

of warfare, the rise of the United States as scientific superpower, the shift of funding from physics to biology in the second half of the century, and what Agar calls the “missing stories”. This term refers to the historiographical gaps that characterize the existing historiography, from the many connections that are not pursued, to the scientific ideas that are not mentioned because they died out quickly, to neglected analytical tools such as those that reveal the specificities of national research systems. But missing are also those stories that did not break through post-war regimes of secrecy, what Peter Galison called the: “classified universe...[which] very probably is much larger than...[the] unclassified one” (p. 508).

While always effective and highly readable, Agar’s narrative is, perhaps inevitably, uneven in terms of originality and depth. This has to do with expertise as well as the current status of historiography – which is very sketchy for some areas, e.g., the most recent trends. Agar is at his best when discussing post-war digital computing and the many paths not taken – which is hardly surprisingly given his own groundbreaking work in this area. But the specialist reader will find other insightful and though provoking sections, such as the discussion on science and social movements in the 1960s.

Agar has produced a truly impressive piece of scholarship, synthesizing a vast amount of secondary literature – this alone would make for an invaluable contribution to the history of science. But this book is not just interesting and useful as a survey. Most intriguing is the way it provokes the reader into reflecting on the possible modes and implications of scaling up the level of our analyses to identify larger patterns in contemporary scientific life.

References

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Felipe Ortega and Joaquín Rodríguez

El Potlatch Digital: Wikipedia y el Triunfo del Procomún y el Conocimiento Compartido [The Digital Potlatch: Wikipedia and the Triumph of Commons and Shared Knowledge]

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Wikipedia is an unexpected miracle. The contemporary experiment of management by the common has turned into a very efficient and success-

ful socio-technical venture. This book investigates the collaborative endeavors and practices around Wikipedia. It aims to understand the particular logics behind one of the greatest and most interesting examples of collective action, creation and free dissemination of knowledge. In concrete terms, the authors intend to shed light on the motivations of Wikipedia editors. In order to do so, they combine qualitative perspectives with quantitative approaches.

The book begins with an introductory chapter in which Ortega and Rodríguez present some of the central notions and arguments of their work. The departure point is their concern over the reasons why people engage in digital collaborative projects. The authors argue that no single motivation can account for the variety of economic practices and behaviours that take place in the Internet, not even within the subset of those who form and sustain the Wikipedia community. Rather, there are multiple, and even contradictory, causes behind such efforts; for instance, altruism, entertainment, obsession, addiction, quest for recognition and, even, vandalism – which is frequently counteracted by digital patrols aimed at detecting attacks and restoring originals. Yet, among this diversity and heterogeneity, Ortega and Rodríguez aim to identify a homogeneous ground or underlying explanation that will allow us to understand the reasons for practices that exclude immediate material or monetary reward, and are therefore alien to our universe of everyday and one-dimensional economic performances. At this point, the potlatch notion enters the scene as a useful example of an economic practice that contradicts the pervasive capitalist logics of accumulation and distribution. This notion is further explored in the next section.

What are the necessary conditions for collaboration and cooperation to be not only possible and recursive, but also interesting, appealing and desirable? In their pursuit of a theoretical framework to help us understand the different economies of practices that can be observed in the Internet, the authors guide us through untenable theories and sites of altruism and cooperation. In the second chapter, “The Digital Potlatch”, Ortega and Rodríguez review several contributions from the scholarly literature. The authors argue that some existing theoretical resources – such as the prisoner’s dilemma, the drama of the commons, etiologic perspectives and classic postulates of liberalism – provide unsatisfactory explanations of the phenomena, due to their excessive focus on monetary-based logics and their lack of attention to individual factors and the contexts in which cooperation is enacted. The authors draw on the notion of potlatch to overcome these insufficient accounts of altruism.

Ortega and Rodríguez describe the general features of the original potlatch ritual, a complex behavioural ceremony practiced in various forms by many North American tribes, in which distribution of property and gifts allows persons to affirm or reaffirm their social status. This example illustrates how, in certain contexts, gifts of material and/or intangible capital allow persons to gain acknowledgment, recognition and re-

noun from the community. This form of generosity brings enormous social prestige. Thus, the sacrifice of economic capital results in symbolic capital gains, which opens the possibility of effective power over the tribe.

Wikipedia is a collaborative venture that aims to create and disseminate knowledge. In this vein, the project shares its commitments with scientific practice. In the third section, "The Genesis of the Field of Scientific Production or an Example of Instituted Collaboration", the authors explore the relationship between science and the Web 2.0. The authors reflect on the similarities and differences, as well as the opportunities and emerging constraints and challenges, enabled by the interplay. Science works as a resistant collaborative network, although pressures and challenges form both inside and outside. Reputation, impact and diffusion are the main characteristics of the logic of symbolic capital accumulation in science.

In the fourth section, "An Ethnography of Wikipedia", the authors report the findings of their qualitative and quantitative analyses of practices around Wikipedia. The investigation thoroughly examines organizational, managerial and operational patterns, and the data point out the parallelisms between Wikipedia behaviour and the potlatch model. The phrase "digital potlatch" refers to practices through which assets (e.g. knowledge) must be given away in order for more valuable capital (namely recognition and popularity) to be obtained. Wikipedia offers a prototypical example of a community that develops common policies, articulates its internal recognition and monitoring mechanisms and coordinates its controls, without monetary flow. What is more, it illustrates how valuable capital in a certain habitat is not necessarily material, but can be symbolic. Arguably, the main argument of the book is that meritocracy and effort recognition are the main driving forces of those who participate in collaborative ventures such as Wikipedia. Although the example is not generalizable for all Internet communities, the authors argue that the success of Wikipedia exemplifies the triumph of shared knowledge and collaborative practices over individualistic strategies.

Ortega and Rodríguez summarize the main findings from their quantitative and qualitative analyses in the fifth section, "The Digital Social Contract." The initial disinterest – the generation of freely accessible shared knowledge – is rewarded with some kind of recognition, and the accumulation of this symbolic capital is the fundamental principle for the acquisition of status in the community. However, Wikipedia is not a tension-free project. For instance, there is ongoing debate over the organization of a system of acknowledgment. Furthermore, meaningful participation seems incompatible with long-term involvement. In the sixth section, "Notes on the Political Dimension of the Shared Knowledge. Towards a Political Anthropology of the Future More Participatory and Open Democratic Governance", the authors briefly reflect on the democratic opportunities that this kind of collaborative undertaking might entail for governance.

In the last section, “Twelve Ideas to Avoid the Tragedy of the Shared Knowledge”, Ortega and Rodríguez outline some ideas for tackling what seems to be an inevitable and progressive abandonment of participation in collaborative ventures. The authors point towards several potential initiatives, such as: redefining the notion of work in our societies and reducing the time devoted to it; dedicating released time to the common, such as by creating shared knowledge; thinking differently and challenging the dominant ideas of production and economic growth; facilitating universal free accessibility to the Internet; encouraging, acknowledging and rewarding collaboration with symbolic capital that can be converted into other forms of capital; and organizing self-managed governance agencies to promote, monitor and evaluate the involvement. Finally, the authors include an appendix in which they provide an account of the methodology employed in the investigation.

Ortega and Rodríguez do an admirable job of attempting to understand how a collaborative endeavour like Wikipedia operates. This book could be very interesting for anyone aiming to understand the logics of collective action and those concerned with new ways to manage the public. Furthermore, it introduces new questions and touches upon issues of interest in different fields. This investigation of the hybrid assemblage known as Wikipedia could be a thought-provoking contribution not only to STS scholars, but also to historians wondering about the origins of practices, economists studying economic practices, sociologists dealing with communities of practice, legal scientists examining questions of property, anthropologists enquiring about the persistence of gift culture and even political scientists captivated with the rebirth of the public space. Lastly, the book is well documented and a valuable contribution to the scarce scholarly literature on Wikipedia in Spanish.

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Claire Waterton, Rebecca Ellis and Brian Wynne

Barcoding Nature. Shifting Cultures of Taxonomy in an Age of Biodiversity Loss

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Making visible the density of the ongoing changes which articulate the relationship between (techno)science and society is not an obvious task. The three authors of *Barcoding Nature. Shifting cultures of taxonomy in an age of biodiversity loss* succeed in such an enterprise, being participant observers and engaged witnesses of a complex turning point in one of the En-