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Understanding Knowledge as a Commons: From Theory to Practice
edited by Charlotte Hess and Elinor Ostrom. Cambridge: MIT Press, 2007.
320 pp. ISBN 0-262-08357-4.

In *Binta y la Gran Idea* (Manso, 2004), a warmhearted short film nominated at the 79th Academy Awards, the main character, Agnile, a local fisherman from a small village in Senegal, learns from a friend that most modern fishing equipment used in Europe allows you to catch in one day, "more fish than you could eat in your whole life." Puzzled by this finding, Agnile humbly writes to the local government:

“if we follow the path shown to us by the First World, we risk that the children of our children will have no fish, no trees, no air...”

The preoccupation of Agnile - the dissipation of a common good due to its over-exploitation by groups and individuals pursuing their best interest - is the tragedy of the commons. This theory, memorably depicted by Garrett Hardin (Hardin, 1968), is the thread that conceptually ties together the chapters of *Understanding knowledge as a commons: From theory to practice*, a collection of essays edited by Charlotte Hess and Elinor Ostrom. Contributors to this book include leading scholars in domains such as intellectual property, open source software, electronic publishing, digital preservation and civic engagement. Their essays present an analysis of the knowledge commons from their particular perspectives and in relation to Hardin's tragedy. The book is divided into three sections: the study of the knowledge commons, their protection, and their production.

What are knowledge commons? In the first section of the book, Hess and Ostrom provide a very thorough introduction and analysis of the concept of knowledge as a commons, appropriate for readers of all levels of familiarity with this field. Remarkably, they collocate the notion of knowledge in the context of more tangible realms, such as oceans and forests, which have traditionally been regarded as common-pool resources. Their analysis, however, tends to capture communities and their knowledge generation mechanisms in too great detail - something that risks undermining the very open-ended nature of the knowledge commons. For example, their diagnostic study tool (the Institutional Analysis and Development framework) primarily takes into account traditional scholarly communication channels, not leaving enough space for novel forms of collaborative knowledge generation and dissemination. However, with David Bollier's contribution (*The Growth of the Commons Paradigm*), the concept of knowledge commons is reformulated, in particular with respect to its most recent evolution. Bollier does a thorough job of presenting a new cultural form of

knowledge, leveraged by the Internet and by the collaborative effort of peer communities in a collective, global, distributed information space.

The protection of the knowledge commons is the focus of the second section of the book. Is networked digital information automatically synonymous with visible, accessible and secure information? Nancy Kranich outlines ways in which technological handling of digital resources might lead to information enclosure and undermine free speech and open access. Donald Waters takes a step further along the knowledge generation chain, providing pragmatic solutions for the concrete preservation of knowledge commons. In both pieces, the authors provide feasible solutions to the tragedy of the commons, however it is with James Boyle's essay (*Mertonianism Unbound?*) that the reader receives a genuine, pragmatic approach to the first and foremost form of information enclosure: copyright. Identifying the success of the web to the lack of formal restraints, such as governing bodies and intellectual property rights, Boyle delivers a provocative and engaging account of the modern tragedy of knowledge commons, not from the detached perspective of an information expert, but from the intimate view of a knowledge user and producer.

The last section of the book deals with a more pragmatic aspect of the knowledge commons: how to build them. Peter Suber's jargon-free essay (*Creating an Intellectual Commons through Open Access*) addresses anyone involved in the scholarly publishing chain: from authors to publishers, and from faculties to repository owners. It is a concrete *how-to* guide on ways to make scholarly material open access, immediately. This section also includes compelling chapters by Peter Levine (*Collective Action, Civic Engagement and the Knowledge Commons*) and Charles Schweik (*Free/Open-Source Software and a Commons in Science*). Levine and Schweik enrich the concept of knowledge commons with a very fresh ingredient: collective cognition. They focus on knowledge collectively contributed by a) ordinary citizens, using participatory technological devices, and b) scientists and engineers, developing software and scientific commons using collaborative platforms. As this section is primarily concerned with concrete scenarios, the pieces by Shubha Gosh and Wendy Pradt Lougee, on the role of intellectual property rights and the changing role of scholarly communication, respectively, would have found a better collocation among the earlier chapters of the book.

Overall, the essays of this book exhaustively cover all the aspects relative to the generation, management and preservation of knowledge as commons. Despite some inconsistencies in the book's organization, the essays, altogether, offer a crisp account, demonstrating that when properly generated and used as a common-pool resource, digital knowledge can overcome the traps - the "tragedy" - regularly associated with other types of commons. One final critique: throughout the book, the terms knowledge commons and information commons, as well as

open access and free access, are often used interchangeably. Although largely acceptable within the scope of this book, Information Science scholars are likely to find such amalgams a bit uncomfortable.

References

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Reviewer

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