

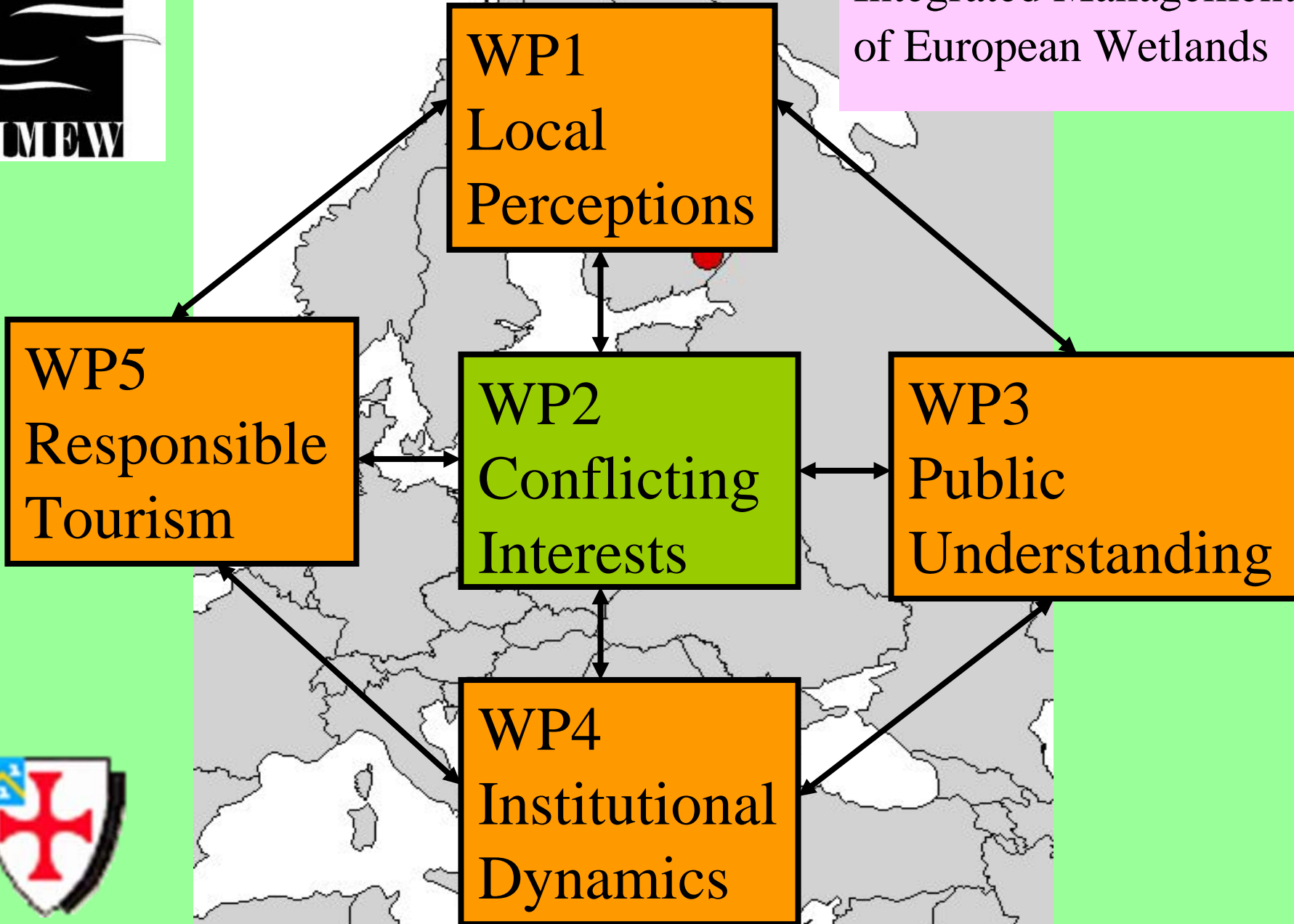
*“Calming Troubled Waters:
making interdisciplinarity work”*

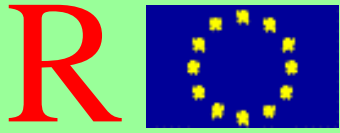
Dave Carss, Mariella Marzano, Sandra Bell



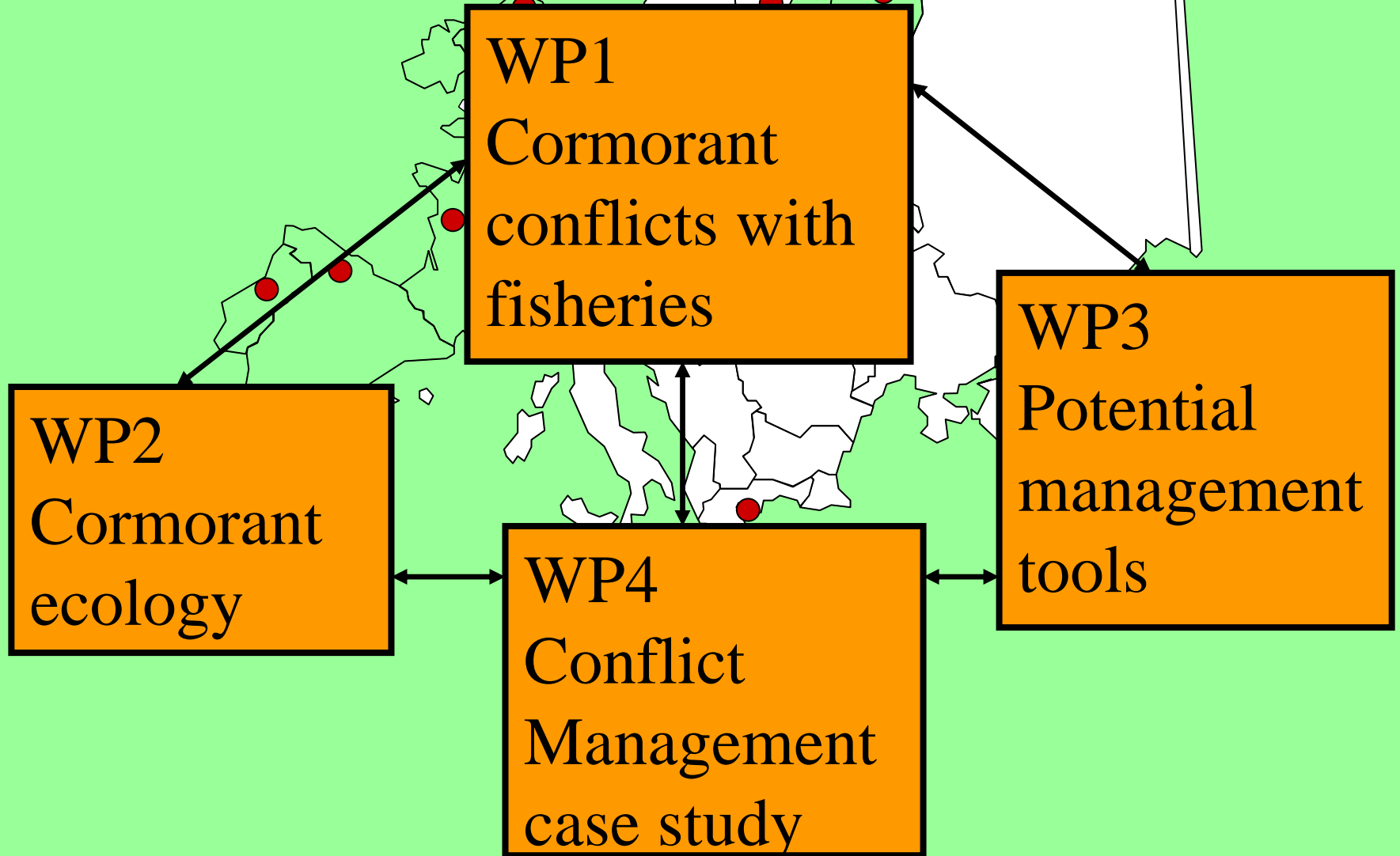


Integrated Management
of European Wetlands



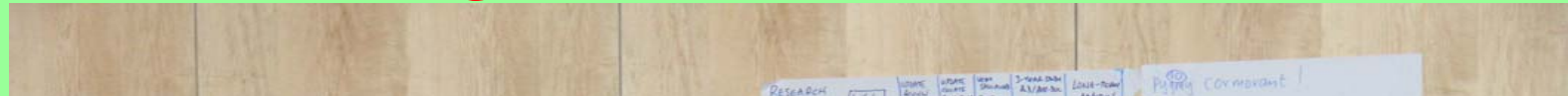


Reducing the conflict between
cormorants and fisheries
on a pan-European scale



Theme 1: Management and organisation of projects

- **What are the obstacles to interdisciplinary work and collaboration?**



I83: One big obstacle is the people themselves! Sometimes, with no bad intent on their part, people become very defensive of their own discipline and find it hard to listen, learn and communicate with others. We claim to be interdisciplinary but have not always learned how to do it. Like everything, it needs practice ...



Theme 2: Integration of natural/social science data

- How far do people understand/accept limitations?

• Does one discipline understand what the other can/can't do and *vice versa*?

• How far do disciplines understand different interpretations, presentations?



- Levels of respect/suspicion – rigour and good practice.

I73: I think the way the scientists presented their work to us social scientists was over our heads ... Maybe those scientists felt they were actually presenting to the other scientists in the room, they didn't want to make it Mickey Mouse because then they'd be judged. So they wanted all the flashy graphs.

I72: They're not doing that to be flashy, they're doing that because that's the simplest way of distilling their message.

I73: But if you can't speak the language in the first place



Theme 3a: Dissemination

“We went to hear the research, we listened, but it was a complete waste of time. The research is a disgrace.”

National Federation of Anglers (1997).



“Surprise, surprise. Year one of the research told us nothing. Year two has told us nothing. So it doesn’t take a rocket scientist to predict what the final year’s will tell us.”

Angling Times Editor (1997).

Theme 3b: Publishing

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I106: Its not just where you publish, its are you using a social science framework or a science one, or a combination. And at the moment, there's no room for a combination. You're still in one style or the other let alone where you publish it.



Loren Kieseberg, *Bloomington*
Harry Smith, *Leicester*

The Study of Interdisciplinary Knowledge

Specialities and Interactions in an Interdisciplinary
Context

I24: We do sometimes publish social science research - but usually in guest-edited special issues focusing on catchment issues for instance. Papers can go through the whole spectrum from chemistry, hydrology, macrophytes, invertebrates, fish and socio-economics.



RURAL ECONOMY
AND LAND USE

The first RELU conference

**RURAL ECONOMY AND LAND USE: THE
CHALLENGE FOR RESEARCH**

January 19th-21st 2005



**RURAL ECONOMY
AND LAND USE**

Interdisciplinary Bridge – a rope bridge

Because it's dangerous ...

- Referees
- Funding
- RAE

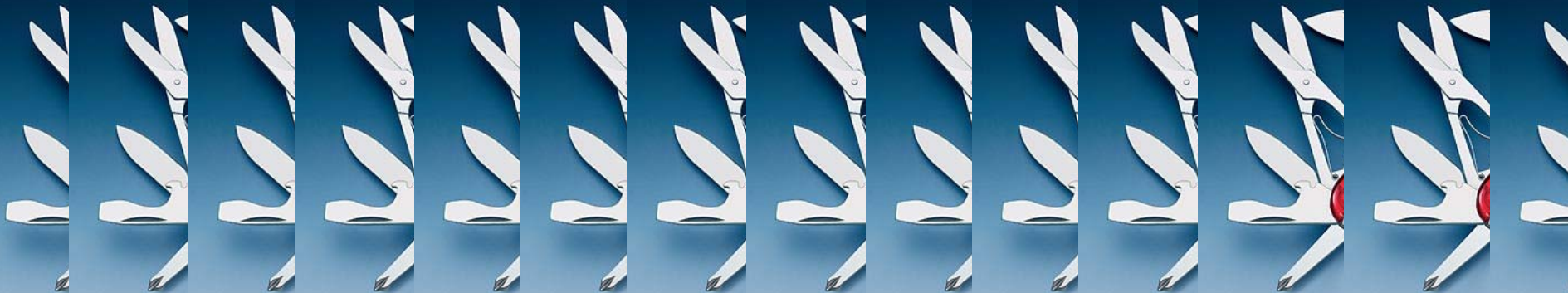
Skills: learning, communication, sensitivity to other disciplines



Need a flexible set of bridge building

Need to know who to build your bridge with

“The choreography of interdisciplinary bridge building”



Time

Communication

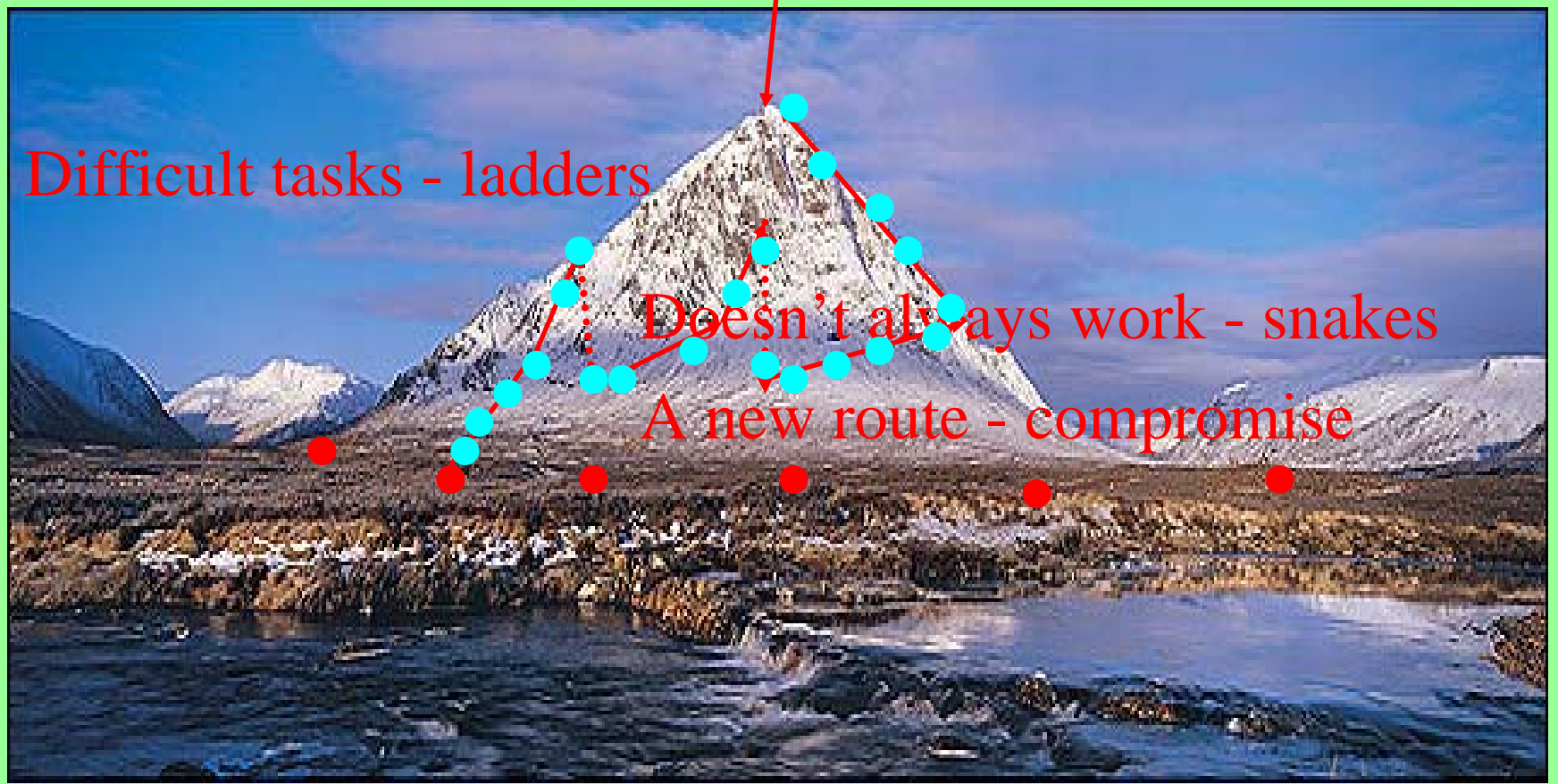
Trust

Tyne Bridges 1905



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Ultimate Goal: shared, novel understanding



Difficult tasks - ladders

Doesn't always work - snakes

A new route - compromise

Foothills – easy start



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Driver: scientists

Steering: motivation



S/absorbers: flexibility

Wheels: understanding

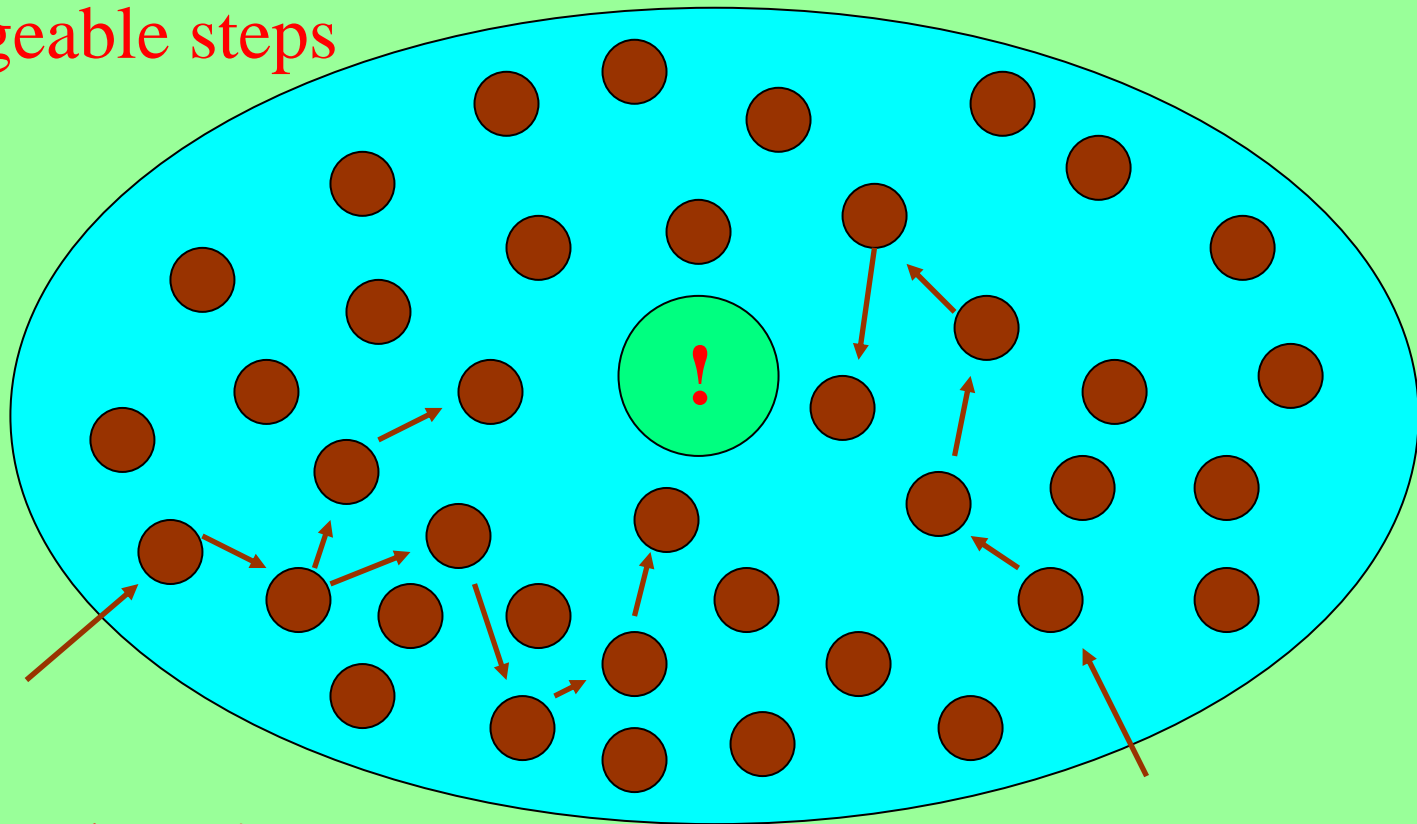
Chain: respect

Power: incentives

Frame: concepts

Bank: stable but people have to be receptive

Manageable steps



Very robust !

Multiple routes

How do you represent this in a grant application?

- **Communication**

I20 You have to be able to explain the same thing in at least two ways. You should be able to explain your research to both a colleague and your grandmother.

- **Quality and Rigour**

I26 The science disciplines are rigorous, they have proformas, they know what they're doing, they can set up experiments...and I think their view was that I just pottered around arranging to have coffee with people. They found it quite difficult to understand how social scientists work.

I02 Statistical methods and conclusions drawn from results of statistical analyses are Gods in my world.

I32 Sometimes reading a social science book or paper is like reading a newspaper where nothing is stated clearly but discussed endlessly.



- **Understanding of other disciplines**

I04 One feels there is a kind of monolithic cannon of what you've got to learn to be a biologist...long-lasting names and taxonomies that take years and years to be at home with so I feel that maybe what they do is more impenetrable to me than what I do to them.

I06 Perhaps 'one element' is to understand what qualitative methods are all about. It can be seen as non-scientific and the results are underestimated and misinterpreted.



- **The future is interdisciplinary**

- have someone in the team (or a team in a large project) who will ensure interdisciplinarity occurs

- start with a pilot project to make sure people are working in an interdisciplinary way

- encouraging interdisciplinarity at school and undergraduate level

- encourage everyone to learn through doing fieldwork