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THE SOCIAL, CULTURAL AND ENVIRONMENTAL COSTS OF HYPER-CONNECTIVITY:

SLEEPING THROUGH
THE REVOLUTION

MIKE HYNES

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The Social, Cultural and Environmental Costs of Hyper-Connectivity: Sleeping Through the Revolution

BY

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INVESTOR IN PEOPLE

Dedication

For Nora and Larry.

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Acronyms

AI	Artificial Intelligence
AIGS	Artificial Intelligence Global Surveillance
ARPANET	Advanced Research Projects Agency Network
AWS	Amazon Web Services
BRI	China's Belt and Road Initiative
CDMA	Code-Division Multiple Access
CEO	Chief Executive Officer
CERN	European Organisation for Nuclear Research
DARPA	Defense Advanced Research Projects Agency
DRC	Democratic Republic of the Congo
EEA	European Economic Area
EEE	Electrical and Electronic Equipment
EU	European Union
FCC	Federal Communications Commission
FTC	Federal Trade Commission
GDPR	General Data Protection Regulation
GPRS	General Packet Radio Service
GPU	Graphics Processing Unit
GSM	Global System for Mobile Communications
http	hypertext transfer protocol
ICT	Information Communication Technology
IoT	Internet of Things
IPCC	Intergovernmental Panel on Climate Change
IPO	Initial Public Offering
IRS	Internal Revenue Service
MIT	Massachusetts Institute of Technology
MOSFET	Metal-Oxide-Semiconductor Field-Effect Transistor
NMT	Nordic Mobile Telephony

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NTT	The Nippon Telegraph and Telephone Corporation
PDA	Personal Device Assistant
PDF	Portable Document Format
R&D	Research and Development
REM	Rapid Eye Movement
SST	Social Studies of Technology
TCP	Transmission Control Protocol
WHO	World Health Organization
WWW	World Wide Web

About the Author

Mike Hynes is a Sociologist and Lecturer in the School of Political Science & Sociology at the National University of Ireland (NUI), Galway, Ireland. He holds a first-class honours' Bachelor of Science degree in Information Technology (IT) and an honours' Master's degree in IT from NUI Galway. His teaching and research interests focus on efforts to improve urban and rural liveability, in addition to digital information and communication technology and the societal changes stimulated by online social media platforms and policy design in relation to work and environmental decision-making. He lives in Galway City, Ireland, with his wife Annette and has three adult sons.

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Foreword

When the devastating impacts of the Covid-19 coronavirus forced the social and economic shutdown of nations and regions across the world, many turned to digital information and communication technology (ICT) to remain in touch with family, friends and work colleagues. Digital technologies became our vital lifeline to those we love and cherish in a time of great stress and anxiety and allowed many to continue to work, albeit from home. It is exactly because our digital devices and global networked technologies have become some integral and embedded into our daily practices that we need a much deeper insight and understanding into the ways such technology has enhanced our everyday lives but also how some of the more darker elements of the digital age are being left unchecked in an environment of often blind techno-utopianism. We must strive to strengthen the elements of digital ICT that support and promote human flourishing and well-being and equally endeavour to limit or eliminate the structures and features of digital technologies – including the ways the digital tech industry itself is organised – that are proving to be socially, culturally, economically and environmentally harmful. This text is an attempt to add to more enlightened discussions and debates on the utility, or otherwise, of digital information and communication innovation and technology and seeks a better understanding of a number of key areas of concern that will grow more conspicuous in the coming months and years ahead. The vast number of ways digital tech has enhanced our lives – in the fields of medicine, education, work, leisure and in staying connected to others – is regularly acclaimed by public commenters, tech writers, journalists, celebrities, politicians and key decision-makers, and these are unchallenged in this book. What is discussed is the often-hidden societal, cultural, economic and environmental dangers that lurk in the darker corners of digitalisation, and the discussions in this text will shine a light into these more shadowy locations. The digital tech visionary Jaron Lanier suggests that it is the tech critics that drive improvements, and it is exactly that spirit in which this book was written.

On a personal level, I regularly use digital tech and appreciate the many ways it has enhanced my own life. It is again the very reason that I seek to advance overall knowledge of the ways we design, develop and adopt our digital devices and see grave dangers in how just a small cohort of organisations and individuals have come to dominate and control all our digital tech futures and the digitalisation narrative. This digital oligopoly exploit our personal data at every opportunity and in ways that have made them the most powerful corporate entities in the world, while at the same time undermine states and societies by avoiding paying

their fair share of tax while heavily influencing legislation and state actions solely in pursuant of their own individual commercial agendas. They are actively shaping societal norms by selectively justifying a hands-off approach on policing certain content on their platforms, on the one hand, while also making other content deliberately available, thereby actively shaping views and public opinion. Furthermore, are the guiding principles underpinning some of these digital innovations and technologies themselves deeply flawed in that they work to diminish, limit or destroy some of our uniquely human competences and adversely affect our overall well-being, while continuing to support and promote a destructive consumerism lifestyle that escalates the damage to our environment and hastens climate breakdown?

This text is aimed at a broad readership, and chapters can be taken as stand-alone pieces of work rather than a singular linear monography. The genesis for this book was born from class discussions and reactions to several topics in 'Digital Citizenship', a module undertaken by applied social sciences undergraduate students at NUI Galway. While not intended to cover all existing debates and aspects of digital ICT's impacts and consequences, or digitalisation futures, it is an attempt to explain some of the potential problematic issues and concerns now emerging in this new digital era and to add to much-needed deliberations that have, heretofore, remained marginalised or silent. I, therefore, would appeal to the reader for some forbearance with respect to the subjective licence taken in some sections of the text, in particular in the later parts of the chapter on Digital Democracy in which I search for my own grasp of modern political realities. The overall intent of this book is not always to fully explain or indeed to be definite about all possible digital futures. Rather, the text also seeks to prompt deeper thought and contemplation about potential and possible impacts and consequences of digitalisation, so some opinion and commentary will be noted at times. Indeed, the reader should feel provoked on occasions and may agree or disagree with some of the lines of argument presented. This, it is hoped, will trigger new reflection, understandings and debates on subjects of some significant societal importance and offer a better awareness of the forces and challenges we are now facing in shaping all our collective digital futures. As a global digital community, we have hitherto collectively failed to fully engage in the critical public debates that would allow us to consider and plot the trajectory of digital ICT innovation and development so that it happens in a way that primarily serves humanity and the planet. Such digital technologies should help limit or eliminate human suffering and ecological destruction. This text, thus, is an effort to add to all our collective knowledge in seeking a more humane and responsive digital technology future.

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The process of writing this book has been a challenging but extremely rewarding experience over the past number of months, but the ideas for the text have been in gestation for about two years. When the Covid-19 coronavirus pandemic paused life as we know it, we were all forced to pivot into new and strange realities, and much of the writing for this book also ceased temporarily. To Ramya, Carys, Jen, Kim and all the publishing team at Emerald Publishing, I thank you for your patience and consideration during this time and for all your efforts and work on getting this text from concept to completion. I have had the good fortune of ongoing conversations about relevant topics with colleagues in the School of Political Science & Sociology at NUI Galway, which began with an opportunity to pitch my ideas in a weekly seminar to school members. I have also been fortunate to have had continuous discussions with undergraduate students of the Applied Social Sciences programme about their lived experiences and understanding of the digital world. To my colleague and students, I am extremely grateful for your time and contribution to my journey of discovery and own personal understanding of the issues. I further wish to acknowledge the ongoing support of the Social Sciences Research Centre (SSRC) at NUI Galway and, in particular, Tony Varley for the encouragement and support to continue developing my thoughts and writing. To Ken Bruen for reading a very crude early draft but giving me hope that my efforts had legs, I thank you. And to Barbara Heisserer who meticulously went through an initial draft and provided constructive and beneficial feedback, I deeply appreciate all your practical and helpful comments but, more importantly, your support and friendship which has been an invaluable motivation. To my parents, for all your love and care: words will never be enough, but I've made a start here! And to my wife Annette, everything that I have been able to achieve and have been able to experience over the past number of years has all been down to your help, support and love, and I will be forever grateful.