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1990 – 1st Austral(as)ian Conference in Information Systems (ACIS), at Monash, chaired by Ross Jeffery

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https://en.wikipedia.org/wiki/ Australasian\_Conference\_on\_Information\_Systems





### **Not Only Horses Wear Blinkers: The Missing Perspectives in IS Research**

#### Roger Clarke PhD ANU FACS FAIS

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## ACIS at UniSA 2 December 2015

http://www.rogerclarke.com/SOS/ACIS15 {.html, .pdf}







## **Conventional Scientistic Research Many Elements of Research Design**

- Research Question(s)
- Unit of Study
- Population
- Sampling Frame
- Survey Design
- Data Collection Design
- Data Analysis Design
- But no sign of 'Perspective'



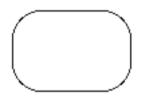
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### **Unit of Study**



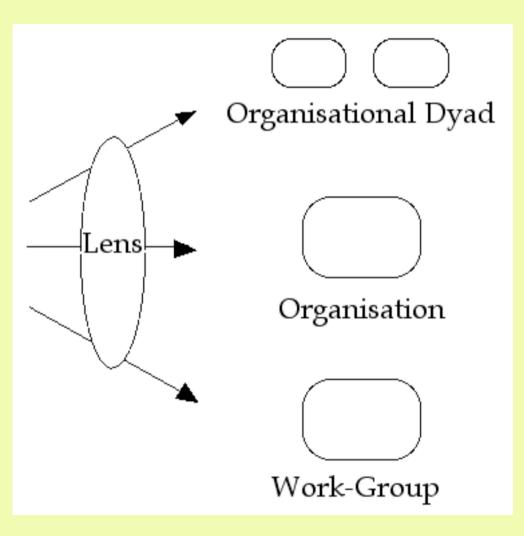




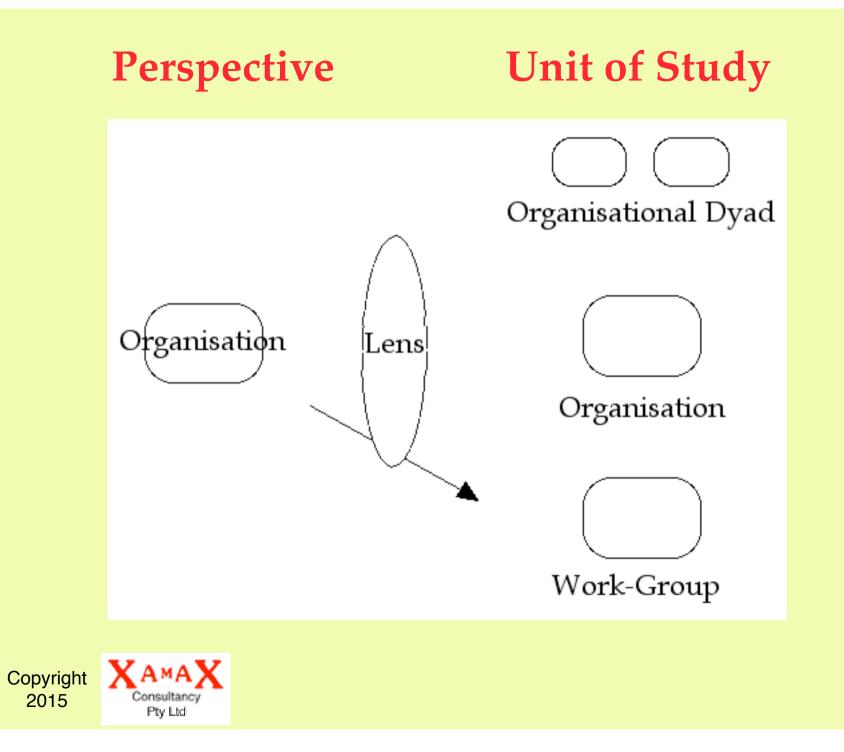
Work-Group



#### **Unit of Study**



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# A <u>Missing</u> Element of Research Design 'Perspective'

The view from the standpoint of a stakeholder in the phenomena that are under observation



Ambrogio Lorenzetti Annunciation, 1344



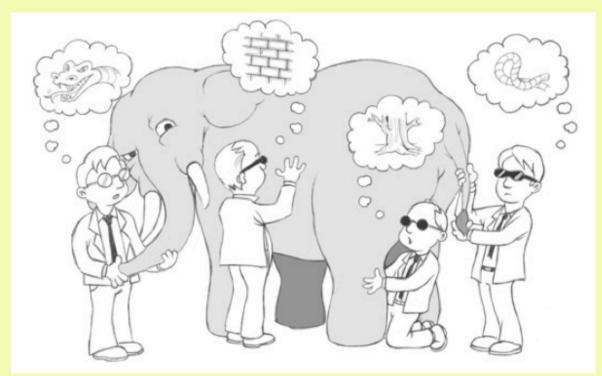
## **Insights from Interpretivism**

- Phenomena are subject to multiple interpretations
- Observation from a single perspective risks inappropriate inferences being drawn



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S ya d va d a (epistemological relativism) The Parable of the Blind(folded) Men and the Elephant

## **Insights from Interpretivism**

- Phenomena are subject to multiple interpretations
- Observation from a single perspective risks inappropriate inferences being drawn

## **Implications of Interpretivism**

- The researcher has a perspective
- The researcher's perspective influences research conception, questions, design, analysis, results
- If a researcher ignores the question of perspective, they blindfold themselves or wear blinkers



## A Missing Element of Research Philosophy

- We discuss:
  - **Ontology** (knowledge about existence)
  - Epistemology (knowledge about knowledge)
  - Methodology (knowledge about process)
- We seldom discuss:
  - Teleology

(knowledge about purpose, and hence whose perspectives the purpose reflects)



AIS eLibrary: 30,000 Entries 0 in Title, 3 in Abstract, 60 in body

#### **Alternative Perspectives**

Economic Dimension	<u>Social</u> Dimension	Environmental Dimension
World Economy	Humanity	The Planet
Supra-National Region (e.g. EU, NAFTA)		
Nation-State	A Society	The Troposphere
Regional Economy		
Sector / Value-Chain	A Community	The Biosphere
Strategic Partners		
Organisation	A Person	A Localised Ecology
Sub-Organisation		



#### The **Dominant Perspective** in IS Research

Economic Dimension	<u>Social</u> Dimension	Environmental Dimension	
World Economy	Humanity	The Planet	
Supra-National Region (e.g. EU, NAFTA)			
Nation-State	A Society	The Troposphere	
Regional Economy			
Sector / Value-Chain	A Community	The Biosphere	
Strategic Partners			
The System-Sponsor	A Person	A Localised Ecology	
Sub-Organisation			



## The Dominant Perspective

• The System-Sponsor's interests are Objectives



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- Entities with institutional or market power are recognised as Stakeholders. Their interests are Constraints



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- The System-Sponsor's interests are Objectives
- Entities with institutional or market power are recognised as Stakeholders. Their interests are Constraints
- Entities without power are ignored Their interests surface later, as 'Impediments' and 'Barriers to Adoption'



#### **Research about People, but for Organisations**

- How can we use social media to influence people?
- How do we buy-off people's privacy concerns?
- Can lifetime eHealth Records be imposed on people?
- Will people submit to pervasive wellbeing monitoring?
- How can we best exploit the crowd?
- How can we de-anonymise the customer?
- Why are people concerned about location sharing?



Let's stop sending printed invoices through the post. What will be the impacts on the organisation?



Let's stop sending printed invoices through the post. What will be the impacts on <u>the organisation</u>? What will be the impacts on <u>the value-chain?</u>



Let's stop sending printed invoices through the post. What will be the impacts on <u>the organisation</u>? What will be the impacts on <u>the value-chain?</u> What will be the impacts on <u>the recipients</u>?



Is the following a legitimate (M)IS research question? *Let's stop sending printed invoices through the post. What will be the impacts on <u>the organisation</u>? <i>What will be the impacts on <u>the value-chain?</u> What will be the impacts on <u>economic actors</u>? <i>What will be the impacts on <u>individual people</u>?* 



## **Person Perspectives**

#### • <u>USERS</u>

- **Organisation-Internal** Since admin computing began
- **Partner-Internal Users** Since Inter-Org Sys began
- External Users Since Extra-Org Sys began (ATMs, EFTPOS, ...)
- Differently-Capable Users



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(<u>Proactive Producer-consumers</u>' expect <u>Professionalism</u>) Since Toffler identified the category in 1970/80



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#### • <u>'USEES'</u>

People who are affected by an information system



Passive Human Resources **Consumer** as **Prey** 



Active Actors



Alternative Organisational **Perceptions** of People

Engaged Participants



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Is the following a legitimate (M)IS research question? Let's stop sending printed invoices through the post. What will be the impacts on the organisation? What will be the impacts on the value-chain? What will be the impacts on economic actors? What will be the impacts on individual people? What will be the impacts on forests?



#### **The Environmental Dimension**

- If we stop sending printed invoices through the post, what will be the impact on **Forests**?
- What are the key factors to be considered when evaluating the **Sustainability Profiles** of alternative designs for information systems?
- How can eCommerce theory be most effectively applied to Carbon Trading? (Expected Citation-Count – 20; Actual – 1)



## Dominance of the Economic Dimension A Pilot Study of Venues in 2014

_			Economic	Social	Envmtal
Venue	<u>Sample</u>	<u>Size</u>	<u>Dimension</u>	<u>Dimension</u>	<u>Dimension</u>
ISR	48	100%	48	0	0
AMCIS	43	10%	40	3	0
EJIS	43	100%	41	2	0
Bled	45	100%	43	2	0
AJIS	38	100%	36	2	0
ACIS	36	20%	35	1	0
Total	253		243	10	0
			96%	4%	0%

## Dominance of System-Sponsor Perspective A Pilot Study of Venues in 2014

			Perspective		
			System	Other	Multi-
<u>Venue</u>	Sample	<u>Size</u>	Sponsor	<u>Party</u>	<u>Perspective</u>
ISR	48	100%	47	1	0
AMCIS	43	10%	39	4	0
EUIS	43	100%	39	2	2
Bled	45	100%	41	3	1
AJIS	38	100%	37	1	0
ACIS	36	20%	31	2	3
Total	253		234	13	6
			92%	5%	2%

## **ACIS'15**

SS Can recommendation agents <u>drive</u> impulsive purchase behaviour?

What is an appropriate framework for using social media to <u>monitor</u> crowd sentiment?



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Soc What is the correlation between uses of ICT and health outcomes in <u>Africa</u>? (Social Dimension) Does broadband connectivity maintain bonding and bridging for <u>households</u> in rural communities? (Social)

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## **Opportunities Arising from the Recognition of Perspective**



Is the following a legitimate IS research question? *Let's stop sending printed invoices through the post.* 

How can an organisation appreciate <u>and manage</u> the impacts on all parties?

. . .

What is 'a feasible and good' design process to reflect the perspectives of all stakeholders?



## 'Big Picture' Issues

- Pornography as a Driver of Net Traffic
   Videotex ... Web ... P2P ... Netflix ...
   (2 in Abstracts among 30,000 entries in AISeL)
- Role of IS and ICT in the GFC
- Sexting (0 in Abstracts in AISeL)
- IS for Appropriate Resource-Usage
- Target Acquisition by Airborne Robots (1 in Abstracts in AISeL)

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. . .

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#### AJIS Section Release: Research on Indigenous use of Information and Communication Technologies

Editorial for the Indigenous use of Information and Communication Technologies Section

Peter John Radoll, John Campbell

<u>Impact of ICT usage on indigenous peoples' quality of life: Evidence from an Asian</u> <u>developing country</u> Md Mahfuz Ashraf, Helena Grunfeld, Ali Quazi

<u>Mediating Tragedy: Facebook, Aboriginal Peoples and Suicide</u> Bronwyn Lee Carlson, Terri Farrelly, Ryan Frazer, Fiona Borthwick

<u>Citizen Perceptions of E-Government in the Kurdistan Region of Iraq</u> Khosro Mohammad Ahmed, John Campbell



Australasian Journal of Information Systems Vol. 19, Nov 2015

## What about Public Policy?

- A matter of regional or national **significance**
- Has social, economic and environmental aspects
- Requires **negotiation** of Objectives and Principles
- Steps to achieve the Objectives include:
  - Regulatory Measures
  - Resource Allocation
  - Conception, articulation and implementation of Programs of Action
- Depends on multi-organisational **collaboration** across the public, private and voluntary sectors



### **Features of Public Policy Research**

- **The Driver is** desire to address **a Problem** of an economic, social and/or environmental nature
- **The Purpose is** to devise possible **Solutions**, evaluate them, articulate them, implement them
- The mode is **Normative**, <u>not</u> merely descriptive, explanatory or predictive
- The mind-set is **Instrumentalist**, <u>not</u> Pure (pursue knowledge) or Applied (of a tool)
- **Quality** is essential, whereas Rigour is desirable



## **Opportunities Arising from the Recognition of Perspective**

- Comparative-Perspective Research leading to better insights for System Sponsors
- Multi-Perspective Research
- Better Constructivist Research e.g. Participative Design Science
- Phronetic Research, to complement Episteme (Science) and Techne (e.g. Design Science)
- Instrumentalist rather than Applied Research
- Research in support of Public Policy



## **Implications for Individual Researchers**

- (1) **Discover** perspective as an important element of research conception, design, conduct and reporting
- (2) **Deliberate** on the alternative perspectives that are relevant to the context
- (3) **Determine** the perspective(s) to be adopted
- (4) **Declare** the perspective(s) adopted



### What {MIS? WI? IS/IM?} Needs to Do

- Acknowledge the existence of perspectives other than that of the client / system sponsor
- Acknowledge in particular the perspectives of users, prosumers and usees
- Recognise them not merely as 'actors'
- Embrace participative analysis and design
- Embody explicit recognition of human diversity, i.e. a rich set of segmentation models
- Include individuals' representatives and advocates within 'business / people processes'







**Recognise Perspective in IS Research** Without Blinkers, We Can Soar!

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