culture after 2005
Christian Rohr: Disaster memory and ‘banished memory’

Hurricane Katrina 2005 and its aftermath
Building guides for secure roof construction

Homeowners’ Hurricane-Resistant Safeguard Guide Reference Drawings

With Engineer Designed
Pull-out Checklist for Homeowners

Plan

Isometric

Double top plate
(saves beam)

Galvanized plate
as specified

Stud

Stud & top plate connection

Guide Ref. #1

High gable: 25’ or greater
Favourable roof shapes
Guide Ref. #11

Hip: 20° or greater

Plan

Isometric
Hurricane Katrina 2005 and its aftermath
New ways of memory culture

New Orleans: Hurricane Katrina Memorial. Photograph: Doug MacCash
Christian Rohr: Disaster memory and 'banished memory'

Hurricane Katrina 2005 and its aftermath
New ways of memory culture

New Orleans: Flooded House Museum (left); 17th Street Canal Floodwall – commemorative tablet (right). Photographs: Doug MacCash
Conclusions

- Integration of disaster memory in pre-modern societies
  - Flood marks
  - Religious monuments and rituals of memory
  - Structural adaptation strategies and optimization of the settlement places
- Large-scale protective structures since the late 19th century
  - Protection against minor events increases the carelessness towards major events occurring only once or twice a century
  - Increase of vulnerability (also due to the value of the real estate and its furnishings)
  - Deceptive disaster gap
- New forms of memory cultures in the wake of major disasters of the last decades
  - Memorial sites
  - Higher sensitivity due to the awareness of the climate crisis
Thank you for your attention!

Prof. Dr. Christian Rohr  
Institute of History  
University of Bern  
christian.rohr@hist.unibe.ch