# When Psychology Went Online:
Review of "Psychological Aspects of Cyberspace: Theory, Research Applications",
Edited by Azy Barak
(Cambridge University Press, 2008)

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Azy Barak is well known for his prolific contributions to several areas of the literature dealing with psychological investigation of the Internet and related technologies, and also the exploitation of the Internet as a space in which the profession of psychology may be conducted. These efforts fall within the domain of what some call "cyberpsychology" – essentially, the application of psychology to the Internet – and that is the focus of this book. In this 300-page volume he has assembled an excellent collection of contributors, all familiar names who have done much to advance their respective fields of expertise. Many of the real pioneers in the area are represented here, bringing to the project a considerable depth and breadth of knowledge and experience. They are drawn from a variety of nations, institutions, and areas of psychology, and thus bring a variety of perspectives to the work.
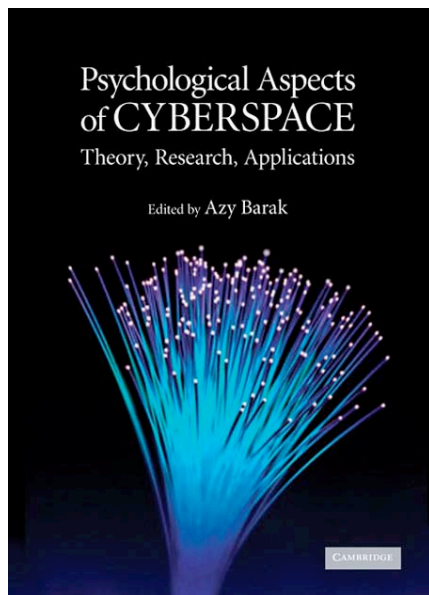
In line with the familiar authors, the chapter list includes many of the familiar topics one would expect. We have Internet abuse (sometimes referred to in terms of addiction, which is addressed in the chapter) from Janet Morahan-Martin; online relationships from Andrea Baker; online group processes from Katelyn McKenna (Yael Kaynan); online psychological assessment from Azy Barak and Liat Hen; online psychological therapy from John Suler; sexual materials and activities online from Monica Whitty and William Fisher. The chapter authors, given their deep involvement in these fields, are qualified to write with authority on their topics. They each review a significant body of research done over recent years, and introduce new interpretations and perspectives. For example, Barak and Hen's discussion of psychological assessment deals with online psychometric tests as one would expect. However, they also deal with other methods such as online interviews and assessment centers that require more innovation in the way Internet technologies are used. Such techniques are becoming more feasible as technology matures.

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While these chapters reflect what may be regarded as "traditional" areas of psychology's interface with the Internet, others reflect issues that have more recently become salient. Issues surrounding online privacy, as discussed in the chapter by Carina Paine Schofield and Adam Joinson, are receiving wider public attention as online service providers of various sorts become increasingly hungry for personal information about their users. For example, technical developments mean online advertising may be personally tailored to the viewer on the basis of unobtrusively acquired information about their browsing habits (e.g. the controversial Phorm technology). There is increasing recognition and media scrutiny of what many people perceive as threats to their privacy.

Alexander Voiskounsky's chapter presents work on flow experiences in online spaces and interactions. This perspective on human experience, which has yet to make a significant impact on the field of Internet science, may have new insights to offer about online life.

Sheizaf Rafaeli and Yaron Ariel discuss the activities and motivations of people who contribute to the relatively new (founded in 2001) user-generated encyclopaedia Wikipedia in various roles. Wikipedia provides a useful online resource, and is worthy of study as a sphere of human behavior in its own right. As well as an information repository, it can be thought of as an interaction space emblematic of the so-called Web 2.0's "architecture of participation". One could list many such examples – Flickr, Digg, delicious and so on – of currently popular Web based applications that rely very heavily on users' input. What motivates people's behaviour in such spaces, and what social rules govern them? Are they similar or different to "traditional" online interaction spaces such as newsgroups or MUDs, and indeed to the offline world?

A theme that permeates many of the chapters is one of change or transition. This begins, aptly enough, with the first chapter where Barak and Suler reflect on the development of the Internet and "cyberspace", the changes in society and human behaviour it has wrought, and how psychology as a discipline has examined those changes and itself been changed. Much is made of the transformative power of the Internet at both a personal and societal level. Personally I am unsure about the extent to which I agree with this, and it seems to be an uncertainty shared by the volume's contributors as a whole: some do very clearly adopt such a futurist perspective, others are more conservative and grounded in traditional psychological models and approaches. My hunch is that both of these approaches – while they might at times frustrate each other – are essential to the development of this growing discipline.

For example, Suler's chapter deals with individual, personal change through the medium of Internet-delivered mental health interventions. This revolves mainly around his "Cybertherapeutic Theory" and an innovative view of how therapeutic activities may be delivered through his eQuest system. I would have liked to see this material complemented by a chapter on more conventional therapeutic approaches that also lend themselves to online delivery and have been subject to efficacy trials: I am thinking particularly of approaches derived from Cognitive Behavioural Therapy (CBT). There is a growing body of literature that demonstrates CBT for a number of different problems may be effectively delivered via the Internet with positive outcomes.

The theme of transformation, this time at a social group level, is continued in Yair Amichai-Hamburger's chapter. This describes a novel system designed to reduce group conflict through online interactions. Based on classical social psychological research on group processes and modern ideas about the special properties of Internet interactions, this describes a Web site (the Net Intergroup Contact platform) being developed to facilitate online meetings between rival groups. These are exciting ideas that clearly have great potential. However, the chapter leaves one wishing it had been written two or three years in the future, when some information was available about how well the intervention had worked.

The notion of transformation is perhaps made most explicit in the final chapter, by Ulf-Dietrich Reips, on how Internet-mediated research has changed science. Alongside his summary of numerous techniques developed for online research, he demonstrates how many notions that were once deemed visionary and futuristic, have actually come to pass and are now in many cases an almost unremarkable part of our daily and professional lives. For example, he describes developments in open-access peer-reviewed online scientific publications, which have grown from a small number of pioneers in the 1990s to over two thousand today. One of the most striking developments in such publication is that articles may link to additional materials (e.g. hotlinked references, or actual experimental materials) in a way that is not possible for paper-based journals. This review is published in just such a journal.

Another example of changes in publishing can be found in the book's ancillary materials. It is common nowadays for books to be accompanied by "companion Web sites" and this is no exception. Indeed, given the topic, it would be surprising for the volume *not* to have a companion site. However, the surprise here comes in the content of the Web site (http://cyberpsych.yeda.info). For each chapter there is a page with a summary,

author biographies and various links. Unusually, it is possible to download the full text of the chapters from the pages. I think this is an incredibly useful resource, especially for students, though I do wonder whether it will hurt sales of the volume. However, there has been speculation that free online versions of books actually boost sales of hard copies (authors such as Paul Coehlo and Cory Doctorow suggest this has been the case for their own works, and mainstream publishers such as HarperCollins are beginning to experiment with online books). I think having the chapters online will certainly increase their exposure and consequently their impact—whatever happens to the sales figures.

The pages of the Web site adopt a blog format, and it is possible for readers to add comments and ask questions. There is evidence that this is happening (albeit to a limited extent at the time of writing), and that chapter authors are responding to the comments. This degree of ongoing involvement is unusual in my experience (I have seen other book Web sites that have similar goals but end up never being updated) and I wonder whether this is due to the use of blogging software rather than less user-friendly approaches. Whatever the reason, the ongoing interactivity is suggestive of the move towards "living documents" mentioned by Reips, and changes in the ways researchers relate to each other and their audiences.

The look and feel of the volume, in both hard and soft covers, is clean and attractive. Despite some oddities of writing in a small number of chapters, the tone adopted by chapter authors is clear and readable. I would consider it accessible both to professionals and to undergraduate students. The reproduction of some of the figures (especially screenshots) is occasionally fuzzy, and there are also occasional typographical errors. None of these are enough to spoil the volume.

While this book presents a survey of a number of different areas where psychology and Cyberspace intersect, a number of other important areas are inevitably omitted. For example, I found little material concerning online education, which has been a focus of much research and practice. Outside of a couple of chapters (e.g. Morahan-Martin on maladaptive use) there is little concerning online gaming of various sorts, which has become a massive industry in recent years. To be fair, though, it appears that psychology as a whole has been slow to devote much attention to the gaming phenomenon—the omission is broader than this book. However, I do not consider the omissions a weakness in the volume: even the most extensive handbooks and reference volumes cannot cover everything.

This book is positioned somewhere between a standard reference work and a vision of the (near) future. Barak's preface characterizes it as both a sourcebook of information for professionals, and a collection of original thoughts and creative views. I think it achieves that goal admirably.