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Åström, Fredrik

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LUND UNIVERSITY

PO Box 117  
221 00 Lund  
+46 46-222 00 00

# Heterogeneity and homogeneity in LIS research

**Fredrik Åström, PhD**

**fredrik.astrom@lub.lu.se**

**Lund University Libraries, Head Office, P.O. Box 134, SE-221 00 Lund, Sweden**

**Introduction.** LIS has been described as a field in crisis with a debated identity, lacking theoretical development and vulnerable to competition from other fields (e.g. (Hjørland 2000, Warner 2001), a notion reflecting theories on ‘fragmented adhocracies’ (Fuchs 1993, Whitley 2000). To better understand and face the challenges, a discussion on the challenges and perceived crisis is suggested. The focus of the discussion is on LIS origins, perceptions and definitions, as well as contextual relations, related to the concept pairs ‘homogeneity – heterogeneity’ and ‘integration – fragmentation’.

**Method.** The analysis is based on meta-analytical LIS literature, with a certain emphasis on empirical investigations, where the findings of these previous studies are related to a set of theories on the organization of the sciences, primarily the framework developed by Whitley (2000); and to ideas by Gibbons *et al.* (2004) for analytical contrast.

**Results.** The development of contemporary LIS can be viewed from three different perspectives. The first perspective is related to a disciplinary based view on the organization of the sciences, where LIS can be characterized as a ‘fragmented adhocracy’ (Whitley 2000), heading for further fragmentation (Fuchs 1993). An interpretation strongly related to the notion of LIS as a field in crisis (Hjørland 2000, Warner 2001). This development can be seen in how the dual origin of the field has lead to great variations in terms of research orientations and scientific organization (Åström 2006, Buckland 1996, Rayward 1996). Another aspect is the great variety of meta-studies, (Åström 2006), reflecting a diverse self-understanding, mirroring high levels of task uncertainty and low degrees of mutual dependency and reputational autonomy (Whitley 2000). This has implications for the internal organization of the field, as well as opening up for external competition, making it easier for external fields to have an impact on LIS research, as well as on definitions of the field and its purposes. This

can be seen in e.g. the large ‘import’ of ideas (Cronin and Pearson 1990), in competition from other fields on researching information related phenomena and in one extreme case: the use of the name information science for a department not including LIS, but at the same university as a LIS unit (Åström 2006).

There are, however, indications on an alternative line of development. Signs of LIS research areas integrating can be seen, e.g. IR and information seeking as well as IR and informetrics (Åström 2007, Ingwersen and Järvelin 2005), suggesting a process of homogenization in at least some parts of the field; and contradicting Fuchs’ (1993) theories on the dynamics of research fields.

The development of LIS can also be seen from an alternative point of view, reinterpreting many of the characteristics of LIS as a field in crisis into traits closely connected to the development of the sciences since 1945, formulated in terms of ‘Mode 2’ research (Gibbons *et al* 1994). From this point of view, the heterogeneous nature of LIS does not signify fragmentation but interdisciplinarity, a trait further emphasized by an increase in cooperation between different information oriented fields in the form of e.g. information schools. Another aspect of the interdisciplinary trait is the shift of emphasis from competition and the protection of disciplinary boundaries to cooperation across disciplinary limits (Åström 2006). One important aspect of the ‘Mode 2’ research is how the organization of research not only stretches across disciplinary borders, but involves non-academic participants to a higher degree and a stronger emphasis on applications oriented research (Gibbons *et al* 1994). This makes LIS characteristics such as the close connection to the field of practice, and a definition of the LIS *raison d’être* oriented towards supporting the dissemination of relevant information, more valid as a basis for academic legitimacy.

**Conclusions.** To understand the dynamics in current LIS development and the notion of LIS as a field in crisis, concept pairs such as ‘homogeneity – heterogeneity’ and ‘integration – fragmentation’ needs to be taken into account. Depending on what parts of the pairs are emphasized – and whether the development is seen from a disciplinary based or ‘Mode 2’ perspective on the organization of the science – how the development of LIS is perceived differs significantly. The notion of LIS in crisis can for instance be reinterpreted from the point of view of Gibbons *et al* (1994), where an interdisciplinary and applications oriented

organization of research where LIS characteristics becomes a trait along the lines of modern scientific organization rather than a cause for concern in terms of academic legitimacy.

Topic areas: LIS versus New Research and Professional Fields, LIS in Contemporary Society

Keywords: organization of research fields, disciplinary crisis, science studies, meta-analyses

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