

DIGITAL CAPITAL

A Bourdieusian Perspective on the Digital Divide

Massimo Ragnedda and Maria Laura Ruiu



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Praise for Digital Capital

As digital communications becomes ever more central to everyday life, work and leisure, their impact on inequality becomes increasingly profound. Is there a new 'digital capital' acquired by those who gain most from these technologies? The authors, established experts in this field, address this problem with a thorough and informed analysis of the concept, and its implications for policy and understanding.

Peter Golding, Professor, Northumbria and Newcastle Universities, UK

Taking their inspiration from Bourdieu's analysis of capital, Ragnedda and Ruiu extend the concept theoretically to the digital. Digital capital is operationalised through the creation of an index that accounts for differences in digital skills and competencies. Digital capital is then related to other forms of capital - economic, social and cultural - showing how digital capital works as a bridging capital allowing those with economic and cultural resources to use the digital to acquire ever greater advantage. This speaks to an important new wave of research on the 'third level of the digital divide' that seeks to measure outcomes. This is a highly cogent and important book both theoretically and empirically that should be of interest to sociologists of class and inequality as well as communication scholars seeking to understand the digital divide.

John Downey, Professor of Comparative Media Analysis and Head of Communication and Media, Loughborough University; Vice-President, European Communication Research & Education Association

Ragnedda and Ruiu build the field of Bourdieusian analysis of digital inequalities in their timely scholarship that speaks to key issues in the emergent field digital divide studies: theory, methodology and implications. The authors push the field forward by conceptualising and digital operationalising capital, integrating important theoretical insights with replicable empirical examination. Meeting this challenge allows their work to make real impact concerning the implications of digital inequalities for theorists, academics, policy-makers and practitioners.

> Laura Robinson, Associate Professor, Santa Clara University

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United Kingdom – North America – Japan – India Malaysia – China Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2020

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-83909-553-5 (Print) ISBN: 978-1-83909-550-4 (Online) ISBN: 978-1-83909-552-8 (Epub)



ISOQAR certified Management System, awarded to Emerald for adherence to Environmental standard ISO 14001:2004.

Certificate Number 1985 ISO 14001



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INTRODUCTION

What is digital capital? How can it be measured? And what impacts might it have on policy-makers working to reduce digital inequalities? The attempt to discuss both the theoretical and empirical implications of these questions is at the very heart of this book. More specifically, the aims of this book are threefold. First, to dig deeper into the concept of Digital Capital and clarify its theoretical framework and critical contribution, and second to propose a model to measure digital capital and third to discuss some policy implications of this theoretical and empirical tool. In order to fulfil these aims we first need to shed light onto the overall questions surrounding this work: is there a need to introduce a new capital in our theoretical baggage? Is not the plethora of capital commonly used by social scientists and media scholars sufficient to describe the different resources/materials used in our everyday life to achieve specific goals? In fact, someone could question the necessity to introduce a new specific capital, instead of including both the digital or technological components to existing 'capital' such as, e.g. economic (that might help explain different access to the ICTs) or cultural capital (different technological skills). Furthermore, even if we introduce a new capital in our research toolkit, can we empirically measure it? Finally, what would be the impacts of this theoretical and empirical model for policy-makers and stakeholders who monitor citizens' digital inclusion level?

This book proposes both a deeper conceptualisation of digital capital as a specific capital and its operationalisation for empirical exploration and measurement. By conceptualising and providing some guidelines for future research on the measurability of digital capital as a specific capital, we are contributing to the lively debate on digital technologies and their impacts on our everyday life. Furthermore, this book also provides policy-makers with a tool that might facilitate the development and monitoring of initiatives addressed to tackle both digital and social inequalities. As we shall see throughout the book, the theorisation of this new concept is based on a preliminary definition provided by Ragnedda and Ruiu (2017) and further reinforced by Ragnedda (2018). However, this book will show some advances in terms of combining both empirical and theoretical approaches to answer the above-mentioned questions about the legitimacy of using a new capital in an extra economic way and contextualising its theoretical contribution in a Bourdieusian perspective. Measuring digital capital means taking into account its multidimensionality, which is not only represented by the material resources that enable the physical access to ICTs but also by the interiorised competences and attitudes that contribute towards increasing the individual level of digital capital. As we shall see, the individual level of digital capital influences both qualities and types of online activities and also the benefits and tangible outcomes we get from accessing and using the Internet. This interpretation also suggests that digital capital can become a valuable tool to explore and tackle the multidimensionality of digital inequalities and their related levels of digital divide (Ragnedda, 2017). As highlighted throughout the book, given its bi-dimensionality (which includes both physical access and digital competences), digital capital interacts with the inequalities in accessing (first level of digital divide),

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inequalities in using (second level) and inequalities in terms of benefits and tangible outcomes (third level). In this vein, this book shows how the constitutive elements of digital capital dialogue with the first two levels of digital divide by facilitating/hampering access to and use of ICTs. Furthermore. it also highlights the bridging nature of this capital that is also connected to the third level of digital divide by producing different tangible outcomes deriving from the interaction between digital capital, different digital experiences and offline capitals. In this direction, this book suggests that the identification and quantification of digital capital is essential to understanding how the individual level of digital capital can contribute towards expanding (or by contrast narrowing) digital inequalities, which in turn play a role in (re)producing social inequalities. Therefore, the utility of this capital is expressed not only in terms of providing scholars with a tool for investigating the intertwined relationships between social and digital inequalities but also informing policy-makers about the digital accumulated experience of people in society and how this could impact individuals' everyday life. This is particularly important in policy-making that aims to address digital/social inequalities through inclusive initiatives that are tailored upon individuals' needs. In fact, in order to both enhance a high-quality online experience (shrinking the second level of digital divide) and foster users' capacities to benefit from the use of ICTs (mitigating the third level of digital divide) the investigation of both competences or access is vital to increase citizens' life chances and, in the long run, to reduce social inequalities.

The digital age has triggered the rise of inequalities that are in part a reflection of the traditional offline inequalities. This book shows the need to introduce a new capital as a theoretical tool to shed light onto the inequalities in the digital age. This is supported by the need for developing a model to

measure both the quality and quantity of digital experiences and the benefits that users can earn from accessing and using the Internet. In order to fill this gap in the literature, we are also attempting to operationalise digital capital as a cumulative and transferable capital, simultaneously specific and intertwined with the other five forms of capitals, namely social (Bourdieu, 1983; Coleman, 1990; Putnam, 1995), political (Mouzelis, 1995; Syed & Whiteley, 1997), economic (Bourdieu, 1983), personal (Becker, 1996; Dei Ottati, 1994) and cultural capitals (Bourdieu, 1983). This work provides, then, both a theoretical and an empirical tool for measuring digital capital, which can be applied for replication and comparison in different social, cultural and geographical contexts. Both the theorisation and operationalisation of this new capital are essential to understanding its interaction with other capitals and its contribution towards digital and social inequalities.

As shown by the first chapter of this book, the theorisation of this new capital is drawn from the definition of digital capital as a set of both digital competencies and digital technologies. In this book we move one step forward by operationalising digital competences by using the European Digital Competence Framework for Citizens (Carretero, Vuorikari, & Punie, 2017), and digital technologies, by referring to the literature with a focus on the way users access and use ICTs. Chapter one takes into account the bi-dimensionality of digital capital, which is not only represented by the physical and material access to digital devices (Van Deursen & Van Dijk, 2019) but also by those digital competences that facilitate the digital experience and, in turn, transform such experience into externally observable outcomes. The two constitutive elements of digital capital - digital competences and digital accesses - can be accumulated and transferred from one arena to another, to increase what Max Weber (1949) defined as individual life chances. Cumulability and transformability are,

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according to Bourdieu, constitutive components of any capital (Ignatow & Robinson, 2017: 952). For this reason, the Bourdieusian capital lens adopted in this book provides a framework for conceptualising and measuring digital inequalities. Digital capital, therefore, can be at the same time accumulated over time (thanks to the cumulability of both technologies and competences) and converted into social, political, economic, personal and cultural capitals (thanks to the outcomes deriving from the digital performance). The results of this accumulation are visible both on the online realm, by influencing the second level of digital divide, and in the offline realm, by increasing the third level of digital divide. In this vein, one of the driving ideas of this book is that in a digital reliant society, where an increasing number of services and resources have moved online, the level of digital capital is vital to confidently use the Internet and to be able to capitalise the use of ICTs for improving life chances. What this book argues is that in order to efficiently operate and move in the information age (Castells, 2011) or information society (Feather, 2013) and be both digitally and socially included, individuals need a certain level of digital capital. In Bourdieusian terms, therefore, digital capital is required to inhabit and operate successfully within the digital arena and to get the most out of it. However, since the difference between online and offline is blurring and since social and digital inequalities are so firmly intertwined, digital capital is increasingly important in individual everyday life, where, first, the access to ICTs and, then, the competences in using them are vital elements to operate in a digital enabled society. Digital capital, therefore, sounds particularly relevant in several specific fields of human life, such as job-related activities, social networking, leisure and welfare services, in which digital access and digital competences are increasingly a necessity, and not a simple option. Digital capital, as we shall see, like other kinds of

capital, is unequally distributed and, as such, tends to reinforce and influence social inequalities. It is a concept that will become vital for digital sociologists and for those scholars who investigate digital inequalities and their effects on the society and everyday life. Digital capital is a concept usurped by economic studies to highlight the nature of 'assets' physical/ intangible to invest in everyday life, to foster individuals' capacity to move up on the social ladder by confidently and properly using digital technologies. The conceptualisation here proposed, moved away from the 'economic' theorisation proposed, among the others, by Tapscott, Lowy, and Ticoll (2000) and Roberts and Townsend (2015) who have used the notion of digital capital to describe the resources upon which the development of new products and services rely in the digital economy. In our approach, digital capital is an important notion that helps shed light onto the multidimensionality and intersectionality of digital inequalities and offers an important conceptual and empirical tool to measure digital divide.

However. both the conceptualisation its operationalisation/applicability require a deep analysis and discussion. In order to respond to these questions and shed light onto the measurability of digital capital as a specific capital, the book is structured into three chapters that respond to three different necessities. First, the need to provide scientific support to the theorisation and conceptualisation of this new concept. Second, the need to operationalise digital capital by developing a model that could be replicated in different contexts. Finally, the need to reflect upon its implication for policy-making. More specifically, the first chapter presents the relevant literature that contributed towards defining the concept of digital capital, thereby extending Bourdieu's field theory. This chapter digs deeper into the theorisation of this concept, by explaining how and why digital capital should be conceived as a specific capital, and not as a mere subset or

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special category of other capitals. The proposed notion of digital capital should be seen as an attempt to integrate the existing approaches of 'capitals' into one comprehensive conceptualisation which can enable to better grasp the intertwined relationship between social and digital inequalities. After providing a definition of digital capital, the methodological approach is described. In the second chapter, we shall look at its constitutive components, by explaining and discussing the reasons why specific components are essential to measuring digital capital. Furthermore, in this chapter we report and discuss some empirical data that were used to test the validity of the Digital Capital Index. Finally, the third chapter discusses the implications of this new concept and its related empirical application on policies and initiatives (both public and private) addressed to tackle digital inequalities. We shall specifically pay attention to policy-making approaches in dealing with digital inclusion and why this model might be useful to tackle both digital and social inequalities. This chapter envisages policy-makers to use this model for monitoring the level of digital inclusion, both at micro and macro level. At the same time, it might be used to develop policies tailored on those who need them the most. Finally, the conclusions highlight future directions for research in this field. This conclusive chapter shall reflect upon the major findings as a whole, and points towards the future needs of the field. It will draw together the comparative points not otherwise articulated in the different chapters.