

BOOK REVIEW:

***Shaping Standardization - A study of standards processes and standard policies in the field of telematic services,* by Tineke Egyedi, Ph.D. Thesis, 1996, Delft Technical University**

**Reviewed by Ken Krechmer
Technical Editor, Communications Standards Review**

Shaping Standardization - A study of standards processes and standard policies in the field of telematic services, by Tineke Egyedi, is a clear, rigorous and ambitious study of standardization from the perspective of a social scientist. Using a social construction of technology (SCOT) model to analyze the field of standardization, the author examines the political role of standardization (actor network), the way standard bodies shape standardization, and the way standards committees shape standards.

Chapter 1 provides the introduction, reviews previous work, and observes that standardization is endogenous to technology. Dr. Egyedi notes that other studies of non-technical factors have not developed a coherent view of standardization. The development of the theoretical framework, Part I of the thesis, begins with Chapters 2 and 3 which develop and apply the SCOT model in a rigorous and well constructed manner. The author notes the weakness of social studies of technology based on a Darwinian metaphor and rejects an evolutionary model of technology in favor of the SCOT model. Rejection of an evolutionary influence on standardization seems to this reviewer unrealistic. As Dr. Egyedi notes, the general effect of evolutionary processes on technology development is well documented.

Part II, Perspectives on Standardization, is the strongest section of the thesis. Chapter 4 provides a well developed view of the formal international standardization organizations: ISO, IEC and ITU. Chapter 5 continues with an excellent view of the European field of standardization including a clear, extensive review of the beginnings of ETSI and its relation to CEN and CENELEC (European standardization organizations), and a good explanation of the developing impact of "gray" standardization (consortia and fora). Chapter 6 examines the example of OSI standards development as representing two different paradigms: telephony and data communications. A few problems emerge here. The analysis is based on considering telephony and data

communications as separate paradigms. This creates a narrow view of the problem that may limit the answers. An analysis based on the paradigm shift from sequential (telephony) systems to adaptive (computer) systems may be more useful. Since the standardization participants the author interviewed are predominately oriented towards formal standards, market and Internet perspectives are sometimes not given equal weight.

Chapters 7 through 9 provide the third part of the work, Integration. Unfortunately, and possibly as a result of earlier missteps, a complete synthesis does not emerge. The SCOT model provides some interesting and useful conclusions. But as the author notes, "Little progress has been made in unraveling the relation between standardization and technology development."

This work is several steps above many non-technical efforts to analyze standardization. This thesis is rigorous and logical, strives for synthesis and is well aware when synthesis has not been attained. The analyses in Chapters 1, 4 and 5 are excellent and a serious contribution to the field of standardization.

Ken Krechmer
Communications Standards Review
757 Greer Road
Palo Alto, California 94303-3024 USA

VOICE: +1 650 856-8836
e-mail: krechmer@csrstds.com