Postdigital Science and Education

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This series is a new, international book series dedicated to postdigital science and education. It brings together a rapidly growing community of authors and the currently highly scattered body of research. The series complements the *Postdigital Science and Education* Journal and together they provide a complete, whole-rounded service to researchers working in the field. The book series covers a wide range of topics within postdigital science and education, including learning and data analytics, digital humanities, (digital) learning, teaching and assessment, educational technology and philosophy of education.

We no longer live in a world where digital technology and media are separate, virtual, 'other' to a 'natural' human and social life. Book series engaged with technology and education tend to view the research field as concerned with the 'effects' of digital media and other technologies on the existing activities of teaching and learning in education. This still assumes a clear division between an authentic educational practice and the imposition of an external, and novel, technology. The rapid growth of research and books and articles dealing with education and research in and for the postdigital age calls for a different approach that is no longer based on a division but rather on an integration of education and technology. This book series meets that need.

This book series

- Fills the gap in the scholarly community as the first academic book series in postdigital science and education
- Explicitly focuses on postdigital themes and research approaches
- Forms a hub for a growing body of scholarship in the field
- Enables communication, dissemination, and community building for researchers, authors, and students.

More information about this series at http://www.springer.com/series/16439.

Maggi Savin-Baden Editor

Postdigital Humans

Transitions, Transformations and Transcendence



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This book is dedicated to my colleague, friend, and mentor Ron Barnett for the years of encouragement and support he has provided. Thank you.

Series Editor's Preface

A few years ago, I was in the place that many academics dream of. I spent most of my time writing books and articles, developing this or that aspect of my theories with each new publication. I had not received too many rejections, my citation count was on the rise, and I was set out for a smooth sail towards a reasonably solid academic career. Yet, something has started to feel wrong, and this feeling has exacerbated with time. My papers have been read, and cited, by a community of people with similar interest, and whose work I read, and cited—not because we deliberately created some sinister quotation cartel, but simply because our works interacted with each other. Slowly and seemingly inevitably I ended up in an obscure, self-referential, albeit very warm and cosy global community. Arguably, our mutual sharing and caring was a natural consequence of a very simple (and sad) fact: no one else seemed to care about what we were doing.

However. I refused to take this enclosure at a face value. I have a wide range of interests, my friends and family come from different circles, and I just knew that many of them are interested in issues I was writing about. However, these people were totally excluded from our academic discussions: they did not have the time, opportunity, and language to participate. After all, it took me decades to arrive to the position of a reasonably comfortable academic writer. How could they possibly catch up all these years of labour while working in arts, insurance, or whatever? This is when I started to feel the real meaning of the phrase 'ivory tower'. While my work is focused to matters of general interest to all people, its structure, language, and position within neoliberal structures of academic knowledge production and dissemination make it elitist (see Fuller 2019). And even within the academia, my work is just a small niche, situated within some larger (but nevertheless very small) niches, with little or no impact to the rest of the world. In order to achieve only modest academic success, one is expected to own their own little research hole and dig it deeper and deeper. This hedgehog approach to knowledge work, which is so prevalent in academic theory and practice, has felt tighter and tighter, until I started to feel it as a full-blown straight-jacket (see Jandrić 2017: xi-xii). I can't breathe! Not here, not like this, not anymore.

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To develop a more whole-rounded, wiser, fox approach to my work, I started to look for concordances. What is it that connects my thinking, my narrow community's thinking, then wider academic circles of people working in similar fields, and my mother, son, and neighbour? What is it that bothers my fellow non-academic family and friends, trying to make a living in our more than challenging times? These questions quickly led to some very deep philosophical questions. What is the nature of today's human condition? How can we improve ways in which we approach it? Following my (then) recent works on dialogue and collectivity (Jandrić 2017), I figured out that I cannot approach this problem alone, so I decided to try my luck in academic publishing.

I immediately understood that my general ideas need a clear, deep, yet easily understandable and widely accessible gathering concept. With a group of closest academic friends, I founded *Postdigital Science and Education* journal and book series. While full story about our reasons behind and around this decision has never been written, some thinking behind it is scattered in a range of publications (Jandrić et al. 2018). I feel that things are better this way: definitions are restrictive by their nature, histories always reflect attitudes of those who write them, and an academic community will do much better with questioning unrestricted by canons.

Our work on the postdigital condition is still in its infancy. While our budding community of postdigital researchers has spent considerable time and effort into defining the concept of the postdigital and our postdigital age (see Peters and Besley 2019; Fawns 2019; Sinclair and Hayes 2019; Knox 2019, amongst others), less attention has been given to their main protagonist—the postdigital human. I am truly thankful to Maggi Savin-Baden, and to all authors in this book, who took up the challenging task to explore this important topic. So who are we, postdigital humans? How do we differ from our ancestors? What heritage, and opportunities for development, are we leaving to generations coming after us?

Tackling these essential questions, *Postdigital Humans* is the perfect inaugural book for the Postdigital Science and Education series. Edited, written, and produced as a labour of love, this book presents a powerful reminder of human costs, and opportunities, associated with techno-social development. Presenting latest results of our community's sustained research of the postdigital condition, *Postdigital Humans* is a snapshot of our current work and a hugely important stepping stone for postdigital research to come.

Zagreb, Croatia Petar Jandrić

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Our revels now are ended. These our actors,
As I foretold you, were all spirits, and
Are melted into air, into thin air:
And like the baseless fabric of this vision,
The cloud-capp'd tow'rs, the gorgeous palaces,
The solemn temples, the great globe itself,
Yea, all which it inherit, shall dissolve,
And, like this insubstantial pageant faded,
Leave not a rack behind. We are such stuff
As dreams are made on; and our little life
Is rounded with a sleep.

(Shakespeare 1611)

Acknowledgements

This book has been a challenge to create in these liquid times of moving technologies. I am grateful to the authors in this volume, who have not only provided fabulous chapter but have been patient and diligent during the editing process. Petar Jandrić, the series editor, has been a power of strength and critique, for which I am grateful. I am also deeply thankful to my husband John who has supported the editing process and in a home of fun, busyness, and chaos is always there to steady the buffs. Any mistakes and errors are mine, a mere postdigital human.

Introduction

Maggi Savin-Baden (Ed)

When Petar Jandrić asked me to bring together a group of authors to create a text on *Postdigital Humans*, I explained that I was not the person for the job. Most of my work to date has been in researching and designing innovative pedagogy to improve student learning. My foray into digital afterlife and the postdigital arena has been relatively recent and so I felt ill equipped to undertake this task. What I realized as I was persuaded to undertake this edited collection was that the area of postdigital humans is, and remains, a complex and under-researched area that transcends a wide range of disciplines—from sociology, computer science, music, and theology to ethics and politics. The collection of chapters here is provided by a group of innovative authors sharing their ideas and reflections. What is common across all chapters is the concern about how we manage the postdigital future and in particular deal with and indeed take on surveillance capitalism and seek to avert the possibly, or even inevitability of the marketized diminishment of the human.

What this text illustrates is that the development and use of postdigital humans is occurring rapidly, but often in unexpected ways and spaces. The chapters explore approaches to developing and using postdigital humans and the impact they are having on a postdigital world. Posthumanism seeks to break down binary distinctions between 'human', 'machine', and 'text' and between 'nature' and 'culture'; it also rejects dualisms that are used to define being such as subject/object (Hayles 1999, 2012). Thus, posthumanist theory is used to question the foundational role of 'humanity'. It prompts consideration of what it means to be a human subject, and the extent to which the idea of the human subject is still useful. This overlaps with Actor Network Theory, where the arguments centre on the idea that actors may be both human and non-human, thus for example supermarket products and digital devices are seen as actors that have influence, but it not clear how all this relates to the understandings of postdigital humans. Yet at the same time digital media are currently being used to expand the possibilities of what postdigital humans might be. For example, whilst the term AI is in very common usage (even if poorly defined), the term 'postdigital humans' is less commonly used. Related terms include 'digital humans', 'autonomous agents', and avatars. However, it is often the xvi Introduction

perceptions of the user, and the human inclination to anthropomorphise, that determine whether something is 'just a programme' or a postdigital human.

This book presents current research and practices at a time when education is changing rapidly with digital, technological advances. In particular, it outlines the major challenges faced by today's employers, developers, teachers, researchers, priests, and philosophers such as the possibility for using postdigital humans for teaching, training, and practice. Broad areas include:

- · Conceptions of Postdigital Humans
- · Postdigital Humans and Education
- · Philosophy, Ethics, and Religion

The first section of the book begins in Chapters 'What Are Postdigital Humans?' and 'Postdigital Humans: Taking Evolution in Own Hands' with an exploration of the ideas and concepts associated with postdigital humans. Chapter 'What Are Postdigital Humans?' suggests that the challenge of the postdigital human is to recognize the ways in which balance must be brought to bear and to realize the ways in which technologies such as algorithms, machine learning, and facial recognition and facial verification can foster social injustice. It begins by exploring conceptions of the postdigital and what it means to be human, then examines the idea of postdigital humans and the relationship between humans and machines. The ethical issues relating to postdigital humans are also discussed in relation to human labour, machine learning, intimacy ethics, and surveillance. In Chapter 'Postdigital Humans: Taking Evolution in Own Hands' Jandrić examines postdigital humans from an evolutionary perspective by presenting the implicit and explicit references to human beings in postdigital literature and identifying a range of viewpoints, approaches, and fields of inquiry which have shaped postdigital thinking over the past 20 years. Building on the understanding of humanity as a normative category, the chapter moves on to explore three 'performance standards' for inclusion into humanity: life, consciousness, and behaviour. The concluding part synthesizes philosophical approaches and postdigital theories and builds a postdisciplinary understanding of the postdigital human.

The second section of the book provides both a practical and philosophical stance towards the use of postdigital humans in education. It begins in Chapter 'Experience of Using a Virtual Life Coach: A Case Study of Novice Users' with an exploration of the experience of Using a Virtual Life Coach (VLC) by Victoria Mason-Robbie. This chapter explores a group of novice users' experiences of using a VLC in order to ascertain whether the technical, pedagogical, and valuable features of the VLC, and its personalisation, were able to support the well-being of users. The results of the study to evaluate the VLC are presented along with a discussion of the moral and philosophical conundrums associated with adopting the VLC to support personal and work-related challenges within the context of postdigital humans. Richard Hall in Chapter 'Venturing Beyond the Imposition of a Postdigital, Anti-human Higher Education' then examines the notion of Venturing Beyond the Imposition of a Postdigital, Anti-Human Higher Education. He argues that analysis of technology enables us to reveal the dialectical construction of our dominant mode of reproducing

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everyday life, which, in terms of higher education, illustrates the relationship between humans and technologies, in order to maintain the reproduction of capitalism. This chapter argues that such a relationship is morbid and lengthens the shadow of value over what it means to be human. The chapter utilizes the metaphor of composting as a way that individuals in their environments process anger, grief, and trauma and find new ways of living. It pivots around the potential for a reimagining of the integration of the digital and the human through mass intellectuality, as a new form of sociability.

In Chapter 'The Value of Postdigital Humans as Objects, or Subjects, in McDonaldised Society' the value of postdigital humans as objects, or subjects, in McDonaldised Society is explored by Sarah Hayes, where she speculates on whether new postdigital positionalities are emerging that might finally challenge more dominant, rational interpretations of what computing means in individual lives. If so, perhaps a more subjective analysis of these new forms of postdigital participation will bring the humanities into computing, instead of vice versa. This may help to reveal the unique positionality in each individual postdigital human encounter, where subjective self-description may now be seen to be more appropriate than objective rationality. The last chapter of this section on postdigital humans and education, written by Michael Fasching and Kathrin Otrel-Cass, explores educational reflections on fake news and digital identities by examining how young people manage the information they receive from different sources. They present vignettes from two projects where young people reflected on their encounters with fake news and analysed how they manage information they receive online in general.

The final section of the book explores the overlapping constructs of philosophy, ethics, and religion. It begins in Chapter 'Listening Like a Postdigital Human: The Politics and Knowledge of Noise' with an exploration of the politics and knowledge of noise by Derek Ford and Masaya Sasaki who consider how the postdigital era has or might change listening practices. It begins with a brief review of postdigital literature that emphasizes the old and the new characteristics of such an era. It then considers the aesthetic and political questions about postdigital human senses, examines key works in sound studies, and briefly revisits the history of the production and reception of music in the twentieth century. The authors suggest that digital music production eliminates noise by turning analogue signals into ones and zeros so that it becomes impossible to tell where the human ends and the digital begins. Chapter 'Ethics, Character, and Community: Moral Formation and Modelling the Human' then considers the ethical conundrums in the area of postdigital humans. Malcolm Brown draws on the work of Alasdair MacIntyre to reconstruct an account of how we become moral persons through participation in communities and create narratives which help construct the self and address both human dependency and autonomy. He, like Richard Hall in Chapter 'Venturing Beyond the Imposition of a Postdigital, Anti-human Higher Education', argues that the limitations of the dominant market model of human interaction need to be examined. He suggests that there is only a slim possibility of the chance of establishing that moral shift before it is too late to prevent the marketized diminishment of the human. Steve Fuller, in Chapter 'The Computer's Hidden Theology and Its Prospects for a Postdigital

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Humanity', then explores theological unconscious of artificial intelligence, which he suggests turns on two contrasting interpretations of the *logos*, the divine word that provides the 'code' underwriting the structure of reality. The historically earlier interpretation is 'Computational Theism', which is based on the contiguity of the divine creator and the created artefact. Fuller explains that many of the early computer pioneers were nonconformist Christians who saw themselves, more or less explicitly, as engaged in a 'second creation', the consequences of which were seen as morally ambivalent. In the final section of the chapter he explores the implications of the transition from this increasingly dominant interpretation that detaches the *logos* from any personal creator to one very much in a Platonic spirit and examines implications for the emerging 'post-digital' world in which humans and advanced machines share a common ecology.

Chapters 'Postdigital Humans: Algorithmic Imagination?' and 'Transcendent Conformity: The Question of Agency for Postdigital Humans' both deal with issues of agency, but in different ways. John Reader in Chapter 'Postdigital Humans: Algorithmic Imagination?' explores the complexity of algorithms on the postdigital human condition. He suggests that if we were to assume there are two main possibilities of postdigital humans, either enhancements of existing humans employing the digital or entirely new forms of human emerging from a hybrid version of some sort, then the question is whether it is possible to incorporate into either of these the imagination which helps us to place ourselves in the position of another and to be able to show empathy which does not rest on calculation. In Chapter 'Transcendent Conformity: The Question of Agency for Postdigital Humans' Alex Thomas argues that the disintegration of ontological boundaries brought about by digital, genetic, and cybernetic developments requires an ongoing normative investigation into the structures, interests, and consequences of this process of technogenesis. He suggests that what is required is an exploration of morphological freedom in order to undermine it as a concept and thereby introduce a complexity-based posthumanist notion of agency. This final chapter in many ways brings together issues raised in other parts of the book that relate to concerns over agency, the wider complex ecology of techno-capitalist relations, notions of individual self-determination, and ways in which humanity needs to come to understand and act in the postdigital world.

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Alexander Thomas is a PhD candidate at the University of East London whose research focuses on the ethics of transhumanism in the era of advanced capitalism. He is also a multi-award winning film director and screenwriter and was longlisted for the Academy Award for Best Live Action Short in 2016. He currently works as a Senior Lecturer in Media Production at the University of East London.