THE ROUTLEDGE COMPANION TO DIGITAL MEDIA AND CHILDREN

This companion presents the newest research in this important area, showcasing the huge diversity in children's relationships with digital media around the globe, and exploring the benefits, challenges, history, and emerging developments in the field.

Children are finding novel ways to express their passions and priorities through innovative uses of digital communication tools. This collection investigates and critiques the dynamism of children's lives online with contributions fielding both global and hyper-local issues, and bridging the wide spectrum of connected media created for and by children. From education to children's rights to cyberbullying and youth in challenging circumstances, the interdisciplinary approach ensures a careful, nuanced, multi-dimensional exploration of children's relationships with digital media.

Featuring a highly international range of case studies, perspectives, and socio-cultural contexts, *The Routledge Companion to Digital Media and Children* is the perfect reference tool for students and researchers of media and communication, family and technology studies, psychology, education, anthropology, and sociology, as well as interested teachers, policy makers, and parents.

Lelia Green is Professor of Communications at Edith Cowan University, Perth, Australia.

Donell Holloway is a Senior Research Fellow at Edith Cowan University, Perth, Australia.

Kylie Stevenson is a Research Associate and HDR Communication Adviser in the Centre for Learning and Teaching at Edith Cowan University, Perth, Australia.

Tama Leaver is an Associate Professor in Internet Studies at Curtin University, Perth, Australia.

Leslie Haddon is a Senior Researcher and Lecturer in the Department of Media and Communications at the London School of Economics and Political Science, London, UK.



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Edited by Lelia Green, Donell Holloway, Kylie Stevenson, Tama Leaver, and Leslie Haddon



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CONTRIBUTORS

Crystal Abidin is Senior Research Fellow and ARC DECRA Fellow in Internet Studies at Curtin University, Australia. She is a socio-cultural anthropologist of vernacular internet cultures, particularly young people's relationships with internet celebrity, self-curation, and vulnerability. Her books include *Internet Celebrity: Understanding Fame Online* by Emerald Publishing and the co-authored *Instagram: Visual Social Media Cultures* by Polity Press. Her most recent publication is the co-edited *Mediated Interfaces: The Body on Social Media* by Bloomsbury Academic.

Ylva Ågren is Senior Lecturer in Child and Youth Studies in the Department of Education, Communication, and Learning at the University of Gothenburg, Sweden. Her research focusses on childhood in social media and children's interactions with electronic media in their everyday lives.

Alicia Allan is Research Fellow at the Institute for Social Science Research at The University of Queensland, Australia, and has multidisciplinary expertise in psychology, health, and design. Having received her PhD from Queensland University of Technology in 2016, her current research addresses how sleep occurs in context, particularly the environmental influences on sleep and wellbeing, sleep in the home setting, and the role of light environments in regulating sleep and wake.

Meryl Alper is Assistant Professor in the Department of Communication Studies at Northeastern University, Boston, Massachusetts, USA. She has extensive professional experience as a researcher, strategist, and consultant with Sesame Workshop, PBS Kids, Nickelodeon, and Disney, and her current research interests include the social and cultural implications of communication technologies, focusing on children and families' technology use. Alper has authored *Giving Voice: Mobile Communication, Disability, and Inequality* and *Digital Youth with Disabilities*, both published by MIT Press.

Chika Anyanwu is Associate Professor of Media and Research Associate at Hugo Centre for Migration and Population Research at the University of Adelaide, Australia. He is the Founding Partner of C3N2 Educational Empowerment, a social enterprise designed to empower people and institutions from emerging communities. He has received many awards, including the Leslie Humanities Cyberdisciplinarity Fellowship at Dartmouth, as well as holding a myriad of academic leadership positions across Australia and internationally.

William Balmford is a sessional Lecturer in the Bachelor of Design (Games) program, member of the Digital Ethnographic Research Centre, and is part of the Design & Creative Practice Engaging Capabilities Platform at RMIT University, Australia. His research uses innovative ethnographic methods and an interdisciplinary approach to collaboration, and explores the impacts of domestic videogame and new media usage, with a keen interest in digital play, social exchange, and the relationship between device and person.

Joke Bauwens is Professor of Media and Communication Studies at Vrije Universiteit Brussel, Belgium, where she heads the research centre for Culture, Emancipation, Media and Society. Drawing upon sociological and philosophical approaches, her research interests and expertise include the social, cultural, and moral consequences of media. She has published on children's and young people's engagement with media, the relationship between digital media and morality, and the digitisation of media, culture, and social life.

Cary Bazalgette taught English in London schools in the 1960s and 1970s before joining the British Film Institute in 1979. As Head of BFI Education from 1999–2006 she led the development of new approaches to education about moving-image media for the 3–14 age group. In 2018 she completed her PhD at UCL Institute of Education, investigating how two-year-olds learn to understand moving-image media. She continues to research and write on this subject.

Maria José Brites is Associate Professor at the Lusófona University, Portugal, and researcher at CICANT. Her research interests include participatory methodologies, youth, journalism and participation, and civic literacy. She has coordinated and participated within a number of international projects and COST Actions, previously being the Portuguese coordinator of the Media In Action project and the RadioActive project. She is currently the Coordinator of the co-funded project Delinquency Centres with Digital and Civic Competencies.

Benjamin Burroughs is Assistant Professor of Emerging Media in the Hank Greenspun School of Journalism and Media Studies at the University of Nevada, Las Vegas (UNLV), USA. His research interests include streaming culture, media industries, and social media. His work has been published in journals including *New Media and Society*, *Journal of Broadcasting and Electronic Media*, and *Critical Studies in Media and Communication*.

Despina Chronaki is Adjunct Lecturer at the National and Kapodistrian University of Athens and the Hellenic Open University, Greece. Her research focusses on audiences of popular culture, media ethics, porn studies, sexuality, and children's experiences with media. For the past decade she has been collaborating with media scholars from around the world on a number of EU-funded Greek, European, and International projects and has presented her findings to international audiences.

Daniela Costa is Coordinator of a national Brazilian-based research project conducted by the Regional Centre for Studies on the Development of the Information Society, investigating the role of ICT in education. She has a PhD in Education from the Pontifical Catholic University of São Paulo and her research interests include education, children, technologies, and social participation.

Natalie Coulter is Associate Professor and Director of the Institute for Digital Literacies (IRDL) at York University, Toronto, Canada. Her research explores the promotional ecologies of children's media and entertainment. She is co-editor of *Youth Mediations and Affective Relations*, published by Palgrave Macmillan, and is author of *Tweening the Girl*, published by Peter Lang. She

Contributors

has been published in the Journal of Consumer Culture, Girlhood Studies and the Journal of Children and Media.

Kathleen M. Curniskey is Professor of Psychology at the College of Staten Island, part of the City University of New York, USA. Her research examines mobile media, affect, intimacy and loss. Currently serving on the editorial board of *Mobile Media and Communication*, published by Sage, she has also authored numerous publications and companions, her most recent being *Mobile Media Practices, Presence and Politics: The Challenges of Being Seamlessly Mobile* published by Routledge.

Susan Danby is Professor in the Faculty of Education at Queensland University of Technology, Australia, and is Director of the Australian Research Council Centre of Excellence for the Digital Child (2020–2026). She has received an Honorary Doctorate in Education from Uppsala University, Sweden, recognising her leadership in child studies and young children's digital technologies. Her research areas include children's lives across home and school contexts, and in clinical and helpline settings.

Raiana de Carvalho is a PhD student in Mass Communications in the S.I. Newhouse School of Public Communications at Syracuse University, New York, USA. Her most recent research explores how social media and mass media impact the way people experience health and illness. She has been interested in studies on digital media, media and identity, children and media, health communication, and narrative studies.

Julián de la Fuente is Assistant Professor of Audiovisual Communication at the University of Alcalá, Spain. His research is multidisciplinary, sharing perspectives and approaches from psychology, anthropology, history, and sociology. Often collaborating with architects, engineers, and artists, he uses qualitative and ethnographic methodologies and the analysis of multimodal discourse. He has authored and co-authored numerous publications examining social media, technology, and young people's digital engagement. He has also conducted several outreach projects for film heritage.

Amy Shields Dobson is Lecturer in Internet Studies at Curtin University, Perth, Australia. Their work focusses on youth, gender politics, social media, and feminine subjectivities. They are the author of *Postfeminist Digital Cultures* and co-editor of *Digital Intimate Publics and Social Media*, both published by Palgrave Macmillan. Their most recent projects include research into cybersafety and sexting education, female genital cosmetic surgery, and girls' and young women's social media cultures.

Madeleine Dobson is Senior Lecturer and the Director of Student Experience and Community Engagement in the School of Education at Curtin University, Perth, Australia. Her research interests include media, digital technologies, social justice, children's rights, and resilience and wellbeing within educational contexts. As an advocate for participatory, ethically literate research that empowers participants to collaborate in the research process, she is particularly passionate about experiential research where participants' experiences and perspectives are elicited and honoured.

Ashley Donkin is a PhD candidate in the School of Arts and Humanities at Edith Cowan University, Perth, Australia. Her PhD is investigating the benefits and risks to 5–12-year-old

Contributors

Australians whilst playing and socialising within online games that have social networking capabilities. She is also a trained high school teacher.

Juliana Doretto is Assistant Professor at the Postgraduate Program in Languages, Media and Arts at the Pontifical Catholic University of Campinas, Brazil. She has published her research on the relationship between journalism and children, specifically within a digital context, while her PhD in Communications from the Universidade NOVA de Lisboa focussed on the contact and engagement Brazilian and Portuguese youth had with the news and the participatory channels that journalist media can offer them.

Nelly Elias is Associate Professor in the Department of Communication Studies at Ben-Gurion University of the Negev, Israel. Her research focusses on psychological, sociological, and cultural aspects of media use in early childhood, including the media effects on parent—child relations and overall child development.

Katie Ellis is Professor and Director of the Centre for Culture and Technology at Curtin University, Australia. She has authored *Disability and Digital Television Cultures* published by Taylor & Francis, as well as having recently co-edited a number of publications including *The Routledge Companion to Disability and Media, Manifestos for the Future of Critical Disability Studies*, and *Interdisciplinary Approaches to Disability: Looking Towards the Future*, all published by Routledge.

Lorleen Farrugia is a PhD candidate, Visiting Lecturer, and Dissertation Supervisor within the Faculty for Social Wellbeing at the University of Malta. A member of the EU Kids Online research network, as well as a member of the Maltese Safer Internet Centre Advisory Board, BeSmartOnline!, her research interests include children, youth, risk, and new media. Her PhD is researching children's social representations of online risks.

Gavin Feller is a Postdoctoral Research Fellow in Digital Humanities at Umeå University, Sweden. His research uses the relationship between technology and culture to explore theoretical questions surrounding power, identity, and community.

Joana Fillol is a journalist and a PhD candidate in Communication Sciences in the Communication and Society Research Centre at the University of Minho, Portugal. Her PhD examines children, teenagers, and news, aiming to create a news outlet for and with this specific audience. As a journalist she has worked in various media and as a researcher she has been a part of the team of the European Project Transmedia Literacy.

luke gaspard is a post-doctoral researcher in the Department of Media and Communications at The University of Sydney, Australia. His research explores a range of digital youth practices centred around sociality and informal learning. Recent publications include "Australian high school students and their Internet use: perceptions of opportunities vs 'problematic situations'" in *Children Australia*, and the co-authored paper "Media practices of young Australians: tangible and measurable reflections on a digital divide" in the journal *Kome*.

Gerard Goggin is Wee Kim Wee Chair in Communication Studies at Nanyang Technological University, Singapore, and Professor of Media and Communications at the University of Sydney, Australia. He has a longstanding research interest in disability, media, technology, and culture. His publications include *Digital Disability* published by Rowman & Littlefield, *Disability and the*

Media published by Palgrave Macmillan, and the Routledge Companion to Disability and Media published by Routledge.

Lelia Green is Professor of Communications at Edith Cowan University, Perth, Australia, and ECU node leader and Chief Investigator with the Australian Research Council's (ARC) Centre of Excellence for the Digital Child. Researching children's lives in digital contexts for 20 years, Lelia has published more than 180 papers, written two books, and co-edited three more. Many of her publications have been grounded in work funded by the ARC and/or associated with the EU Kids Online project.

Sara M. Grimes is Director of the Knowledge Media Design Institute and Associate Professor in the Faculty of Information at the University of Toronto, Canada. Her research focusses on the intersection of children's media, culture, technology, and play. She has published widely on the commercialisation of children's digital play and creativity online, and the impact of intellectual property regimes on children's cultural rights. She was Principal Investigator of the Kids DIY Media Partnership.

Leslie Haddon is Senior Researcher and Lecturer in the Department of Media and Communications at the London School of Economics and Political Science, UK. Recently, his research has focussed on children's digital experiences, helping to co-coordinate the EU Kids Online project, and being on the team for the ARC Toddlers and Tablets project, which looked at smartphone and tablet use of 0–5 year olds. He has published numerous journal publications, book chapters, encyclopaedia entries, and books.

Ashfara Haque is a researcher and educator in media and communication. She has degrees in Communications from Edith Cowan University, Australia, and training in Media and Journalism from Scripps College of Communication, Ohio University, Ohio, USA. She specialises in children and media, media law and ethics, environmental communication, and broadcast journalism. She has published several articles in academic journals including *Media Asia*. She was a Fellow Broadcast Journalist at Deutsche Welle, Germany, and SUSI academic scholar in the USA.

Ellen J. Helsper is Professor in the Media and Communications Department at the London School of Economics and Political Science, UK. She is a Visiting Scholar at universities around the world, consults for intergovernmental organisations and NGOs on issues of participation and engagement in increasingly digital societies, and works in commercial audience research. Her research considers the links between social and digital inequalities and methodological innovation in quantitative and qualitative media and communications research.

Larissa Hjorth is Distinguished Professor at RMIT University, Australia, an artist, and digital ethnographer. She has two decades of experience working in cross-cultural, interdisciplinary, collaborative creative practice and socially innovative digital media research that explores intergenerational literacies around play and sociality. She is currently the Design & Creative Practice ECP Platform Director at RMIT. The Platform focusses on interdisciplinary collaboration and creative solutions to real-world problems, especially in relation to ageing well, through careful and multisensorial methods.

Donell Holloway is Senior Research Fellow at Edith Cowan University, Australia. She is currently Chief Investigator on three Australian Research Council grants: the ARC Centre of Excellence for the Digital Child; The Internet of Toys: benefits and risks of connected toys for

children; and Toddlers and Tablets: exploring the risks and benefits 0-5s face online. Her research centres on the domestic context of children's media use for children and their families.

Heather A. Horst is Director of the Institute for Culture and Society at Western Sydney University, Australia. A sociocultural anthropologist by training, she researches material culture, mobility, and the mediation of social relations, through digital media and technology. Her most recent publication is *Location Technologies in International Context* published by Routledge, and she is co-editor of *The Moral Economy of Mobile Phones: Pacific Island Perspectives* published by ANU Press.

Sandy Houen is Senior Research Associate in the Faculty of Education at Queensland University of Technology, Australia. Her research interests include children's social interactions in home and classroom contexts, and early childhood education. Her PhD work has contributed finegrained understandings of teacher—child interactions in prior-to-school settings and she has published numerous co-authored journal articles and conference papers.

Madison Irons is a 2018 graduate of Northeastern University, Boston, Massachusetts, USA, where she received a Bachelor in Communication Studies and a minor in English and Psychology. During her time at Northeastern she worked as a Special Events Assistant Manager for the Asperger/Autism Network.

Lauren Johnson works as an English language instructor in Manchester, UK, and develops arts-based community literacy programmes for newcomer youth. Completing a Master of Arts in Literacy Education at the University of British Columbia, Canada, her research focussed on multimodal approaches to literacy engagement with youth from refugee and immigrant backgrounds.

Ana Jorge is Research Coordinator at the Centre for Research in Applied Communication, Culture, and New Technologies at Lusófona University, Portugal. She has researched children and youth as media audiences, as objects of media representation, and as content producers, specifically in regards to the topic of celebrity and microcelebrity. She has co-edited *Digital Parenting* published by Nordicom, as well as a number of journal articles in *Celebrity Studies* and *Communications*, among others.

Nahid Afrose Kabir is Professor of History in the Department of English and Humanities, BRAC University, Bangladesh, a Visiting Researcher at Georgetown University, USA, and Adjunct Professor at Edith Cowan University and the University of South Australia, both in Australia. With publications in numerous peer-reviewed journals and edited collections, her recent books include Muslim Americans: Debating the Notions of American and Un-American published by Routledge, and Young American Muslims: Dynamics of Identity published by Edinburgh University Press.

Maureen Kendrick is Professor in the Department of Language and Literacy Education at the University of British Columbia, Canada. Having a keen interest in visual communication, her research examines literacy and multimodality as integrated communicative practices, specifically in marginalised populations in East Africa and Canada. She has authored and co-authored numerous journal articles and book chapters and has also co-edited volumes on youth literacies, and family and community literacies.

Mike Kent is Professor in the Centre for Culture and Technology at Curtin University, Australia. His research is centred on the intersections of disability, social media, and eLearning. He has

authored, co-authored, and co-edited numerous publications, with his most recent being the co-edited *Manifestos for the Future of Critical Disability Studies* and *Interdisciplinary Approaches to Disability: Looking Towards the Future*, both published by Routledge.

Jung Soo Kim is a product owner with FactSet Research Systems, having received a Master of Science in Software Engineering and Computer Science from Fairfield University, Fairfield, Connecticut, USA. A two-time recipient of the Porter Academic Scholarship Award, she wrote her Master's thesis on the self-teaching experience of Gidget users in a CS101 course.

Robin M. Kowalski is Centennial Professor of Psychology at Clemson University, Clemson, South Carolina, USA. Her research addresses aversive interpersonal behaviours, notably complaining, teasing, and bullying, with a particular focus on cyberbullying. Named by *The Princeton Review* as one of the best 300 professors in the nation, she has received several awards including the Phil Prince Award for Excellence and Innovation in the Classroom, and Clemson Women's Commission Outstanding Female Faculty Member.

Pilar Lacasa is Emeritus Professor of Audiovisual Communication and Researcher in the Faculty of Humanities at the University of Alcalá, Spain. She has coordinated the Images, Word and Ideas Research Group since 1998 and has been a visiting researcher at universities across the globe. Pilar is the author of *Learning in Virtual and Real Worlds* published by Palgrave Macmillan and *Adolescent Fans: Practices, Discourses, Communities* published by Peter Lang.

Linda Laidlaw is Professor in Language and Literacy Education at the University of Alberta, Canada. Her research considers digital and mobile technologies in primary education, and she is particularly interested in the relationship between children's digital practices at home and their experiences at school. Her current projects, funded by the Social Sciences and Humanities Research Council of Canada, investigate new pedagogical frames and strategies for literacy education in a changing world.

Gerison Lansdown is an international consultant, having published and lectured widely on children's rights. Founder Director of the Children's Rights Alliance for England and former Vice Chair of UNICEF-UK, she currently chairs a number of advisory boards including Child to Child and the ODI Gender and Adolescence: Global Evidence Advisory Board. She is an Adjunct Professor at Carleton University, Ottawa, Canada, and is on the editorial advisory board of the *Canadian Journal of Children's Rights*.

Mary Anne Lauri is Professor in Psychology at the Faculty for Social Wellbeing at the University of Malta and is an active member of many voluntary, media, and political organisations. She has authored several works published in both Maltese and international journals. Her co-authored book *Exploring the Maltese Media Landscape*, published by Allied Publications, won a prize awarded by the National Book Council in Malta. She is a current member and researcher of the EU Kids Online network.

Tama Leaver is Associate Professor in Internet Studies at Curtin University in Perth, Australia. He is a Chief Investigator in the Australian Research Council Centre of Excellence for the Digital Child. His books include *Artificial Culture: Identity, Technology and Bodies* published by Routledge, the co-edited *Social, Casual and Mobile Games* published by Bloomsbury, and the co-authored *Instagram: Visual Social Media Cultures* published by Polity.

Michael J. Lee is the Dorman-Bloom Assistant Professor of Informatics at the New Jersey Institute of Technology, Newark, New Jersey, USA, where he directs the Gidget Lab, which focusses on designing, creating, and testing technology-focussed educational tools. His research in computing education is funded by the National Science Foundation and Oculus Research, and has received numerous best paper awards. He holds a PhD in Information Science from the University of Washington, and a Master's from UC Berkeley.

Dafna Lemish is Distinguished Professor and Associate Dean of Programs at the School of Communication and Information at Rutgers University, New Jersey, USA. Founding editor of the *Journal of Children and Media*, and Fellow of the International Communication Association, her research specifically addresses children, media, and gender representations. One of her most recent publications is the co-authored *KakaoTalk and Facebook: Korean American Youth Constructing Hybrid Identities*, published by Peter Lang.

Sonia Livingstone (OBE) is Professor in the Department of Media and Communications at the London School of Economics and Political Science, UK. She researches young people's risks and opportunities, media literacy, and rights in the digital environment, and is the author of 20 books. Founder of the 33-country EU Kids Online research network, she currently directs the projects Children's Data and Privacy Online, Parenting for a Digital Future and Global Kids Online (with UNICEF).

Marcela Losantos Velasco is the Coordinator of the Research Institute of Behavioural Sciences at Universidad Católica Boliviana 'San Pablo', Bolivia, and has been Coordinator of the Alalay Foundation, which designs care intervention models for at-risk children and adolescents in Bolivia. Her PhD examined the permanence of children on the streets of La Paz in Bolivia and, in 2018, she received the Marie Curie Award from the National Science Academy for her work researching street children.

Deborah Lupton is SHARP Professor in the Faculty of Arts & Social Sciences at the University of NSW, Australia. Working in two research centres and leading the Vitalities Lab, she is author and co-author of 17 books. These include *Fat* (2nd edition), published by Routledge, and *Data Selves*, published by Polity. She is Fellow of the Academy of the Social Sciences in Australia, and Honorary Doctor of Social Science awarded by the University of Copenhagen.

Jamie C. Macbeth is Assistant Professor in the Department of Computer Science at Smith College, Northampton, Massachusetts, USA, and a Martin Luther King Jr. Visiting Scholar at the Massachusetts Institute of Technology. His research is focussed on building computing systems that demonstrate a human-like capability for in-depth understanding and production of natural language, and that thus can achieve richer interactions with human users.

Annie McCord is a Doctoral candidate in Industrial-Organizational Psychology at Clemson University, Clemson, South Carolina, USA. Her research addresses online communications and social psychology, and how these principles can apply to workplace incivility and counterproductive workplace behaviours. Annie has extensive knowledge of the literature pertaining to cyberbullying and workplace cyberincivility. She was awarded Master in General Experimental Psychology at Western Carolina University.

Lidia Marôpo is Assistant Professor at the Polytechnic Institute of Setubal, Portugal, and researcher at the Interdisciplinary Centre of Social Sciences at Nova University of Lisbon,

Portugal. Undertaking cross-national studies between Portugal and Brazil, her research addresses the relationship between young people and the news media, their reception of news content, and more broadly media and identity, audience studies, digital media, and digital media activism. She has published her findings both nationally and internationally.

Giovanna Mascheroni, PhD, is Associate Professor of Sociology of Media and Communication in the Department of Communication and Performing Arts, Università Cattolica of Milan, Italy. She is part of the EU Kids Online management team and WP6 leader in the H2020 project ySKILLS. Her work focusses on the social shaping and the social consequences of the internet, mobile media, and IoTs for children and young people, especially on datafication and its implications for digital citizenship.

Thinayna Máximo holds a Master's in Communication from the Federal University of Ceará, Brazil. Member of the Research Lab on Children, Youth and Media (LabGRIM), she researches the relationship that children have with the internet, especially social networking sites.

Vinca Merriman was primary research assistant on Children Making Games, a sub-project of the Kids DIY Media Partnership, providing game-related and child-centred insight into the 'doit-yourself' media-making phenomenon. She also contributed to a global study of children's rights in the digital age led by Western Sydney University and the London School of Economics and Political Science. A Master of Information at the University of Toronto, Canada, she's currently an account manager at Ipsos Canada.

Pernilla Miller is a Research Associate in the Faculty of Education at Queensland University of Technology, Australia. She is a qualified primary school teacher who undertook the research pathway. Her research interests include pre-service teachers' global imagination, children's peer and sibling relationships, and children's digital lives.

Lien Mostmans is Research Advisor for Erasmus University College Brussels, Belgium, where she coordinates international research projects in the fields of children, education, and healthcare. Holding a PhD in Media and Communication Studies from Vrije Universiteit Brussels, she has extensive research experience in the field of children and media cultures, using a wide range of qualitative, such as ethnographic and visual, methodologies.

Pedro Moura is a PhD student in Communication Sciences at the University of Minho, Portugal, and a Researcher at the Communication and Society Research Centre. Part of the Portuguese team that participated in the European research project Transmedia Literacy, his research interests relate to media reception, transmedia storytelling, and media education and literacy. His PhD research project is focussed on the reception of transmedia narratives by young people.

Bjørn Nansen is a Senior Lecturer in Media and Communications at the University of Melbourne, Australia. He has published widely across studies of technology innovation and adoption, digital media industries, and cultural practices of media use in everyday and family life. His work often focusses on emerging and marginal digital practices, and is based in interdisciplinary approaches to research. His current projects investigate children's YouTube, digital memorialising, and sleep management technologies.

Galit Nimrod is Professor at the Department of Communication Studies and Research Fellow at the Center for Multidisciplinary Research in Aging at Ben-Gurion University of the Negev,

Israel. Aiming to contribute to the understanding of wellbeing in later life, she studies psychological and sociological aspects of leisure, media, and technology use among older adults. She has published extensively on this topic in leading scientific journals and has presented her studies at numerous international conferences.

Marije Nouwen is a researcher at the Meaningful Interactions Lab in the Institute for Media Studies at the KU Leuven, Belgium. She is pursuing a PhD degree in Social Sciences on the topic of playful tangible interactions between dislocated grandparents and grandchildren. She has worked previously on several research projects, primarily focussed on children and digital media.

Joanne O'Mara is Associate Professor in Language and Literature Education in the Faculty of Arts and Education at Deakin University, Australia. An experienced English and Drama teacher, she continues to work with young people through her university research, focussing on emergent literacies and new textual practices, digital games, and the spatial and social dimensions of teachers' work. Her research is dedicated to working in collaboration with students, teachers, schools, professional associations, and key education authorities.

Brian O'Neill is Director of Research at Technological University Dublin, Ireland. His research addresses youth and digital technologies, specifically online safety and policy for the digital environment. He has conducted research for the European Commission and UNICEF. He chairs the Steering Group of Media Literacy Ireland and is a member of Ireland's National Advisory Council for Online Safety. He co-authored *Towards a Better Internet for Children? Policy Pillars, Players and Paradoxes*, published by Nordicom.

Sara Pereira is Associate Professor at the Department of Communication Sciences and researcher at the Communication and Society Research Centre at the University of Minho, Portugal. Cocoordinator of the Observatory on Media and Information Literacy (MILObs), her research interests are children, young people and media, media literacy and education, and media audiences. She coordinated the Portuguese team of the European research project Transmedia Literacy.

Guadalupe Peres-Cajías is Head of the Communication Research Center at Cibescom-Universidad Católica Boliviana San Pablo, La Paz, Bolivia, and main editor of its journal. She is a PhD student of Communication Studies in the Vrije Universiteit Brussel, Belgium. Her research focusses on social and cultural processes, based on communication analysis and innovative methodologies. She published a book about festivities and youth identities in La Paz and Bogotá (PIEB-UCB) and writes regularly for two national newspapers, *Página-Siete* and *El-Deber*.

Cristina Ponte is Full Professor of Media and Journalism Studies and member of ICNOVA, at Universidade NOVA de Lisboa, Portugal. Her research examines children, youth and media, and media and generations, with a focus on the family, digital inclusion, media, journalism, and society.

John Potter is Associate Professor (Reader) in Media in Education at the University College London Institute of Education, UK. His research and publications focus on media education, new literacies, creative activity, and learner agency; teaching and learning responses to media technologies in formal and informal settings.

Xiang Ren is Research Fellow in Chinese Media and Culture at Western Sydney University, Australia, and a member of the Institute for Culture and Society and the Australia-China Institute for Arts and Culture. He has published widely on digital publishing, creative industries, and open

knowledge. Working for over a decade in Chinese media industries, his current research focusses on the globalisation of Chinese digital popular culture in the fields of webnovel, short video, and live streaming.

S M Shameem Reza teaches Development Communication, Media Policy, and Public Communication at the University of Dhaka, Bangladesh, and was Ford Asia Fellow at IKMAS, Malaysia. His research and academic publications examine issues in young people and media, community broadcasting, media policy and regulations, NGO and media development, right to information, and environmental advocacy. As a communication consultant, he has worked for, among others, the World Bank, UNICEF, IFAD, BRAC, and Save the Children.

Chris Richards retired from the Institute of Education at the University of London in November 2013, having begun teaching in 1974 with Waltham Forest's West Indian Supplementary Service. He has authored three books, the most recent being *Young People, Popular Culture and Education* published by Bloomsbury. He has also co-edited *Children's Games in the New Media Age* published by Routledge and co-authored *Children, Media and Playground Cultures* published by Springer.

Ingrid Richardson is Professor of Digital Media in the School of Media and Communication at RMIT University, Melbourne, Australia. Interested in the 'human-technology relation', she has published widely on topics such as scientific technovision, virtual and augmented reality, games, mobile media and small-screen practices, and web-based content creation and distribution. She is co-author of both *Gaming in Social, Locative and Mobile Media* published by Palgrave Macmillan and *Ambient Play* published by MIT Press.

Claudia Riesmeyer is Research Associate in the Department of Media and Communication at the Ludwig-Maximilians-University Munich, Germany. Her research interests address the media socialisation process as an intergenerational project, media literacy, and qualitative research methods. She deals with the effects of media literacy, such as political participation, the recognition of dangerous content, or health communication, as well as the self-representation of children and adolescents on social networks.

Wonsun Shin is Senior Lecturer in Media and Communications at the University of Melbourne, Australia. Areas of research include youth and digital media, marketing communications, consumer socialisation, and parental mediation. Her work has been published in the *Journal of Children and Media* and *New Media and Society*, among others. She serves on the Editorial Review Boards of the *Journal of Advertising* and the *International Journal of Advertising*.

Brian Simpson was formerly Professor of Law in the School of Law, University of New England, Australia. Before retiring he taught child and family law for more than 30 years in both Australia and the UK. His research has been interdisciplinary, focusing on children's rights, law and new technologies, and urban justice. He continues to co-convene the IT Law and Cyberspace stream at the UK Socio-Legal Studies Association Annual Conference.

Simon Smith is Professor of Sleep and Health in the Institute for Social Science Research at the University of Queensland, Australia. He is a clinical neuropsychologist and has published widely on sleep, circadian rhythms, health, and social context across the lifespan.

Elisabeth Staksrud is Professor at the Department of Media and Communication, University of Oslo, Norway. She is part of the management team of the EU Kids Online project, and chair of

the ECREA Children, Youth and Media section. Her research interests examine children and online risk and opportunities, including rights-based issues and transgressive online behaviour, freedom of expression and media censorship, and research ethics.

Christine Stephen was a research fellow at the University of Stirling, Scotland, and has recently retired. Her research concerns young children's learning and the ways in which this is supported at home and in educational settings, and the influence of culture and children's everyday experiences. She has co-directed a series of studies of young children's engagement with digital technologies, has published many journal articles, and co-authored two books about growing up with new technologies.

Kylie J. Stevenson, PhD, is an interdisciplinary researcher and HDR Communications Adviser in the Centre for Learning and Teaching at Edith Cowan University, Perth, Australia. Her research spans children and technology, creativity and reflective practice, arts education, higher degree by research pedagogy, and experiences of welfare dependency. Previously a Research Associate on several Australian Research Council grants, she has authored over 20 articles and book chapters. An accomplished poet, Kylie has two collections published in anthologies.

Amanda Third is Professorial Research Fellow in the Institute for Culture and Society and Co-Director of the Young and Resilient Research Centre at Western Sydney University, Australia. Researching technology practices of marginalised youth through rights-based and intergenerational approaches, she also co-directs the Intergener8 Living Lab, and is a Program Co-Leader in the Centre for Resilient Communities and Inclusive Societies. She recently led the authorship of Young People in Digital Society: Control/Shift published by Palgrave Macmillan.

Vítor Tomé is Assistant Professor at the Autonoma University of Lisbon, Portugal, Researcher at the University Institute of Lisbon, and a professional journalist. He is involved in numerous international projects, including as International Expert for Digital Citizenship Education (DCE) for the Council of Europe, International Advisor for DCE in General Education (Shota Rustaveli National Science Foundation of Georgia), Scientific Coordinator for the Portuguese Ministry of Education, and Coordinator of the Digital Citizenship Academy (Lisbon area).

Liza Tsaliki is Associate Professor in the Department of Communication and Media Studies at the National and Kapodistrian University of Athens, Greece. Investigating teens' access to sexual content across four countries, her research spans political engagement and participation, celebrity culture and activism, gender and technology, porn studies, children, youth and sexualisation. She is commentaries editor for *The International Journal of Media and Cultural Politics* and editorial board member of *Convergence* and *Information, Communication and Society*.

Karla Van Leeuwen is Professor in Family Studies at the Faculty of Psychology and Educational Sciences at KU Leuven, Belgium. Affiliated with the Parenting and Special Education Research Unit, she conducts research on child/adolescent characteristics such as temperament, personality, and genes, as well as environment (parenting) interactions in the prediction of child/adolescent outcome, assessment of parenting, differential parenting, co-parenting, parenting of children with special needs, and evaluation of parenting support programmes.

Inês Vitorino Sampaio is Associate Professor of Communication Sciences and a member of the Research Lab on Children, Youth and Media (LabGRIM) at the Institute of Culture and Art, Federal University of Ceará, Brazil. Her research focusses on children, youth and media, digital

Contributors

cultures and advertising with a background in sociology and communication. Her research has been published in numerous international journals, including *Communication Studies* and the *Journal of Communication Studies*.

Jarrod Walczer is pursuing his PhD in Media and Communications at the Queensland University of Technology's Digital Media Research Centre, Australia. Fusing cultural studies with digital methods, he explores the impact that toy unboxing creator culture on YouTube has had on the children's media industry in the US. He received his Master of Arts from the University of Southern California and his Master of Science from the London School of Economics and Political Science.

Rebekah Willett is Associate Professor in the Information School at the University of Wisconsin-Madison, USA. She has conducted research on children's media cultures, focusing on issues of play, literacy, identity, and learning. Her publications investigate makerspaces, playground games, amateur camcorder cultures, families' screen media practices, and children's story writing. She has numerous publications in journals of education and childhood studies, among others, and has co-authored and edited five books.

Suzanna So Har Wong is Adjunct Professor and Lecturer in Elementary Education, Language and Literacy at the University of Alberta, Canada. Her research focusses on young children's home digital literacy practices and the connections between literacy learning and makerspaces in elementary classrooms. She worked with researchers across the world during her Postdoctoral Fellowship. She is currently a Research Collaborator in a 'maker literacies' project funded by the Social Sciences and Humanities Research Council of Canada.

Bieke Zaman is Associate Professor and Head of the Meaningful Interactions Lab at KU Leuven, Belgium. Her research addresses the intersection of Communication Sciences and Human–Computer Interaction research. She conducts research on children and technologies, player–computer interaction, and progressive research and dissemination methods.

Tony Borning Zhang is a Bay State Master Student at the University of Massachusetts, Boston, USA, majoring in computer science. His current research is about science learning and educational games. He was previously a summer camp instructor with iD Tech Camps in Amherst, where he taught coding and machine learning to children aged 13 to 17.



INTRODUCTION

Children and Digital Media

Lelia Green, Donell Holloway, Kylie Stevenson, Tama Leaver, and Leslie Haddon

Children continuously reinvent digital technologies in ways that serve their purposes and passions. From cheap text messages that innovated with a language of their own, to today's child-led political activism using digital connectivity, under-18s have challenged the status quo and claimed new spaces of agency and authority. In doing this, children have encountered risks, and sometimes harm; and taken opportunities and experienced benefits while resetting adults' priorities in their families, their localities, and across the world. This book explores these dynamics and the multi-faceted nature of children's complex and evolving relationships with digital media.

Divided into six parts, *The Routledge Companion to Digital Media and Children* provides insights into the digital lives of under-18s around the globe, in good circumstances and in challenging situations. It also considers the many ways in which adults construct and understand children's lives; and the activities and wellbeing of the young people they care for, create policy about, and seek to support. Drawing upon children's voices and perspectives, the 54 chapters include content from six of the seven continents, and from a wide variety of disciplinary perspectives.

Part I, the Creation of Knowledge, introduces the collection by examining the ways in which researchers work with and alongside children to construct the data which informs understandings of children's interactions with digital media. It also begins the exploration of how children learn through their uses of information and communication technologies. Digital Media Lives, Part II, interrogates children's use of digital media in the active embrace of opportunities for agency. It also considers how young people teach each other about technology use and connected sociability, and parents' engagement with children through mediation and via caring, intimate surveillance. Part III, Complexities of Commodification, centrally addresses the challenges posed by patterns of profit-making that construct children as consumers and as target markets; and which monetise young people's activities and data.

The second half of the book turns from the objectification of children by industry and markets to the acknowledgement of children as global citizens, as young people with rights. Part IV, Children's Rights, acknowledges a conversation which reached a crucial turning point in 1989 with the promulgations of the United Nations Convention on the Rights of the Child, currently being revisited with specific reference to the digital environment. Changing and Challenging Circumstances, Part V, examines children's digital media use across a range of contexts, some of which highlight gross inequalities in children's access. The final section, Part VI, addresses Local Complexities in a Global Context, highlighting the diversity of the ways in which children's digital culture is manifest around the globe. Each of these parts will be briefly introduced and

discussed in the remainder of this Introduction, which concludes with observations about digital media and the children who use it, alongside those children who can't or don't have access.

PART I: Creation of Knowledge

Natalie Coulter starts the collection (Chapter 1) by considering a range of ways in which social and cultural discourse constructs the notion of the child, children, and childhood. Her contribution, Child Studies Meets Digital Media: Rethinking the Paradigms, provides the Companion with a starting point which is subsequently developed through and across other chapters. Coulter highlights the ways in which (mainly) adults construct the idea of the child, and notes that these constructions reflect the specifics of a social, technological, political, and cultural moment in time. Within that discursive space, the notions of the child circulating in and through culture nonetheless have implications for the opportunities enjoyed by actual children in their everyday uses of digital media, while influencing the future opportunities available to young people in connected space. In addition to recognising the importance of the everyday construction of the child, conversations about children and digital media are often replete with hopes, fears, and judgements. Further, such discussions frequently include ethical dimensions. It is to this aspect of digital media and children that Madeleine Dobson turns in Chapter 2, Engaging in Ethical Research Partnerships with Children and Families. Using the United Nations Convention on the Rights of the Child (UNCRC) as a litmus test for researchers' approaches to children and their data, Dobson argues that children are citizens from birth and deserving of engaged research practices that are democratic, inclusive, and empowering. Eschewing one-dimensional and one-way research, where the power is almost entirely in the hands of the researcher, the chapter demonstrates that not only is it possible to build reciprocal inclusive research partnerships with children and their families, but it leads to better research and more reliable outcomes.

In Platforms, Participation, and Place: Understanding Young People's Changing Digital Media Worlds (Chapter 3), Heather Horst and luke gaspard identify three critical aspects of young people's digital media activities that enable and support participatory culture. The authors argue that the challenges and opportunities provided by these lenses for viewing digital culture are not mutually exclusive but mutually constitutive, building upon one another while delineating how young people understand and engage in dynamic media landscapes. This chapter critically engages with any assumption that digital media is available to young people for them to mould as they wish, according to their choices. The intersections of platforms, participation, and place highlight how commercial interests and technical infrastructure remain determining factors of much of the inequality that characterises children's digital media experiences around the globe. Continuing the focus on contemporary childhood in Chapter 4, Rebekah Willett and Chris Richards address Methodological Issues in Researching Children and Digital Media. They argue for the importance of researching children's media engagement in terms of the digital culture created and experienced by young people themselves. Willett and Richards's chapter explores the value of combining reflective observation and interviews with children on the one hand and working with children as participant researchers on the other. Drawing attention to the inherent interpolations and intertextual references relating to digital media in online and offline contexts (and the essential permeability of the apparent boundaries between these), the authors note that children are both 'beings' and 'becomings', negotiating socio-cultural structuring forces through agency, and their own agency through such structures. They argue that engagement with the agentic child, alongside careful reflection by researchers, will help create meaningful understandings of children's digital cultures.

Christine Stephen's focus (Chapter 5) on Young Learners in the Digital Age invites consideration of the emergence of the digital child through nuanced, situated interactions with digital

media in the age group from birth to eight years old. At the same time, Stephen's chapter continues the emphasis on relationships, values, and choices that inform and constitute children's engagement with digital media, especially within the home. A cultural-historical perspective illuminates empirical evidence to highlight children's agency in relation to digital media use, alongside the activities of parents, peers, and educators. Stephen reveals that, even at very young ages, children's interests and preferences can be gleaned from their personalised digital media experiences.

The ways in which people learn about children and digital media are complemented by research into the ways in which children learn about people, and themselves, through their use of digital media. This shift in focus constitutes the second element of the Part 1 theme, Creation of Knowledge, and is introduced in Chapter 6: Children Who Code. Here, Jamie C. Macbeth, Michael J. Lee, Jung Soo Kim and Tony Boming Zhang turn their attention to the potentially life-changing impact of a child's understanding of the ways in which coding can deliver control over media devices and experiences. Drawing upon research into children's responses to a tenweek coding project that aimed to redress structured disadvantage, and harnessing young people's memories of their first experiences of coding, the authors argue that coding skills equip young people to become power users of digital media, aware of the risks, benefits, and affordances of digital media that children who are less aware might simply take for granted. Kylie J. Stevenson's work (Chapter 7) similarly explores children's creativity in digital contexts, although her focus is on a younger age group. Interrogating the notions of Craft's little c creativity, and Vygotsky's construction of play as creativity, Stevenson examines the means and technologies through which children entangle themselves in digital play. Applying posthuman perspectives and possibility thinking to children's everyday technological experiences with the Internet of Toys, makerspaces, and apps, Stevenson delivers on her chapter's title: Young Children's Creativity in Digital Possibility Spaces: What Might Posthumanism Reveal? She argues that the conceptual tools and literature around creativity, digital media, and posthumanism enable careful consideration of the emergent assemblages of the human child and the digital non-human.

Children's informal learning around digital media often takes place within the home. In Chapter 8, The Domestication of Touchscreen Technologies in Families with Young Children, Leslie Haddon applies a domestication framework to explore the diverse reasons - in addition to 'education' - underlying parents' decisions to introduce their very young children to touchscreen media. Drawing upon material collected as part of an Australian/UK project, Toddlers and Tablets, which examined children's digital media use between birth and five years old, Haddon examines parents' nuanced support for their children's digital media experiences while also noting that, in talking about media content with children, parents often engage with non-digital and philosophical topics. Haddon's discussion also highlights unanticipated aspects of children's digital engagement, the guilt that parents sometime feel about this area of their parenting practice, and the frequent requirement for adult intervention and support in this younger age group. Although the value of digital media in connecting children to absent grandparents has been a long-standing focus of research, less attention has been paid to the ways in which grandparents mediate their grandchildren's digital activities when they are acting in a caregiving role of children aged two to seven. Differentiating between the mediation of interactive media and non-interactive media, the research presented by Nelly Elias, Dafna Lemish, and Galit Nimrod in Grandparental Mediation of Children's Digital Media Use (Chapter 9) underlines that the management of children's digital media use is an area of concern for many grandparents. Although grandparents' attitudes, behaviour, and knowledge about digital media is variable, the mediation role they commonly play is an integral and important component of contemporary grandparenting duties. Part of the complexity of these activities lies in the fact that grandparents find themselves negotiating their grandchildren's expectations around digital media use alongside the expectations of their own children, their grandchildren's parents.

PART II: Digital Media Lives

This section of the *Companion* transitions from a consideration of how researchers gain knowledge about digital media and children, and how they come to understand children's growing engagement with digital media, to an appreciation of the ways in which children and young people come to integrate digital media into their lives. Part II begins with the youngest children, whose natural gestures are particularly suited to touchscreen technology – or so it might appear. In Chapter 10, Young Children's Haptic Media Habitus, Bjørn Nansen identifies that there is limited research on children's engagement with haptic interfaces and few studies of how designers take account of very young children's gestural repertoires when developing these haptic interfaces. Phenomenological writings and the concept of habitus are suggested as constituting a useful framework for understanding body-technology relations in children's experiences of haptic technologies. Nansen demonstrates the value of this approach using material from an ethnographic study where children do not just interact 'naturally' with the interface but need to discipline their gestures in order to learn the grammar of interaction that designers have mapped into devices, partly based on videos of young children's gestures.

Continuing the focus on younger media users, Cary Bazalgette uses Chapter 11, Early Encounters with Narrative: Two-Year-Olds and Moving-Image Media, to examine how young children learn to make sense of moving images. Based on observations and videos of her grandchildren, the author considers the conventions children need to learn to engage with and become immersed in visual media. Drawing attention to the overlooked specificities of children's consumption of audio-visual material, she argues that children are doing far more than 'just looking' at a screen and proposes that moving-image media are not facsimiles of what is observed by children in the everyday, but constructed artefacts that employ complex protocols and codes to support meaning-making. Bazalgette sensitises the reader to what two-year-olds might observe; what may be motivating young children in, for example, their repeated viewing of the same moving images; and the cognitive and emotional processes that can come into play. In addition to learning audio-visual conventions from repeated engagement with media content, young children also learn from each other's experiences as Sandy Houen, Susan Danby, and Pernilla Miller show in Chapter 12, Siblings Accomplishing Tasks Together: Solicited and Unsolicited Assistance when Using Digital Technology. These researchers use a linguistic analysis of Australian sibling conversational interactions to demonstrate how young children collaborate to achieve digital goals, and how they learn in this process. Houen, Danby, and Miller first indicate different ways in which children might try to recruit assistance, and then they use fragments from case studies to show how children manage both solicited and unsolicited assistance from their siblings. Such management of help may involve negotiation of goals, resisting assistance, and modifying strategies in the light of resistance; for example, providing verbal instructions rather than demonstrating how to solve a problem. Relevantly, sibling learning is a multi-directional process with younger siblings supporting older sibling learning, and vice versa.

Conceptualising Children as Architects of Their Digital Worlds, Joanne O'Mara, Linda Laid-law, and Suzanna So Har Wong's Chapter 13 uses case studies from Canada and Australia to explore how children aged five to ten can engage creatively with digital materials, working as designers. Providing examples from controlling robots, creating digital worlds with Minecraft, and developing games, O'Mara, Laidlaw, and Wong demonstrate that some children are motivated to learn programming skills and develop their digital literacy. These processes require openended applications that provide some freedom for children to set specific goals and include social elements. Informed by the Maker movement, the authors also indicate how adults, especially teachers, can encourage and support the process of learning for children to become their own digital architects. Sara Pereira, Joana Fillol, and Pedro Moura use Chapter 14, Teens' Online and

Offline Lives: How They Are Experiencing Their Sociability, to note debates about whether online options to communicate are displacing or stimulating sociability among young people. Putting this discussion into a media-embedded perspective, they draw on Floridi and other researchers, highlighting how the online/offline distinction is itself fading. Based on multimethod data from a Portuguese study, Pereira, Fillol, and Moura demonstrate the profound role played by digital media in teenagers' performance of sociability. Such practices blur old boundaries between online and offline, even as teens' social engagements highlight the various ways in which online sociability is embedded in offline life, mostly with known friends, complementing other forms of interaction. At the same time, the authors note that these teen sociability practices mainly exclude adults and are differently experienced by rural and urban students.

Although many teens use social media as a means of maintaining and deepening their friendship networks, some take part in fan-based affinity networks and make new friends through shared interests. This is an area of interest for Julián de la Fuente and Pilar Lacasa in Chapter 15, Teens' Fandom Communities: Making Friends and Countering Unwanted Contacts. The authors use a three-year Spanish ethnographic study of online fandom relating to celebrities such as Harry Styles and One Direction to explore girls' contact management practices. Outlining various processes at work in this online community of interest, especially concerning the fans' diverse relationships with each other, de la Fuente and Lacasa analyse the behaviour of tweens and early adolescents, typically girls aged between eight and fourteen. As they decide whether or not to engage with other unknown online fans, community members also negotiate the nature of fanfiction production, the commitment implied in writing for other fans, the multiple profiles of individual fans, and the different places they can hang out online. At the same time as learning how to manage relationships with people they are yet to meet in real life, the children use digital media in a way often characterised by an exploration of personal identity. In Chapter 16, Identity Exploration in Anonymous Online Spaces, Mary Anne Lauri and Lorleen Farrugia focus on the use by adolescents of social networking sites supporting anonymous communication. Although these sites have attracted criticism for being risky spaces, especially where they might appear to support cyberbullying practices, the authors review the literature to show that such online spaces can have a value for identity exploration and production. Lauri and Farrugia subsequently draw on qualitative and quantitative Maltese data from the EU Kids Online project to examine the various attractions of such sites, the role of peer pressure, and adolescent users' awareness of the risks involved, even if, in some young people's judgements, those risks are outweighed by benefits.

Parents and educators are implicated as key resources in supporting children's negotiation of risky digital encounters. But when does support become intrusive? In Supervised Play: Intimate Surveillance and Children's Mobile Media Usage (Chapter 17), William Balmford, Larissa Hjorth, and Ingrid Richardson review the growing literature on different and subtle forms of surveillance in everyday life that have been enabled by mobile technologies, focussing on parental monitoring of their children. Noting that not all forms of surveillance should be considered negative, and that judgements around intrusiveness tend to reflect the age of the children being monitored, the authors use examples from the Australian Games of Being Mobile project to explore parents' friendly, intimate, and caring surveillance practices. Adults' favoured strategies include unobtrusively communicating parental availability via mobile games, following children on social media, only allowing the use of digital devices where children can be observed, and co-playing games with children as a means of knowing more about children's activities. Parents' management of anxiety over their children's digital activities also informs Bieke Zaman, Marije Nouwen, and Karla Van Leeuwen's chapter (18), Challenging Adolescents' Autonomy: An Affordances Perspective on Parental Tools. Exploring the different types of parenting implied by parental choice of different tools for monitoring or controlling their children's digital experiences,

these researchers critique the standard nomenclature of parental mediation practices, arguing that parents' active engagement with children's activities can in one context be a form of control, and in another parental support, allowing privacy and encouraging autonomy. Zaman, Nouwen, and Van Leeuwen show how the concept of affordances is complex, covering features of design but also the meaning that parents assign to design; for example, an affordance not correlating with the type of parent they want to be. Finally, the researchers examine parenting tools and the ways in which these are marketed to show how these strategies address different groups of parents and styles of parenting.

PART III: Complexities of Commodification

The culmination of Part II acknowledges that many affordances of digital culture reflect the marketing strategies of technology companies towards children and their families. In Part III, Complexities of Commodification, Ylva Ågren begins discussion of children as consumers by arguing against simplistic understandings of children's relationship to consumer culture. In her chapter (19), Children's Enrolment in Online Consumer Culture, Ågren suggests that young people are often positioned as either naïve or fully competent in terms of comprehending and negotiating the commercial underpinnings of consumption, especially in digital contexts. Challenging this polarisation through two case studies of Swedish children, she highlights the multifaceted engagement by children of different ages in virtual worlds while playing the mobile game *Pokémon Go*. The case studies demonstrate how the practices exhibited by children in responding to the game's commercialism are inevitably intertwined in their everyday lives, including their play spaces and digitally infused imaginative activities. Indeed, Ågren's chapter underlines that children's understanding of consumption and their roles as consumers is a crucial part of their emerging appreciation of how contemporary society works.

Benjamin Burroughs and Gavin Feller in Chapter 20, The Emergence and Ethics of Child-Created Content as Media Industries, take a deep dive into the world of child YouTube stars, asking some hard questions about child labour and aspiration. While they argue that each new medium comes with new questions about children's labour and participation, to date the children featured in YouTube videos, even those featured almost every day, are not specifically covered by many legal systems, including in the US which is not, as it happens, a signatory to the 1989 UN Convention on the Rights of the Child. While children view, enjoy, mimic and idealise child YouTubers, their attention and activity are both incentivised and completely monitored by commercial platforms such as Google, the owners of YouTube. Questions of transparency and ethics are also central to Crystal Abidin's chapter (21), Pre-School Stars on YouTube: Child Microcelebrities, Commercially Viable Biographies, and Interactions with Technology. Abidin utilises three pre-school YouTubers as case studies - one from South Korea, one from the US, and the last from Singapore - and examines their presence on screen, and the explicit and implicit parental practices framing the online presence and profitability of these children. While each of the three offers a different window into the life of a pre-school YouTuber, the commonalities provoke significant questions. Indeed, Abidin concludes with a call for greater transparency in terms of the contracts, labour expectations, parental management, and general terms of work that govern the lives of these pre-school YouTube stars.

Adopting a broader perspective on the rights of all children in their everyday digital lives, Tama Leaver uses Chapter 22, Balancing Privacy: Sharenting, Intimate Surveillance, and the Right to be Forgotten, to argue that in the era of sharenting, apps, platforms, and infant wearables, protecting children's right to privacy is a thankless task that all too often falls on the shoulders of new parents. At an incredibly busy time of their lives, when they are learning as they go, parents frequently find themselves ill-equipped to manage their child's initial online presence and

navigate the many challenges that come with protecting a young child's data. Leaver examines the function served by popular parent and child influencers as privacy role models, explores new questions provoked by (over)sharenting, and weighs the digital traces young people leave against any right they might have to one day have their childhoods forgotten, at least by big data giants and social media platforms. In Chapter 23, Parenting Pedagogies in the Marketing of Children's Apps, Donell Holloway, Giovanna Mascheroni, and Ashley Donkin maintain the focus on parents as the digital decision-makers for their children, examining apps specifically aimed at preschoolers. Extrapolating from the app store listings for a range of popular education apps, these researchers argue that such digital tools situate parents and carers as online educators from the beginning of children's lives. Indeed, promotional discourses not only build the notion of parental responsibility for using education apps from a very young age but also implicitly criticise parents who are not participating in the data economy relating to shifting educational aspirations, metrics, and norms. Holloway, Mascheroni, and Donkin raise issues that continue to resonate in the wake of, for example, the spread of the Coronavirus pandemic and the resulting requirement upon parents to educate millions of school children in their homes, often adopting apps and online platforms at very short notice.

In Chapter 24, Digital Literacy/'Dynamic Literacies': Formal and Informal Learning Now and in the Emergent Future, John Potter warns against existing, relatively static notions of digital literacy and media literacy. Instead of stasis, argues Potter, the broadly conceptualised fields in which literacies and digital technologies interact are deeply contingent on lived everyday experiences which constantly shift. To capture the changing nature of lived experiences, approaches to learning, and the many emergent areas of digital technology in contemporary culture, Potter uses young people's digital media production experiences to offer the concept of 'dynamic literacies' which inherently remind everyone that the literacies needed to navigate the current, evolving digital and material world are fluid, changing, and responsive. Reflecting Potter's insights, it is the very complexity and contingency of children's digital lives that is exemplified in Chapter 25, Inês Vitorino Sampaio, Thinayna Máximo, and Cristina Ponte's work on Being and Not Being: 'Digital Tweens' in a Hybrid Culture. These researchers highlight major differences between Brazilian experiences of digital culture, relating these to inequalities across experiences of childhood, while also highlighting many points of continuity. A country characterised by inequality, Brazil celebrates affluent child stars who produce YouTube videos about product consumption while simultaneously accommodating almost five million children without regular internet access. Focusing on tweens, aged 11 to 12 years old, Sampaio, Máximo, and Ponte highlight different forms of online interactivity, often characterised by the fact that tweens tend to access the internet using mobile phones. Some of the most popular content for this cohort is the aspirational child YouTubers who review consumer products while also suggesting that fame is within the reach of every child.

In "Technically They're Your Creations, but ...": Children Making, Playing, and Negotiating User-Generated Content Games (Chapter 26), Sara M. Grimes and Vinca Merriman explore children's understanding of copyright, ownership, and intellectual property in user-generated content (UGC) games such as *Minecraft*. While there is a significant body of work exploring the educational and pedagogical uses of UGC games, Grimes and Merriman address a relatively under-researched gap by asking how children aged between six and twelve understand intellectual property. Their game-jam group interview sessions reveal complex ideas about ownership and copyright, some close to existing legal realities, others based on the notion that the owners of games would do the right thing by players. Dishearteningly, while the children interviewed had emergent ideas about copyright, all of them indicated that it was something corporations owned, and they did not. Grimes and Merriman end their chapter with a call to include children in public discussions about digital authorship rights.

In Chapter 27, Marketing to Children through Digital Media: Trends and Issues, Wonsun Shin offers a big picture overview of the approaches and concerns raised when advertisers target children. Shin notes that, while older children are directly targeted since they themselves hold increasing purchasing power, this is also true of younger children. The marketing strategies to the latter, however, revolve around prompting younger children to actively and repeatedly ask parents to make specific purchases. Formal advertising on various platforms and channels, branded experiences in games, and even influencer marketing on Instagram and YouTube, are all arenas where children must learn to negotiate marketing and commercialism in various forms. Children are far from passive, often pushing back against marketing intrusions, but the sheer scale of advertising and marketing in children's digital worlds can become insidious. Shin concludes by arguing that an era of social media demands more nuanced studies of children's understanding of marketing in order to encompass a comprehensive model of persuasion that acknowledges the diversity of media and platforms through which children participate and consume.

PART IV: Children's Rights

Discussions of marketing, commodification, and privacy inevitably raise the issue of children's rights, and particularly their rights in the context of digital environments. The 1989 adoption of the United Nations Convention on the Rights of the Child (UNCRC) was reprised 25 years later when the UN Committee on the Rights of the Child met to discuss 'Digital Media and Children's Rights'. The resulting Digital Rights Framework reconfigured approaches to children's needs, agency, and vulnerability to harm in today's digital world. That framework implies and assigns roles and responsibilities to a variety of social actors, including the state, families, schools, commercial entities, researchers, and children themselves. Part IV of the *Companion*, Children's Rights, centrally addresses children's rights in the digital world. It gathers together research from around the globe that focusses on these children's rights as agential citizens to provision and participation regarding digital devices and content, as well as their right to protection from harm. Interwoven throughout this part is an acknowledgement that children of various ages, abilities, socioeconomic and geographic backgrounds should have equal access to digital media. This part also highlights children's right to have a voice when decisions regarding their rights are being made.

Brian O'Neill's chapter (28) on Child-Centred Policy: Enfranchising Children as Digital Policy Makers, discusses children's right to be consulted by policymakers. Referencing the UNCRC, O'Neill emphasises the importance of children having an active role in the making of decisions that affect their lives. The contribution addresses ways in which children's participation in policymaking can be enhanced and heightened, arguing that doing so will also improve policymaking decisions. As O'Neill suggests, the digital environment both demands and offers new approaches to meaningful processes for engaging children and young people in policymaking.

In the first of two related chapters, Law, Digital Media, and the Discomfort of Children's Rights (Chapter 29), Brian Simpson argues that many conventional rights approaches to children's use of digital media are centred on the negative goal of protecting children from potential harm. This perspective reflects political, ideological, economic, and romantic conceptions of the child that result in a legal narrative inclined towards child protection. Simpson challenges this dominant paradigm by identifying a variety of flaws in relation to 'avoid harm' approaches to children's rights. He argues that more focus needs to be placed on supporting children's rights to autonomy and active engagement in the digital world. Chapter 30, No Fixed Limits? The Uncomfortable Application of Inconsistent Law to the Lives of Children Dealing with Digital Media, explores the notion of the best interest of the child, investigating how the concept of best interest may be re-articulated to focus on children's rights to agency. Simpson discusses legal

cases from the US within which notions of the immature or wicked child obfuscate, or impede, more nuanced understandings of children's rights to digital speech and discourses that address the broader rights of children in a digital world.

In Children's Agency in the Media Socialisation Process (Chapter 31), Claudia Riesmeyer focusses on children's agency and media socialisation. She argues that research into media socialisation often concentrates on how children and young people are socialised through interactions with their elders, parents, teachers, and their peers. The role of the individual within this socialisation process is largely ignored, however. Riesmeyer provides a systematic literature review to highlight the importance of the concepts of self-socialisation and agency within the media socialisation process. She concludes her work by formulating four theses aimed at guiding future research in this area. Lelia Green, in Digital Citizenship in Domestic Contexts (Chapter 32), notes how the notion of digital citizenship has become an important topic in policy circles where the rights of the child are addressed. In this context, digital citizenship rights tend to function as a way of highlighting what policymakers might deem to be appropriate media use, as well as supporting children's fundamental right to online participation. Green draws on ethnographic work with a group of male teen gamers and their parents to demonstrate that many children negotiate their digital rights in the domestic realm. She argues that parents have an important role in helping develop their children's understanding of digital citizenship.

The rights of vulnerable or disadvantaged children form the focus of the next three chapters. In Chapter 33, Meryl Alper and Madison Irons discuss Digital Socialising in Children on the Autism Spectrum. Drawing upon theoretical and conceptual frameworks relevant to disability, autism, and youth, the authors investigate autistic youth and their use of digital technologies. Three areas are foregrounded in this analysis of autistic youth and media: technologies for socialisation, materials for socialising, and media that supposedly promote anti-social behaviour. Alper and Irons echo previous authors' views that disproportionate attention is paid to harm (avoidance) rather than benefit, noting that neurodivergent children's digital socialising has received much less notice than their digital socialisation and anti-social uses of digital media. They conclude that there are tensions and contradictions in how social norms are shaped, transformed, and communicated through media at both the interpersonal and institutional level. Chapter 34, Disability, Children, and the Invention of Digital Media, investigates this topic area more broadly. Authors Katie Ellis, Gerard Goggin, and Mike Kent note that discourses and research about children's media use tend to omit or overlook children with disabilities. They argue that more research in this area is urgently needed because, without it, a full and comprehensive understanding of children's media use will remain partial and incomplete. In addition, the chapter argues that important theoretical, policy, and practice insights may be gained through the lens of critical disabilities studies, and that those insights will benefit research into digital media and children in general.

Joke Bauwens and Lien Mostmans use Chapter 35 to address Children's Moral Agency in the Digital Environment. They argue that digital engagement provides a practice ground in which children learn about ethical and moral responsibilities to themselves, each other, and society at large. It is through digital conversations with others that children learn what it is to have and express moral agency. Although the literature tends to focus on the moral crises thrown up by such topics as sexting and cyberbullying, Bauwens and Mostmans suggest that active agency lies in the negotiation of moral and social dimensions of peer culture and risk management. Noting that an everyday understanding of moral agency mandates that more attention be paid to the role of digital media in supporting children to lead meaningful and fulfilling lives, these authors call for a greater emphasis upon the experiences of children outside Anglophone cultures. In the final chapter in Part IV (36), Sonia Livingstone, Amanda Third, and Gerison Lansdown discuss Children's Rights in the Digital Environment: A Challenging Terrain for Evidence-Based Policy. They highlight that the UNCRC has many policy implications for children's digital lives, but

that its 1990 ratification means that it easily predates the widespread adoption of the internet. Critically evaluating the challenges facing policymakers who seek to recognise and support children's rights in a rapidly evolving digital world, Livingstone, Third, and Lansdown note that the UN Committee on the Rights of the Child has recently committed to developing a UN General Comment on Children's Rights in Relation to the Digital Environment. In this, the authors call for global consultation with children as part of a positive framework that recognises children as agential actors and rights holders.

PART V: Changing and Challenging Circumstances

From pregnancy apps which instil habits that support parents through their children's early years to questions about how children understand death and express grief, digital media accompany many of life's changes and challenges: the focus of Part V of the *Companion*. This part starts at the beginning of a young child's life with Deborah Lupton's chapter (37) on Caring Dataveillance: Women's Use of Apps to Monitor Pregnancy and Children. Highlighting that dataveillance can be caring as well as, or instead of, intrusive, Lupton draws upon two qualitative research projects with young mothers to explore their use of apps in relation to conception, pregnancy, and the care of babies. Examining the data with a feminist new materialism lens, which considers human-nonhuman assemblages that generate 'thing-power', Lupton argues that people learn both how to become and how to live with data. In the case of new mothers, this is complicated by social expectations of what it is to be a good mother and a rejection of the old personal apps that women had previously used to monitor their own fitness, but which they now felt guilty about as their mothering role increasingly requires them to attend to the baby's wellbeing rather than their own.

Health apps often monitor the quality and quantity of sleep, and this is the focus of Alicia Allan and Simon Smith's chapter (38) relating to Digital Media and Sleep in Children. Highlighting that device use can be linked to poorer sleep and a range of adverse health outcomes, Allan and Smith explore a range of reasons why this might be the case. While arguing that more nuanced research is required, these authors also offer evidence-based recommendations for the management of children's digital media use prior to bedtime.

While social media use, particularly at bedtime, may not be an optimally healthy choice, Ana Jorge, Lidia Marôpo, and Raiana de Carvalho use their chapter (39) to consider possible interactions between positive and negative aspects of the relationship between Sick Children and Social Media. Their central case study examines Lorena Reginato and CarecaTV, the YouTube channel started by Lorena when she was 12 years old and fighting brain cancer. Arguing that social media use can allow sick children and their families agency in constructing a network that connects health professionals, friends, family members, supporters, and other children in similar challenging circumstances, Jorge, Marôpo, and de Carvalho suggest that such activist-based activities can raise awareness of the experiences of children living with, and sometimes recovering from, serious illness. Children's use of digital media to explore and communicate their sexuality is a more closely regulated, contested, and censored space than their use of social media in circumstances of illness. In Chapter 40, Children's Sexuality in the Context of Digital Media: Sexualisation, Sexting, and Experiences with Sexual Content in a Research Perspective, Liza Tsaliki and Despina Chronaki note that the growth of digital media use has been associated with increasing fears about the sexualisation of children and teens. Rejecting a simplistic effects and risk narrative, Tsaliki and Chronaki highlight the benefits of adopting cultural studies-based approaches that offer nuanced understandings of self-presentations and representations of children's sexuality in their social and historical context. These researchers advocate the application of a children's rights framework in this area that recognises and respects young people's claims to sexual rights and citizenship.

Ellen J. Helsper uses Chapter 41, Digital Inequalities Amongst Digital Natives, to provoke consideration of the many inequities that persist in terms of children's access to, understandings, and uses of digital media. Critiquing the notion of the digital native, she argues that it is the socio-technical ecology, rather than the generation that a child is born into, that has the greatest impact upon their future digital lives. Such ecologies comprise more than the family of the child and extend to neighbourhoods, peer groups, and values systems. Using internationally comparative datasets, Helsper demonstrates that inequalities are directly related to variable positive and negative outcomes which reflect the specific circumstances of children. Considering socio-economic disadvantage, age, and gender differences, and young people with emotional vulnerabilities, she proposes that inequalities need to be addressed via changes to young people's socio-digital environments. Helsper calls for more research on disadvantaged children in the Global South, and one aspect of this is considered in Chapter 42, Street Children and Social Media: Identity Construction in the Digital Age, by Marcela Losantos Velasco, Lien Mostmans, and Guadalupe Peres-Cajías. Researching the digital lives of street children in Bolivia, these authors argue that many street children are on Facebook, with most participants accessing the app daily. Indeed, mobile phones are readily converted to money, so digital media technologies operate as a desirable exchange commodity. Noting that street children use social media to build and maintain links with each other, with aid organisations, and with volunteers and professionals, Losantos Velasco, Mostmans, and Peres-Cajías analyse a selection of children's posts to explore their constructed identities and the strategies used to manage relationships with imagined online and offline audiences.

Robin M. Kowalski and Annie McCord turn to the thorny issue of adolescent experiences of bullying and being bullied in Chapter 43, Perspectives on Cyberbullying and Traditional Bullying: Same or Different? The researchers consider different aspects of social aggression both online and off, drawing upon the experiences of adolescents who have encountered bullying in a range of different circumstances. Noting the conceptual importance of distinguishing the two types of behaviour, given that there are concomitant risk and protective factors and outcomes, Kowalski and McCord conclude by highlighting the importance of intervention strategies, including young people's suggestions for parents who may be worried about how to support a child who is dealing with victimisation.

In Digital Storytelling: Opportunities for Identity Investment for Youth from Refugee Backgrounds (Chapter 44), Lauren Johnson and Maureen Kendrick examine the pedagogical benefits of using personal storytelling to provide opportunities for young people from refugee backgrounds. As well as practising digital literacies, such stories allow young people to explore different aspects of their identities. Adolescents from refugee backgrounds often struggle to reach the language and literacy proficiency of their peers while also dealing with the added burden of living with trauma, and thus this pedagogical approach offers notable benefits. Johnson and Kendrick use a case study, Abdullahi's story, to indicate how creating his digital record offered Abdullahi a specific learning experience and helped him communicate his knowledge and identity to peers and the wider community. The authors argue that communicating his past experiences in an agentic manner enabled Abdullahi to build his identity within a new social context, allowing him to develop hope and plan for his future.

The final chapter in Part V of the *Companion* continues the focus on children's experiences of trauma. Children, Death, and Digital Media, by Kathleen M. Cumiskey (Chapter 45), records how children and adolescents may turn to digital media as a means of navigating experiences of grief and bereavement. In circumstances of grief, loss, and longing, the storage, retrieval, and sharing of digital content around people who are loved, but now gone, can help young people continue to feel connected with those who have died. The chapter uses two case studies to explore nuanced complexities around children's use of digital media as a means of trying to

manage traumatic experiences and the processes of grieving. Cumiskey suggests that people in the child's circle can help the child reconnect, build support networks, and take part in collective activities while the young bereaved person engages in meaning-making around death.

PART VI: Local Complexities in a Global Context

The final part of this volume, Local Complexities in a Global Context, foregrounds the fact that nuanced understandings of children's digital media use need to be located within specific contexts. This introduces huge complexity, but also recognises the creative capacity of young people to use the social, communicative, and technological tools at their disposal to express themselves, their identities, and their hopes for the future. Although the preceding parts have drawn their content from around the globe, each of the chapters in this part is specifically associated with one country or continent.

In Chapter 46, Very Young Children's Digital Literacy: Engagement, Practices, Learning, and Home–School–Community Knowledge Exchange in Lisbon, Portugal, researchers Vítor Tomé and Maria José Brites provide an account of an innovative fieldwork project entitled *Digital Citizenship Education for Democratic Participation*, in which they worked with young Portuguese children aged three to eight, their parents and teachers, and the local neighbourhood of the Caneças district in inner-city Lisbon. The aim was to use digital media to foster social participation. Tomé and Brites demonstrate how this community-based action research project developed very young children's digital literacy competencies through the application of an intervention model. They argue that adaptive in-service teacher training around digital media use can assist to rapidly overcome the gap between high digital use at home and low digital use at school.

Chika Anyanwu uses Chapter 47 to shift the geographical focus by addressing the under-considered topic of The Voices of African Children. Drawing on data collected from Young and Online: Children's Perspectives on Life in the Digital Age (The State of the World's Children 2017 companion report), the South African Kids Online report, and selected UNICEF reports, while freely acknowledging that the data analysed comprises mere snapshots of a complex continent of 54 countries, Anyanwu argues that the global nature of digital platforms that cross geo-cultural and political landscapes give impetus to a collective analysis of the experiences of African children. This contribution gives voice to the challenges these children face in engaging with digital media and notes that promising young African entrepreneurs have used their experiences of childhood challenges to craft creative solutions that increase African children's participation in the online world.

Limiting the Digital in Brazilian Schools: Structural Difficulties and School Culture (Chapter 48) showcases Daniela Costa and Juliana Doretto's presentation of data from two research surveys conducted in Brazil involving 1,106 participating schools, alongside interviews with more than 14,000 students and 1,854 teachers. They highlight contradictions between the data gathered and the existing public policies on the educational use of digital technologies. Noting a range of issues for schools including inadequate internet connections and digital technology, and how teachers often needed to use their own mobiles to access the internet for tasks within the curriculum, Costa and Doretto call for government policies that make a difference in paying real heed to the social discourses that position Brazilian children's digital technology skills as vital to addressing education dilemmas and disadvantage.

Amy Shields Dobson's chapter (49), Australia and Consensual Sexting: The Creation of Child Pornography or Exploitation Materials?, presents her argument that the framing of youth sexting practices as 'child pornography' or sexual exploitation materials, both legally and culturally, has significant unintended negative impacts on young people and those who care for and about them. Dobson's research demonstrates that current laws pathologise and potentially criminalise

children's and teens' sexuality as expressed and experienced through digital media, arguing that the debate requires reframing to address youth sexting as an issue of young people's sexual rights. She explains why young people remain vulnerable under child pornography laws but acknowledges that the prohibitions around the making and circulating of child sexual abuse materials are crucial in the historical and cultural context of digital media and potential adult exploitation.

S M Shameem Reza and Ashfara Haque use Chapter 50, Revisiting Children's Participation in Television: Implications for Digital Media Rights in Bangladesh, to present field research conducted with Bangladeshi children who participated in child-led TV shows or attended TV shows with children mostly as presenters or performers. They identify a range of changes associated with the deregulation and the liberalisation of communications coinciding with economic growth in South Asia, the result of which has been a sudden expansion of conventional broadcast and digital media. Reza and Haque argue that such significant disruption makes it imperative for signatories to the UN Convention on the Rights of the Child, like Bangladesh, to have a charter to support children's rights and participation in both digital and legacy media contexts. The authors explain that the parallel developments of a digital media space and legacy media highlight the importance of acknowledging and protecting children's rights, fostering their participation in the digital age.

Xiang Ren's contribution, Chinese Teen Digital Entertainment: Rethinking Censorship and Commercialisation in Short Video and Online Fiction (Chapter 51), examines problems in Chinese teenagers' online cultural engagement and civic participation. He argues that, while internet regulations and censorship in China effectively control political agendas, they are less successful in protecting children's safety and rights, particularly when children view unsuitable content. Xiang Ren further posits that Chinese teenagers are being engaged in 'playbour', or the rapid commodification of informal creative labour, and he calls for China's teen digital entertainment sphere to be subject to greater scrutiny by academics and policymakers, along with increased action via platform governance and regulation, to attend to teenagers' rights as participatory creators.

In Sexual Images, Risk, and Perception among Youth: A Nordic Example (Chapter 52), Elisabeth Staksrud provides insights from a Norwegian study of children aged nine to sixteen (and their parents) about young people's exposure to sexual images on the internet. Staksrud details how Norwegian parents find sexual risk in general, and sexual content specifically, worrisome. This is especially the case for parents of younger children and parents of daughters. The results from Staksrud's study demonstrate that younger children and girls are most upset, and most likely to experience negative feelings, after seeing sexual images online, while older boys appear to be the least affected by such content. Such results, she argues, identify a need for more research on the gendered nature of sexual risk assessment and experience among young people.

Jarrod Walczer's chapter (53), US-Based Toy Unboxing Production in Children's Culture, addresses a younger age group but also deals with challenges posed by adults' perceptions of the impact of content upon children. Critically examining YouTube creators in the US who make toy unboxing videos for children, Walczer draws upon 25 interviews with top-ranking toy unboxers to argue that, as children's culture changes to encompass digital media, longstanding anxieties and new concerns have arisen in response to toy unboxing content. Using a circuit of culture approach, Walczer declares that children's digital practices should not be seen as separate from those in the 'real world'. He further suggests that before governments, regulators, and industry rush to constrain such materials, close attention should be paid to the circuit of culture theory as it relates to toy unboxing media, and the agency implicit in children's engagement with these programmes on YouTube. Doing this may result in new perspectives that help shape more nuanced understandings of toy unboxing videos.

The final chapter in the Companion remains in the US and considers older teens' negotiations of their religious-cultural identity as Muslims within the context of a sometimes Islamophobic

socio-political environment. In Chapter 54, The Role of Digital Media in the Lives of Some American Muslim Children, 2010–2019, Nahid Afrose Kabir synthesises some nine years of field interviews to demonstrate how young American Muslim children use digital media to negotiate community relations, develop friendships, and explore personal, cultural, and religious differences. Kabir gives an account of the challenges faced by some of these children, such as negotiating the cultural dilemmas of family expectations and peer group pressures. She suggests that digital media assists Muslim children in their identity formation, identity negotiation, and their communication skills, while also helping to keep them globally connected. In this final chapter on digital media and children, Kabir reflects on the sophisticated ways in which some Muslim American children use digital media to negotiate complex aspects of their identity, moving between being an American child and a Muslim child, while belonging to a local peer group and also remaining a member of a cultural/ethnic diaspora.

Taken together these 54 chapters provide a broad but deep interrogation of the many issues raised and challenges addressed by children's digital media use. Even as this volume was being developed and curated, the impacts of digital media continue to transform and disrupt what children and their families deem to be everyday life. As this Introduction goes to press, the world is in the grip of the COVID-19 pandemic with unprecedented numbers of children and parents locked down in their homes, reliant on their digital media skills, technology, and infrastructure to work, learn, and play. While that is a subject for many other volumes, this *Companion* has set out to capture and interrogate the rich diversity of young people's imaginings for and interactions with the digital materials that help constitute their lives. It provides a firm foundation upon which others will continue to build.