POLITICS AND TECHNOLOGY IN THE POST-TRUTH ERA

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POLITICS AND TECHNOLOGY IN THE POST-TRUTH ERA

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Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2019

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British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN: 978-1-78756-984-3 (Print)
ISBN: 978-1-78756-983-6 (Online)
ISBN: 978-1-78756-985-0 (Epub)

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Chapter 1

Politics and ICT: Issues, Challenges, Developments

Anna Visvizi and Miltiadis D. Lytras

> Previous industrial revolutions liberated humankind from animal power, made mass production possible and brought digital capabilities to billions of people. This Fourth Industrial Revolution is, however, fundamentally different. It is characterized by a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human.
> (Schwab, 2017)

Technological advances have been altering the dynamics of social interaction and societal processes ever since, with each subsequent industrial revolution bringing about new implications for our societies and economies, and thus for the political process and politics. The nature and scale of technological advances that influence socio-political and economic landscapes today make the correlation between technology and society seemingly more complex, more pervasive, and more challenging to comprehend (Visvizi et al., 2018; Ordóñez de Pablos & Lytras, 2018; Pérez-delHoyo, et al., 2018). Indeed, the context in which contemporary socio-political processes unfold defies easy categorizations. In many instances, the scale, the multivaried nature, and the pace of developments in world politics and economics make it challenging to identify the causal relationship behind them on the spot. Given the pace of information diffusion these days, in absence of imminent evidence-based explanations, room is created for perceptions and opinions to step in the debate and effectively crowd out objective facts.

Touted as "post-truth", this specific condition characterizing contemporary politics and society has been defined in a number of ways, sparkling a vivid debate in academia and elsewhere (D'Ancona, 2017; McIntire, 2018; Lewandowsky et al, 2017; Rochlin, 2017). In brief, it denotes the condition in which appearances are given priority over objectivity, and so interpretations, emotional and subjective assessments and evaluations cloud the essence of things and so the truth. What

Politics and Technology in the Post-Truth Era, 1–8
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doi:10.1108/978-1-78756-983-620191001

is particularly worrying are the implications of the prevalence of assumptions and unfounded interpretations for the social and political processes. A case can be made that by viewing the reality through the prism of frequently misjudged assumptions, rather than through the lens of objectivity, leads the members of our societies to a self-assuring oblivion, self-complacency and muted alertness to pressing needs and challenges that our societies face (Visvizi, 2018).

Considering the dialectical relationship between technological advances and post-truth, and the impact they have exert on politics and society today, the objective of this volume is to offer an insight into "the what," "the how," and the "to what end" pertinent in the discussion on information and communication technologies (ICT) and politics at macro-, mezzo-, and micro-levels of politics and policy making.

This edited volume brings together and discusses critically the well-established, emerging, and nascent concerns and questions related to the impact of ICT on our societies, especially on the field of politics. By embedding the discussion in a broad conceptual framework and reaching out to case studies, this volume offers a journey into technological advances and showcases how sophisticated technology impacts politics and the policy-making process around the world today. By integrating views and insights from several continents and by focusing on several issue areas, this edited volume serves as a primer on the emerging and contentious relationship between the promise and the potential ICT holds for politics.

The chapters included in this volume take a multi- and inter-disciplinary take on the role of ICT in shaping diverse layers of politics in its local, regional, and global outreach. Drawing on their extensive experience in academia, politics, and the think-tank sector, the authors contributing to this volume elaborate on the intricacies of technologies and paradigms that shape the field of technological innovation today such as the big data paradigm, data mining, data analytics, social media mining methodologies and sentiment analysis, cognitive computing and artificial intelligence, virtual reality, augmented reality, and blockchain technologies. These are then applied to real-life events and/or processes to demonstrate the inseparability of ICT and politics today. The authors contributing to this volume query the prospect and the potential related to open data, data analytics, and data mining for data-driven decision process in view of optimizing the performance of public administration and promoting a healthy relationship between the public and the private sector. The chapters included in this volume dwell also on a variety of issues bound to steer the debate on privacy in times of data mining. Moreover, drawing on the case of Snowden, questions of civic responsibility, safety, and national security are upheld. Fig. 1 mirrors the variety of topics and issues that the authors contributing to the volume have dealt with.

The chapters included in this volume pertain to all spheres of human interaction, including private life, wellbeing, civic engagement, as well as democracy. Questions of safety and security have been also examined carefully both in connection to citizens' privacy and freedom from unauthorized use of their personal data and to questions of cyber warfare. Equally important in the debate in the

Fig. 1: Politics and Technology Word Cloud.

volume have been questions of ethical dilemmas that the ICT and its use generate. The notion of the regulatory framework within which ICT and its impact on our societies unfolds has gained attention in the book too. Overall, the 19 chapters included in this volume have been grouped in three thematic parts covering democracy, security, and policy making. Fig. 2 offers an overview of the key topics and issues discussed in the volume.

The chapters included in this volume introduce the reader into a great number of case studies. Together, they mirror several of the most topical processes and trends that define the fields of domestic and international politics these days. Specifically, the following country case studies have been included in this volume, alphabetically: Angola Belarus, Brazil, Egypt, Russia, Saudi Arabia, Taiwan, China, Tunisia, the United States, and Zimbabwe. The authors upheld such topics as cyber warfare and propaganda, questions of surveillance in context of national security, issues pertaining to data collection and processing, also as seen from the regulatory perspective. The case of Snowden was discussed in detail, albeit from different perspectives in two chapters. E-government initiatives have been queried. The geographical focus of the discussion covered areas such as Central and Eastern Europe (CEE), Western Balkans, the Arab World, Sub-Saharan Africa, North America, and Asia.

Following this introduction, in Chapter 2 titled "From the Freedom of the Press to the Freedom of the Internet: A New Public Sphere in the Making?" Cláudia Toriz Ramos explores the synergies that emerge among ICT, democracy promotion, transparency, and the state-building process. By focusing on the cases of Tunisia, Egypt, Angola, and Zimbabwe, the author examines in which ways the internet, seen as a "public sphere" for processes of regime transition, may serve as a mean of promoting democracy and freedom of speech.

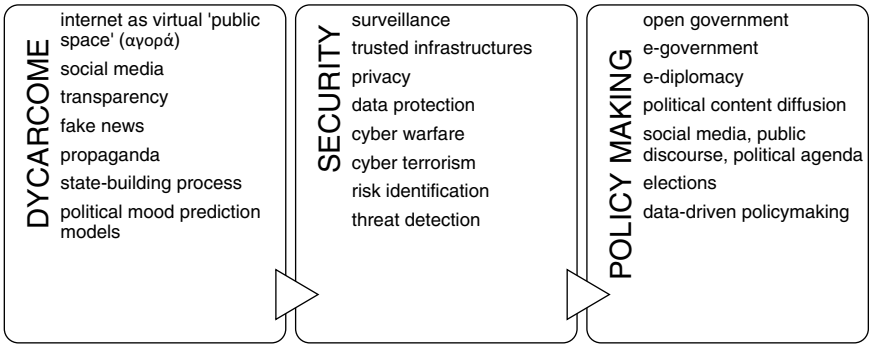

Fig. 2: Politics and ICT: Key Issues and Areas Influence.

In Chapter 3, Marçal Mora-Cantallops, Zhengqi Yan, and Salvador Sánchez-Alonso discuss the patterns of political content diffusion in social networks. As the authors argue, over the past few years, ICT and social media have become increasingly relevant to politicians and political parties alike, often used to issue statements or campaigning, among others. At the same time, citizens have become more involved in politics, partly due to the highly interactive and social environments that the social networking services provide. Political events flow through these networks, influencing their users; such events, however, often start offline (outside the online platform) and are, therefore, difficult to track. Event studies, a methodology often used in financial and economic studies, can be translated to social networks to help modeling the effect of external events in the network. Accordingly, the event study methodology is applied to two cases, including the tariff war between the United States and China, with multiple responses and retaliations from both sides, and to the Brexit referendum.

In Chapter 4, titled "Contemporary Politics and Society: Social Media and Public Engagement in Belarus," Victor Shadurski and Galina Malishevskaya employ the case of Belarus and the contradictions inherent in its socio-political model to showcase how the onset of the ICT and therefore the evolution of the means of spreading information amplifies these contradictions. To this end, the authors highlight the increased engagement of the state authorities in the online information domain. Interestingly, the authors elaborate as well how the remaining stakeholders, including opinion leaders, activists, and bloggers, can use the online information domain to make their cases. The chapter includes case studies detailing how exactly information technologies and online communication contribute to the formation of a new socio-political agenda in the country. The key examples relate to situations where, owing to extensive public engagement and support for online appeals, it became possible to use mechanisms of legitimate influence on government decision making and bring to account officials responsible for concealing information.

The following Chapter 5 adds to the discussion on social media by offering a more nuanced view of methodologies enabling targeted and purposeful use of social media as a tool of policy making. Indeed, in the chapter, titled "Modeling

Public Mood and Emotion: Blog and News Sentiment and Politico-economic Phenomena," Mu-Yen Chen, Min-Hsuan Fan, Ting-Hsuan Chen, and Ren-Pao Hsieh discuss the exploitation of advanced computational techniques, such as text mining and sentiment analysis in social media. By focusing on the value added of big data mining and analysis, the authors demonstrate how to use information otherwise contained to the spheres of political blogs and news articles to build a public mood prediction model. The authors focus specifically on the stock market and Taiwan. Clearly, selected insights from their research might well be employed in political analysis.

Chapters 6 and 7 are devoted to the General Data Protection Regulation (GDPR) introduced in the European Union (EU) on May 25, 2018. Nikolaos Dimisianos, in his chapter titled "Political Campaigns, Social Media and Analytics: The Case of the GDPR," discusses the impact of sophisticated technologies on political campaigns' design, management, execution, and impact. The author examines in which ways social media, social media analytics, and disruptive technologies are combined and leveraged in political campaigns to increase the probability of victory through micro-targeting, voter engagement, and public relations. More specifically, the importance of community detection, social influence, natural language processing and text analytics, machine learning, and predictive analytics are assessed and reviewed in relation to political campaigns. Data processing is examined through the lens of the GDPR and its provisions. The author concludes that while data processing during political campaigns does not violate the GDPR, electoral campaigns engage in surveillance, thereby violating Articles 12 and 19, in respect to private life, and freedom of expression accordingly, as stated in the 1948s Universal Declaration of Human Rights. From a slightly different angle, Chapter 7, titled "Assessing Compliance of Open Data in Politics with European Data Protection Regulation," authored by Francesco Ciclosi, Paolo Ceravolo, Ernesto Damiani, and Donato De Ieso, examines the compliance of open data, as applied in politics, with the GDPR requirements. Particular attention in this context is paid to legal questions pertaining to the data processing procedures, including open data licenses and anonymization techniques.

Chapters 8 and 9 uphold the big question of government surveillance in the United States following the case of Snowden. Specifically, in Chapter 8, titled "ICT, Politics and Cyber Intelligence: Revisiting the Case of Snowden," Emanuel Boussios investigates how cyber intelligence and cyber terrorism impact national security, surveillance, and privacy. The author focuses on a critical issue in cyber intelligence in the United States that concerns the engagement of state-owned, or state-controlled, entities with overseeing citizens' activity in cyberspace. The emphasis in the discussion is placed on the constitutionality of state actions and the shifting boundaries in which the state can act in the name of security to protect its people from the nation's enemies. The case of Snowden, discussed in this chapter, reveals the US government's abuses of this surveillance machinery prompting major debates around the topics of privacy, national security, and mass digital surveillance. In a similar manner, in Chapter 9, titled "Government Surveillance, National Security, and the American Rights: Using Sentiment Analysis to Extract

Citizen Opinions," Lily Popova Zhuhadar, and Mark Ciampa, discuss the case of Snowden to examine citizens' opinions about privacy and security.

Questions of national security and threat to national security born in cyberspace are the focus on the following chapter (Chapter 10). Aleksandra Kuczyńska-Zonik and Agata Tatarenko in their chapter titled "Information Security Risks in the Context of Russian Propaganda in the CEE" outline the problem of information security in Russia and CEE countries since the year 2000. The authors demonstrate the specifics of Russian propaganda in the CEE, which visibly poses a security threat to those countries. The authors present the evolution of Russian information policy, propaganda, its tools, and instruments, including traditional and social media.

In Chapter 11, titled "The ICT and its Uses: Fighting Corruption and Promoting Participatory Democracy – The Case of Romania," Cristina Matiuta examines ICT, online communication, institutional transparency, anticorruption, and participatory tools as an integral approach to engaged citizenship. As the author argues, the Internet and digital technologies have become part of our life, essential for several daily activities and new powerful means of communication as well, able to invigorate the traditional forms of interaction between citizens and public institutions. The chapter examines their spread across the EU, and particularly in Romania, and their potential to promote transparency and accountability within the public institutions, to fight against corruption, and to expand citizens' social mobilization. Even if Romania has much to do to provide quality online public services, to increase the efficiency in public administration, and to improve the communication between citizens and institutions, the examples and best practices mentioned in the chapter highlight the potential of ICT both as anti-corruption and participatory tools.

In Chapter 12, Higinio Mora, Francisco A. Pujol López, Julio César Mendoza Tello, and Mario R. Morales discuss the role of virtual currencies in modern societies, especially the challenges and opportunities they generate. As the authors argue, virtual currency is a digital representation of value that is neither issued by a central bank nor issued by a public authority. Its reliability is based on advanced cryptographic methods which provide privacy and confidence to citizens. Virtual currency and its underlying technologies such as blockchain or smart contracts trigger transformation in many areas of the society's functioning. Cryptocurrencies in this view constitute a good example of how specific technology may lead to substantial transformation of the world. Still, virtual currencies could benefit from the versatility of collaborative communication of social media and Internet to promote and develop new commerce and business initiatives as well as new forms of financial flow managements.

Chapter 13, titled "Digital Diplomacy in Practice: A Case Study of the Western Balkan Countries," by Gorazd Justinek, Sabina Carli, and Ingrid Omahna, addresses the link between ICT and digital diplomacy. The focus of this chapter is directed at Western Balkans and efforts invested in the promotion of Open Government in the region. As the authors argue, global mass communications and advances in ICT present a new challenge to the traditional way of conducting international relations. While the mode of conducting diplomacy is changing, diplomats are forced to communicate with many new actors in the international stage through new means of communication. The chapter overviews the existing digital

diplomacy research reports. Against this backdrop, it presents the outcomes of a 2017–2018 study of communication strategies employed by six countries of the Western Balkans, including Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia.

The role of ICT in enhancing citizens' involvement in the day-to-day policy making is showcased in Chapters 14, 15, and 16. Both chapters offer detailed case studies, pertinent to Brazil and Saudi Arabia, respectively. The discussion in Chapter 14 revolves around social media and politics. The chapter titled "Social Media and the Brazilian Politics: A Close Look at the Different Perspectives and 'The Brazil I Want' Initiative," by Cleber Pinelli Teixeira, Jônatas Castro dos Santos, Reisla D'Almeida Rodrigues, Sean Wolfgand Matsui Siqueira, and Renata Araujo, provides an excellent case study depicting how to use social media in a positive manner. In the context of Web 2.0., social media have established themselves as a part of citizen's daily routine. Hence, social media have a direct impact on politics today. This chapter examines this phenomenon and its implications for politics by tracing and examining the recent initiative launched by Rede Globo aimed at collecting citizens' views and visions on Brazil's future. "The Brazil I Want" project sought to encourage citizens to publish videos featuring their visions and views of Brazil's future. Thousands of citizens used this opportunity to express their concerns and hopes related to the future of their cities and their country. This chapter demonstrates to what extent and how social media can serve as source of information, to feed the policy-making process in view of boosting its efficiency and, thus, a society's wellbeing.

In Chapter 15, Stuti Saxena **e**valuates the national Open Government Data (OGD) portal of Saudi Arabia. As the author highlights, OGD, a philosophy and set of policies, gains on momentum today. Believed to promote transparency, accountability, and value creation by making government data available to all, OGD constitutes a yet another field in which the interlocking relation between technological advances and politics can be studied. Using the national OGD portal of the Kingdom of Saudi Arabia as a case study, the author evaluates the portal to underline the significance of maintaining the quality of the datasets published online. The findings suggest that there are many drivers to re-use the datasets published via the portal. At the same time, however, there are barriers to re-use the datasets on account of the non-publication of updated datasets. Implicitly, quality of the datasets should be improved. More involvement of the government agencies is required for contributing toward the datasets. Also, user involvement should be promoted by encouraging them to contribute to the datasets and lending recommendations for the improvization of the datasets published via the portal. The case of Saudi Arabia is elaborated in further detail in Chapter 16. Hussein Alhashimi examines the features and implications of the e-government initiative, especially as applied in the field of financial transactions and their transparency.

In Chapter 17, Gloria H. W. Liu and Cecil E.H. Chua examine the local politics behind large information systems projects to showcase how arduous a process it can be. As the authors explain, getting the top management support for projects of this kind is often difficult, because top management has multiple priorities. Political maneuvering is thus an integral and necessary part of the process of

obtaining top management support. In Chapter 18 Katarzyna Żukrowska examines the ICT market and the role of ICT in the global economy. As the author argues, the analysis of the relationship between ICT and politics would be incomplete if the direct and indirect influence ICT exerts on international economy was not considered. This chapter examines the features of the international trade in ICT seen as a complex reflection of the current stage of liberalization achieved at the forum of the World Trade Organization (WTO) and subsequent spillovers to other domains of economic and political collaboration worldwide. It is argued that ICT and its development not only result in the "shrinking of the distance" in the world economy but also stimulate economic liberalization, further reshuffling production from more- to less-advanced economies, and, finally, help to overcome trade imbalances on the global scale. In brief, a case is made that ICT creates the conditions conducive to the enhancement of international political and economic collaboration. The discussion in the volume concludes with a Chapter by Miltiadis D. Lytras and Anna Visvizi, titled "Conclusion: ICT and Politics – Taking Stocks of the Debate," where the editors of the volume take stocks of the points and ideas presented in the volume to highlight both the new avenues of research pertinent to the fields and their potential application in socio-political life.

By bringing together research reflecting on developments in Europe, the United States, Asia, and Africa, this edited volume serves as a primer on the emerging, sometimes contentious, but overall misunderstood, relationship between the promise and potential inherent in ICT and the world of politics. The editors are hopeful that the book will prove useful for students, researchers, and practitioners working in the fields of politics, international relations, and computer science.

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