# The X(Disciplinarity) of Information Science

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#### **Abstract**

The Master Thesis deals with the x-disciplinarity of information science, as it is considered as a multi-, inter- or transdisciplinary discipline in the discourse of this subject. But what in particular do these concepts mean and how are they specifically differentiated from each other? The thesis introduces the concept of disciplinarity with a historical approach and presents the development of different cooperation concepts (multi-, trans-, interdisciplinarity) as well as of the concept of transscience (Transwissenschaft). The disciplinarity of information science is analyzed on a communicational, social and cognitive level. Beside the definition of the term "information", the paradigmatic development of information science is drafted, followed by an evaluation of relevant publications and an application of the different concepts of disciplinarity to information science. It is concluded, on the basis of a critical analysis, that real collaboration within the discipline is needed instead of blurry labels.

**Keywords:** history of sciences; interdisciplinarity; transdisciplinarity; multidisciplinarity; disciplinarity

#### 1 Motivation

The concept of interdisciplinarity had been developed in the 1960s as a reaction to the increasement of scientific specialization and the differentiation of disciplines as a result of the continuing growth of knowledge. The conse-

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quence was an anxiety for the loss of scientific relevance; therefore interdisciplinarity had been arisen as a concept of mending. But the concept of interdisciplinarity developed rapidly into a buzz word. Other concepts – in differentiation from interdisciplinarity – emerged: multi-, pluri- and transdisciplinarity (cf. Ryser, 2016). In the upcoming discourse those concepts are summarized as x-disciplinarities. The x-disciplinary orientation of information science is indicated in numerous texts. The thesis deals with the theoretical and sociological conditions for the cooperation and networking within the disciplines. The main focus lies on information science as the "science of information" and its meaning and role in the information society.

#### 2 Results

The disciplinary classification of information science is related to its comprehension of its main concept: information. Information science represents a paradigmatic understanding of information and dedicates itself from an action-relevant [handlungsrelevant] point of view to the use of and access to information. In order to clarify the concept of "information" x-disciplinary cooperation is needed. The paradigmatic evaluation shows, that information science has developed from a bibliographical discipline in the beginning to a pragmatic-cognitive discipline, which has mathematical and technically influences (cf. Kuhlen, 2013). But the technical side should not be left aside, because it stands in a direct relationship with recent developments: Information science as a mixture of social science and humanities with a direct influence of recent technical developments.

#### 3 Conclusion

The analysis of relevant publications and discursive comparison (on a communicational, social and cognitive level) of specific (implicit and explicit) statements indicates that the complexity and missing disciplinary framework had been criticized a lot, especially in an international context. Often this problem is assigned to the x-disciplinarity, which prior to this was entitled as

its strength. This assumption is ascribed to a lack of questioning the concepts, which is demonstrated by insufficient terminological classifications and the lack of reflection of existing statements. So a basic desideratum is acknowledged: "Im Normalfall wird ein allgemeines, eben unterbestimmtes Verständnis von Interdisziplinarität stillschweigend vorausgesetzt oder hinsichtlich der terminologischen Regelung auf ältere Texte verwiesen, ohne dass jedoch die darin enthaltenen Regelungen kritisch geprüft würden" (Balsiger, 2005: 137). The actual problem lays not in the cooperation, it rests in the lack of a disciplinary foundation, which is the basic concept of comprehensive cooperation. A disciplinary compartmentalization would be off target as well as the current elusiveness of the discipline. An extensive adaption of this subject needs a cooperation of different disciplines and an inclusion of the public. But it shouldn't be forgotten that "[...] keine interdisziplinäre Kompetenz [könnte], die disziplinäre Kompetenz ersetzen [...]: interdisziplinäre Kompetenz setzt disziplinäre Kompetenz voraus" (Mittelstraß, 1987: 154). Therefore it is necessary to focus on the discipline, for creating an additional value through cooperation, instead of absorbing other concepts.

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