### **GOVERNING THE ANTHROPOCENE: CYBERSYSTEMIC POSSIBILITIES?** SCHLOSS HERRENHAUSEN, 30-31<sup>ST</sup> JULY 2015

INQUIRY RECORDING TEMPLATE		
Table Number:	8	
	Sarah Cornell	
Participant	Tilman Hertz	
Names	Francesca landolo (only participated the first day)	
	David Rousseau	
	Sandro Schlindwein	
	Stuart Umpleby	
	Sabine Weiland	
	Jue Wang (PhD student)	
Recorder Names:		
(PhD Students +		
others)		

## DAY 1 Thursday 30<sup>th</sup> July

## Please take a photo of your table group at some suitable point during day 1 or day 2 and insert at the end of the template.

<b>INQUIRY 3</b> – At the end of this session have all <u>Issues (I)</u> and <u>Opportunities</u> (O) listed from		
sticky notes on conversation maps – take and insert photos (2) of sticky notes on conversation maps.		
ISSUES – List	OPPORTUNITIES – List	
1 Effectiveness of predictive models for complex	1 We can use the existing mechanisms, which	
systems is unknown	means that not everything needs to be	
2 Things tend to polarise to the dominant	political negotiated	
discourses/actions	2 Laws requiring in transparency in financing	
3 What you see is not what you get	of reports on environment effects	
4 Dealing with linked issues (when the links look	3 If this is a predictable dynamic, maybe it can	
different to every viewer)	be activated/deployed	
5 Models are easily taken as prescriptive or	4 Cybersystemics can point to what needs to	
predictive, which displaces attention from actual	be illuminated	
decision making	5 A philosophies cybersystemics may help to	
6 Checks and balances are easy to lose	distinguish which systems can be predicted	
	and which cannot be	
Insert Photo 1	Insert Photo2 (if not included in photo 1)	



<b>INQUIRY 4</b> – Update listing of Issues and Opportunities noting any changes to existing ones		
and adding new ones.		
ISSUES – list	OPPORTUNITIES- list	
1 Issue with modelling: models have a particular	1 Lots of experiments "new agoras" to learn	
range; models embed assumptions (this means	from, to link up, and to adapt	
we need to take care when go out of that range,	2 Reflexive models (learning feedback to human	
don't look at assumptions)	systems open)	
Insert photo 1 of revised conversation map	Insert Photo2 (if not included in photo 1)	

Please Insert any additional Narrative elements here – e.g. agreements, disagreements, explanations novel insights etc

## DAY 2 Friday 31<sup>st</sup> July

## Please take a photo of your table group at some suitable point during day 1 or day 2 and insert at end of template

#### **KEY REFLECTIONS ON DAY 1 + NEWS OF DIFFERENCE**

#### 1. REFLECTIONS ON DAY 1 (list here)

Knowledge issue, experts/people have knowledge are privileged or not?

#### 2. NEWS OF DIFFERENCE (list here):

Hosts:

*Pair 1: Who have the knowledge? Who is the expert? Who got power? The rich and powerful decide unless society decides* 

Pair 2: What level/scale works for consensus/cooperation? Jump to conclusion too early Chaos needs to be organised

Pair 3: Add strength to environmental organizations to strengthen institutions

3. Update listing of Issues and Opportunities - noting any changes to existing ones and adding new ones.

ISSUES – list	OPPORTUNITIES- list
1 Good system theory and methods (e.g.	1 Foster applications and real action-oriented
participatory approach) are not routinely applied	research and target academic accreditation
because universities don't recognise it as "science"	processes
2 Seeing "the problem"—how, who, at what scale?	2 Change perception of what science is
3 Wholes and parts behave differently, but we tend	3 Strengthen scientific foundations of
to look at one or the other $ ightarrow$ cross purpose	systemology
4 Lack of integrated academic discipline centered on	4 Timing predictions is difficult, stability to
systems	instant is easier to see
Insert photo 1 of revised conversation map	Insert Photo2 (if not included in photo 1)



Please Insert any additional Narrative elements here – e.g. agreements, disagreements, explanations novel insights etc

We are talking about system theory all the time, however, there exists no such "system theory", it is just a series of approaches. So it gives us opportunities to development the theory itself. It is important that we focus on the theory itself.

# INQUIRY SESSION 5: Update Issues/Opportunities and Reorganise

1. Update listing of Issues and Opportunities - noting any changes to existing ones and adding new		
ones.		
ISSUES – list	OPPORTUNITIES- list	
1	1	
2 No Change	2 No Change	
3	3	
Insert photo 1 of revised conversation map	Insert Photo2 (if not included in photo 1)	

2. Photo of reorganised Issues and Opportunities	on new sheet
Insert photo	
Insert photo	ere – e.g. agreements, disagreements, explanations
novel insights etc	

## INQUIRY SESSION 6: Update Issues/Opportunities

1. Update listing of Issues and Opportunities - noting any changes to existing ones and adding new		
ones.		
ISSUES – list	OPPORTUNITIES- list	
1	1	
2 No Change	2 No Change	
3	3	
Insert photo 1 of revised conversation map	Insert Photo2 (if not included in photo 1)	

2. Photo of clusters of Issues and Opportunities on new sheet		
Insert photo		

Please Insert any additional Narrative elements here – e.g. agreements, disagreements, explanations novel insights etc

## INQUIRY SESSION 7: Formulating an actionable system

1. Update listing of Issues and Opportunities - noting any changes to existing ones and adding new		
ISSUES – list	OPPORTUNITIES- list	
1 Accrediting organisations destroy systems	1 Design a structure of a university that	
centers and institutions	supports system inquiry (do a research on	
2 Big science projects are not well known	"wandwaver solution")	
	2 Experiment more	
	3 Expand the conception of science to enable	
	more social experimentation	
	4 More service-learning project from school	
	start with young people	
	5 Use process improve methods in all	
	organizations	
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2. List of subsystems title and opportunities	
Subsystem title	Opportunities in Subsystem
Do longitudinal research to real implement systems sciences	Opportunities in subsystem 1 If this is a predictable dynamic, maybe it can be activated/deployed 2. Foster applications and real action- oriented research and target academic accreditation processes 3 Timing predictions is difficult, stability to instant is easier to see 4 A philosophies cybersystemics may help to distinguish which systems can be predicted
Support ways of multiple perspectives	<ul> <li>1 Cybersystemics can point to what needs to be illuminated</li> <li>2 Lots of experiments in "new agoras" to learn, to link up, and to adapt</li> </ul>

Expand concept of science to include systemic	<ol> <li>Change perception of what science is</li> <li>Expand the conception of science to enable more social experimentation</li> </ol>
Create reflexive governance	<ol> <li>Reflexive models (learning feedback to human systems open)</li> <li>What environment instruments stimulate reflexive thinking</li> <li>Laws require transparency in financing on environmental reports</li> <li>Experiment more</li> </ol>
Embed cybersystemic in learning and teaching	<ol> <li>Design a structure of a university that supports the systemic inquiry</li> <li>Strengthen scientific foundation of system theory</li> <li>More service-learning project in school</li> <li>Teaching causal influence in elementary school</li> </ol>
Find ways to protect vital checks and balances	<ol> <li>We can use the existing mechanisms, which means that not everything needs to be political negotiated</li> <li>Use process improve methods in all organizations</li> </ol>
<complex-block></complex-block>	

Please Insert any additional Narrative elements here – e.g. agreements, disagreements, explanations novel insights etc

#### 3. Voting on priority subsystems

- Listing on priority subsystems
- 1. Expand the concept of science to include systemic
- 2. Embed cyber systemic in learning and teaching, education of the young people
- 3. Create reflexive governance
- 4. Find ways to protect vital checks and balances

5. Do longitudinal research in implemented system sciences Insert photo of voting on systems map

Please Insert any additional Narrative elements here – e.g. agreements, disagreements, explanations, interpretations novel insights which can help interpret voting

## PLENARY – Reflections and Priorities

- 1. Reflections on your inquiry (please list)
- 1) Expand the concept of science to include systemic
- 2) Embed cyber systemic in learning and teaching, education of the young people
- 3) Create reflexive governance
- 4) Find ways to protect vital checks and balances
- 5) Do longitudinal research in implemented system sciences
- 2. A priority action relating to the subsystem receiving the most votes

Reflexive governance

Education in cybersystemic for yound people

Longitudinal research

Please Insert any additional Narrative elements here – e.g. agreements, disagreements, explanations novel insights etc

## Please make sure you have taken a photo of your table group at some suitable point during day 1 or day 2

### Insert table group photo here:

Insert photo of table group



\*\* Please note: the PhD cohort will meet directly after

the end of day 2 for a short debriefing \*\*

THANK YOU!