

# Towards the Preservation of Web Records: A Case Study of the Capture, Arrangement and Description of a Professional Seminar eLearning Space

Paul Wu Horng-Jyh  
Nanyang Technological University

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InterPARES 3 Project, 1<sup>st</sup> International Symposium  
National Archives of Korea  
Seoul, South Korea  
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# Outline

- Introduction to Professional Seminar (PS) and Constructive Pedagogy
  - Formulating PS activities: Activity Theory
  - F-analyzing PS Activity: SECI Knowledge Creation Model
- Likening PS e-Learning to e-Art (rather than to e-gov or e-science)
  - Prospective and Retrospective Records of PS
- Capturing, Arranging and Describing Web 2.0 Records – PS' retrospective records
  - Interactive, Experiential, and Dynamic records of PS
- Concluding Remarks



# Professional Seminar – A Case of Constructivist Pedagogy

- A core course for **Master of Science students**, with majors in Information Studies, Information Systems, and Knowledge Management since 2005 **Division of Information Studies** of NTU
- The number of students is 230 from very ***diverse backgrounds***
  - **Demography**: range of age, culture, language and professional background
  - **Learning objectives**: ranging from interest of new career in information, career advancement in existing work, exposing themselves in international learning environment, to self-enrichment and life-long learning.
- To take advantage of this complexity, one of the essential tasks to be achieved, then, is to orient and guide the students in ***forming a coherent and vibrant learning community***, as content-specific courses will tend to suit one group but disfranchise another.
  - be conducive for students to forge collaboration and share knowledge ***by cross-fertilizing their diversity*** that naturally complements each others’.
- Thus, the goal of this core course: cultivating students’ ***soft skills***, such as ***leadership, communication, critical/creative thinking, and entrepreneurship, and ethics***



# Constructivist Pedagogy

- Tradition along education reformists: Piaget, Vygotsky, and Dewey
  - Human construct **knowledge** and **practice** from their **experiences**
  - **Reflective** and **Dialogic** learning styles in a community of learners
- Specific Ingredients
  - Eliciting prior knowledge and practice
  - Creating cognitive dissonance
  - Application of knowledge with feedback
  - Reflection on learning
- Related: Authentic & **Formative Assessment**
- Alternatives: Behaviorism, Cognitivism – **Summative Assessment**



# Overall Course Structure - Offline

<b>Seminar 2 :</b> Date: September 27th 2008 (Saturday) Venue: Lecture Theatre 1, North Spine, Nanyang Technology University		
Time	Agenda	Speaker/Moderator
0900 – 1000	Topic: Leadership	Mr. Heng Chiang Gnee
1000 – 1030	Panel Discussion	Mr. Heng and Dr. Wu
1030 – 1100	Tea Break	
1100 – 1230	Morning Break-out Session	Moderating Subgroups & Groups
1230 – 1330	Lunch Break	
1330 – 1430	Topic: Ethics	Prof Cheong Hee Kiat
1430 – 1500	Panel Discussion	Prof Cheong and Dr. Wu
1500 – 1530	Tea Break	
1530 – 1700	Afternoon Break-Out Session	Moderating Subgroups & Groups



# Formulating PS – Activity Theory

- Subjects: Who is involved in carrying out the activity?
- **Activity (Model):** What sort of activity is of interest?
- Object: What are the shared objects produced from activity?
- Tools: By what means are the subjects performing the activity?
- Rules and regulations: Are there any cultural norms, rules or regulations governing the performance of the activity?
- Division of labor: Who are responsible for what, when carrying out activity and how are those roles organized?
- Community: What is the environment in which this activity is being carried out?
- **Outcomes:** What is the desired outcome from carrying out this activity?



# Modeling PS Activity: SECI Knowledge Creation Model

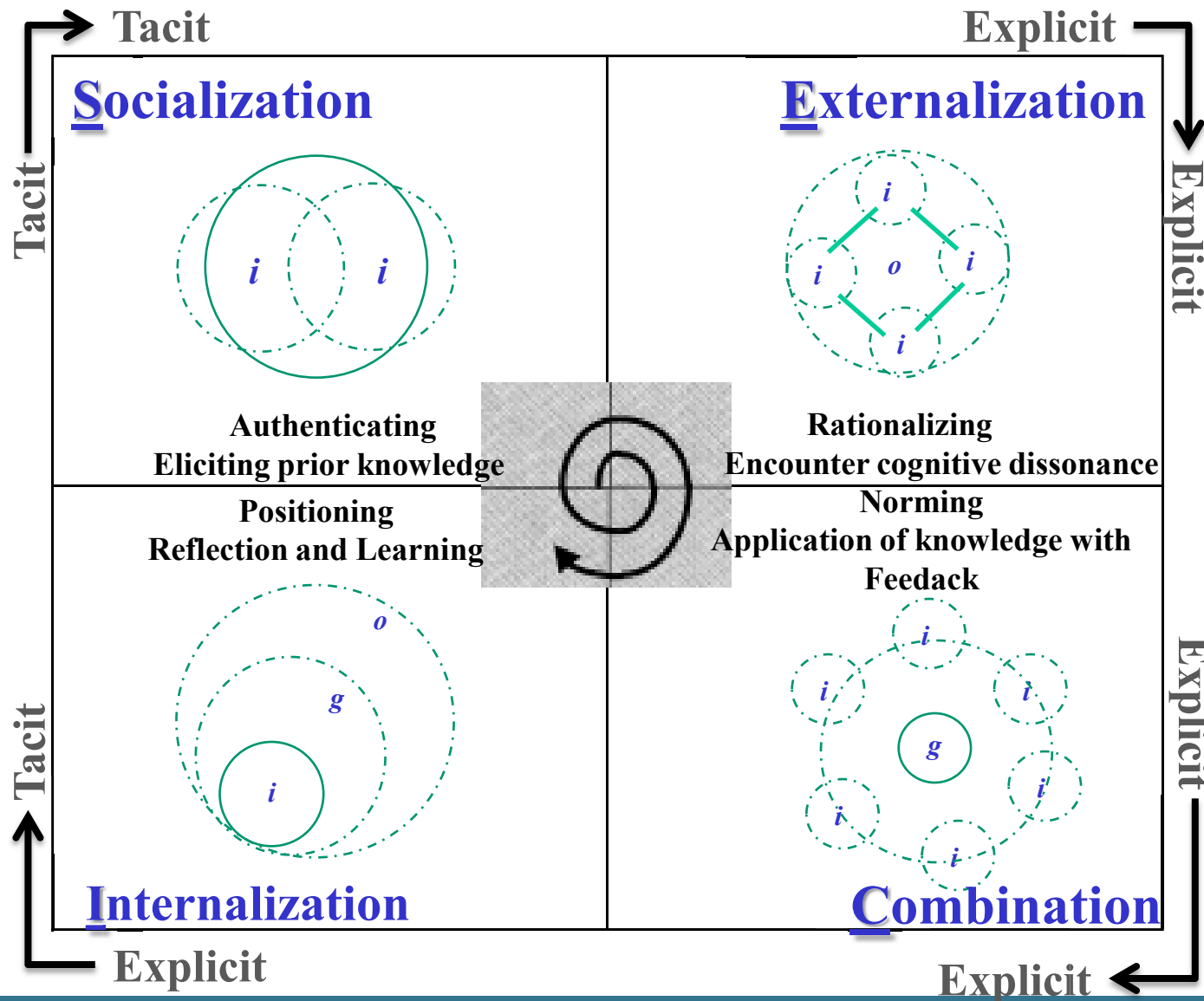
- Not Market-based approach
  - Knowledge is asset to be exchanged
  - Calculus based on economics
- But Ba-based approach
  - Knowledge is experience (tacit) to be shared (explicit) and embodied (tacit) for practice
  - Level ground based of mutual recognition

\*Ba: an energized with heightened conscious agents

**Nonaka, I., Toyama, R., & Konno, N. (2000). SECI, Ba and Leadership: a Unified Model of Dynamic Knowledge Creation. *LONG RANGE PLANNING*. 33 (1), 5-34.**



# SECI Model of Knowledge Creation



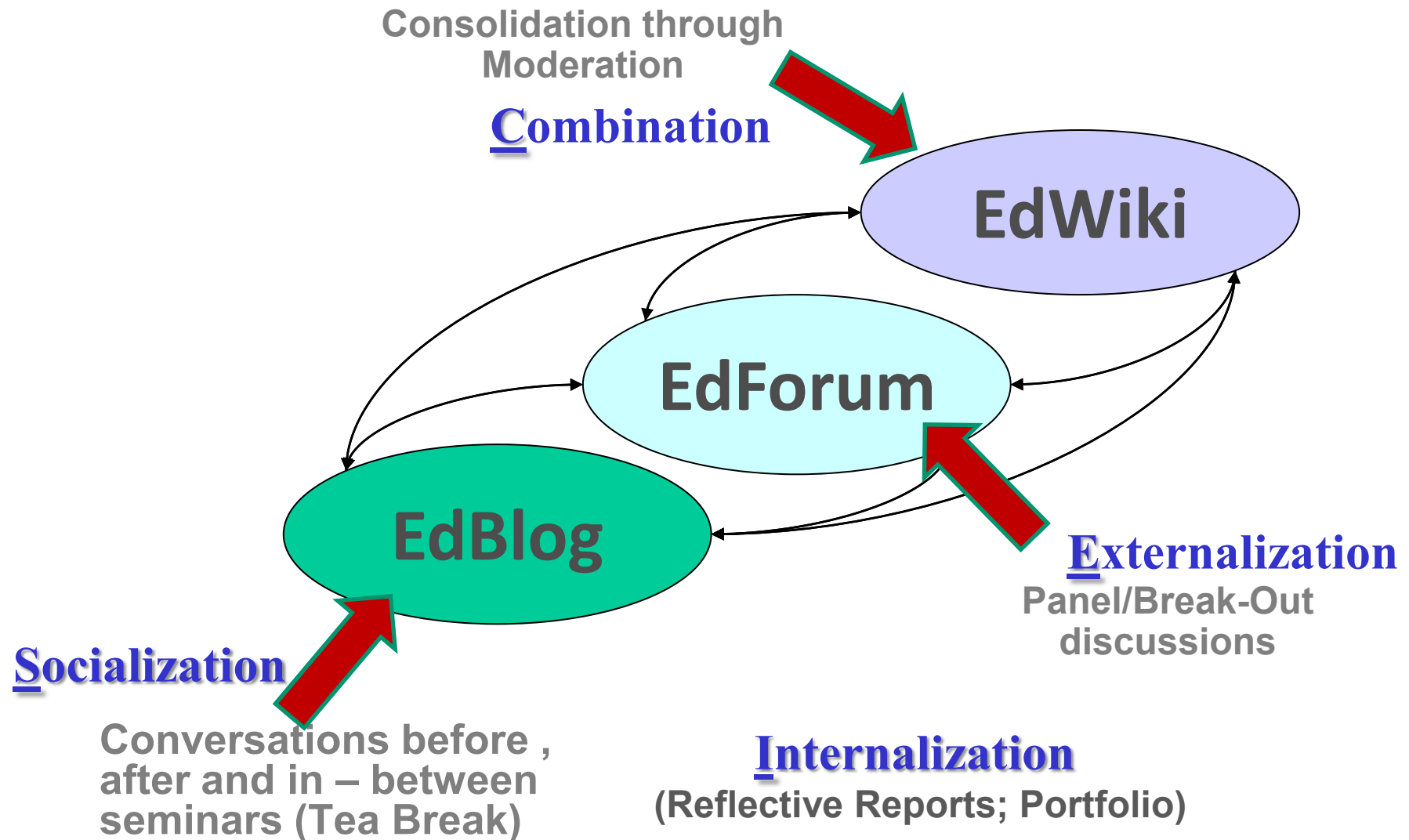


# Ba/SECI in the context PS

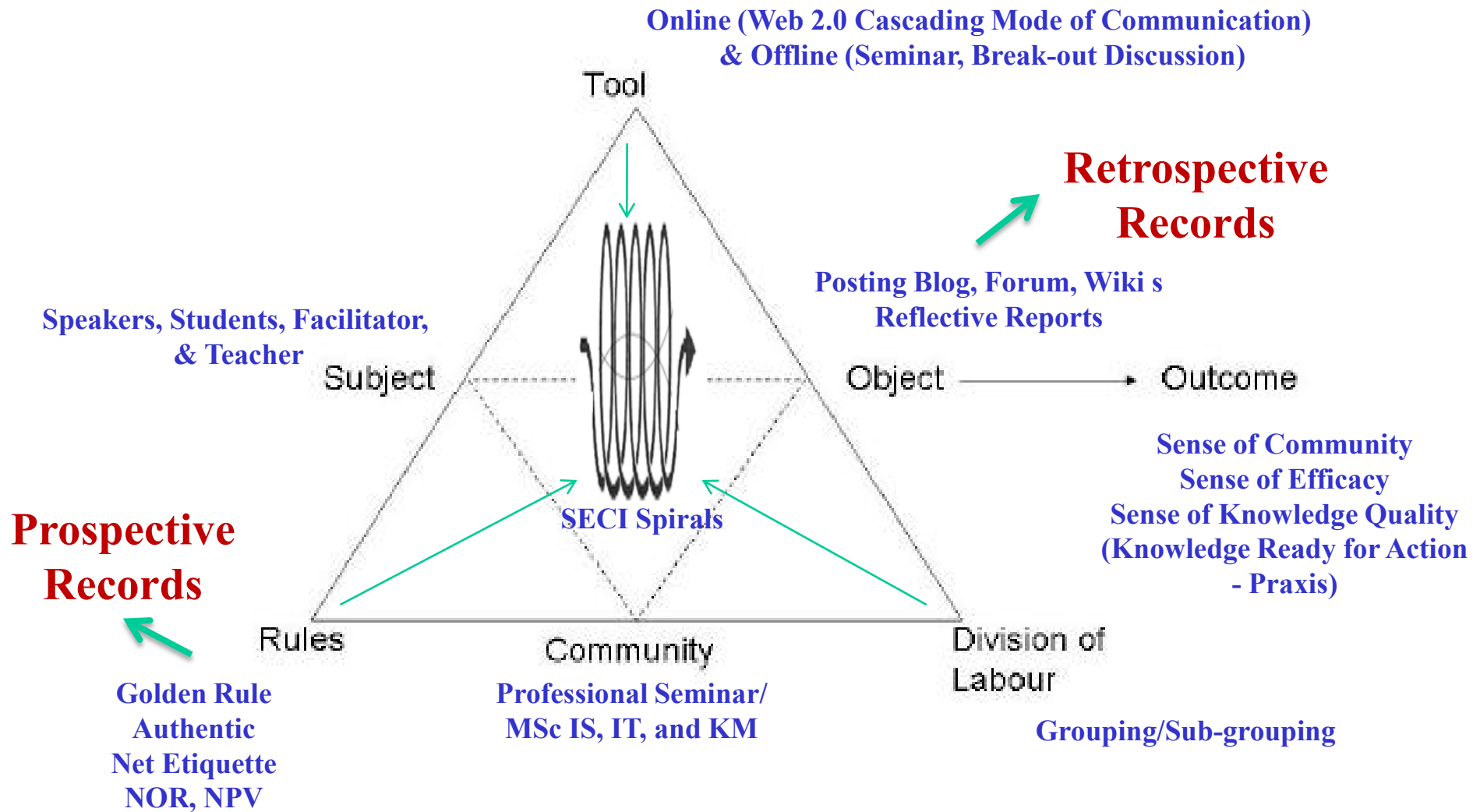
- Issue of concern: how can the course offer better education to students
- Not, Market-based
  - Specific expertise and professionalism for better career advancement
  - Better experts: Information Professionals
- But, Ba-based
  - Community of learners and support groups
  - Better communicative dynamics
  - Authenticated, rationalized knowledge ready for action



# Configure PS using Web 2.0 tools



# PS Activity System, and Records



# Sample PS Prospective Records

- An e-mail by instructor to invoke Golden Rule (see paper)
- A certificate to recognize collaborative efforts



**WKW School of Communication & Information**  
Division of Information Studies



*Awards*

Name of Student

*for*

Best Team in  
Collaborative Action Challenge

**Dr Paul Wu Horng-Jyh**  
Course Co-ordinator, Professional Seminar

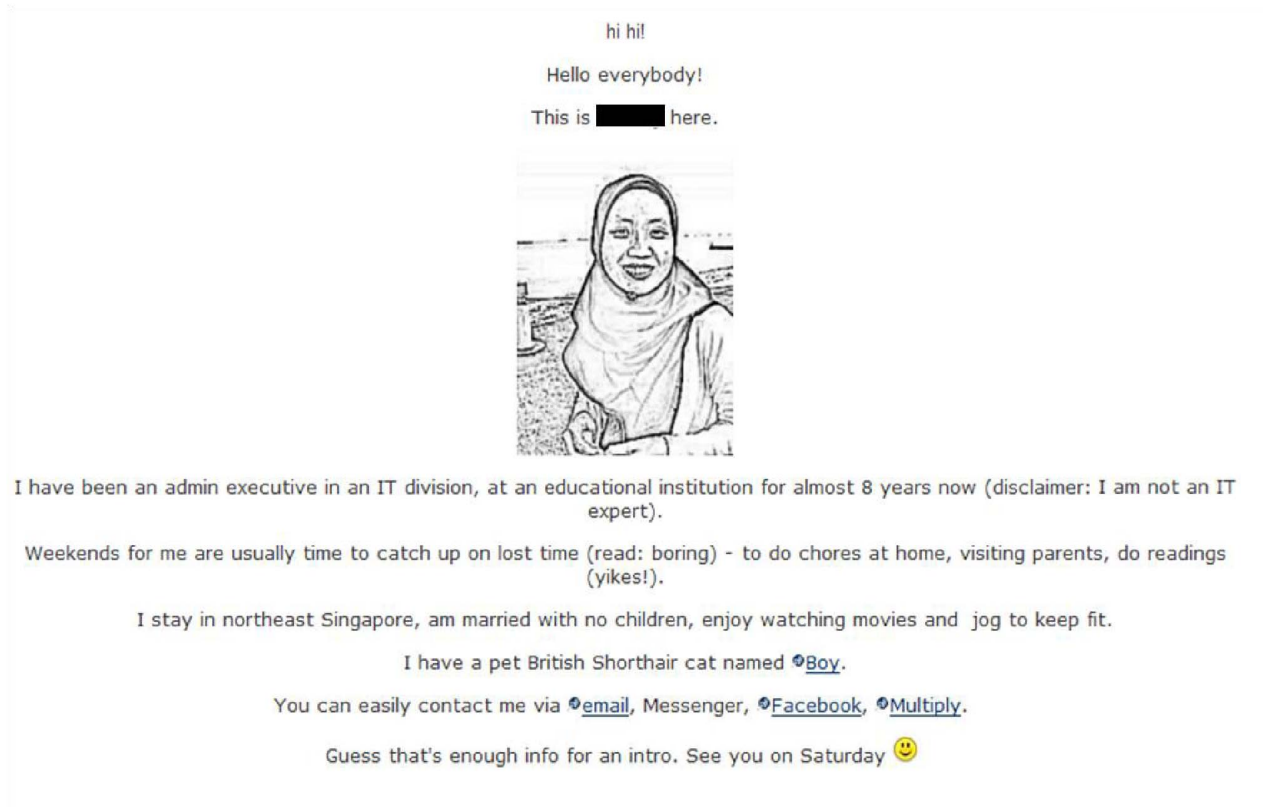
**Assoc Prof Abdus Sattar Chaudhry**  
Division Head (Information Studies)



**InterPARES Project**  
Paul Wu Horng-Jyh  
Singapore Team

# Sample PS Retrospective Records

- A reflective report highlighting team work
- A wiki entry on “Engagement”
- A blog post w/ comments introducing one-self



# Identifying PS' retrospective records of collective performance – e-Art

- Web 2.0 an experiential system, as the users responding and interacting with each other by expressing their thoughts and experiences on other people's thoughts
- Documentary form of Web 2.0 postings
  - having fixed form and content with proper capturing methods
  - having explicit linkages to other records – for instance, comments are to a post in blog and replies are to a thread in a forum discussion, within or outside of the digital system, through a classification code associated with SECI sense-making process: Socialization, Externalization, Combination, and Internalization.
  - kept in a eLearning platform with clear administrative context
  - having a unambiguous writer and addressee, while the author is the instructor who prescribed the SECI learning spaces
  - action associated with them are retrospective records of a collective “performance” that are designed according to a Constructivist Pedagogy



# Capturing, Arranging and Describing Web 2.0 Records – PS' retrospective records

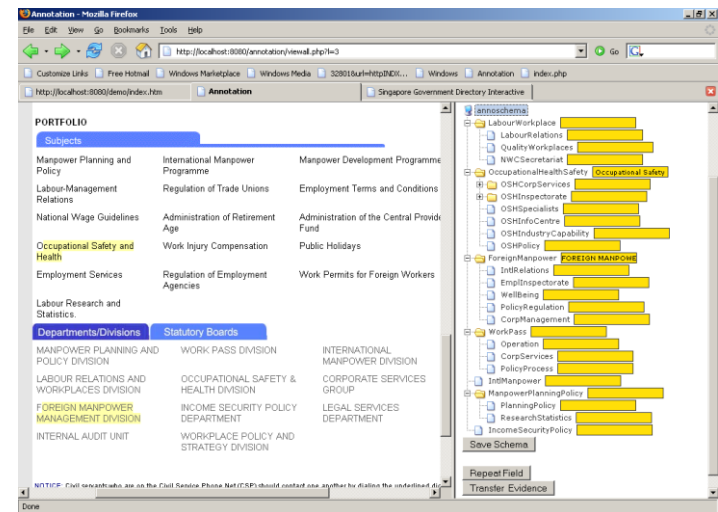
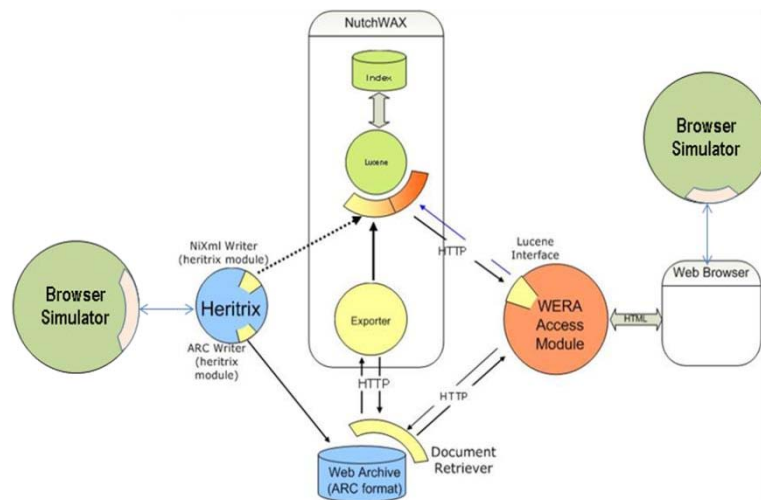
- Arranging records based on classification of records into mini-series of SECI spirals
  - Miguel's presentation
- Describing the collection of e-Learning records as network of mini-series, with EAD template
  - the Australian connection
- Capturing/Preservation is a challenge
  - the Australian connection: Paul's ICA 2008 presentation progressive preservation – a continuum thinking (capture->arrange->describe)
  - Profs Lee's & Guercio's, and Paul's NAK 2009 presentations

	Content Based	Event Based
Client	Remote-Harvesting	??
Server	??Direct DB Transfer	Transaction Archiving



# Web Annotation for Web Intelligence (WAWI) Web Annotation System

- Integrated with IIPC Web Archiving System under development since 2006 as part of Web Archives of Singapore reported mainly in IAWAW series
- Two main features
  - Relate Web content to the semantic content in the metadata
  - Relate metadata to ontology in relational metadata



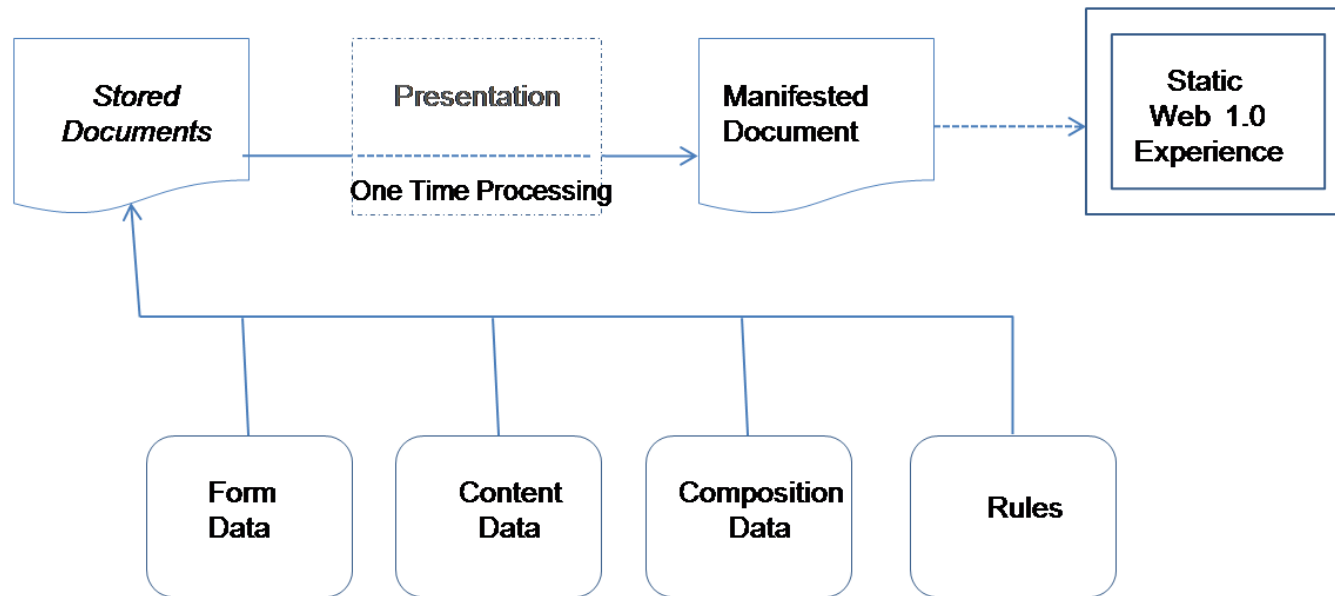
Wu, H-J P, Heok K-H A, Tamsir, P. I., (2007) "Annotating Web Archives – Structure, Provenance and Context through Archival Cataloguing." *New Review of Hypermedia and Multimedia*, 13 (1): 55-75





# Capturing interactive, experiential, and dynamic Web 2.0 records (I)

- Almost all current Web capturing systems assume Web 1.0 attributes
  - Broken links
  - Not able to produce interactive & dynamic captures





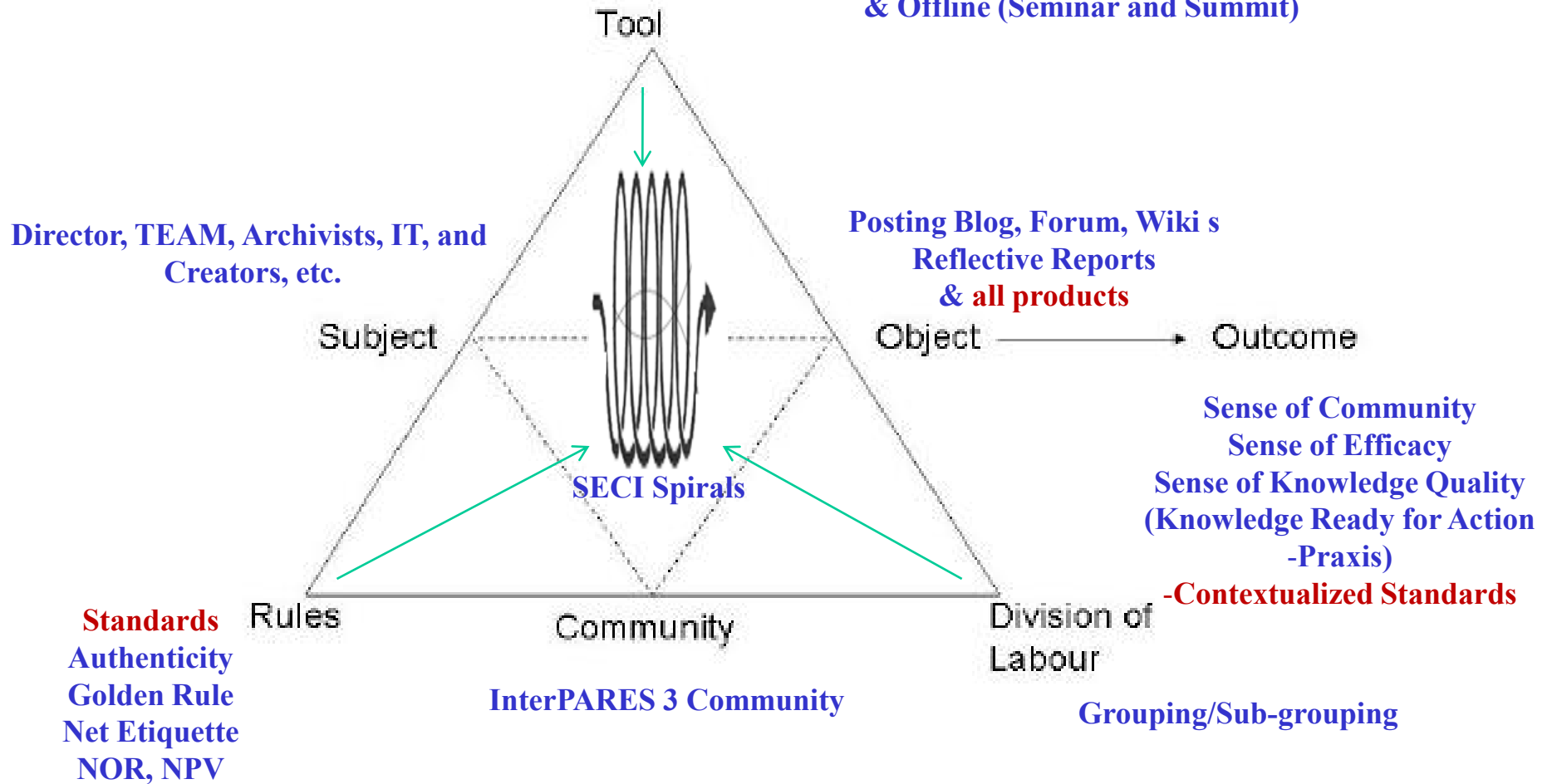
# Concluding Remarks

- InterPARES 2 is rich in theoretical constructs to be explicated and applied
  - Curating e-Art, eLearning records and beyond
  - Capturing interactive, experiential, and dynamic records
  - Demonstrated in “preserving” PS records
- Highly cross-fertilization among InterPARES 3 team remains to be explored and exploited
- Imagine the potential of InterPARES 3!!
  - “Performing” and “Appreciating” Action Research



# InterPARES 3 Activity System?

Online (Cascading Mode of Communication in Web 2.0)  
& Offline (Seminar and Summit)





# *Thank You*

Feedback: [hjwu@ntu.edu.sg](mailto:hjwu@ntu.edu.sg)

