CROSSING BORDERS, TRANSCEDING BOUNDARIES: RESULTS FROM THE CROSS-CULTURAL ADAPTATION OF THE INTERDISCIPLINARY STUDY

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OUTLINE

• Overview and study design (Anne Dijkstra)
• Case China (Yan Shi)
• Case South Africa (Shadrack Mkansi)
• Conclusions (Mirjam Schuijff)
• Panel discussion
CULTURAL ADAPTATION STUDY

• Different contexts enrich the view on RRI
• Two cases: China and South Africa
• Feeds into Implementation Roadmap
INVOLVED PARTNERS

• China – **CRISP** = China Research Institute for Science Popularization
• South Africa – **SAASTA** = South African Agency for Science and Technology Advancement
• Netherlands – **UT** = University of Twente
• Collaborative effort
RESEARCH QUESTIONS

• How are RRI and other relevant concepts implemented in international contexts?
• What are barriers and successes to the future implementation?
• What can be recommended for the future implementation of RRI in institutions?
METHODOLOGY

• **Multi-method approach** – enables to use a rich variety of sources which leads to more insightful understandings and increased diversity (Greene et al, 2001)

• **Qualitative**
  - Same design in both cases

• **‘Literature’ studies**: e.g. academic literature, reports, policy documents, books, presentations, field trip reports, personal communications, emails

• **Interviews**: 13 in South Africa, 30 in China
INTERVIEWS

• About one hour, semi-structured
• Questions were tested and adapted
• Background; challenges for research and society; engagement; impacts of research on society; governance of research; changes foreseen in practices and policies; responsibilities; support
• What is necessary for Europe to realise RRI?
USED DEFINITIONS OF RRI

• *Von Schomberg* (2013, p.19) = transparent, interactive process, *mutually responsive*

• *European Commission* = *inclusive approach*, align process and outcomes, anticipating implications and societal expectations
  – Five thematic keys – Gender, Open Access, Science Education, Engagement, Research Ethics
  – Three O’s – open to science, innovation, the world
ANALYSIS AT DIFFERENT LEVELS

- Conceptual, governmental, institutional, individual
- Looking for striking aspects in the ‘themes’, adapted from the EU keys
- Translated to recommendations for governments, institutes and individual researchers
ADAPTED THEMES

• **Equality** – e.g. including ethnic groups, equal access to universities

• **Science education, outreach and open access** – innovation requires science education and outreach, access to information

• **Stakeholder and public engagement** – to bring together, exchange views

• **Ethics and broader impacts** – moral considerations, impacts to lives, society, environment
CASE CHINA

YAN Shi (China Research Institute for Science Popularization, CRISP)
Case description based on:

- Literature findings from various sources
- Interviews (n=30), face-to-face, 11 females, 19 males, 22 from universities, 8 from institutes, age between 30-64
IN CHINA

- RRI reflected in social responsibility
- Strong emphasis on innovation via scientific literacy and science popularization
AT THE GOVERNMENTAL LEVEL...

• At the governmental level, popularization of science and technology is part of a national strategy which is reflected in various policy documents.

2002

2006

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AT THE INSTITUTIONAL LEVEL...

• Science education takes place both inside and outside schools.

• Many organizations have their own bureaus or departments for science popularization and communication.
AT THE INDIVIDUAL LEVEL...

• At the individual level, topics where (public) debate is ‘on the rise’ – GM food, air pollution (sustainability)......

• Some increasing awareness of need for research ethics, engagement, impacts
CHINA

- At all levels ‘practices’ found to foster social responsibility
CASE SOUTH AFRICA

Shadrack Mkansi (SAASTA)
SOUTH AFRICA

Case description based on:

- Literature findings from various sources
- Interviews (n=13), via Skype, 12 male, 1 female, age between 38-75, leading positions in universities and science centres
IN SOUTH AFRICA

Innovation as a means to advance the economy and lives of people

RRI reflected in many aspects

• Equality
• Science education and outreach
• Community oriented research
AT THE GOVERNMENTAL LEVEL

- Responsive to society, e.g. research policy for improving lives as well as fundamental research projects
- Indigenous knowledge systems policy

Challenges
- Available budget
- Equal access > e.g. Fees must fall movement

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AT THE INSTITUTIONAL LEVEL

• Science education and outreach via e.g. science centres, nation-wide programmes, SAASTA > raise enthusiasm for science
• Entrepreneurial attitudes for finding budgets
• Open access platform

Challenges
• Distance to rural areas
AT THE INDIVIDUAL LEVEL

- Skilled in making most out of budget
- Some researchers are actively engaged
- Striving for open and trusting relationships
- E.g. Study to ‘kougoed plant’ shows respect for local knowledge
- More formal recognition of public activities
COMPARISON AND CONCLUSIONS

Mirjam Schuijff (UT)
PRACTICES AT THE GOVERNMENTAL LEVEL

- Innovation and knowledge economy as policy objectives
- Challenges regarding different levels of science literacy and inclusion, affecting research and universities.
- China: science education prominent
- South Africa: science engagement, indigenous knowledge
AT THE INSTITUTIONAL LEVEL

• Large efforts for science education
• Rural communities are literally far away → affects efforts and equal access
• Institutions do not have formal recognition systems for RRI aspects
• System for research ethics becoming important in China, in place in South Africa
AT THE INDIVIDUAL LEVEL

• Engagement and science education not always considered part of their job > acknowledge
• Support and training wanted
• Role models can stimulate or facilitate RRI
CONCEPTUAL LEVEL

- RRI not labelled as such; ‘RRI’ not well-known

Yet, in both countries:
- Many efforts can be seen as RRI-related
WHAT IS NECESSARY FOR EUROPE TO REALISE RRI?

• Europe can learn from international perspectives.
• Europe can design new strategies to take society along.
• Set up exchange programmes
PANEL DISCUSSION

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QUESTIONS?

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NUCLEUS
The label RRI is necessary for successful implementation

- Agree
- Disagree
- Sometimes
WHAT CAN WE LEARN FROM THE FINDINGS?
HOW CAN WE USE THESE FINDINGS FOR OUR PRACTICES?
THANK YOU!