UNISA LIS Research Symposium

Paradigm shift(s) in information behaviour

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Introduction

Research voices drive

- worldviews
- perceptions of what needs to be done and how it needs to be done
- research focus
- research methods
- **priorities**
- attitudes
- services, products, infrastructures

… **It can widen research horizons**

Reflection can change directions… paradigm shift(s) (cont.)

Reflection requires a

- Study of the literature (**research**, practice, opinions)
  - Past
  - More recent (e.g. 2005 – 2009)
  - Present (e.g. 2010)
- Study of reports by experts in the field
  - Review chapters (e.g. *Annual Review of Information Science and Technology [ARIST])*
  - Monographs
  - Opinions & concerns expressed in articles and conference reports (cont.)

Reflection can change directions… paradigm shift(s)

Reflection requires

- querying what is said and **noting possible gaps**
- suggesting bridges with earlier paradigms
- forming an opinion about future research
- **contextualising** such an opinion in e.g. a national context
- keeping an open mind about re-aligning impressions / thoughts

Reflection needs to be ongoing

Researchers' voices: Cheng & Shaw (1999:11)

"There is growing realization that this is a "big problem" or "grand challenge" and one of considerable importance for information science. The delightful complexity of information seekers, coupled with the variety of influences from information seeking environments, provides a huge puzzle for the social scientists. Introduce questions of aesthetics, perception, emotions, creativity and serendipity, and the mix becomes even more interesting. Then add the technical complications, and impact of computer and telecommunications technologies, and it is evident why the challenges for interdisciplinary research have captured so much attention".

Defining information behaviour

Tom Wilson's encapsulating, onion model of information behaviour as including

- recognising information needs and acting on it
  - information seeking: e.g. choice of channels
  - information searching: interacting with sources such as books, people
  - information retrieval: interacting with electronic resources (e.g. computers) to search databases, library catalogues, etc.
    - **Web information seeking**
- Not acting on information needs
- Unawareness of information needs (cont.)

Defining information behaviour (cont.)

In addition to Tom Wilson's definition, there are others (e.g. Case, Fischer) pointing out the wider context of information behaviour to include:

- information communication
- information sharing
- information filtering
- information organisation and storage
- information usage (cont.)

Defining information behaviour (cont.)

Information behaviour, **information practice** or both?

Reijo Savolainen defines information practice as "a set of socially and culturally established ways to identify, seek, use, and share the information available in various sources such as television, newspapers, and the Internet. These practices are often habitual and can be identified both in job-related and non-work contexts".

Noticing new terminology, acknowledging their value does not imply immediately discarding old terminology e.g. user studies, information behaviour

Sources consulted

- Chapters from *Annual Review of Information Science & Technology* (2006, 2007, 2008, 2009, 2010)
- *Journal of the American Society for Information Science and Technology*
- *Bulletin of the American Society for Information Science and Technology*
- *Journal of Documentation*
- *Journal of Information Processing & Management*
- Specialisation disciplines and sub-disciplines (e.g. Health Sciences)

(ASIS&T) special interest group – SIG/USE focus

- Shaping and identifying information needs
- Seeking (and not seeking) information that will address those needs
- Exploring information sources present in one's context / situation
- Retrieving information from available information sources
- Sharing information with others
- Managing personal information collections
- Communicating and collaborating with others concerning an information need or information resources
- Personal and group-based information use

Resources of inspiration in the field

- Information Seeking in Context (ISIC) conferences – every 2 years
- American Society of Information Science & Technology (ASIS&T) special interest group – SIG/USE – planning meeting in 1998; annual meetings

Terminology – not always clearcut

- Information
- Information behaviour, human information behaviour, HIB
- Information practice
- Information needs, information seeking, information searching (search)
- Information retrieval, cognitive information retrieval (CIR)

Terminology – not always clearcut

- Information sharing
- Information finding
- Synchronous collaborative information retrieval (SCIR), collaborative information seeking, collaborative information retrieval
- Information source horizons
- Knowledge sharing
- Relevance

Target groups

- Professional: media professionals, nurses
- Academic: post-graduate, undergraduate, scholars
- Government: legislators
- Everyday life: environmental activists, domestic violence survivors, ambulance drivers
- Traditional medical practitioners
- Minorities groups, groups affected by social disparities, etc.

Mostly smaller number of participants (also called actors)

Contexts

- Online communities
- Creativity & crafts
- Everyday life e.g. wedding planners, domestic violence
- Audio visual archives, etc.

- Mostly real life
- Some controlled settings

Medium of delivery

- Web / Internet
- Social networking tools e.g. Twitter (as word of mouth)
- Digital libraries
- Mobiles, Iphones, PDA, Ipods
- Orally-based information, etc.

Nature of studies

- Research / academic
- Empirical
- Descriptive
- Practitioner-based
- Theory building, conceptual
- Theory building, conceptual

Duration of studies

- Over shorter periods
- Very few longitudinal studies
  - E.g. Carol Kuhlthau

Types of information seeking

- Purposive information seeking
- Information encountering
- Browsing, etc.

Influencing factors

- Subjective factors (e.g. happiness, satisfaction, confidence, familiarity)
- Anxiety
- Dyslexia, etc.

Research methods & data collection

Quantitative & qualitative

- Questionnaires – self-administered, electronic
- Diaries
- Content analysis e.g. queries
- Transaction logs / web logs -- seldom supplemented with questionnaires and interviews / focus groups
- Use scenarios

Research methods & data collection

Quantitative & qualitative

- Use scenarios
- Dialogic approach – content analysis of discourse

Combinations of methods; triangulations --- verification or depth?

Supporting theories / disciplines

- Social constructivism
- Social phenomenology
- Anthroplogy
- Disciplines of context e.g. Health Sciences
- Learning Sciences – need further exploration

Concerns noted

- Gap between Information Retrieval (IR) and information seeking (IS) research – addressed by cognitive paradigm. Sufficient?
- Lack of frameworks for intervention and design
- Insufficient studies on diseases such as HIV/AIDS
- Insufficient studies on information organisation & re-use
- Seldom a link between knowledge & information needs
- Sound research; unimportant discoveries
- Noting paradigm shifts in related fields (e.g. moving from cure to caring)
- Need to consider the theoretical constructs of the field

Target groups (i.e. actors) missing

- Intermediary roles
- Librarians & information professionals
- Researchers in Library Science, Information Science & Information Behaviour
- Academics and researchers in Education
- People affected in the context of their profession (e.g. doctors, nurses and medical social workers experiencing health problems)

Purpose of research explicitly linked to making a difference in practice

- Although implications of research are indicated, it is often more superficial and not fully aligned with practice, or further pursued
  - Carol Kuhlthau – zones of intervention (following Vygotsky's ideas)

Limitations in literature considered

- Limited reviews, mostly based on consultation of key authors
- Many national publications e.g. From China, Pakhistan not considered

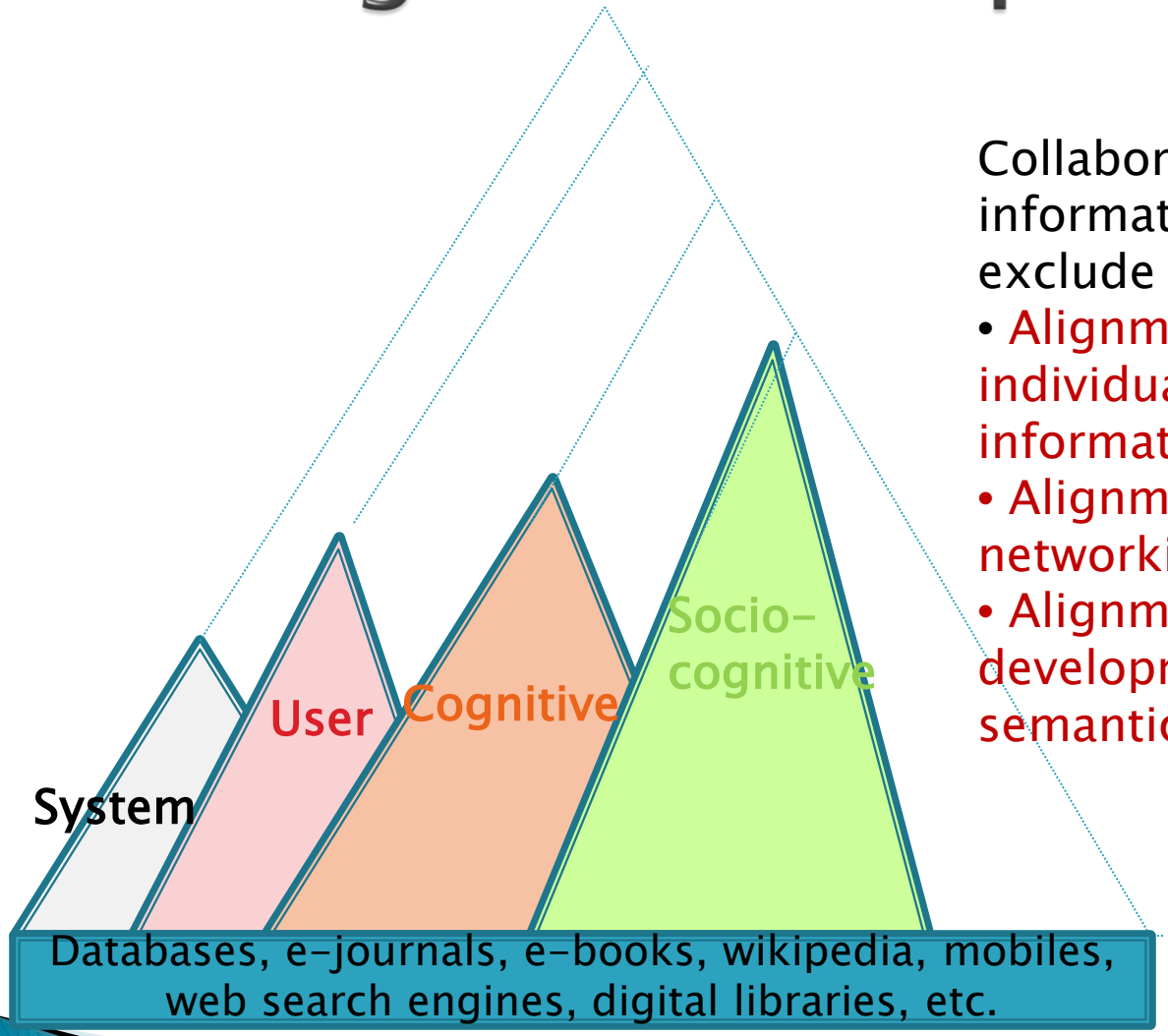
Observations

- Although problems in the research design /method may be admitted it is seldom attempted to solve this
  - Transaction log analysis
- In-sufficient links to models in the field e.g. Taylor's information-use environment model

Earlier paradigms

- Systems-oriented approach
- User-centered approach
  - User studies / use studies / usage studies
  - Affective issues
  - Individual vs groups / organisation
- Cognitive approach
- Socio-cognitive approach

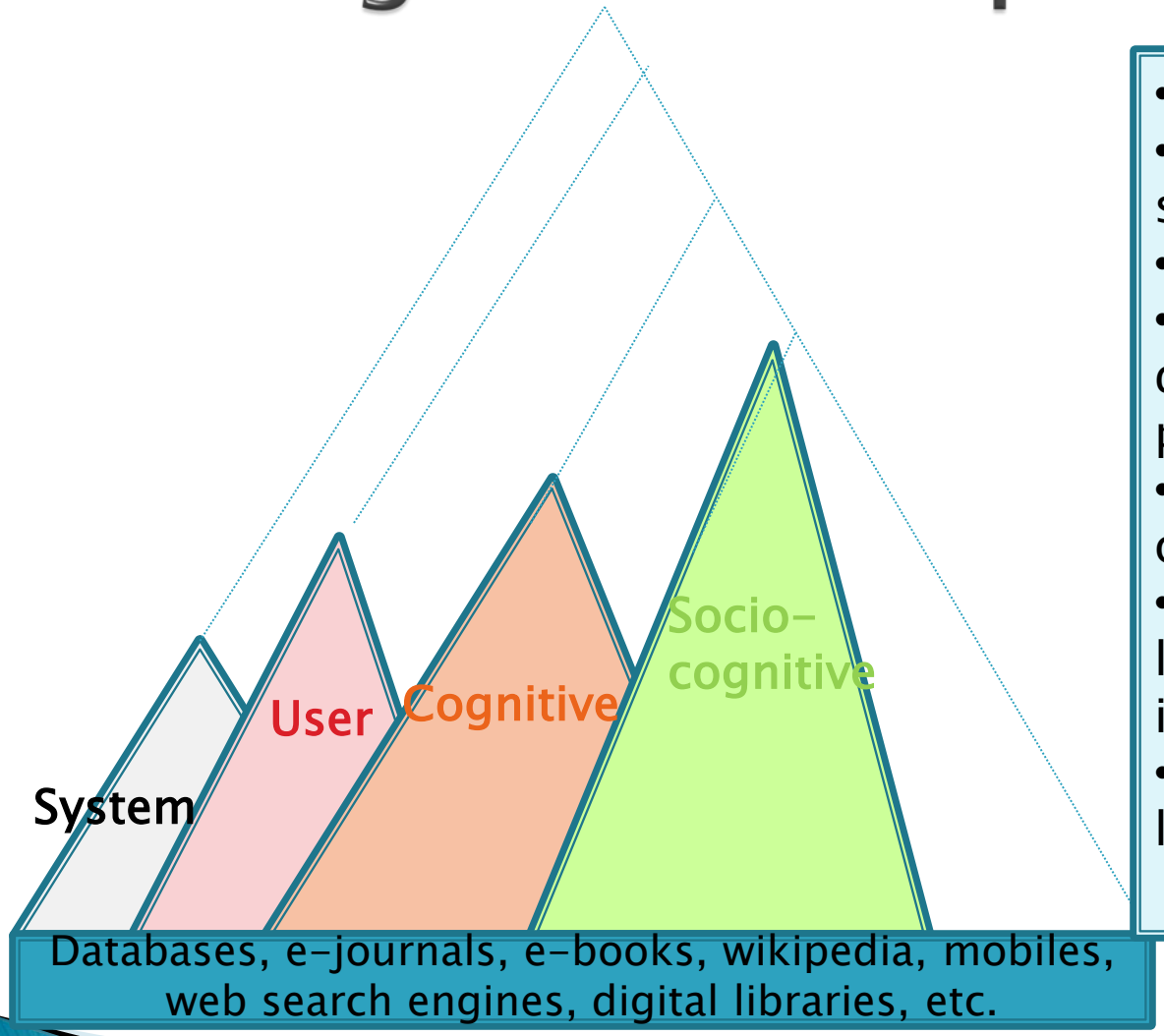
Building on earlier paradigms



Collaborative work, learning, information seeking does not exclude individual seeking

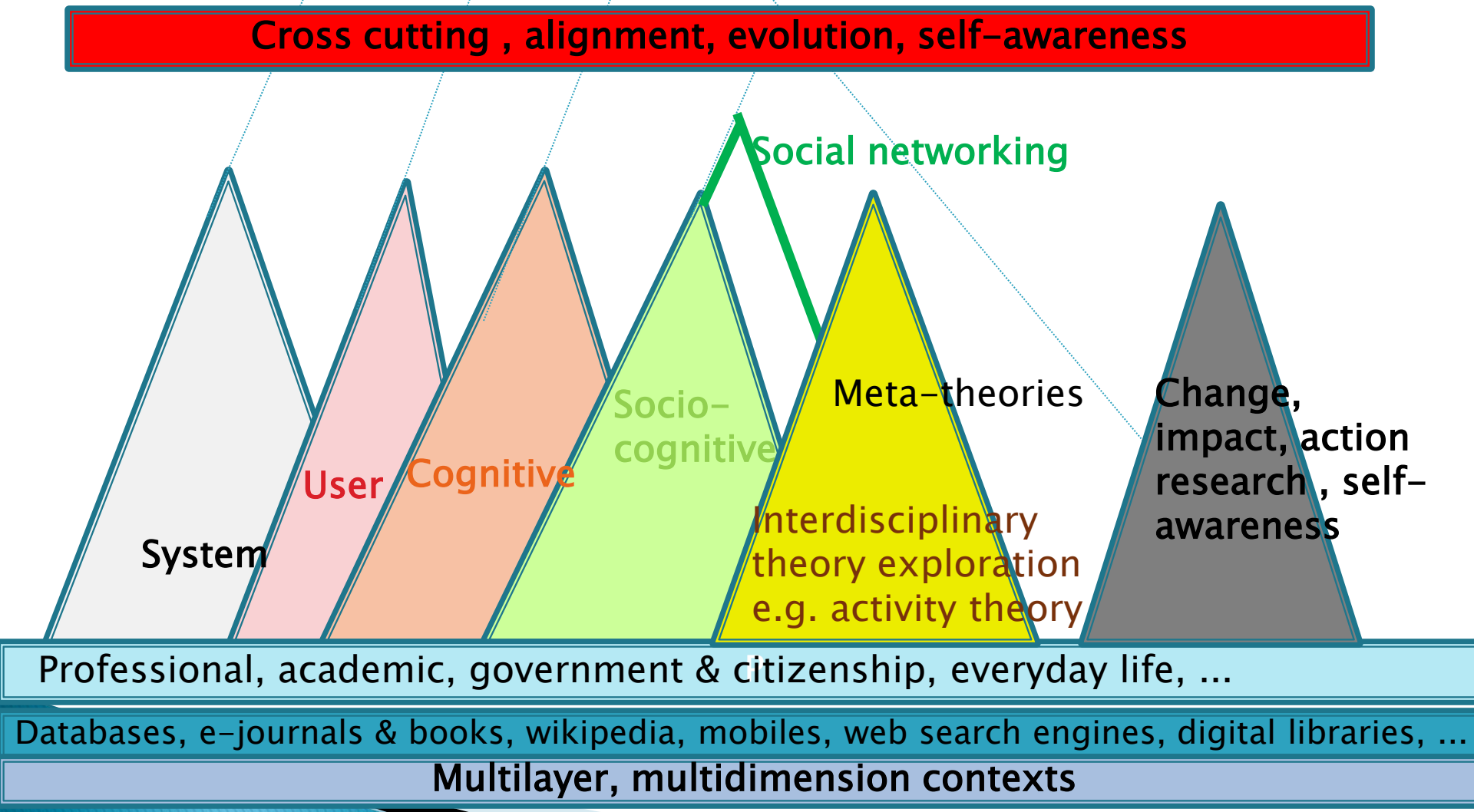
- Alignment required between individual and collaborative information seeking
- Alignment required with social networking
- Alignment required with new developments in IR e.g. semantic searching

Building on earlier paradigms



- Evidence-based
- Contextualisation from supporting disciplines
- Zones of intervention
- Aligning methods of data collection with purpose & gaining depth
- Acknowledging impact of researcher preference
- Flow between every day life and task-based information behaviour
- Sensitivity for culture, literacy, digital divide

Building on earlier paradigms



Suggestions

- Consider models not widely known e.g. model by Urquhart & Rowley on information behaviour of students and lessons that can be learned -- link to information literacy
- Person-in-progressive situation model
- Need to align with research on other activities such as reading, writing, comprehension, creativity
- Psychology of personality
- Spectrums of users in a particular contexts
  - Undergraduate student, post-graduate, academic, post-doctoral
  - Patient, survivor, carer of patient (cont.)

Suggestions (cont.)

- Need to consider and promote (zone of intervention) the use of a spectrum of information sources (e.g. oral, digital libraries, portals,...)
- Change and influence e.g. Affecting information literacy
- Activity theory
- Action research
- Monitor related ICT developments e.g. iPhones

Suggestions (cont.)

- Deeper level post-doctoral research required
- Contextualisation through various lenses

Information behaviour in developing countries

- Need to draw more on other disciplines and question assumptions e.g. drawing on social informatics and ICT for Development
- Gap analysis of status quo in research and perceived needs to address issues of information retrieval and intervention in practice – audit of needs and expertise required

Conclusion

We should not underestimate the challenges and difficulties, but also the reward of taking a **rich** and **varied perspective** on the fundamental problems of information behaviour

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