



Children Online:  
Research and Evidence

# Theories and Concepts for Understanding Children’s Digital Lives: An Annotated Bibliography

Authors

Sonia Livingstone and Mariya Stoilova

This annotated bibliography provides a roadmap for understanding nine key areas of children’s digital lives. It has been designed for researchers and research users and provides essential and supplementary texts on each of the areas.

*Citation: Livingstone, S. and Stoilova, M. (2021). Theories and Concepts for Children’s Digital Lives: An Annotated Bibliography. CO:RE – Children Online: Research and Evidence.*

Acknowledgements: We thank Miriam Rahali for her assistance in developing this bibliography and the many colleagues who contributed sources and insights.

Key areas of children’s digital lives

<b>Children and young people</b> The child, children, young people Development and evolving capacity Structures and cultures of childhood Diversity and difference	<b>Digital environment</b> Technology and affordances Uses, users and domestication Normative values in design Innovation, datafication and AI	<b>Access</b> Place and time of access In/equality and in/exclusion Fixed, mobile and wearable Transcending on/offline
<b>Opportunities and benefits</b> Internet engagement Engagement and participation Information and exploration Play, creativity, fun	<b>Skills and literacies</b> Learning and information skills Digital skills and competencies Data literacy and e-Safety Civic and other literacies	<b>Risk and harm</b> Content, contact, conduct, contract Familiar and emerging risks Cross-cutting risks including privacy Relation between risk and harm
<b>Health and wellbeing</b> Digital wellbeing and health Mental ill health and anxiety Resilience and coping Vulnerability	<b>Social support</b> Parental mediation Socialisation, family and school Sociality and peer support Professional help services	<b>Policy and regulation</b> Children’s rights in the digital age Law, policy and regulation Agency, voice and activism Responses to emerging challenges



[www.CORE-evidence.eu](http://www.CORE-evidence.eu)

This project has received funding from the European Union’s Horizon 2020

Grant Agreement ID 871018

## DIGITAL ENVIRONMENT

This section addresses theories and concepts for analysing the relation between technology and users. Several of the suggested sources advocate a holistic view of the digital environment, concerned that research on children often focuses on particular, new or salient technologies without contextualising these within the overall media environment (for example, by using concepts of mediatization or datafication) or the diverse societal or cultural contexts of children's lives.

Most of the interesting theory on digital technology and the digital environment (or ecology) is focused on the generic 'user'. There has been relatively little attention to the child's perspective on the digital, or on how the design and deployment of digital technologies specifically supports or undermines children's lives and children's rights.

 **Ahn, S. (2021). [Symmetrifying smart home](#). *Media Theory*, 5(1), 89–114.**

This article discusses the implications from the domestic application of the Internet of Things (IoT), suggesting that the 'smart home' changes the socio-phenomenological meaning of place-making. It uses the term 'topological power' to refer to the perpetual binding of smart spaces and the multiplicity of their structure.

**Bollmer, G.D. (2018). [Theorizing Digital Cultures](#). SAGE Publications.**

This book explains how digital media affects identities, bodies, social relations and practices, drawing on key theorists.

 **boyd, d. (2011). [Social Network Sites as Networked Publics: Affordances, Dynamics, and Implications](#). In Z. Papacharissi (ed.) *Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39–58). Routledge.**

The idea of affordances captures what it is that technologies offer, or make available, to their users. boyd's account of digital affordances as persistence, visibility, spreadability and searchability has become something of a modern classic, being widely used to examine how children and young people engage with digital media.

**Bruns, A. (2008). [Blogs, Wikipedia, Second Life and Beyond](#). Peter Lang.**

Written at the height of the excitement over user-generated content and the prospect that the digital environment radically repositions people not merely as recipients but also as creators of content and participants in the digital public sphere, Bruns offers an exploration of the developing participatory online culture and the factors that drive this process, and coins the term 'produsage', a new process for the continuous creation and extension of knowledge and art by collaborative communities that has the potential to affect many aspects of our lives, from culture to economy and politics.

 **Bucher, T. (2020). [The right-time web: Theorizing the kairologic of algorithmic media](#). *New Media & Society*, 22(9), 1699–1714.**

This article draws on social theory, media studies and rhetoric to discuss the implications from real-time or near-instantaneous content production and delivery.

**Clark, L.S. (2009). Theories: Mediatization and Media Ecology. In K. Lundby (ed.) *Mediatization: Concept, Changes, Consequences*. Peter Lang, 85-100.**

Clark offers a theoretical discussion of the concepts of mediatization and media ecology.

 **Coleman, R. (2020). Refresh: On the temporalities of digital media 'Re's. *Media Theory*, 4(2), 55–84.**

This article theorises the refreshing of digital media streams and feeds, paying particular attention to the temporality of digital content. Taking Raymond Williams' notion of 'a structure of feeling' and using empirical evidence, Coleman argues that the refreshing of digital media indicates a non-linear temporality and is experienced as a generational belonging.

**Couldry, N. & Hepp, A. (2017). The Mediated Construction of Reality. Polity Press.**

This book explores the processes through which an everyday world is constructed in and through media. It discusses the technology-based interdependence between humans and machines, and the cultural and institutionalised practices around them, framed with the structure–agency debate.

**DeNardis, L. (2020). The Internet in Everything: Freedom and Security in a World with No Off Switch. Yale University Press.**

Although DeNardis' book is not focused on children and young people, it provides an excellent analysis of the key developments in and implications of the shift to the Internet of Things (IoT). It thus provides a framework for critically examining emerging technologies and for exploring what these mean for families' privacy, security and everyday practices.

 **de Reuver, M., Sørensen, C. & Basole, R. (2017). The digital platform: A research agenda. *Journal of Information Technology*, 33(2), 124–135.**

This article provides a discussion of the conceptual challenges related to digital platforms and the need for clarity of definitions.

**Deuze, M. (2020). The role of media and mass communication theory in the global pandemic. *Communication Today*, 11(2), 4–16.**

Deuze uses seven fundamental theories to explain the role of media in contemporary society drawing on theoretical insights related to mass society theory, social constructivism and mediatization.

 **Ferrari, V. (2021). Introducing the glossary of decentralised technosocial systems. *Internet Policy Review*, 10(2).**

This is an editorial introduction to a collection of open access articles by experts from various disciplines discussing the social, technical, economic and political aspects of decentralised, encryption-based, peer-to-peer technologies. The concepts covered by the Special Issue are: reputation, digital scarcity, smart contracts, self-sovereign identity, mining, blockchain-based

technologies, cryptoeconomics, blockchain governance, trust in blockchain-based systems, decentralised autonomous organisation, decentralised autonomous organisation and cryptocurrency

 **Flew, T. (2017). The 'theory' in media theory: The 'media-centrism' debate. *Media Theory*, 1(1), 43–56.**

This article offers a review of various approaches to understanding the relationship of media to wider society, with a set of critiques of media-centrism. Concepts such as media-centrism, the mediasphere, medium theory, media ecologies and mediatisation are introduced as a challenge to more traditional social theories applied to media.

 **Goggin, G. (2013). Youth culture and mobiles. *Mobile Media & Communication*, 1(1), 83–88.**

This article provides a good summary of the first phase of youth and mobile phone research, and provides links to further reading on researchers in the field.

 **Haddon, L. (2013). Mobile media and children. *Mobile Media & Communication*, 1(1), 89–95.**

Situated within the context of wider social change, this article explores a broad range of topics related to children and mobile phones.

 **Hepp, A. & Hasebrink, U. (2018). Researching Transforming Communications in Times of Deep Mediatization: A Figurational Approach. In A. Hepp, A. Breiter & U. Hasebrink (eds) *Communicative Figurations: Transforming Communications in Times of Deep Mediatization* (pp. 15–48). Palgrave Macmillan.**

Hepp and Hasebrink argue that, in our present time of 'deep mediatisation' we cannot identify single or straightforward media effects but must examine how socio-technological environments contribute to the social contexts ('communicative figurations') in which children grow up (along with family, schools, peers, etc.). Additionally, specific communicative practices emerge in these social contexts that contribute to the development of the digital environment.

 **Hildebrandt, M. (2020). Smart technologies. *Internet Policy Review*, 9(4).**

The article discusses smart technologies from the point of view of the post-phenomenological philosophy of technology and embodied cognition. It offers a relational and ecological understanding of the constitutive relationship between humans and technologies.

 **Hug, T. & Leschke, R. (2021). On the medialization of the world and the mediatization of discourse. *Media Theory*, 5(1), 59–88.**

Hug and Leschke discuss the notions of medialisation and mediatisation and the politics behind the concepts, drawing on German media and communication studies.

 **Hutchby, I. (2001). Technologies, texts and affordances. *Sociology*, 35(2), 441–456.**

A classic article on the notion of digital affordances, offering a critical sociological analysis of how the digital environment 'affords' or offers particular structured ways in which users (people) can, or are likely to, engage with technologies. The emphasis on affordances avoids listing the independent

features of technological devices or services, and instead invites analysis of how technologies and their users can be mutually defined and productively understood as co-dependent.

 Jaakkola, M. (2019). From vernacularized commercialism to kid bait: Toy review videos on YouTube and the problematics of the mash-up genre. *Journal of Children and Media*, 14(2), 237–254.

User-led production agency, primarily discussed from an adult perspective, is becoming increasingly relevant with regard to children, with concepts such as user-generated content, produsage, presumption, vernacular creativity, participatory culture etc. This is an under-researched area from the children and youth perspective, but may provide important insights for children's and young people's online agency.

 Katzenbach, C. & Bächle, T.C. (2019). Defining concepts of the digital society. *Internet Policy Review*, 8(4).

An editorial introduction to a collection of open access articles that define and discuss fundamental concepts related to the digital society, referring to key frameworks and theories. Each article contextualises the concept in relation to its origin and academic traditions, and analyses its contemporary use in different research approaches. The concepts covered by this Special Issue are: algorithmic governance, datafication, filter bubble, platformisation and privacy.

 Laskowska, M. & Marcyński, K. (2019). Media ecology – (Un)necessary research perspective in communication and media studies. *Mediatization Studies*, 3, 53–68.

This article discusses the origin and development of the concept of 'media ecology', offering an overview of the different contexts in which the term has been used. The authors argue that a common feature of the different approaches is the understanding of media ecology as an environment with inherent biases in which individuals symbolically construct the world they come to know, and the social, economic, political and cultural consequences from this process. The era of Big Data adds additional dimensions to this environment.

 Livingstone, S. & Lunt, P. (2014). Mediatization: An Emerging Paradigm for Media and Communication Studies. In K. Lundby (ed.) *Mediatization of Communication. Handbooks of Communication Science* (21) (pp. 703–724). De Gruyter Mouton.

The concept/theory of mediatisation, although highly significant and popular in media studies, is still underused in researching and theorising 'children online' and its broader institutional and societal context. This chapter examines the relation between mediatisation and mediation, and positions it in relation to other '-isations' such as globalisation, individualisation and commercialisation.

**Lum, C.M.K. (2006). Perspectives on Culture, Technology and Communication: The Media Ecology Tradition. Hampton Press.**

Lum's book offers an introduction to media ecology as a theory that encompasses a coherent body of canonical literature and perspectives on understanding culture, technology and communication. It explains some of media ecology's defining ideas, theories or themes about the interrelationship between culture, technology and communication.

**Lupton, D. (2020). Data mattering and self-tracking: What can personal data do? *Continuum*, 34(1), 1–13.**

The ‘vital materialism’ framework is interesting as it offers the opportunity to see what data ‘can do’ for users. It needs to be problematised in terms of how agency is distributed between the subject and the object, and even though this contribution is not focused on children, it can be of interest for those studying children’s datafication and how, for example, (self-tracked) data can tell the truth about something the subject may not know otherwise.

**Lupton, D. & Williamson, B. (2017). The datafied child: The dataveillance of children and implications for their rights. *New Media & Society*, 19(5), 780–794.**

This article brings together the theory of data and datafication with theories of childhood, and sets out the many – and largely adverse – ways in which children’s lives are tracked, quantified and monetised from birth. It introduces a conceptual framework centred on ‘dataveillance’ (surveillance through data collection and the construction of ‘digital data assemblages’). It complements the traditional research focus on how children use digital technologies, with an emphasis on how children are used by digital technologies.

 **McHale, S.M., Dotterer, A. & Kim, J.Y. (2009). An ecological perspective on the media and youth development. *The American Behavioral Scientist*, 52(8), 1186–1203.**

This perspective is modelled after Bronfenbrenner’s (1979) conceptualisation of the ecology of human development, and depicts the nature and range of contextual influences on youth media use.

**McMahon, C. (2019). The Psychology of Social Media. Routledge.**

A short, accessible treatment applying psychology to social media usage. Structured across the main elements of social media (profiles, connections etc.), it includes case studies from various episodes in recent history (the ‘ice bucket challenge’, A Gay Girl in Damascus, etc.), interpreted with regard to relevant theories or concepts (social capital, context collapse, telepresence etc.).

 **Media Theory (2019). Special Issue on Rethinking Affordance, 3(1).**

The Special Issue offers a theoretical overview of affordance, discussing a range of classical and new theorists.

**Mitchell, W. (2003) Me++: The Cyborg Self and the Networked City. The MIT Press.**

Mitchell first described the concepts ‘living lab’ or ‘virtual lab’ in this book, referring to an iterative process of innovation where developers of the tool/environment, users and researchers work together in the co-creation, testing, experimentation and evaluation of an ICT product. The living lab methodology is becoming more popular for involving users as designers of the product. It also enables researchers to collect data in real-life settings.

 **Plantin, J.C., Lagoze, C., Edwards, P. & Sandvig, C. (2016). Infrastructure studies meet platform studies in the age of Google and Facebook. *New Media & Society*, 20(1), 293–310.**

This article examines the characteristics of digital platforms, and makes the case that they are increasingly becoming part of society’s infrastructure (akin to the electricity or transport system). The

concepts of infrastructure and platform are insightfully contrasted in terms of their architecture, market structure, temporality, scale and user agency, among other factors.

**Ragnedda, M. & Muschert, G. (2018). *Theorizing Digital Divides*. Routledge.**

This book explores digital divides and inequalities from a theoretical perspective, presenting different perspectives and theoretical approaches in analysing digital inequalities and examples of how each theory is applied in research.

 **Rasmussen, T. (2014). [Internet and the political public sphere](#). *Sociology Compass*, 8, 1315–1329.**

This article applies Habermas' theory of the public sphere to the internet, thinking through the challenges of the digital as a platform or infrastructure for critical, rational debate.

 **Simon, J., Wong, P.-H. & Rieder, G. (2020). [Algorithmic bias and the value sensitive design approach](#). *Internet Policy Review*, 9(4).**

This article outlines the current debates on algorithmic bias and fairness in machine learning, and discusses how a value sensitive design approach could contribute to understanding the key issues.

**Taylor, E. & Rooney, T. (eds) (2017). *Surveillance Futures: Social and Ethical Implications of New Technologies for Children and Young People*. Routledge.**

This edited collection addresses the main spheres of children's lives including self, school and social life through the prism of technological surveillance and its consequences. A wide range of current and emerging technologies is identified and critically examined, in order to draw out a multidisciplinary exploration of the socio-political and ethical implications throughout childhood and youth.

 **Vanden Abeele, M.M.P. (2016). [Mobile youth culture: A conceptual development](#). *Mobile Media & Communication*, 4(1), 85–101.**

This article sheds light on the theoretical foundations of 'mobile youth culture' by first describing how culture is constituted by commonalities in adolescent mobile phone use, and then by tracing the origins of said commonalities through network analysis.

 **Wei, R. (2013). [Mobile media: Coming of age with a big splash](#). *Mobile Media & Communication*, 1(1), 50–56.**

This article draws on foundational scholarship in new media research to examine mobile media. Wei conceptually explores how the advent of mobile telephony – as a wireless telecommunication system and portable platform for human communication – has transformed the classical definition of mass communication.