# Kai Cornelius · Dieter Hermann Editors

# Virtual Worlds and Criminality



## Virtual Worlds and Criminality

Kai Cornelius • Dieter Hermann Editors

# Virtual Worlds and Criminality



Editors
Dr. Kai Cornelius, LL.M.
Institute for German European and International Criminal Law
University of Heidelberg
Friedrich-Ebert-Anlage 6-10
69117 Heidelberg
Germany
cornelius@jurs.uni-heidelberg.de

Prof. Dr. Dieter Hermann Institute of Criminology University of Heidelberg Friedrich-Ebert-Anlage 6-10 69117 Heidelberg Germany hermann@krimi.uni-heidelberg.de

ISBN 978-3-642-20822-5 e-ISBN 978-3-642-20823-2 DOI 10.1007/978-3-642-20823-2 Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2011933553

#### © Springer-Verlag Berlin Heidelberg 2011

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable to prosecution under the German Copyright Law.

The use of general descriptive names, registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

#### **Preface**

The fusion between virtuality and reality has achieved a new quality of experience by the establishment of metaverses and virtual worlds. With globally registered accounts nearing 800 million and revenues approaching US\$ 1 billion annually (according to the Consulting Company KZERO), virtual worlds such as Second Life, Twinity, Entropia Universe, or Fregger have experienced rapid growth in recent years and show no signs of slowing down. Not only have countless companies discovered these "virtureal worlds" as marketplaces, but also have fraudsters and other criminals.

The term *metaverse* is used herein to mean a social virtual world such as *Second Life, There,* or *Playstation Home.* It describes a permanently existing 3D virtual world close to reality in appearance, created by its participants and constantly evolving through their activities. The users have an "avatar" as the digital representation of their physical selves. They accomplish various goals: meeting and socializing with other avatars, buying and selling virtual items, playing games, and creating and decorating virtual homes and properties. Certain transactions among users result in a circular flow of real-world money, which takes place partly within the virtual world but are linked directly with the outside world via exchange rates.

Various Massively Multiplayer Online-Games (MMOGs) such as *Entropia Universe* and *World of Warcraft* contain elements that bear a resemblance to aspects of the metaverse, although the MMOGs typically focus on a specific gaming activity rather than on general-purpose socializing. These MMOGs are included in the more comprehensive concept of "virtual worlds".

To meet the new challenges arising from virtual worlds, the *Institute of German, European and International Criminal Law*, supported by the *Institute of Criminology*, both part of the *University of Heidelberg*, organized the symposium "Virtual Worlds and Criminality" at the *Internationales Wissenschaftsforum Heidelberg*, a center for scholarly exchange in all areas of science and academic research. This conference brought together European experts from different academic disciplines, *inter alia* representatives from jurisprudence, social sciences and media sciences, as well as from psychology. They discussed the reasons for and the impacts of these

vi Preface

new forms of criminality as well as the necessities and possibilities for fighting these. Moreover, other fundamental issues were examined, such as the addictive potential of virtual-world use, media violence, and conflict resolution problems arising in the context of virtual worlds. These proceedings (which were made following the conference) provide insight into much of the results of the discussion.

The conference could not have taken place without the generous sponsorship of the *Deutsche Forschungsgemeinschaft*, Germany's largest research funding organization, and the inclusion of the conference in the symposia program by the curators' board of the *Internationales Wissenschaftsforum Heidelberg*.

The symposium and the publication of its proceedings would not have been possible without the help and cooperation of many members of the Institutes' staff. At the risk of overlooking important contributions of others, special mention should be made of Ms. *Julia Neugebauer* who coordinated administrative tasks and of Ms. *Johanna Nieswandt*, who assured the efficiency of the publication process.

Heidelberg, January 2011

Kai Cornelius Dieter Hermann

### **Contents**

Virtual Worlds as a Regulatory Challenge: A User Perspective Christoph Klimmt	. ]
Crime Potential of Metaverses	19
Is Virtual Violence a Morally Problematic Behavior? Tilo Hartmann	31
Media Violence and Criminality	45
Internet Dependency: Symptoms, Diagnosis and Therapy Bert Theodor teWildt	61
Conflict Resolution in Virtual Worlds: General Characteristics and the 2009 Dutch Convictions on Virtual Theft	79
Responsibility under Criminal Law in Virtual Worlds	95
Index	121

#### **Contributors**

**Kai Cornelius** Institute for German, European and International Criminal Law, University of Heidelberg, Heidelberg, Germany, Cornelius@jurs.uni-heidelberg.de

**Tilo Hartmann** Department of Communication Science, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands, t.hartmann@fsw.vu.nl

**Dieter Hermann** Institute of Criminology, University of Heidelberg, Heidelberg, Germany, hermann@krimi.uni-heidelberg.de

**Christoph Klimmt** Department of Journalism and Communication Research, Hanover University of Music, Drama and Media, Hannover, Germany, christoph. klimmt@ijk.hmtm-hannover.de

**Christian Laue** Institute of Criminology, University of Heidelberg, Heidelberg, Germany, laue@krimi.uni-heidelberg.de

**Arno R. Lodder** Department Transnational Legal Studies, Computer/Law Institute, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands, a.r.lodder@vu.nl

**Bert Theodor teWildt** Centre for Psychological Medicine, Hannover Medical School, Hannover, Germany, tewildt.bert@mh-hannover.de

#### Virtual Worlds as a Regulatory Challenge: A User Perspective

**Christoph Klimmt** 

**Abstract** Multi-User Environments offer a broad range of possibilities to experience action-oriented contexts, for example, simulations of real-world contexts, materializations of fictional contexts (e.g., the "Lord of the Rings" universe), and the co-creation of mixed virtual-real interaction spaces such as "Second Life". The chapter elaborates the key elements of multi-user environments from a user perspective: Interactivity, mediated interpersonal communication, easy accessibility, and reflects on the motivational appeal of these characteristics. From this reconstruction of what multi-user environments "can do", implications for effects perspectives are derived, such as the diffusion of responsibility and liability for events and actions (including potentially illegal actions) occurring in multi-user environments. The chapter builds on these considerations to point out effect issues of scientific interest, most importantly, new dimensions of copyright issues and transfer effects (stimulation or facilitation of real-world crime by virtual multi-user environments). Finally, conceptually most central themes for interdisciplinary research on legal/criminal effects of multi-user environments are discussed, namely "sense of right and wrong" in virtual versus real contexts, media literacy and prevention of transfer effects, and the legal status of virtual spaces and the actions conducted in them.

#### 1 Introduction

Virtual multi-user environments or "Metaverses" have evolved to a major challenge for academic research of various disciplines, including communication, psychology, law, and criminology. The relevance of this attention for virtual worlds is justified by two major developments: (1) A large and still growing number of people who

Department of Journalism and Communication Research, Hanover University of Music, Drama, and Media, Hannover, Germany

1

e-mail: christoph.klimmt@ijk.hmtm-hannover.de

C. Klimmt (⊠)

2 C. Klimmt

attend virtual worlds, for example, for play, social interaction, and/or work, and (2) rapid advancement of the technical capabilities that allow for ever-new possibilities in terms of use and commercial exploitation. Virtual Worlds (VWs) are clearly on their way to occupy an important and distinct meaning in everyday life of tomorrow. With those VWs that are currently available rising many questions, including liability issues, legal regulation, and criminal prosecution (see the various chapters in this volume), it is important to reflect proactively about "what's in VWs" that renders them so appealing to users and producers alike. Understanding the power of VWs early in their evolution should allow to take effective measures concerning the chances and the social problems this new communication mode is bringing out or will bring out in the (near) future.

This chapter introduces a user perspective on VWs. It synthesizes research and arguments from communication science and media psychology to inform the multi-disciplinary debate on VWs. Two questions will be discussed: What is so appealing about VWs? And which kind of effects should be expected from frequent use of VWs that are of primary relevance especially in legal and criminological contexts? Reflections on these key questions will allow to derive interdisciplinary research perspectives on today's and tomorrow's VWs. They shall also help to conclude specifications of demand for new thinking in terms of legal regulation and prevention of social problems that may become evident once VWs have become an integral part in modern societies' everyday life. Therefore, the chapter addresses the issues of motivational appeal of VWs (II.) and effects perspectives (III.). Consequently, three conceptual 'hotspots' for crossdisciplinary research on user issues in VWs are recommended as approaches to resolve the unique challenges that come along with the mass use of VWs (IV.).

#### 2 The Motivational Appeal of Virtual Worlds

An analysis of why VWs are so attractive for users is indicated not only because it follows the growing importance of VW use as a common activity in need of scientific description and explanation. In the present context, this analysis is required to understand the motivational and social forces that underlie the growing importance of VWs and many of the concerns that law experts, criminologists, and many others holds in respect to VWs. For instance, issues of excessive or addictive use of VWs are closely connected to the fascination people experience during VW use (see teWildt this volume). Understanding what attracts people to VWs will thus be useful to derive perspectives on the regulatory and administrative challenges attached to VWs.

#### 2.1 The Diversity of VWs

Explanations of people's interest in and sustained use of VWs conflict with the fact that contemporary VWs are highly diverse. In terms of technology, the most

advanced type of VWs today are Massively Multiplayer Online Role Playing Games (MMOs), among which "World of Warcraft" is the most prominent example. In MMOs, players typically control one individualized character and navigate through a large, complex virtual environment. Interacting with the (avatars of) thousands of other players and collecting digital objects of diverse kinds, users resolve tasks ("Quests") and organize in groups to meet major challenges. Modern "Game VWs" such as MMOs come along with highly impressive audiovisual representations and significant narrative complexity. With the opportunity to interact, communicate, and co-play with many other users, the bandwidth of appeal factors in MMOs is extraordinary (Yee 2006).

Other types of contemporary VWs are not so much centered around a virtual-fictional world, but rather rely on user-generated content and the cocreation of digital objects by users. "Second Life" is the most popular and well-known example of this kind of VWs. Such environments allow users to customize a virtual representative (an avatar similar to most MMOs, see above) to occupy virtual space, build houses and visit places of other users. Rich interaction and communication opportunities allow for multiple applications, such as virtual work meetings, lectures in virtual classrooms, or all-virtual theater play.

Another important type of VW is social network sites such as "Facebook". While these platforms are less visual than MMOs and "Second Life" in the sense that they do not provide a virtual-spatial environment that users can navigate through, they host virtual representations of many real individuals including images and textual self-descriptions. Links between user profiles make social relationships visible, and many modalities of user-communication are available that create substantial social dynamics and appeal (e.g., online groups of shared interest, message boards on individual profile-sites, and built-in channels of mediated interpersonal communication).

For each of these (and conceivable further) manifestations of VWs, specific literature on user motivations and everyday practice has been published (e.g., Yee 2006; Boyd and Ellison 2007). This chapter does not go into the details for all types of VWs, but rather distills general principles of user attraction that (should) apply to all kinds of VWs. This abstract approach is indicated to connect to requirements for law making and regulatory concepts that cannot be customized to any possible subtype of VWs, but need to focus on the core elements behind (virtually) all these subtypes in order to be efficient and effective.

# 2.2 What Is in VWs for Users? General Principles of VW Appeal

What do people find in VWs that creates their positive feelings during use and makes them return so frequently? What are the common characteristics of heterogeneous VWs such as "World of Warcraft". "Second Life", and "Facebook"? Four