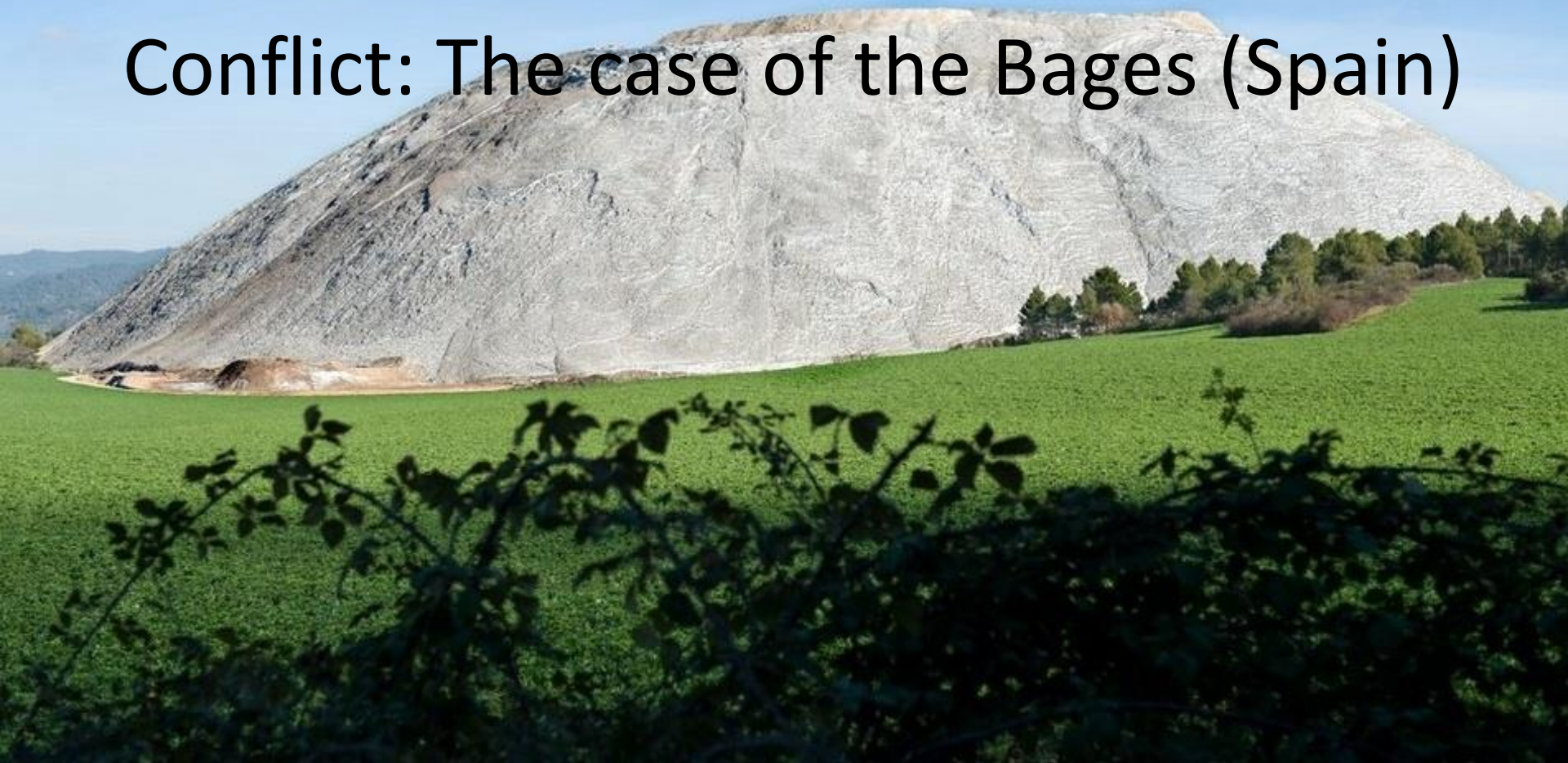
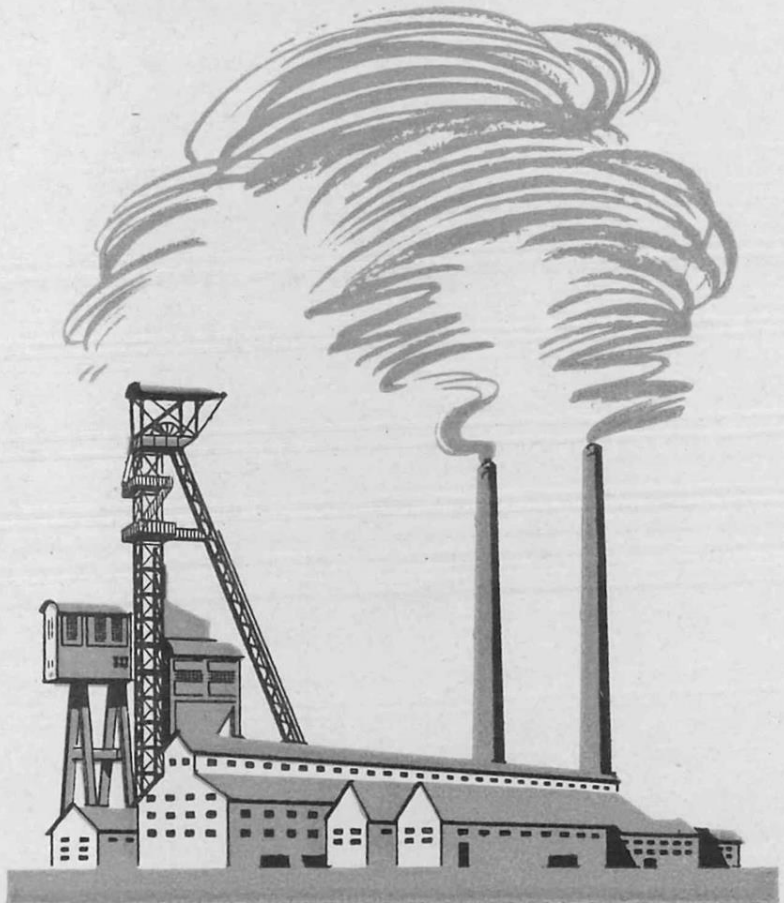


Potash Extraction and Environmental Conflict: The case of the Bages (Spain)



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GRATS seminar – 10 June 2013



MINAS POTASICAS

de
CARDONA
SURIA
SALLENT
BALSARENY

Outline

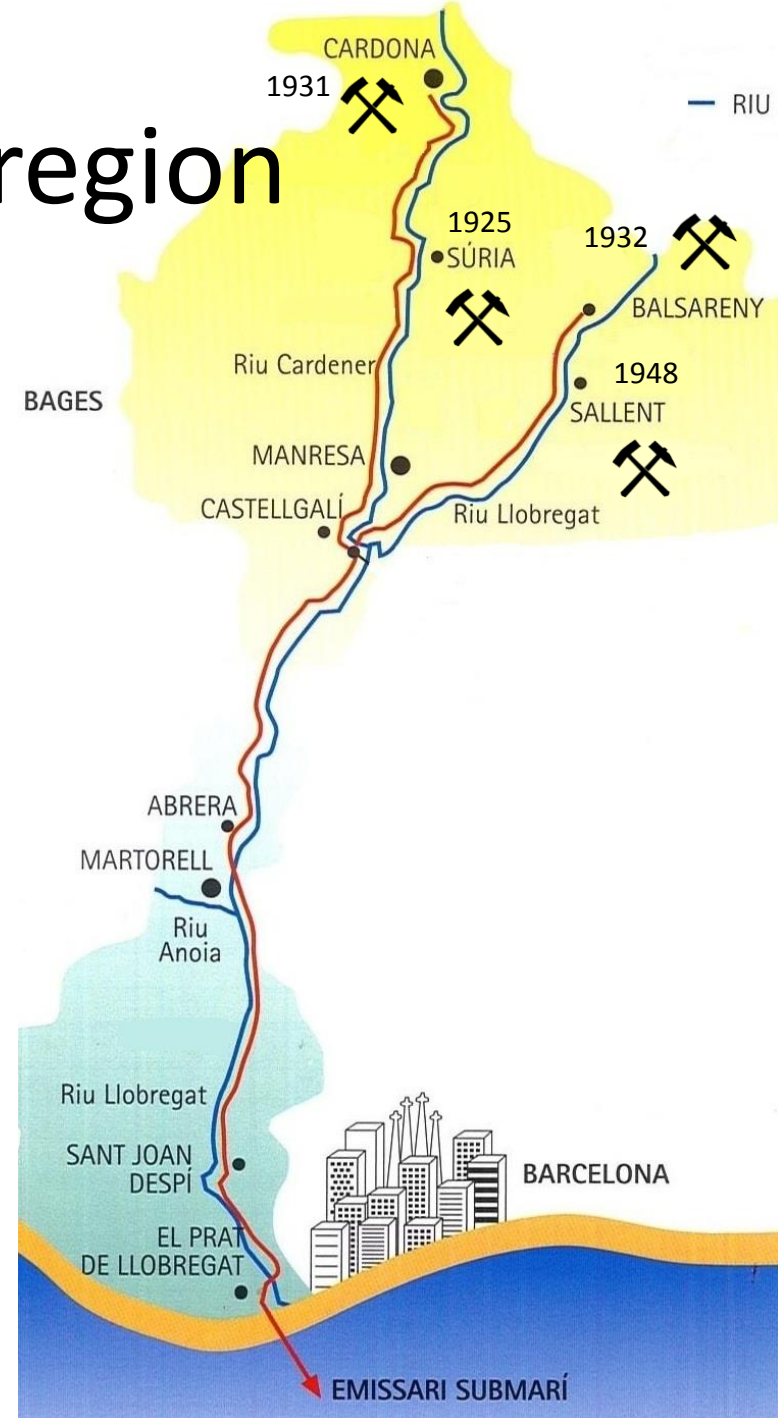
1. Why potash?
2. The Bages region
3. A historical approach
4. Conclusions
5. Further research

1. Why potash?

- Renewed interest in mining in Spain
- Potash used to produce agricultural fertilisers. **Potassium** is a primary nutrient for plants.
- Under addressed in the literature
Industrial agriculture: Potash production process generates residues: brines and mine tailings - in Bages and other regions

2. The Bages region

- Mining since 1925, mostly for export (now 70%)
- **Negative impacts:** brines and mine tailings. Dissolution of waste salts and introduction in the water flows
- **Remediations:**
 - Brine collector (1989) (problems: insufficient, 400 breakages)
 - Reverse osmosis filters (2009) in water treatment stations (energy intense, end-of-pipe)
- Cost (pipeline, desalination, etc.): **200 M € subsidized (2008-2011)**
- Still danger to BCN's water supply





El Cogulló mine tailing. 48 Ha. 50 million tonnes. Biggest accumulation of industrial waste in Catalonia.

3. A historical approach in the Bages case

- 1. Problematizing infrastructures:** the Brine collector (1932-1989). From private initiative to public responsibility.
- 2. Narrative continuity:** Public protest and activism on human health (1930s – 1990s). Broken by the dictatorship.
- 3. The anthropic origin of salinisation.** 1920-1930s debates about different sources.

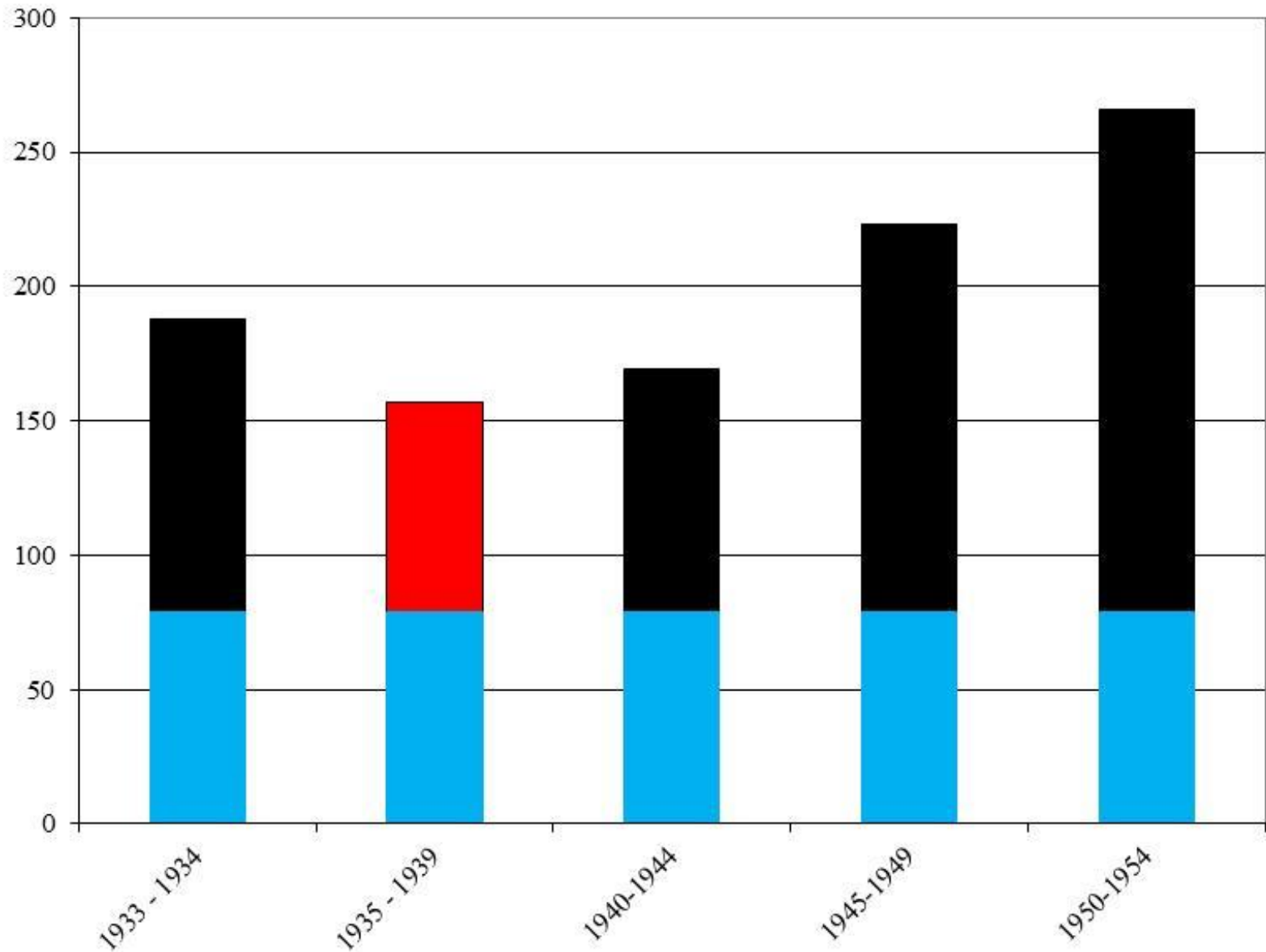


Fig. 1: Chlorine concentrations in SGAB wells (mg Cl⁻ /l).

4. Conclusions

1. Externalities as cost-shifting successes
2. Water history as history of quality, not only supply!
3. War as a disruption to the environment
(Environmental Histories of War)

5. Further research

1. Potash markets since the 1920s and the evolution of the Spanish importance
2. Human health issues: accumulation of residues in landscape... and in bodies?

Thanks for your attention



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