

A University of Sussex PhD thesis

Available online via Sussex Research Online:

http://sro.sussex.ac.uk/

This thesis is protected by copyright which belongs to the author.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the Author

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the Author

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given

Please visit Sussex Research Online for more information and further details

UNIVERSITY OF SUSSEX

Virtual Cosmopolitics and Global Ethics: An Analysis of Transnational Global Justice Movements across Social Media Networks

Oliver Hall

Student Number: 21415991

Qualification: Doctor of Philosophy (PhD)

Supervisors: Professor Gerard Delanty and Dr James Hardie-Bick

Number of Words: 79,534 September 2020

DECLARATION

I hereby declare that this thesis has not been and will not be, submitted in whole capart to another University for the award of any other degree.	or in
SignatureOliver Hall	

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my supervisors Professor Gerard Delanty and Dr James Hardie-Bick for not only their expertise, attentive guidance and encouragement throughout this project, but also for their unwavering patience due to its particular longevity. I am immensely indebted to them for their part in vastly improving my arguments, developing my academic voice and for the academic opportunities presented to me during my PhD career.

I would also like to give a special thanks to my wife Abhilasha who has—as always—been an incredible source of support, inspiration and motivation. A project of this time-scale would have been impossible without her shared commitment. Lastly, I also need to thank my family for their support and consideration especially during my frequent periods of absence.

UNIVERSITY OF SUSSEX

Oliver Hall 21415991

Doctor of Philosophy (PhD)

Virtual Cosmopolitics and Global Ethics: An Analysis of Transnational Global Justice Movements across Social Media Networks

ABSTRACT

Global ethics in recent scholarship has been understood in largely substantive terms as constituting a normative set of political principles, cultural values and religious moral imperatives. It has thus been commonly understood as a type of strong moral universalism with prescriptive moral frameworks rooted in foundational principles. In contrast, this thesis understands a global ethics in sociocognitive terms in ways of thinking, feeling and acting; it is found in a moral consciousness of the need for an ethics on a planetary scale which is articulated in emotional responses to global issues within critical publics throughout the world and embodied in ethico-political practices that shape common struggles around a global justice politics that extends beyond national frames of reference. By this understanding, its conceptual indicators can be seen in discourses of co-responsibility emerging around perceived global threats that can generate social bonds in transnational solidarities and collective-identities. Understood through the normative perspective of critical cosmopolitanism, this study examines a global ethics—as emerging out of a critical way of seeing the world, in moral evaluations and critical diagnoses of social conditions—articulated in cross-national political projects which are digitally mediated in social media networks. There has been scarce scholarship on the relationship between digital technology and a global ethics—a gap this thesis fills by focusing on the way in which global ethics today arises within interactive, creative and collaborative digital spaces built across social media networks. Despite its imbrication in new digital systems of exploitation, domination and surveillance capitalism, the central argument of this thesis is that social media networks open digital spaces integral to expressions of a post-traditional ethics today: as a new global communications ecology, they have (a) heightened our sense of moralpractical reflection toward the non-human world and the universe of distant others and (b) offered digital symbolic spaces within which to build collective action frames in response to global risk through building shared antagonisms, common meanings and radical imaginaries of alternative futures which can mobilise collective actions, in multiple urban spaces, across the globe. To support this central argument, the thesis draws on the recent cross-national cases of digital activism in response to global problems in the form of the Occupy Everywhere, Friday-For-Futures and Global Frackdown movements. These movements exhibited network practices that displayed social, symbolic and cognitive articulations of a cosmopolitan citizenship.

Key Words: Global Ethics, Global Justice, Virtual Cosmopolitanism, Digital Symbolic Spaces

Table of Contents

Introduction	1
Social Media and Social Movements	2
Justice, Cosmopolitanism and Post-Traditional Ethics	4
Structure of the Thesis	6
Chapter 1: Digitising the Social: The Internet, Mediated Sociabilit	y and 9
From Analogue to Digital Modes of Societal Organisation	9
Everyday Life in the Postdigital Society	13
Internet and Society: Beyond Optimistic and Pessimistic Narratives	16
Virtual Conceptions of the Social: Negative or Positive/Fake or Real?	21
Virtual Aggregations: Socio-Spatial Enclaves or Communities of Alterity?.	25
The Virtual Community as a Communication Community	27
Chapter 2: (In)Between Digital Domination and Liberation: Digital Surveillance and Democratic Resistance	al 30
The Information Society: Reality or Ideology?	30
Digital-Labour, Surveillance Capitalism and New Modes of Power	37
Cyberactivism, Social Media Networks and Networked Social Movements	
Social Media Networks and its Symbolic Politics	46
Complex Internationalism, Global Flows and Transnational Politics of Glo	bal Justice
In Conclusion	
Chapter 3: Social Media and a Radical Politics: the Digital Mediat Transnational Politics of Global Justice	ion of a 51
Example 1: The Occupy Everywhere Movement—15th October, 2011	51
Example 2: The Global Frackdown Movement—19th October, 2013	59
Example 3: The Fridays-For-Future Movement—15 TH March, 2019	63
Social Media Networks and Global Justice as a Politics of Multiplicity	66
In Conclusion	67
Chapter 4: Global Justice and the Prospects for a Virtual Cosmopo	
Global Justice and Cosmopolitanism	
Virtualising Social Capital: Bonding or Bridging?	

The Virtualisation of Cosmopolitanism	75
Global Justice as a Virtual Cosmopolitics	78
In Conclusion	83
Chapter 5: Virtual Cosmopolitics and Global Ethics	84
The Concept of Global Ethics	84
Liberal, Substantive and Responsibility Foundations to Global Ethics	86
Discourse Ethics and Global Ethics	89
Affect Theory and The Emotional Structures of Global Ethics	90
Social Media Networks and the Possibility of Post-Traditional Ethics	93
Networked Publics, Solidarity and Post-Conventional Belonging	96
In Conclusion	98
Chapter 6: Global Ethics and The Virtual Prospects for a Cosmop Citizenship	olitan 99
Indicator 1: Discourses of Co-Responsibility as a Global Ethics	99
Social Media Networks and Discourses of Co-Responsibility	101
Indicator 2: Transnational Solidarity Networks as a Global Ethics	104
Social Media Networks and Transnational Networks of Solidarity	107
Indicator 3: Collective Identity as Global Ethics	109
Social Media Networks and Collective-Identity	111
From National Citizenship to Cosmopolitan Citizenship	112
In Conclusion	115
Conclusion	116
Bibliography	

Introduction

As an integral part of our new global communications ecology, social media platforms now play a significant role in the mediation of contemporary social relations. By constituting 'a group of [i]nternet-based applications that build on the ideological and technological foundations of web 2.0 and that allow the creation and exchange of user-generated content' social media platforms have spread across the world and entangled themselves within the fabric of our everyday lives. (Kaplan and Haenlein, 2010: 60). In 2020, it is estimated that these social platforms are now used by 3.96 billion people or 51% of the human population and its annual growth rate reached approximately 10.5% (376 million), 1 million a day or almost 12 every second (Datareportal, 2020). In our contemporary societies, these social media networks now constitute dominant cultural platforms through which dense flows of social, political and economic activity disperse continuously across its networks; we use them to access information, to organise and maintain our intimate, professional and social relationships, to advance our careers, to express and build our sense of selfhood, to pursue our sense of belonging in communities, to participate in forms of civic engagement and to engage in politics. With this increasing use of social media networks to mediate most aspects of our everyday life, there is an ongoing debate which is centred around the question: do social media produce positive or negative outcomes for society? Answers to this specific question have primarily fallen into two opposing perspectives: the cyber-optimists and the cyber-pessimists. For the optimists, social media have enabled its users to communicate, connect and exchange information within digital spaces that allow new forms of collaboration, creativity and knowledge production (Gauntlet, 2011; Shirky, 2010). For the pessimists, social media are viewed as creating new types of social pathology—from depression by exerting pressures to conform to perfect depictions of body-image, identity and relationships (Ormerod, 2018) to exacerbating societal loneliness (Keen, 2012; Turkle, 2011) and deepening addiction of its users through perpetual cycles of dopamine hits generated by its feedback loop of social approval, attention, shares, likes and views (Seymour, 2019; Lanier, 2018). This view of social media also highlights the impact of its attention economy, a new political-economy of digital capitalism that generates surplus-value by the mass extraction, storage and analysis of its users' metadata that is created as an outcome of all social activity. As a source of surplus, this attention economy has given rise to new massifying modes of dataveillance (search histories friendship networks and spatial movements) and a new species of power that seeks to use this data to influence, predict and control human behaviour (Zuboff, 2019).

Both these perspectives have merit by drawing our attention to new forms of sociality as well as new systems of power that have been afforded by social media platforms, but they both suffer from an oversimplified either/or zero-sum logic where its positive or negative consequences outweigh its counterpart. Moreover, these positions can also be seen to be rooted to some extent within wider perspectives on technology which view it in instrumental terms as a neutral tool that produces positive effects or in substantive terms as non-neutral imbued with interests that produce largely negative outcomes. This thesis positions itself in-between the binary logic of these cyber-optimistic and cyber-pessimistic positions by presenting a case for a two-fold view of technology as consisting of both a cultural artefact with valuative content and the exact ends to which its uses is directed by its operators. This two-fold view of technology reflects both the

material and the symbolic aspects of social media as a communications medium. The materiality of social media extends to its infrastructures, software and hardware and constitutes it as a cultural artefact which informs its symbolic dimensions ie, the social affordances to which it can be used to produce, transmit and receive meaningful symbolic forms across space-time. The material dimension points to its status as a private infrastructure which constitutes a system of asymmetrical power relations where its infrastructures are built on a new political-economy of digital capitalism in which all activity across its networks form new sources of surplus-value. A central argument of this thesis is that this new mode of power is not just a natural outcome of digital technology itself, but a distinct 'consumption model' with a specific commercial logic: a neoliberal logic orientated to the maximisation of profits supported by dataveillance systems. Uses of social media networks also inhabit an opposing logic—a 'community model' that serves social life by the role it plays in social relations, democratic debate and political mobilisations. In contrast to optimistic and pessimistic perspectives, this thesis takes a cyber-realist perspective which acknowledges that, in our complex technological societies, social media signify dominant spaces in which ongoing struggles between networks of domination and networks of liberation play-out (Lindgren, 2017: 22). While accepting that this neoliberal logic is a contextual factor, social media networks as a new communications ecology also represent significant spaces today for new forms of resistance to power and towards subnational, national and transnational issues ie, as communication tools to organise an extra-institutional politics in the collective-actions of mass-protests, marches and civil disobedience that stretch across vast geographical distances. The focus of this thesis, therefore, is on the way in which social media networks are used in the mobilisation of collective-actions across borders in response to the threats posed by global risks.

Social Media and Social Movements

With its worldwide propagation, social media platforms have now become increasingly used in mobilizing and coordinating collective actions across the world. From the Arab Spring uprisings across Tunisia, Egypt and Syria, the Los Indignados, in Spain, Extinction Rebellion, in London, and the #MeToo movement to the Occupy movement. As this introduction is being written, the Black Lives Matter movement has utilised social media networks to frame shared antagonisms around the structures of institutionalized racism, police brutality and injustice and to build a collective imaginary of alternative futures of racial justice that has spread across the world. But, what role do social media play in the mobilisation of collective actions across social movements? There are various narratives which have offered different answers to this question. In popular journalistic commentaries, the role of social media in collective action has been understood as a relationship of causality, that is, a universal narrative of technological causation that explains mobilisations without reference to its sociohistorical, cultural and political contexts. This overly optimistic narrative is rooted within a strong expression of technological determinism and is evidenced in reports of the Arab Spring uprisings which labelled these protests as the 'Facebook and Twitter Revolutions' (Taylor, 2011). In other commentaries, the internet and social media are viewed as inaugurating a new type of networked social movement by its capacity to equalise power relations through its horizontal transmission of information, ideas and communications (Castells, 2012; Mason, 2015; Diamond, 2012). This 'equalisation thesis' views digital networks as a unique technology that revolutionises communications and by extension institutes a distinct qualitative change to society by democratising its structures of power through the equal access and distribution of information across its horizontal networks (Hara and Huang, 2013: 494).

Again, this narrative attributes too much explanatory power to distinct properties of networking technology which itself is seen to determine the specific nature, mobilisation and emancipatory potential of networked social movements. The celebrated nature of horizontality feeds into the idea of the internet and social media as inhabiting a mythic status, as Mosco (2005) comments, [t]he internet provides the basis for a powerful myth [as] ... it is a story about how ever smaller, faster, cheaper and better computer and communication technologies help to reali[s]e ... those seemingly impossible dreams of democracy' (2005: 30). In a juxtaposed narrative, the spaces of social media networks are viewed as effectively anti-democratic because they are colonised by state power structures for the imposition of propaganda, censorship and surveillance which sustain institutional systems of domination (Morozov, 2011: 203; Gladwell, 2010). This narrative rests on the idea of a 'networked authoritarianism' by which authorities colonise communications networks to exert hegemonic power over populations during citizen uprisings that extend to military-grade cyberattacks on Gmail accounts of activists, device and network control, domain name control, localised disconnection and restriction (Mackinnon, 2012: 78). By rejecting its democratic possibilities, this extreme position collapses into cyber-dystopianism in which social media networks are seen as a dominant locus of power, control and domination. But, the existence of countervailing currents do not *ipso facto* negate its democratic possibilities. In other words, social media networks are dominant spaces for both power and counterpower. In an alternative narrative, social media networks have been viewed as transforming the nature of political action itself in new forms of connective-action where an extra-institutional politics is the sum-total of fragmented and disparate individuals in social aggregations or 'smart-mobs' (Bennett and Segerberg, 2012; Juris, 2012; Rheingold, 2010; Margetts et al, 2016). This thesis reduces mobilisations to assemblies of isolated activists. It, thus, marginalises the social, cultural and symbolic processes involved in the common construction of a social movement ie, its shared antagonisms, values, identities and collective demands. It, therefore, overlooks the fact that one of the first steps in collective action is 'the identification of an enemy, the definition of a purpose and an object at stake in the conflict' which is a symbolic process whereby 'different fragments join ... together to form a movement' (Melucci, 1996: 292; Baker, 2016).

Overall these approaches exhibit a fundamental limitation: (a) they either attribute too much explanatory power to technology in the mobilisation of collective-action or (b) none whatsoever and (c) ignore the social, cultural and symbolic processes of meaning-making involved in building a collectivity. As a rejoinder to these positions, the central argument in this thesis is that in order to understand the impact of social media on collective-action, we must tie its specific socio-technological affordances not to the action itself, but to the mechanisms and processes under which collective-action occurs. As a new communications ecology, the principal affordance of social media is the way in which it enables its users to produce, transmit and receive meaningful symbolic materials across time-space (Thompson, 1995: 35). As the social world is a symbolic universe, these symbolic forms permeate into social practices, our sense of selfhood and mediated sociality. By opening-up 'digital symbolic spaces' within which soft resources of cultural ingredients—from narratives, know-how, identities to solidarity networks—are brought to life, exchanged and stored, social media networks are dominant cultural arenas that constitute a major vehicle of meaning-work: a communicative process in which the symbolic is constituted and pervades into physical spaces that can mobilise collective actions across urban spaces (Milan, 2015: 3; Gerbaudo, 2012: 4). In other words, the digital symbolic spaces within social media networks can open arenas where activists can build

'collective action frames' ie, in the 'production and maintenance of meaning' among a group of activists that act to bring together shared antagonisms, common-values and critical imaginaries of alternative futures (Benford and Snow, 2000: 613). As counter-spaces in which to explore various visions of utopia in alternative social imaginaries, social media networks can be a powerful tool to engage in the cultural dimensions of a symbolic politics: a digital symbolic space in which to challenge, resist and subvert and dominant capitalist logics. Moreover, the despatialised character of social media networks can alter connections between activists by facilitating 'relational diffusion' (pre-existing connections), but also possibilities for 'brokerage' (new connections, ties and networks) (Tarrow and McAdam, 2005: 127). Therefore, as a new communications ecology, these socio-technological affordances of social media can be used in ways that affect the cognitive and relational mechanisms underpinning collective action. With its despatialised nature, a fundamental characteristic of social media networks is its availability of cultural resources on a global scale as it can stretch these relational and cognitive dimensions, its symbolic forms and spaces of the political across national frames of reference. Its global flows have also contributed to our heightened awareness of global risks—from poverty, inequality to climate change—by giving shape to new modes of 'mediated worldliness' whereby our spatial horizons now routinely extend beyond national borders (Thompson, 1995: 34). A key argument in this thesis is that social media networks, as dominant cultural spaces, both contribute to our heightened awareness of global risks and provide digital symbolic spaces for activists to engage in the shared construction of collective action frames and to brokerage new ties across borders in a transnational global justice politics. By drawing on examples of this new type of politics, as seen in the Occupy Everywhere, Global Frackdown and the Friday-For-Futures movements, this thesis argues that social media networks are effective tools to mobilise this global justice politics: to open new pluralised spaces of the political where multiple belongings, flexible identities and the cross-fertilisation of different cultural models can unite multiple, plural and diffuse activists around shared antagonisms, common values and collective commitments to 'the universali[s]ed demands of humanity, ecology and sustainability' (Rai and Cohen, 2000: 152). In contrast to the descriptive frameworks of globalisation and transnationalism, this thesis locates this politics of global justice within the normative perspective of a critical cosmopolitanism.

Justice, Cosmopolitanism and Post-Traditional Ethics

Within the cosmopolitan tradition, the concept of 'justice' has been understood as either a moral or institutional ideal in which our moral obligations and duties can be achieved by the extension of rights across borders (Tan, 2004: 10). As a moral ideal, it concerns specific sets of rights that can secure a distinct set of universal human capabilities (Nussbaum, 2008: 495; Sen, 2008) and, as an institutional ideal, it concerns the construction of a new political system of global institutions ie, a 'cosmopolitan democracy' where basic human rights can be secured by world citizenship (Held, 1998; Archibugi, 1998; Thompson, 1998). This emphasis on rights, however, overlooks the worldwide spread of neoliberal governmentality at the root of cultural, ecological and social injustices, but, most damagingly, these cosmopolitan approaches understand the idea of justice as overarching normative political projects rooted in a strong moral universalism—in abstract universal moral principles—that could serve to 'hegemonically legitimi[s]e Western ideological authority' (Kirtsoglou, 2010: 173). In contrast to top-down normative projects, this thesis views the idea of justice through the lens of a critical cosmopolitan sociology where it emerges within the intersections of 'self, Other and world' rooted in the transnational field of

social relations in which symbolic struggles play-out in dialogical exchanges (Delanty, 2009: 32; Agustin, 2017). Global justice is therefore a reaction to changing social realities: it is a dialogic process in which critical publics respond to global risk through transnational campaigns in bottom-up networks. Within these global-local relations, the normative aspect of this cosmopolitan sociology can be viewed through the dialogic construction of the cosmopolitan imagination: a new critical way of seeing, thinking and understanding the world, a critical attitude with an evaluation or critical diagnosis of social conditions that recognises the immanent possibilities for the transformation of self and society (Delanty, 2009: 16; Mignolo, 2000: 741; Kurasawa, 2007). From this critical cosmopolitan perspective, a central argument of this thesis is that the global flows that disperse throughout digital symbolic spaces in social media networks give shape to counter-spaces in which the cosmopolitan imagination emerges in the construction of collective action frames ie, in the articulation of shared antagonisms (a critical diagnosis of social reality) and in radical imaginaries that experiment with utopias in alternative futures (a prognosis of social reality). This thesis, therefore, argues that these digital symbolic spaces are now dominant sites in which a virtual cosmopolitanism arises in two political cosmopolitan relationships: in transnational social movements that attempt to build a shared normative culture around moral commitments to global justice and an inclusive politics of recognition articulated in the extension of solidarity networks across borders (Delanty, 2012b: 44).

Despite its status as a distinct field of enquiry, the concept of global justice as individuals, groups and social movements that pursue institutional reforms through bottom-up sociopolitical action is also connected to the concept of global ethics. The specific idea of global ethics concerns the moral responsibilities, values and norms of individuals and collective agents. Therefore, in its pursuit of global institutional reforms, the transnational politics of global justice makes explicit moral evaluations about the ethical status of these institutions and, in its sociopolitical actions, it vocalises ethical claims regarding the moral responsibilities of governments and institutions. The distinct concepts of 'justice' and 'ethics' therefore often overlap, entangle and interweave, as Dower (2014) highlights, 'global justice as an ethical claim is a major part of a global ethic[s]' (2014: 12). In the theoretical pursuit for its universal foundations, approaches to global ethics have rooted it within the possibility of an 'overlapping consensus' between 'peoples' or nations over universal liberal principles of freedom and equality (Rawls, 1987), in universal standards embedded within a minimal set of fundamental cultural values (Bok, 2002), in the common ethical imperatives found within all major religious traditions (Küng, 1993) or in a macroethics with an imperative of collective-responsibility (Jonas, 1984). These political, cultural, religious and collective-responsibility approaches suffer from a reliance on a strong moral universalism in which a global ethics is rooted in prescriptive ethical frameworks with fixed moral principles values, norms and standards of judgement. These specific approaches, thus, collapse into claims of its neo-colonial, paternalistic and imperialistic traits where it can be viewed as enforcing the international order built by Western powers and morally justifying a Eurocentric world order (Hellsten, 2015: 87). Instead of these top-down foundational approaches, this thesis draws on the postfoundational concept of 'co-responsibility' (Apel, 1993), but in contrast to its mediation in a communicative rationality, it argues that a global ethics is a key aspect of affective practice: it is seen in emotional flows of political communications concerning the human and ecological consequences posed by global issues. By this understanding, a global ethics is best viewed as in actual existence: it is an emergent reality arising out of the emotional flows of discourses of coresponsibility viewed in global-public discourse, political communications and critical publics throughout civil society that exhibit a moral consciousness of the current need for global ethics (Delanty, 2009: 90). The central argument of this thesis is that transnational extensions of social bonds, networks and belonging built around shared moral commitments to tackle global issues through a global justice politics represent basic indicators of a global ethics today: it is found in discourses of co-responsibility, transnational solidarity networks and collective-identities. In other words, a global ethics is best understood in sociocognitive terms where discourses of coresponsibility are indicative of new ways of thinking, feeling and imagining that take shape in the submerged networks of civil society and build social bonds and collective-identities in the cross-border politics of global justice. The original contribution of this thesis is that social media are dominant mediums through which global ethics is made possible today: they are integral to the cultivation of our sense of moral-practical reflection toward our collective fate where global flows deepen our 'sense of responsibility for the non-human world and the universe of distant others' (Thompson, 1995: 264). Global ethics is a major dimension of a virtual cosmopolitanism evidenced in the digital symbolic spaces where transnational solidarity networks in response to global issues root new forms of belonging within post-traditional types of political community. To conclude, this thesis links these mediated expressions of global ethics to the social, symbolic and cognitive articulation of a cosmopolitan citizenship: a citizenship that is typified by cultural politics with new demands for global rights, obligations and responsibilities.

Structure of the Thesis

The structure of this thesis is organised into six chapters. The first chapter maps out the extent to which contemporary societies have been reconfigured by digital technology. It examines the societal shift from analogue to the digital, the specific nature of the digital and the material and symbolic dimensions of communications media in the context of everyday life in our postdigital society. From a sociohistorical perspective, the thesis sets-out a critical analysis of the optimistic and pessimistic narratives on the effects of the internet and social media on society which both abstract from philosophical perspectives on the nature of technology. Instead of collapsing into a techno-determinism by viewing technology as inherently positive or negative, this chapter frames a view of technology around Melvin Kranzberg's (1995) first law that 'technology is neither good or bad nor is it neutral' by understanding it as composing a sociocultural artefact imbued with valuative content and specific affordances to which its operators can use as means to achieve both positive or negative ends. From this perspective, an argument is presented that understands this positive or negative determination with reference to the way in which it falls on the specific logics behind its affordances which may give rise to dialectical tensions between conflicting logics ie, a neoliberal capitalist logic verses a social logic of resistance. In opposition to a cyber-optimism or a cyber-pessimism, this chapter positions itself with cyber-realism—a position which acknowledges media spaces as inhabiting ongoing struggles between networks of domination and networks of liberation. In conclusion, a specific notion of virtual community is advanced that emphasises the cultural, symbolic and imaginative dimensions of belonging around common-interests which take both negative and positive forms, but also can radicalize into communities of dissent with multiple, diffuse and diverse members.

The second chapter begins with a critical analysis of a strand of the information society thesis that envisages technology through the lens of a modernist ideology exhibiting a metanarrative

of social progress which obscures its invested interests, disguises its inequalities, conflicts and new power asymmetries. This extends to uncritical commentaries that see postindustrial society as a postcapitalist society and more recent narratives of the internet and its digital peer-to-peer exchanges as the basis for a new postcapitalist economy. In contrast to an epochal shift beyond the sociohistorical mode of capitalism, digital technology is a constitutive part of reconfiguring its productive forces by which a new digital infrastructure accompanies new forms of cognitive, communicative and co-operative labour that forms new exploited sources of commodification, valorisation and capital accumulation. An integral dimension to these productive forces is the new political-economy of big-data which has created a massifying mode of dataveillance and new techniques of power which attempt to influence, predict and control human behaviour. A central argument in this chapter is that these digital systems of exploitation, surveillance and power are not a natural outcome of digital technology, but a specific neoliberal capitalist logic built on the incessant pursuit to maximise the accumulation of capital and surplus. Instead of the view that it is an inherently negative technology, social media, as a communications ecology with social affordances, enables a competing social logic of resistance in which activists use its networks to frame, organise and coordinate collective action against this neoliberal logic. Social media are, thus, viewed as a contemporary societal locus in which dialectical tensions play-out between a neoliberal logic of domination and a social logic of resistance. In conclusion, this chapter contends that social media networks are conducive to transnational social movements by opening digital symbolic spaces within which to build collective action frames and to enable activists to brokerage new ties in translocal networks around the master-frame of global justice.

The third chapter focuses on an analysis of three empirical examples of the way in which social media networks have been utilised to frame, organise and coordinate transnational movements. The first example looks at the Occupy Everywhere movement which used social media networks to frame its shared antagonisms in the 'We are the 99%' and build translocal networks through which to organise and coordinate its collective actions within urban spaces across 82 countries. The second example examines the Global Frackdown movement which drew on social media to frame, organise and coordinate collective action that spread to 27 countries around the world against the human and environmental consequences created by global fracturing practices. The third example considers the Friday-For-Futures movement which used social media networks to frame, organise and coordinate collective actions across 132 countries in protest against the ecological threats created by climate change. In conclusion, this chapter argues that these crossnational movements mobilising collective actions in the master-frame of global justice highlight that social media networks are conducive to a politics of multiplicity which can bring multiple, diverse and diffuse activists together across cultures, ethnicities, genders, nationalities, ages and political ideologies. This chapter contends that social media networks are central sites in which new cosmopolitan spaces take shape in contemporary articulations of a global justice politics.

The fourth chapter examines the prospects of social media for a type of virtual cosmopolitanism. It begins by assessing cosmopolitan approaches to the concept of justice. In contrast to a concept of justice as a normative political project ie, as a set of rights which can secure universal human capabilities needed to fulfil a good life (Nussbaum, 2008: 495) or a system of global institutions which represent a form of 'cosmopolitan democracy' (Held, 1998: 24), this chapter presents an argument for a specific critical cosmopolitan sociology in which an idea of justice is seen as a reaction to changing social realities: it is a bottom-up dialogical process in which critical publics

respond to challenges within the social world in non-legalistic and extra-institutional claims, discourses and subpolitical forms of action. From the prism of a critical cosmopolitan sociology this chapter critiques critical commentaries on the idea of a virtual cosmopolitanism by arguing that the global flows that circulate within the digital symbolic spaces of social media networks can offer preconditions for an ontological framework of specific cosmopolitan relationships: a soft cultural cosmopolitanism as a type of cultural omnivorousness and in stronger political relationships rooted in radical political activity around issues of global justice that construct a shared normative culture and extensions of political community toward a politics of recognition (Delanty, 2012b: 44). In conclusion, this chapter argues that virtual cosmopolitanism emerges in bottom-up responses to the human threats associated with global risks where cosmopolitan projects around global justice use social media networks to construct transnational networks of solidarity built around intersecting modes of thought, commitment and subpolitical actions.

The fifth chapter roots the concept of virtual cosmopolitanism to articulations of a global ethics. In contrast to top-down normative frameworks of ethical principles found in political, cultural, religious and collective-responsibility approaches, this chapter argues that a global ethics is best viewed as a sociocognitive construct evidenced in shifts in worldviews, perceptions and emotion among individuals, groups and movements in response to global issues. Global ethics, therefore, can be viewed as emerging in discourses of co-responsibility, transborder networks of solidarity and collective-identities in post-traditional types of political community. This chapter contends that social media networks as a new communications ecology are core mediums through which a post-traditional ethics is made possible today: they are dominant cultural platforms which (a) heighten our awareness of global issues; (b) offer discursive spaces to challenge dominant codes in circulating discourses of co-responsibility; (c) meaning-making spaces to mobilise, organise and coordinate collective action in a justice politics which (d) unites activists across borders in transnational solidarity networks and (e) builds post-traditional political communities through networks of belonging in collective-identities. The final chapter provides empirical support for these specific indicators of a global ethics by applying them to the empirical cases of the Global Frackdown, Occupy Everywhere and the Friday-For-Futures movements. In conclusion, this chapter argues that by opening digital symbolic spaces to articulate global justice politics, social media networks constitute dominant mediums through which a global ethics is expressed today which itself highlight social, symbolic and cognitive articulations of a cosmopolitan citizenship.

Chapter 1: Digitising the Social: The Internet, Mediated Sociability and the Virtual Community

'We are moving from a world of Internet wizards to a world of ordinary people routinely using the Internet as an embedded part of their lives ... [i]t has become clear that the Internet is a very important thing, ... it is being used more – by more people, in more countries, in more different ways ... [it] is becoming embedded in everyday life'

(Wellman and Haythornthwaite 2002: 5-6).

Digital technologies are now a fundamental characteristic of modern society. From the internet, smartphones to social media platforms, these technologies have now permeated into the fabric of our everyday life. But, in a normative assessment of their social consequences, have they had positive or negative effects on society? Have they enhanced or progressed society or have virtual expressions of digitally-mediated sociability and community replaced, detracted or eroded the propinquity of the real as articulated in the traditional rootedness of these activities in face-toface social contexts? This chapter presents an argument that digital technologies do not simply produce positive or negative social outcomes, but both as cultural artefacts with imbued values and by the exact ends to which they are directed by their operators. Digital technologies are now entangled within the fabric of the social world which produce both positive and negative forms of sociability and virtual communities. This chapter is divided into four sections. The first part explores the ubiquitous and deep-seated processes of digitisation as it permeates into every aspect of everyday life from social practice to modern modes of being. The second section explores the substantive question as to the effects of the internet and social media on social life in the form of a critical analysis of its optimistic and pessimistic positions. The final part explores the possibility of community over the Internet and, again, from a critique of existing optimistic and pessimistic positions, it offers an idea of virtual community as communicatively constructed where boundaries are symbolically constituted and where the search and desire for a modern sense of belonging arise from the idea of community as an imaginative possibility.

From Analogue to Digital Modes of Societal Organisation

In Being Digital, Nicholas Negroponte (1995) recognised a substantive transformation occurring to the foundations of modern institutions and its structures of social relations. He pinpointed the source of this transformation as typified by a shift from patterns of social organisation mediated by analogue systems of information transmission to systems mediated, embedded and organised by new digital infrastructures of multimedia entangled in complex webs of global communications networks (1995: 163). For Negroponte (1995), this transition from analogue to digital, as an outcome of digitisation, was marked by a change from physical atoms to abstract bits in the worldwide production, storage and transmission of information (1995: 18). In more specific terms, what exactly is meant by the concept of the digital? In its etymological roots, the word digital derives from the Latin digitus translated as 'digit of the finger or toe' which denote a quantifiable method in which the calculation, conversion and transmission of information is encoded using a mathematical configuration of discrete numerical integers with discontinuous scales of measurement (Quinion, 2002: 58; Isaacson, 2014: 36). By this broad definitional scope, the concept of the digital is not exclusively rooted in electronic computational systems. With discrete units inscribed in its notational systems of meaning, the digital extends to non-electronic modes of digitisation from the Ancient Chinese abacus and semaphore to Morse code communications (White, 2008: 5). In other words, the

digital consists of information encoded into discrete countable units whereas analogue information consist of signals with infinite or continuous scales of measurement—from flows of electricity, light waves and sound waves (Cramer, 2015: 17). In its common usage and the one to which Negroponte (1995) referred, the digital pinpoints its transformative dimension: electronic digitisation. Unlike its analogue counterpart, in electronic modes of digitisation, the DNA of information—its smallest constitutive or atomic element—is transformed into the digital bit composed of a numerical value of either zero or one (Moreno, 2013: 2; Bowen and Giannini, 2014: 325). Embedded within computational systems, the constitutive properties of digital information—in all its permutations in text, image, audio and video—takes the form of innumerable encoded strings of binary digits of zeros and ones to which its structure undergoes a metamorphosis: it becomes easily compressible, replicable and less prone to error. Because of its distinct properties, digitally encoded information has given rise to three key characteristics that have had significant consequences for reconfiguring social relations: it enabled 'digital convergence' (condensing sound, image, text and video content into a single medium) 'multifunctionality' (new modes of information production, transmission and reception) and 'intelligence' (problem-solving capacities embedded in information appliances, systems and networks) (Hamelink, 1997: 5). The most fundamental dimension of electronic digitisation was the development of the internet that constituted a core networking technology which laid the foundations for digital network architecture and the internetworking of computer systems across the world (Leiner, et al, 2000: 1; Castells, 2000). With its socio-historical roots in the Cold War and its development within a scientific-military-industrial complex, the internet built a 'network of networks' in which packet switching¹ technology—controlled by the TCP/IP protocol suite—enabled the full-duplex or bidirectional transmissions of informational datagram packets across vast geographical distances in Wide Area Networks (WANs) (Leiner et al, 2000: 24; Fall and Stevens, 2012: 13). Moreover, the later development of the World Wide Web² (WWW) a layer of protocols and computer language built on-top of its backbone enabled easy distribution of digital files across its computer networks (Berners-Lee et al, 1992: 53).

Together these developments enabled digitally encoded information to be composed, compressed and modulated in network bandwidths of millions (mega), billions (giga) and trillions (tera) bites per second, at the speed of light, in assemblages of copper wire, optical fibre and radio spectrum across the globe. By integrating computational systems into a network of networks around the world, the internet has been the central motor behind the worldwide intensifications of digitisation. At the time of Negroponte's (1995) observations of the changes occurring through digitisation, the worldwide population of internet users was estimated at 16 million (Internet World Statistics, 2020). Today, twenty-five years later, the total population of global internet users has reached 4.5 billion or 59% of the human population (Statista, 2020). The internet has grown at an exponential rate and continues to grow by 11 users per second, 1 million users per day and 365 million users annually (Dougherty, 2019). According to the International Telecommunications Union (ITU), from 2005 to 2019, global internet use

¹ Packet switching technology emerged from Leonard Kleinrock's (1961) theory of packet-switching which itself was later developed in 1969 by Paul Baran (at Research and Development (RAND) corporation) and Donald Davies (at the British National Physics Laboratory NPL) (Ryan, 2010: 17).

² The WWW consists of (1) the Hypertext Transfer Protocol (HTTP), allowing client or host computers to communicate with servers (in the form of access requests to web-pages) via network routers; (2) the Hypertext Markup Language (HTML), a common language in which to communicate and used to build web-pages linked together by chains of hyperlinks and (3) the Uniform Resource Locator (URL) allowing any computer to locate information stored on any other computer or web server (White, 2008: 368).

increased by 10% annually (ITU, 2019). From these statistics, however, the critical question is why is there still 41% of the human population offline? The issue is not just a matter of use, but also access. As is the case with most technology, the spread of the internet has been asymmetric. This 'digital divide' ie, disparities of its use and access reflects a social divide (disparities within countries) and a global digital divide (disparities between countries) (Norris, 2001: 234; Bertot, 2003; Selwyn, 2004). Within countries, the digital divide itself is not just a technological divide, but a sociopolitical one: it is a reflection of structural inequalities rooted in a wide spectrum of intersecting factors of social stratification from class, income, education, age, geography, ethnicity and gender (Royal Geographical Society, 2015; Fairlie, 2005; Pew Research Centre, 2013). In 2018, a report by the Office of National Statistics (ONS) showed there to be 5.3million adults (10% adult population), in the UK, that were non-internet users, 3.1 million were women, 50% were 75 years old, 23.3% were disabled and 23% were economically inactive (ONS, 2019). Between countries, the digital divide is attributed to various multilayered and intersecting structural variables from economic development (Wong, 2002; Norris, 2001), information infrastructure (Hawkins, 2005; Hao and Chow, 2004), culture (Norris, 2001) and cost of access (Yu, 2006: 239). This can be viewed in the geopolitical disparities between countries in internet penetration rates as the highest rates are concentrated among the OECD and G20 with Europe (82.5%) and the Americas (77.2%) while Africa (28.2%), Asia & Pacific (48.4%) and Middle East (51.6%) (ITU, 2019). Despite these disparities, since 2000, the highest global growth rates, in internet use, have been concentrated within developing regions with Africa increasing by (12,441%), Asia & Pacific by (2,109%) and Middle East by (5,527%) (World Internet Statistics, 2020b). This growth has largely been driven by increasing availability and coverage of mobilebroadband networks. According to ITU, the global coverage of mobile-broadband now covers 93% of the human population, while LTE or 4G coverage covers 82% of the world population or 6.4billion people (ITU, 2019). This trend can also be seen in increases to mobile-broadband subscriptions around the world which cover 82% of the world population, while global subscriptions per 100 inhabits is increasing annually by 18.4% (ITU, 2019). While the current scale of the digital divide within and between countries is a challenge, it does not detract from the fact that the internet has profoundly transformed the communications ecology of contemporary societies, as Tufekci (2017) suggests, 'an internet society is different to a preinternet society regardless if people use it or not' (2017: 117).

This rapid growth of internet users around the world has led to accelerating rates of digitisation. As Hilbert and Lopez (2012) highlight, digitisation of all global analogue information—our technological collective memory—was calculated, in 1986, at 1%, by 2007, this had reached 97% (2012: 10). But, in terms of total worldwide information storage, even in 2007, the digital exceeded analogue by a factor of 15 reaching a global approximation of 276.12 gigabytes (2012: 10; Manovich, 2001: 44). Today, worldwide digital data has reached volumes difficult to comprehend. In 2020, the global datasphere, that is, our accumulated digital universe of data is expected to reach 44 zettabytes with a projected rise to 175 zettabytes by 2025 (IDC, 2018). To give some sense of comparative measure, a zettabyte is equal to a trillion gigabytes or information storage capacity equal to 10^{21} bytes or a billion terabytes. In comparison, a DVD-R disc has a 4.7 GB storage capacity and an Ultra HD 4K disc 100GB. By these measures, a zettabyte is, therefore, approximately equal to 250 billion DVDs and 21.5 billion UHD 4K discs. Moreover, the current size of our global datasphere exceeds the storage capacity needed to store 'all words ever spoken by human beings' which was calculated at 42 zettabytes at 16 kHz 16-

bit audio (Liberman, 2003). This exponential growth of our digital datasphere was accompanied by a worldwide shift from static desktop computers to smart mobile devices which themselves now surpass the 7.8 billion humans on the planet. According to the Cisco Annual Internet Report (2018), global mobile devices reached 8.8 billion, in 2018, and is projected to rise to 13.1billion by 2023 (2018: 2). In 2019, 93% of the world's population lives within the coverage of a mobile broadband service (ITU, 2019). The huge rise in mobile devices and mobile broadband coverage has seen a concomitant rise in mobile digital data traffic: every month there is 40.77 exabytes of data flowing between these global mobile devices—equal to approximately 212 million DVDs (Statista, 2020b). These volumes of digital data reflect a typical day in which 294 billion e-mails are sent around the world, accompanied by 5 billion online searches with 3.08 billion social media users who send 500 million Tweets, upload 95 million photos on Instagram, send 65 billion messages on WhatsApp and watch 100 million hours of video on Facebook (World Economic Forum, 2019).

These incomprehensible volumes of electronic information produced, stored and transmitted within and between our computer systems reflect a societal condition in which our information and communication structures are constitutively digital. But, this does not signal a complete rupture from the analogue as its systems and infrastructures underpin the conditions for digital processing—its materials, electrical voltage and signalling mechanisms—and specifically in relation to its mobility: the global propagation of digital information requires the modulation of an analogue carrier signal in which its discrete units of zeros and ones in a datagram package can travel to its destination through electricity in copper-wire, light in fibre-optic and radio waves in wireless (WiFi) networks. The opposition between the analogue and the digital—as distinct, separate and disconnected worlds—is, then, a false dichotomy: they intimately overlap, intersect and entangle in hybrid assemblages of systems, devices and networks. Moreover, in this sense, the digital—as instantiated in media technology—is not just an immaterial abstract bit, but a socio-material artefact containing a tightly-interwoven, equally definitive and codetermining relationship between the material and the symbolic: 'technology has a symbolic dimension, but also a distinctive material capability to embed, transform and make accessible symbolic content' (Gillespie, Boczkowski and Foot, 2014: 10). This materiality of the digital problematises binaries between the physical atoms of the analogue world and the abstract bits of the digital world which often reinforce and perpetuate false distinctions between 'offline' and 'online' and 'real' and 'virtual' worlds. Notwithstanding its entanglement within analogue structures, the ubiquitous digitisation of societies has produced macro-sociological frameworks by which to categorise the specificities of our modern social condition with reference to a new digital epoch that has giving rise to concepts from the 'network society' (Castells, 2000); the 'information society' (Leadbeater, 1999) to a type of 'digitalism' (Bowen and Giannini, 2014). These macro-sociological concepts, however, mapped the changes brought on by initial stages of digitisation and the social, cultural and political transformations caused by computerisation, connectivity and internetworking. Today, the structure of society is best seen as having entered a postdigital condition. This idea of the postdigital designates a distinct social condition in which 'computation has become spatial in its implementation, embedded within the environment, in the body and in society [and] ... becom[ing] part of the texture of life itself' (Berry, 2015: 50). By this meaning, the prefix 'post' does not simply indicate a rupture with the digital nor an end to the digital, but, as Cramer (2015) suggests, it is a conceptual tool to explore subtle cultural shifts, changes and mutations of the digital into new power structures that have profound

implications on culture, politics and society (2015: 15). In this way, postdigital society 'dissolves the dichotomy of the old and new media as synonymous with the analogue and the digital'. (Cramer, 2015: 21). In other words, the postdigital constellation designates our current social condition where ubiquitous computation, AI, and algorithms permeate into everyday life.

Everyday Life in the Postdigital Society

In contemporary societies, the onflow of human actions—from our cultural practices, identities, friendship networks, cognitive structures to patterns of social relations—are now mediated by complex, ubiquitous and interwoven socio-technical systems. Complex computational systems now embed social structures and institutions: they make possible the performance, production and reproduction of social life through its mediation across infrastructural assemblages of code, software, databases, algorithms, RFID, WiFi, smart devices, Bluetooth and GPS. In other words, our postdigital world is characterised by the extensity, intensity and velocity of interconnectivity between humans, machines and everyday objects. This interconnectivity is highlighted by our move towards the Internet of Things (IoT) which is bringing people, processes, data and objects together in 'generative ... techno-landscapes comprising self-aware devices which can sense, interact and analy[s]e data from other devices' (Elliott, 2019: 15). The IoT is creating a sociotechnical landscape in which our interactions with machines is becoming largely automated as viewed by the expanding array of smart devices in our homes with central user interfaces (CUI) which control all aspects of our environment—from the automation of temperatures (Google's Nest thermostat), the automation of lighting efficiency (Phillips Hue) and the automation of our home security with motion sensors, cameras and smart locks (Hive) to WiFi enabled smart ovens (LG, Samsung) smart fridges (Siemens, AEG) and smart vacuums (iRobot). In 2020, there will be approximately 50 billion devices connected to the internet—a ratio of roughly 6.58 devices for every human on the planet—and by 2030 this is believed to reach 125 billion (Cisco, 2014).

At the centre of this new sociotechnical landscape is a digital infrastructure of computational systems embedded with Artificial Intelligence (AI) capability which can 'sense its environment, think, learn and react in response to data-sensing' (Elliott, 2019: 4). This AI-related technology has been integrated with advanced robotics developing intelligent humanoid systems designed for space exploration (Kirobo, CIMON and Valkyrie), autonomous vehicles (by Tesla, Nissan and Waymo), 3D interactive holograms (by Hypervsn), 3D printing (by Phrozen and Prusa) and augmented and virtual reality systems (by Sony, HTC and Facebook). But, AI-technology is now deeply interwoven in the 'expert systems' and 'flow of [digital] architectures' through which our everyday life is increasingly mediated—from AI Autopilot systems in commercial flights, machine-learning algorithms used to create our credit scores and GPS navigation to our digital assistants Siri (Apple), Alexa (Amazon) and Cortana (Microsoft) with which we use to schedule meetings and search the web (Giddens, 1990: 27; Knorr Cetina, 2003: 7). With over 100 billion apps downloaded from the Apple Store alone since 2008, AI technology is now embedded within phone applications to which we are now increasingly reliant—a fundamental component in our miniaturised mobilities—to organise the culture of our now increasingly mobile lives (Elliott and Urry, 2010: 27). AI-technology is also used in the dominant cultural platforms—from Facebook in its artificial neural networks to power facial recognition software to identify friends in photos and Google with its Page-Rank algorithms to personalise search results to Amazon with its neural networks to personalise product recommendations. These

cultural platforms are deeply embedded in our networked interactions—from the way in which we access information through online search engines (Google), how we purchase goods and services (Amazon, Alibaba and e-Bay) and how we create, organise and maintain our intimate, professional and social relationships, our membership(s) to communities, our strong-weak social networks and forms of civic engagement (Zoosk, LinkedIn and Facebook). Al technology now increasingly shape routine pathways of digitisation that support the cyclical repetitions of social life which underpin everyday practices—from messaging, music, film and TV streaming, online banking, status updates, blogs and e-mail (Lupton, 2015: 3).

Within our postdigital society, AI-enabled computational systems penetrate into the structures of our subjectivity and body. We routinely utilise these dominant cultural platforms to fashion a sense of selfhood by maintaining and managing a coherent biographical narrative, perception and image of self by joining groups, posting on timelines, commenting, tagging and up-loading personal images, photos and videos (Papacharissi, 2011; Ellison, 2013). Theoretical insights into the nature of the self in contemporary society are viewed in terms of a wider symbolic project, an ongoing biographical narrative built from the referential structures of reflexivity, choice and intersubjective experience (Giddens, 1991: 5). An important activity in maintaining a coherent narrative of self-identity—as an expression of reflexivity—is the way in which a sense of self is routinely performed in social media spaces through closely producing, crafting and managing our presentations and impressions of self to others (Goffman, 1990: 26). In our postdigital world, this impression-management of the self and its narrative character becomes increasingly 'transmediated' by cutting across, entangling and imbricating our virtual (digital) and actual (physical) milieux where fashioning a sense of self is integrated, dispersed, episodic and interactive (Elwell, 2014: 243). Digital systems permeate deep into the physical structures of the body too, as smart devices, RFID chips and sensors become wearable digital appendages designed across medical, sporting, life-style, entertainment and gaming sectors to collect, record and monitor biometric data from heart-rate, body weight, blood pressure, blood glucose levels, lung function and brain activity to responding to body movements-gestures and voice commands (Lupton, 2015: 165). Smart devices encompass a plethora of everyday objects from smart watches (Apple iwatch), smart straps (Pagare, Apple and Android pay), smart wristbands (Lenovo, FitBit), smart glasses (Google Glass), smart headphones or hearables (Samsung, Motorola and Bragi Dash) and smart tattoos or invisibles (DuoSkin) to smart clothing (Athos, Hexoskin, Lumo) and even digital pills or ingestibles.

This intensification in the digitisation of corporeality has given rise to the Quantified Self—a movement and everyday practice which designs and instrumentalises digital systems for the quantification of biometrics from inputs, cognitive states to performance with the purpose of augmenting our biological and personal activities (Lupton, 2015: 182; Fleming, 2012). Alrelated technology is also integrated within digital surveillance networks that monitor our spatial movements in highly visible systems through intelligent closed-circuit television (CCTV) cameras, license plate and facial recognition software, smart traffic lights, motorways and camera-integrated drones (Lupton, 2015: 3). This technology has been used to build state-corporate digital surveillance systems too which surreptitiously operate with increased invisibility. The large-scale collection of metadata that is automatically produced from all digital activity is used in new massifying modes of dataveillance where the corporations of Facebook, Google and Amazon commodify this metadata to generate new systems of surplus-value

through customising their services, selling it to third-party data brokers or/and using it to sell targeting advertising to its corporate customers. Dataveillance systems, thus, constitute a new technology of power that is ubiquitous, mobile and invisible and seeks to influence, predict and control human behaviour through digital data (Zuboff, 2019; Deleuze, 1990). Metadata is now an invaluable resource in state surveillance systems too where intelligence agencies have accessed metadata from corporate servers both unofficially through surveillance programs from PRISM by the NSA and TEMPORA by GCHQ—and through official legislation such as the Patriot Act Section 215, in the US, and the Regulation of Investigatory Powers Act Section 8(4) (RIPA), in the UK, (Lyon, 2015: 2; Simcox, 2015: 7). National intelligence agencies frequently use metadata to build ubiquitous mass-surveillance systems which monitor spatial movements, purchase activities and mass communications of entire populations (Bauman and Lyon, 2013: 123). The collection of metadata in big-data sets is now increasingly used in democratic electoral politics. This was illustrated by the enlisting of the services of private data companies Aggregate IQ and Cambridge Analytica by the Trump 2016 presidential campaign and the leave campaign in the 2016 Brexit referendum which used metadata to build personal profiles of core sections of the electorate in order to influence voters' opinions through bombarding them with disinformation. These specific uses of the internet and social media networks are what Feenberg (2019) refers to as the 'consumption model' and the 'cyber-political model' that extend to the distinct logics of entertainment/commerce supported by surveillance, datamining and targeted advertising and (quasi)state actors that dissiminate propaganda to disrupt enemies with trolls, bots and malware (2019: 231).

In contrast to these models, the internet and social media networks have also been used as spaces of resistance to power and towards subnational, national and transnational issues ie, as communications tools to organise an extra-institutional politics in the collective-actions of mass-protests, marches and civil-disobedience that can stretch across geographical distances. This specific use of the internet and social media networks is what Feenberg (2019) refers to as the 'community model' which brings together functions that serve social life and has 'significant consequences for the public sphere where it plays a role in supporting democratic debate and mobili[s]ation' (2019: 231). This multiple models approach highlights a crucial point in current debates over the overall societal effects of the internet and social media: they cannot be reduced to single one of these many dimensions as these 'systems ... coexist as assemblages of features, functions and usages' (Feenberg, 2019: 230). As Feenberg (2019) rightly points out its '[d]esign is pulled in many directions by [multiple] actors with different interests and worldviews [with] some pursuing profits and others involved in public life' (2019: 230). In what follows, these different models will be discussed in the context of overlapping, competing and interdependent logics with specific reference to the 'consumption model' and 'community model' as comprising dialectical tensions between values of a neoliberal surveillance logic and sociodemocratic logic.

Because these computational systems now permeate our cultural practices, social relations, our subjectivity, our bodies, our politics and underpin a new modality of power, they now form the connective-tissue of our everyday life: they mediate intersubjective flows of human experience, creativity, cognition, action, power, counterpower and sociality in its 'cyclic, habitual and fluid repetitions' (Gardiner, 2000: 87; Lefebvre, 1991: 6). This cultural embeddedness of the digital was illustrated by the widespread use social media networks in response to Covid-19. Within national lockdowns, throughout the world, its networks were used for 'crowdsourcing' to create

local support networks to assist vulnerable groups in the provision of essential services—from grocery shopping, delivering medication and to help mitigate feelings of isolation. This helped reaffirm the ties of local communities. Its networks were also used for 'crowdfunding' in which public donations generated additional funding to under pressure public-services ie, the NHS. Its networks helped organise online social activities and build virtual communities, in times of disruption, but also to spread harmful disinformation and misinformation about the pandemic. In other words, contemporary culture is now inescapably digital, as Lupton (2015) suggests, 'life [itself] is digital'—it is now a qualitatively distinct way of life that codifies our modern existence from our private domain of the household, to the public domain of politics (2015: 1; Wajcman, 2015: 2). Digital systems permeate our cognitive structures by reconfiguring our phenomenological experiences and perceptions of time-space, reshaping our relations with, and access to, information, knowledge and human others which has facilitated, according to Heim (1993), an ontological and epistemological shift to a new mode of being in the world organised around imbrications of human and (non)human assemblages (1993: xxi). For Heim (1993), the qualitative texture of our inner experiences of the world have transformed under widespread conditions of digitisation:

'an ontological shift has occurred by looking at our daily activities on digital computers shap[ing] our reading and searching through information—hypertexts, outliners, email and database searching belong to the new way things are organised—technology is changing our given reality...opens us up to different places and these places connect in new ways that differ from the old places in kind and quality' (1993: xiii-xiv).

This now increasing intermediation between humans and inhuman objects, according to Hayles (2005), has questioned the prevailing premise in the autonomy of the liberal humanist subject, as Herbrechter (2013) contends, the demarcations between 'human, [in]human, organic and [in]organic, autonomous and heteronomous forms of agency' have now blurred leading to new theorisations of the posthuman and transhuman subject (2013: 183; 2005: 133). In this context of the posthuman or transhuman subject, Donna Haraway's (2016) writings on the 'cyborg' and Deborah Lupton's (2015) concept of the 'digital cyborg assemblage' are accurate visions of our contemporary postdigital constellation: the blurring boundaries in everyday practices that augment, configure and entangle the corporeality of the human body with digital objects in a way that reflects our social condition that 'on the ontological level, our sense of selfhood and embodiment are [intimately] implicated with digital technologies' (1991; Lupton, 2015: 165). This conjures a multitude of critical-existential questions with reference to how digitisation has eroded capacities for human choice: in postdigital societies, can we actually choose not to live under digital technology? With its mediation of most aspects of everyday life, does this choice even exist? To this extent have these digital systems—the internet, devices and social media networks—created positive or negative effects on society? And, as Feenberg (1999) and Gane (2002) have rightly asked: Do we shape technology or does it shape us?

Internet and Society: Beyond Optimistic and Pessimistic Narratives

As a new technology, in the nineteen nighties, the internet was the subject of two opposing cultural discourses in relation to its potential impacts on the structure of society: by optimists, it was a techno-panacea to current social problems, but for pessimists, it signalled a major threat to society. In its optimistic commentaries, the internet exhibited revolutionary potential in its capability to solve the major social issues plaguing capitalist societies—the asymmetrical

distribution of wealth, life-chances and cultural, social and economic disenfranchisement. With its virtualised landscapes stretching beyond the real constraints of everyday life, the internet was a utopian socioeconomic configuration, a new revolutionary information society characterised by distilling in situ the purities of democracy, capitalism and liberty (Rossetto, 1998; Barlow, 1996). This internet optimism was rooted in predictions proclaiming its virtual spaces would collapse markers of social differentiation wherein its 'online users can float free of biological and sociocultural determinants' (Dery, 1994: 3), construct disembodied, multiple and fluid identities free from ascriptive markers (Turkle, 1995: 12) and give 'access to resources which were once restricted to those with the right face, accent, race, sex none of which now need be declared' (Plant, 1997: 46). Moreover, its virtual landscapes were believed to have inaugurated a new economy, new culture and new society by liquidating the monopolisation of old market leviathans through eradicating the competitive advantages found in economies of scale and, therefore, creating a level playing field in e-commerce (Gates, 1996; Kelly, 1994).

By incorporating a position aligning with an extreme form of internet exceptionalism³, this optimistic narrative was encapsulated, at the time, as the 'Californian Ideology'—a clustering of 'cyberbolic' libertarian ideas coalescing into a belief that cyberspace would construct a 'new Jeffersonian democracy' of free-markets and liberty structured around a modernist ideology of social progress embedded within virtues of technological innovation (Barbrook and Cameron, 1996: 1-2). The problem with this type of internet optimism, however, was its extrapolation of the aforementioned benefits—not from empirical analyses—but, from a priori reasoning deduced from the intrinsic properties of its technology (Howard and Fitzgerald, 1996: 3). But, more recent empirically guided studies have showed that these a priori prophecies did not fully materialise⁴. This optimistic narrative is, therefore, built upon a logic of prophetism and exhibits a radical form of internet-centrism and, in-conjunction with what Coyne (1999) has termed 'technoromanticism'5, this optimism effectively abstracts from a wider metanarrative of technoinstrumentalism in its deterministic and essentialistic assumptions that technology has a predetermined trajectory or teleology toward positive social change embodied in socioeconomic advancements (1999: 19-20; Graham and Dutton, 2014: 7). Entangled in a grand-ideology of social progress, this instrumentalist perspective on technology—which is institutionalised, dominant and now considered common-sense—views it as a neutral tool that only serves the purposes to which its users intend and, within this spirit of techno-neutrality are indifferent to politics and devoid of any valuative content (Feenberg, 1999: 4).

³ The concept of Internet exceptionalism maintains that the uniqueness of Internet technology requires it to be legally regulated, not by existing legal frameworks governing other media, but by crafting a specific legislative framework with Internet-specific laws ie, those pertaining to the regulation of social networking sites such as the 'requirements to verify users' age, combat sexual predators and suppress content that promotes violence' (Goldman, 2010: 167).

Empirical studies have shown significant markers of social identity such as race (Nakamura, 2002) and gender (Springer, 1996) (Kendall, 1998) do not only matter, but are still stereotypically and prejudicially depicted online. Economically, (Curran, 2012) has illustrated the importance of corporate size in economic success online as access to capital and economies of scale still represent major economic advantages over the internet.

⁵ The concept of technoromanticism—juxtaposed to enlightenment rationalism and fragmentation—refers to the emergence of digital narratives postulating the infused 'unity' between humankind and technology and how this unification can facilitate technological progress toward a romanticized digital utopia (Coyne, 1999: 19-20).

Juxtaposed to this optimistic account is the pessimistic stance which viewed internet technology as generating largely negative effects on society. In Technopoly, Postman (1993) argued that computer technology was creating a condition of technopoly, that is, 'the submission of all forms of cultural life to the sovereignty of technique and technology' (1993: 52). Within this condition, he described that 'human life finds its meaning in machinery' and 'human beings are placed at the disposal of their techniques and technology [and], in a sense, are worth less than their machinery' (1993: 52). In High-Tech Heretic, Stoll (1999) argued that computers and the internet will ultimately make individuals more unhappy, addicted and dissatisfied (1999: xiv). Similarly, in *Electronic Hive—Refuse It*, Birkerts (1994) suggested that the internet was making us all lonely by increasingly removing us from the world of face-to-face contact— "we find it as unthinkable to walk five miles to visit a friend as it was once unthinkable to speak across that distance through a wire" (1996: 81). This pessimistic narrative viewed computer technologies as new mechanisms of control, as Winner (1996) claimed, the entrenchment of computers in workplaces saw them become an administrative apparatus of surveillance that governs the minds and actions of workers by collecting, storing and monitoring the data records of all computational activities performed by employees (1996: 69).

In contrast to the technological neutrality informing the instrumentalist position, this dystopian narrative abstracts from the more critical substantivist perspective that considers technologynot as a neutral tool indifferent to politics—but, as embodying political values: it is complicit in structuring our view of the world, our subjectivity and our contemporary forms of living as it permeates, organises and controls all structures of our society (Barney, 2004: 38). Within this perspective, the distinction between means and ends—the neutrality view of technology as used with a means to an end—is liquidated as its technical logic is an end in and of itself and, by using technology to shape our lives, it shapes us: it transforms what it is to be human, that is, who and what we are (Feenberg, 1999: 8). In Some Social Implications of Modern Technology, Marcuse (1941) argued that the technological power laying at the centre of our modern socioeconomic apparatus had created a technological rationality, that is, a standardised, calculated and compliant mode of thought which 'establishes standards of judgement and fosters attitudes which make [us] ready to accept ... the dictates of the apparatus' (1941: 141). In this sense, according to Marcuse (1964), 'technology as such cannot be isolated from the use to which it is put; the technological society is a system of domination which operates already in the concept and construction of techniques' (1964: xvi). By this understanding, technology is an autonomous system that directly extends the hegemonic logic of a technological rationality, standardisation and homogenisation which functions as a mechanism of domination, an ironcage described by Weber (1992), in which technique⁶, according to Ellul (1964), has 'been extended into all spheres ... [as] it destroys, eliminates or subordinates the natural world' (1992: 182; 1964: 78-9; Mumford, 1964: 283). In The Question Concerning Technology, Heidegger (1977) argued to this effect by positing that the essence of technology signifies a deeper ontological revealing of the symptoms of our age: the enframing of the human consciousness into a cognitive parochialism where a rigid instrumental orientation toward mastering, categorising and quantifying the natural world dominates, imprisons and reduces humanity to mere 'standing reserve' from which, we, as subjects become reduced to objects of

⁶ For Ellul (1964), 'technique' is a broader concept than technology as it refers to 'the totality of methods rationally arrived at and having absolute efficiency ... in every field of human activity' (1964: xxv).

instrumentalisation (1977: 12-15). Despite identifying the valuative content of technological objects, artefacts and systems, the substantivist perspective suffers from a similar weakness as the instrumentalist position as it views technology not as positive, but as inherently negative—a corrosive essence with an apocalyptic teleology in a fatalism toward its eventual dominion over members of a technological society.

19

Overall, the weaknesses within these two positions, as Graham and Dutton (2014) suggest, is their tendency to collapse into an overt form of technological determinism (2014: 7). This is found in a set of assumptions running through both discourses that envisages technology not just as exogenous or autonomous, but a heteronomous system existing outside the socio-cultural context of society—by either (a) presupposing its utopian telos as externally determining the trajectory of social change and (b) as a dystopian hegemonic system outwardly imposing techniques of control, regimentation and domination over society. As a consequence, these positions precipitate a conceptual rupture of technology from its social context by decontextualising its design, development and implementation from the specificities of its sociohistorical, cultural and political environments. As Robins and Webster (1999) have highlighted, these narratives of internet technology mistakenly presuppose its operation as existing above and beyond the realm of society unaffected by the obvious contingency of its normative structure of culture, beliefs, values and politics (1999: 68). Indeed, as Castells (2014) illustrates, technology should be understood as 'an expression of material culture ... produced in a social process, in a given institutional environment on the basis of the ideas, values, interests and knowledge of [not only] its producers...but also its users' (2014: 11-12).

Moreover, in contrast to these one-sided perspectives, technology is not inherently good or bad, as Illustrated by Kranzberg's (1995) first law: 'technology is neither good nor bad; nor is it neutral' (1995: 5). On top of this, technology is neither just an object with valuative content nor just a tool to achieve an end to which it is used, but both: it is a two-sided phenomenon containing an object and an operator (Feenberg, 1999: 16). In its design and development as an object, artefact or system, technology is imbued with valuative content with reference to decisions made over its appearance, function and purpose which are influenced by wider sociohistorical, cultural and political contexts7 (Klein and Kleinman, 2003: 30). Ie, social media platforms have an encoded politics that impose specific 'strategies, mechanisms and economies' on social affordances (Van Dijck and Poell, 2013: 3). In other words, these algorithmic environments are encoded with design decisions that set conditions on its social uses as well as its specific types of sociality—from liking, tagging and recommending—and its value judgements about (un)acceptable content to its terms and conditions of use and its business model (Milan, 2015: 3). In accordance with its design as a technological object, technology contains specific affordances to which its operators can use as a means to achieve certain ends. For example, social media networks can be used for multifarious purposes—from connecting with friends, staying in touch with distant relatives and engaging in political protests to spying on your ex-partners, cat-fishing or trolling. The determination of whether a technology is good or bad largely falls not on the technology per se, but on the specific logics behind its technoaffordances or the way in which it is used to achieve certain ends that may give shape to

⁷ Sociological scholarship has showed that the design, implementation and collective meaning attributed to technological artefacts entail processes of sociocultural construction and interpretation—an interpretative flexibility comprising competing perceptions and understandings where concrete social meanings crystallise in periods of rhetorical closure (Bijker, Hughes and Pinch, 1989: 40-44).

dialectical tensions between conflicting logics—the capitalist-economic logic behind corporate systems of digital surveillance versus the political logic of online data privacy (discussed at greater length in chapter 2). In contrast to one-sided narratives, a *cyber-realist* position, then, acknowledges, in our postdigital societies, that there is an ongoing struggle between networks of domination and networks of liberation (Lindgren, 2017: 22). Because of this, as Feenberg (1999) stresses, we should not jettison a commitment to a normative assessment of technology and its uses in society with reference to a purely affirmative stance as its inscription in new modes of power and control must be subject to social, moral and political critique (1999: 13).

To maintain the case of social media platforms, the two-sided nature of technology—between the object and operator—is not independent, but entangled in an 'ongoing, articulated and mutually determining' relationship between the material and the symbolic in processes of sociocultural mediation (Lievrouw, 2011: 45; Gillespie, Bochzkowski and Foot, 2012: 2). As a communications infrastructure, the materiality of social media platforms—from software processes, and protocols to algorithmic architectures—both enable and constrain symbolic means to communicate and with its entanglement within social practice can re-configure its materiality, re-mediate practices and reform patterns of relations and the institutional structures of social arrangements (Lievrouw, 2011: 45-6). In other words, this symbiotic relationship between the material and the symbolic is at the centre of a recursive process by which technology is reshaped in its use, is entangled within social practice and embedded in institutional structures. Social media, thus, constitute technocultural assemblages whereby 'software processes, patterns of information circulation, communicative practices, social practices and political contexts are imbricated in, articulated with and redefined by each other in complex ways' (Langlois et al, 2009: 416). From this position, we can envisage the relations between the internet, social media and society in less deterministic terms as a 'techno-social' concatenation, an interweaving of technology and human agency with the former not only shaping, but also being shaped by the latter in its use and modifications within a myriad of social, cultural and political practices and contexts (Crang et al., 1999: 2; Bingham, 1996: 637).

With its status as a new communications infrastructure, how has the internet and social media platforms affected the nature of social relations? In classical sociological theory, a concept of the social was largely envisaged as emerging from interactions between unmediated agents occurring within and across territorial space, as Marx (2015) theorised, the cosmopolitan character of capital with its 'expanding market ... chas[ing] the bourgeoisie over the whole surface of the globe' but, in this account, as with others, a concept of social relations is attached to the 'linear logic of clock-time' (Marx, 2015: 7; Urry, 2000: 126). This conception, however, presupposes the confinement of social relations to contiguous situations of face-to-face copresence which anchors its enactment within fixed spatio-temporal contexts where time is tied to space. The cultural diffusion of the internet has rendered these classical ideas of the social problematic as modern social relations are now increasingly mediated through diffuse digital networks in a global multimedia system capable of cutting cross the physical barriers responsible for framing traditional experiences of time-space (Gane, 2004: 1). Baym (2010) points to changes in the 'temporal structure' of personal connections facilitated by the internet and digital media through enabling synchronous and asynchronous modes of communication which 'can enhance the sense of placelessness ... and make people feel more together when they apart' and can 'allow very large groups to sustain interaction' across periods of time and

over large geographical distances (2010: 8). Likewise, for Held et al (2000), Giddens (1990), Urry (2000), Sassen (2004), but most notably, Castells (2000b; 2001; 2010) the internet has severed the ties of time from space as digital information travels, at an instantaneous rate, across the globe, intensifying the stretching and interconnectedness of social relations as they 'destabiliz[e] old hierarchies of scale' by dispersing human interactions across multiple landscapes from the local-to-global and global-to-local (2000: 17; 1990: 64; 2000: 126; 2004: 301: 2000b: 77; 2010: 21; 2002: 3). Indeed, this has led to the 'compression and de-sequencing of time' as sociality is ordered in random temporal sequences across the 'space of flows' that can disembed face-to-face interactions from local contexts and reembed them across despatialised networks which facilitates the repatterning of institutional practices across the digital terrain of cyberspace—from the social and cultural to the political (Castells, 2001: 3; 2000: 13; 2000b: 442; Giddens, 1990: 63-4). These transformations to the ordering of timespace have reconfigured the contextuality of social life in which the social has taken on a distinct qualitative structure: it is increasingly more virtual, transnational, anonymous and hypermobile. What consequences do these changes pose for social relations? Have these changes—facilitated by its distinct techno-affordances—produced positive or negative effects on the nature of social relations? Is virtuality real or fake?

Virtual Conceptions of the Social: Negative or Positive/Fake or Real?

In a small body of earlier studies into the social effects of computer-mediated communications, the internet was said to have largely a negative impact on social relations. It was argued that the internet 'degraded' 'fragmented' and 'displaced' the perceived 'real' and 'authentic' forms of face-to-face interactions (Nie and Erbring, 2000: 278; McPherson et al, 2006), losing its 'affective and soul-orientated communion' (Birketts, 1996:) by creating a depthlessness of superficial, ephemeral and isolated interactions (Barber, 1998; Stoll, 1999) that has negatively altered previous structures of social practice conducive to democracy (Luke, 1998: 124-6). At the centre of these critical narratives, according to Chen (2013), is the 'time-displacement hypothesis'—an argument implying a negative trade-off between time spent online and time spent on face-to-face interactions with the implication that increasing the former reduces the latter (2013: 407). This hypothesis was a fundamental premise, in Bowling Alone, in which Putnam (2000) suggested that new technology was corroding social capital by 'individuali[s]ing' leisure-time and 'disrupting opportunities for social-capital formation' taking place in face-to-face relations between friends, neighbours, relatives, involvement in politics, organisations and in communities (1995: 9). Similarly, Kraut et al (1998) spoke of an 'internet paradox' wherein, as a social technology, the internet had the effect of decreasing social involvement, reducing the size of social networks and increasing loneliness and depression (1998: 1029). Likewise, Nie and Erbring (2000) suggested 'the more hours people use the internet, the less time they spend with real human beings' (2000: 16). But, this hypothesis is built from a set of false premises: it assumes that (a) online social ties are exclusively a type of 'bridging' capital and, thus, superficial, weak and transient which (b) equates offline f-to-f social ties as a type of 'bonding' capital and, thus, thick, strong and durable and that (c) weak online social ties corrode, denigrate and replace strong offline f-to-f social

 $^{^8}$ Social capital, for Putnam (2000), refers to 'features of social organi[s]ation such as networks, norms and social trust that facilitate coordination and cooperation for mutual benefit' (2000: 66).

ties. The essential weakness in this hypothesis, therefore, is its denial that strong ties are maintained over the internet. Later empirical studies⁹ highlight this weakness, by not just showing the internet to expand the breadth of social networks (Sum et al, 2008; Zhao, 2006) and enable the bridging of social capital among diverse social groups (Ellison et al, 2014), but also to be effective in sustaining the depth of strong ties at a distance (Ellison et al, 2007). Despite its fundamental weaknesses, this hypothesis has resurfaced in more recent critical narratives around the internet and social media platforms. In *Alone Together*, Turkle (2011) claims that the internet and social media have made us more connected, but paradoxically, in superficial ways that make us, ultimately, more alone, isolated and lonely, as she argues, '[w]e are increasingly connected to each other, but oddly more alone: in intimacy, new solitudes' (2011: 19). The reason for this solitude is that these digital networks draw us away from more meaningful face-to-face interactions as 'technology offers us substitutes for connecting with each other face-to-face' (Turkle, 2011: 11). This is the exact point where the time-displacement hypothesis appears in her central argument:

22.

'[I]f you're spending three, four or five hours a day in an online game or virtual world, there's got to be someplace you're not. And that someplace you're not is often with your family and friends—sitting around, playing scrabble face-to-face ... watching a movie together in the old fashioned way' (Turkle, 2011: 12).

Similarly, in *Digital Vertigo*, Keen (2012) claims that social media offers an impoverished type of sociability—in contrast to f-to-f forms—and resembles 'an anti-social future, the loneliness of the isolated man [sic] in the connected crowd' and, in this sense, 'the reality of social media is an architecture of human isolation rather than community' (2012: 13-14). But, this hypothesis rests on a view of the digital as a one-way, uniform and denigrative process that acts upon passive agents by imposing an artificial mode of sociality that reduces us all to isolated, solitary and lonely individuals. In this respect the hypothesis ignores the varied, creative and complex ways in which individuals use digital technology to connect, mediate and shift interactions between virtual and actual contexts. This pinpoints another weakness of the hypothesis: its nostalgic distinction between the virtual/real. On top of its earlier studies, Turkle (2011) speaks of a new self 'split between the [virtual] screen and the physical real' (2011: 16) and, likewise, Keen (2012) of a splintered-self caught between the inverted boundaries of an unreality and reality where 'absolute unreality is [physical] real presence and the completely fake [virtual] is also the completely real' (2012: 14). This ongoing distinction between the virtual (non-physical) and the real (physical) is a false dichotomy; it perpetuates romantic oppositions between the [real] harmonious local community of an ideali[s]ed past and the alienated [virtual] existence of the lonely netizen' with the former decomposing into the latter (Castells, 2001: 117). This virtual/real separation is an articulation of a myopic either/or reasoning that completely overlooks the interwoven nature of postdigital societies wherein the digital bridges virtual/actual social relations, identities and interpersonal engagements. In other words, the digital should not be set against so-called real f-to-f sociability as it is itself real—it is entangled within the fabric of f-to-f social relations that does not just supplement, but also

⁹ Bargh and McKenna (2004) demonstrate that Nie and Erbring's (2000) argument is a non-sequitur as its findings do not support its argument (the link showing internet to detract from face-to-face interaction is assumed), but, in fact, their results show a correlation between increased internet use and a decrease in time spent on less sociable activities like watching TV (2004: 10). In the *Internet Paradox Revisited*, Kraut (2002) refutes his earlier argument by arguing that the Internet can have a positive effect on social involvement and networking as '[it] may be more beneficial to individuals to the extent they can leverage its opportunities to enhance their everyday social lives' (2002: 69).

enhances them. Today, life is constructed in-and-through the digital: 'it is an extension of life as it is, in all its dimensions, and with all its modalities' (Castells, 2001: 118; Woolgar, 2002: 16; Elliott, 2019: 45; Lupton, 2015; Wajcman, 2014).

This reality of the virtual is not just an epiphenomenon of the institutionalised nature of the digital as the virtual, that is, the immaterial and non-actualised dimensions of the world as it has always been ontologised as an irreparable constituent of the real¹⁰. The world is too intricate to be reduced to an ontology of the real narrowly defined in terms of its tangibility, concreteness and materiality, as Shields (2003) posits, everyday experience occurs not just in realms of the actual, but also it cuts across, entangles and overlaps within optic modes of the virtual, abstract and probable worlds (2003: 32). The point, then, is that our everyday experiences of the virtual—through our mobile devices, screens and terminals—is not simply a simulation or hyperrealisation of the real, inauthentic and artificial, but an ontological experience of a different mode of the real—one with a virtual form, yet authentic which retains traces of the actual (tied to hardware, software and corporeality), yet not quite so, but, as Hardt (1993) reminds us, 'while the virtual may not be actual, it is nonetheless real' (1993: 16). In contrast to the time-displacement hypothesis, as an essential part of the reality of everyday life, the internet and social media networks do not simply have an overwhelmingly negative impact on the structure of social relations—an absence of dialectical thinking—but, as a social technology, with techno-affordances, they are habitually used in social actions, activities and practices, across various contexts, that can produce social and non-social outcomes.

Instead of creating isolated, solitary and lonely individuals, Zhao (2006) suggests, its impact on sociability is determined by the way in which individuals use it in either an introversive or extroversive lifestyle (2006: 858). If used introversively, the internet will have a limited impact on sociality, whereas if it is used extroversively, studies show it can be conducive to interpersonal relations¹¹ by expanding the breadth of secondary social ties and support the maintenance of existing strong ties across diverse platforms—from e-mail (Zhao, 2006), blogs (Stefanone and Jang, 2008; Qian and Scott, 2007) and social media sites¹² (Ellison et al, 2007). But, the distinct techno-affordances of the internet has also been tied to more negative aspects of sociability, as Bargh and McKenna (2004) suggest, its capacities for anonymity, de-spatiality and instantaneity have greatly influenced the way in which this digital technology has been used in certain negative activities—from cyber-bullying, trolling and hazing (2004: 18). These negative activities extend into the far recesses of the virtual world even to an underground clandestine space. In *The Dark Net*, Bartlett (2015) examines this clandestine world that exists beyond the popular search engines of Google, Yahoo and Bing—a world only accessible by the

¹⁰ The virtual encompasses non-concrete aspects of the real world from '[f]iction, imagination, memory, engineering and mathematics' which necessitate a cognitive ability to create 'visualisations, representations, conceptualisations and ideations' (Shields, 2003: 23).

¹¹ In a PEW study, Boase et al (2006) showed these diverse internet-based platforms to be conducive to strengthening social capital by increasing the maintenance of core and expanding the scope of secondary social ties with respondents also reporting consulting these mediated ties to make important life decisions (2006: 10). In a statistical analysis of the European Social Survey across the UK, Finland, Italy and France, Räsänen and Kouvo (2007) showed a positive correlation between the frequent use of the Internet and increases in two forms of sociability: interpersonal relations and civic-engagement (2007: 235).

¹² Ellison et al (2007) and Valenzuela et al (2009) show correlation between social activities across social media (from tagging, commenting, posting and messaging) and improved socio-psychological benefits from feelings of improved self-esteem and life-satisfaction (2007: 1164-5; 2009: 893).

browser 'Tor' which encrypts user activities by cloaking its origin, destination and content rendering them completely anonymous, secure and untraceable (2015: 2). This dark-side of the internet is a space which harbours unconventional activities, ideas and opinions that exist below cultural and legislative norms—from illegal pornography, far-right nationalist, radical and extremist ideologies, markets for assassinations, illegal drugs, weapons, goods and services (2015: 3). But, in his conclusions, Bartlett (2015) is ambivalent toward its overall implications as 'the dark net is not black and white: it is confusing shades of grey' as it is also used in a variety of positive ways as a space for whistle-blowers, human-rights campaigners, activists and groups as he comments that with 'every destructive sub-culture I examine there are just as many that are positive, helpful and constructive' (Bartlett, 2015: 5).

This anonymity, as a core techno-affordance of the internet, has also empowered marginalised groups to express their identities which are stigmatised within society without suffering shame, embarrassment, ridicule, verbal and physical violence. In ethnographic work, Marciano (2014) showed an Israeli transgender newsgroup to use digital spaces as a preliminary, complementary and alternative setting to overcome social hostility in exploring marginalised gender-identities (2014: 827). Moreover, this anonymous dimension to the internet has been shown to cultivate increased self-disclosure, confidence and reduce anxiety by creating a secure environment with equal status among interlocutors and, according to Yum and Hara (2006), this has shown to support the construction of strong relational ties based on trust, honesty and common-interests (2006: 144). Indeed, empirical studies have shown that anonymity offers social support among minority groups—from cancer patients (Radin, 2006), physically handicapped (Bower and Tuffin, 2006) and sexual minorities (Marciano, 2014).

On a societal level, the ubiquity of digital technology reflects a wider shift in the dominant mode of social arrangements from a 'little boxes model' built around 'densely knit ... homogenous [spatially]-bounded groups and communities' as a primary source of sociability to a 'glocali[s]ed network model' where 'boundaries are more permeable, interactions are with diverse others [and] linkages switch between multiple [local and global] networks' (Wellman, 2002: 14). This broader shift in modes of sociability is not a direct outcome of digital technology, but its ubiquity has offered the material basis to extend 'glocali[s]ed networks' as an integral type of sociality to pursue the specific life-choices available in expressions of 'networked individualism' (Wellman, 2002: 14; Castells, 2001: 131; Papacharissi, 2011: 316). This type of individualism does not collapse into a possessive, narcissistic and egotistical moral individualism rooted in the rational, optimal and self-centred model of a homo-economicus, but a social pattern within which the intersection of virtual-actual networks are built by individuals, on the basis of a complex set of 'interests, values, affinities and projects' (Castells, 2001: 131). This sociability is orientated less to place-to-place and more towards person-to-person through which individuals now pursue their own life-projects by building to diffuse, plural and interactive social networks (Wellman, 2002: 14). It is in the pursuit of life-projects across digital networks where individuals also become part of a group by fashioning a sense of belonging in new forms of virtual community.

Virtual Aggregations: Socio-Spatial Enclaves or Communities of Alterity?

In its etymological roots, the concept of 'community' derives from the Latin 'com' (with or together) and 'unus' (one or singularity) and, thus, rests on a sense of shared belongingness¹³ within a group. In its traditional conception, community was seen as a belongingness in social attachments rooted in a homogeneous system of close-knit, spatially-bounded groups with a normative structure of values, practices and meanings organised around the propinguity of fto-f interactions. New conceptions of virtual community have de-stabilised this traditional basis of belonging—as stemming from thick social relationships built on a common culture, spatiality and co-presence—by reconceptualising it across diffuse, plural and thin social relations mediated by digital networks with social aggregations crystallising around shared interests. However, this very notion of community, coupled with its claims to foster legitimate forms of belongingness, has been subject to critical commentaries, not just on grounds of its suitability as an analytic device for exploring online social formations (Fernback, 2007; Postill, 2008), but also, in a more dystopian discourse as 'pseudocommunities' parasitic on the real-life 'authentic' expressions of belongingness created in f-to-f communities. Within this pessimistic discourse, the idea of a virtual community can be seen to exist, but in a defaced, denigrative and corrosive form as 'a progressive disavowal of the real ... a culture of experiential disengagement [and] a pacification of embodied experience' (Robins, 1999: 166), responsible for creating a sense of alienation and a loss of 'real' community (Ludlow, 1996: xv) by 'isolate[ing] us from others rather than bringing us together' (Stoll, 1995; Parsell, 2008) and where 'anyone, anywhere, anytime can have an opinion without ... any commitment or accepting any responsibility' (Dreyfus, 2001: 78; Galston, 2000). This narrative not only exaggerates the impact of virtual communities, but also presupposes a romanticised traditional idea of community, as a nostalgic apotheosis which has long since been displaced as its dominant form (Castells, 2001: 128).

What, then, are the integral characteristics of a virtual community? How can community over the internet and social media be differentiated from hyperchaotic flows across digital networks? To address this question, the literature on virtual communities have emphasised the regularity and longevity of mediated social exchanges, as Jones and Rafaeli (2000) contend, community does not exist in every social formation, but arises out of 'a specific set of circumstances' which must first be rooted in some degree of consistency and stability in social interactions, contextualised within a specific space, where 'social relationships can [be] forged in cyberspace through repeated contact' (2000: 215; Fernback and Thompson, 1995). The digital spaces opening-up as potential platforms for community once only encompassed chat-rooms, newsgroups and bulletin-boards, but now extends to a myriad of modern virtual arenas from the environments of multi-user domains (MUDs, MOOs and MMORPG) and social network sites (Facebook, Instagram and Twitter) all of which, cut across a wide spectrum of activities and interests from 'information, discussion, play, work [to] education' (Van Dijk, 1997: 50). A distinguishing feature of a virtual community is the structure of its formation: its configurations are organised around the subjective pursuits of individuals that amass around an axis of common-interests with 'groups of people brought together by shared interests...[in social, cultural and mental reality ranging from general to special interests or activities]' (Van Dijk,

¹³ Belonging as a socio-psychological concept entails a sense of 'valued involvement within a group or environment, an experience of feeling valued, needed and accepted' by others with similar interests (Hagerty et al, 1992: 173).

1997: 40). Conversely, Van Dijk (1997) further points out, that as a site of differentiation from traditional community, the virtual community is forged by common-interests typified by loose affiliations, spatially-diffuse frames of social organisation and open boundaries of culture and identity (1997: 45-6; Feenberg, 2019: 234). The central question in this debate is whether common interests can create a sense of belongingness?

In one of the first major theoretical expositions of virtual community, Howard Rheingold (1993) in The Virtual Community: Homesteading On The Electronic Frontier viewed virtual community as 'social aggregations ... with sufficient human feeling ... form[ing] webs of personal relationships' that can produce a qualitatively new kind of community with malleable boundaries that would not otherwise exist: 'people in virtual communities can do just about everything people do in real life, but we leave our bodies beyond' (1993: xvii). This understanding of virtual community is couched in technological determinism by exaggerating its capacity to create something new, at times, even superior forms of community that would not otherwise exist (Delanty, 2010: 140). In a more sociologically cautious idea of virtual community, Craig Calhoun (1998) in Community Without Propinguity Revisited envisages it as a form of 'dense, multiplex ... autonomous networks of social relationships ... [characterised by] a mode of relating' giving technological expression to the increasing modern importance of indirect social relationships created—not from technology or globalism—but out of processes of modernization (1998: 391). For Calhoun (1998), the internet does not create anything new nor promotes social networks, but, instead, it (a) gives alternative expression to existing kinship/direct relationships, (b) offers increased reliance on indirect social relations and (c) constructs 'socio-spatial enclaves' as 'communities of similarities' built—not on pluralism or alterity—but on sharing a single interest (1998: 384).

As 'communities of similarity', the virtual community, according to Calhoun (1998), connects people with similar opinions, beliefs, and interests, but also prejudices that can create homogenous enclaves with polarising thought, sentiments and ideas 'characteri[s]ed by particular identities and lifestyle choices ... a gay community, a singles community ... a community of white ethnics trying to avoid blacks' (1998: 384). Because the virtual community is rooted in an expansive range of shared interests, they do take negative forms in closed/exclusive 'pernicious communities' within which bigotry, racism and xenophobia exist from white supremacist to terrorist groups (Parsell, 2008: 42). With its organisation around lifestyles instead of thick cultural bonds, the 'thin' virtual community, for Calhoun (1998) loses its substantive capacity to enhance democracy as its 'compartmentali[s]ation of community life is antithetical to the social constitution of a vital public sphere (1998: 389). The most fundamental weakness of Calhoun's (1998) idea of virtual community is its failure to realise a basic techno-affordance of the internet: its capacity to connect a wide spectrum of individuals across a diverse matrix of categorical identities and sociohistorical horizons. By viewing communities of interest as reinforcing categorical identities, Calhoun (1998) collapses a complex field of categorical differences—intersecting across ethnicity, gender, age, sexuality, religion and class—into a single topic of interest which neglects the influences of social, cultural and historical experiences that shape our interests. From this perspective, the virtual community is enclosed, separate and homogeneous where interests reflect categorical identities. But, this conception of community approximates more to extreme articulations of the 'pernicious community' and not to the virtual community which is defined more by pluralism

with many being built on a single interest, yet converging multiple, diffuse and diverse social actors across differences in ethnicity, gender, culture and nationality. As Van Dijk (1997) highlights, 'virtual communities possess partial cultures and identities ... plural and multifarious and although the members affiliate for a particular common interest, they are otherwise heterogeneous' which can generate common agreement, but also points of conflict, difference and divergence (1997: 46). By ignoring this dimension of pluralism vis-à-vis the ability of diverse actors to build bonds of belonging around interests, Calhoun (1998) rejects the capacity of a virtual community to enhance democracy.

The possibility to enhance democracy across digital spaces is a major theme in Castells (2001) theory of virtual community. With new de-spatialised digital forms of sociability, Castells (2001) proposes the need for a post-traditional concept of community from close-knit spatial units to diverse networks by 'de-emphasi[s]ing its cultural component [and] emphasi[s]ing its supportive role' and, in this process, draws on a definition of virtual community as: 'networks of interpersonal ties that provide sociability, support, information, a sense of belonging and social identity' (2001: 127). In opposition to Calhoun (1998), Castells' (2001) view of virtual community as networks of sociality are crystallised expressions of a networked individualism articulated in two distinct ways: as (a) experimental—ephemeral communities based on pure virtual relationships as in communities of interest, but often as (b) supplemental—reinforcing existing offline relationships (2002: 128). These expressions mirror a transition from primary to secondary social ties, but, even with experimental expressions—transcending spatial proximity—they offer important 'sources of information, of work performance, of leisure, of communication of civic involvement and of enjoyment' (Castells, 2001: 128). This idea of virtual community opens the possibility for its capacity to enhance democracy. By considering digital networks as creating overall positive effects of society, however, Castells (2001) collapses into a soft techno-determinism by exaggerating these effects¹⁴. On this point, it is important to keep in mind Calhoun's (1998) caveat: not to 'misunderstand the internet by exaggerat[ing] its novelty' (1998: 380). To adequately understand the societal impact of digital technology—be it the internet or social media—is to see its affordances as producing dialectical tensions between Calhoun's (1998) concerns over its creation of new challenges from pernicious communities, surveillance and new technologies of power and Castells' (2001) vision to open new possibilities for post-traditional forms of political community to counter, resist and subvert new institutional structures of power and domination (1998: 381-2; 2001: xiv).

The Virtual Community as a Communication Community

The virtual community—as a post-traditional type of community—relies upon the structures of communication to build a sense of belonging and to open its capacity to democratise society. The post-traditional virtual community is diverse, diffuse and dialogical where social bonds of belonging are discursively constructed out of the intersubjective processes of digital exchanges. Its bonds of belonging are built on the pursuits of individual interests which make them more ephemeral than traditional bonds, but, more diffuse, multiple and plural. As an outcome of

¹⁴ Castells (2001) exaggerates the effects of technology which collapses into technological determinism which can be exemplified in his claim that technological inferiority was one of the 'the main triggers' of Gorbachev's *perestroika* and, ultimately, to the disintegration of the Soviet Union in 1991 (2001: 21).

communicative processes, belongingness in the virtual community is symbolically constituted: it is through uses of symbols where actors produce shared meanings, ideas and perceptions of group boundaries. This symbolic construction of boundaries underpins the basic idea of a community, as Cohen (1985) asserts, '[t]his consciousness of community is ... encapsulated in perception of its boundaries ... which are themselves largely [symbolically] constituted by people in interaction' (1985: 13). But, there is more to the structure of a virtual community than its symbolic construction, as Delanty (2010) argues, 'community today is abstract and lacks visibility and unity and, as a result is more of an imagined condition ... found as much in the search and desire for it as in its capacity to provide enduring forms of symbolic meaning' (Delanty, 2018: 153). The virtual community is multilayered: it is a mode of consciousness with a 'symbolically-constituted level of experience and meaning ... articulated in the construction of boundaries, but also, on the imagined level, it entails group formation underpinned by the search and desire to pursue a sense of belonging' (Delanty, 2018: 153).

This search and desire for virtual community as an imagined condition is rooted within the broader context of social, cultural and political transformations expressed in new structures of individualism. In our contemporary societal condition of 'institutionali[s]ed individualism' the state now increasingly addresses 'its rights and services to the individual – not to the family, class or ethnicities...[where] all the risks and implications are being transferred to the individual as an actor who defines his/her own situation' (Beck and Beck-Gernsheim 2001: 156; Bauman, 2001; Giddens, 1991). With the displacement of traditional frameworks of authority, meaning and identity anchored in the state, family, work and class, the source of community, today, is reconstituted on the search and desire of individual pursuits for identity, meaning and belonging which is given its content and trajectory by the multiple specificities of life-projects. In other words, 'meaning is not given, but is constructed by social actors who use ... symbolic resources to create new universes of meaning' (Delanty, 2018: 154-5).

Today, the digital networks of social media constitute dominant cultural platforms with symbolic resources to build new forms of meaning, to construct identities and bonds of belonging. As an imagined condition, the virtual community can invoke a 'radical imaginary' by which it can institute critical, transgressive and transformative projects where the institution of society is collectively imagined anew creating spaces of tension, resistance and sociopolitical actions (Castoriadis, 1987: 369). This radical imaginary increasingly takes shape within social conflicts over belonging evidenced in networked social movements rooted in struggles for recognition, identity-politics and fights for global justice. Digital networks now operate as dominant spaces within which a symbolic politics is shaped by challenging, rejecting and subverting institutional codes in favour of alternative meanings, values and visions of different sociopolitical futures. These virtual communities as communities of dissent mobilise around alternative meanings, identities and belonging in struggles both within and beyond national frames of reference. To conclude, we can agree with Pierre Lévy (2002) that this normativetransformative dimension captures an accurate description of a virtual community as 'a new way of making society which [is] rhizomatic, transitory and dissociative from time-space' (2002: 103; Feenberg, 2019; Beck, 2015).

In Conclusion

This chapter has presented a specific case for a *cyber-realist* perspective as a way to understand the complex, entangled and dialectical tensions between the competing interests, worldviews and logics of a 'consumption model' and a 'community model' within social media platforms. Instead of subscribing to the binary logic of cyber-optimist and cyber-pessimist perspectives in which technology is viewed as either a neutral tool with often positive effects or as non-neutral with imbued valuative content which is inherently negative, this chapter has argued for a twofold view of digital technology as comprising a cultural artefact with distinct operators to which it is used to achieve specific ends which can produce both positive and negative outcomes. This chapter argued for a particular understanding of the virtual; one that does not replace, corrode or represent a simulation of the real, but which constitutes a different mode of the real that is embedded within the fabric of everyday life. As such, the virtual does not denigrate traditional forms of face-to-face sociability nor does it corrode the traditional idea community, but, instead, offers important spaces in which post-traditional forms of community emerge in belongingness which is diffuse, ephemeral and based on shared-interests around pursuits and desire to belong. From a cyber-realist perspective, this chapter concluded by recognising the tensions between the way in which social media networks present new challenges in the form of power, control and domination exerted by new systems of dataveillance, but its new possibilities for the posttraditional expression of political community to resist, counter and subvert structures of power. The next chapter will focus in more detail on these new challenges of power and its possibilities of resistance across social media networks with reference to the following questions: what are the characteristics of this new technology of power and how can social media networks provide the symbolic resources for a cultural politics that can extend across national borders.

Chapter 2: (In)Between Digital Domination and Liberation: Digital Surveillance and Democratic Resistance

'Contemporary social media is a field of power struggles, in which dominant actors command a large share of economic, political and ideological media power that can be challenged by alternative actors' (Fuchs, 2015: 18).

The specific aim of this chapter is to explore the tensions between the new technologies of power and the new possibilities for resistance within the sociocultural spaces of social media networks. In line with a cyber-realist perspective, this chapter will develop a dialectical understanding of social media networks which inhabit struggles between two dominant logics: a neoliberal logic of accumulation supported by dataveillance practices and a social logic of resistance orientated toward social relations, democratic debate and political mobilisations. This chapter is divided into two main sections which reflect these tensions between power and resistance. The first part offers a critical analysis of the optimistic strand of the information society thesis by suggesting that the equation of technological advances with social progress is the ideological trappings of a neoliberal worldview. It argues that technology needs to be understood through a critical lens in which it is used today to further entrench power relations, exploitation and inequality both within and between countries. The second section explores in more detail the relation between social media networks and the mobilisation of collective-action. It offers a critical analysis of the major perspectives on networked social movements which develops an argument that social media platforms do not create collective action in-and-of-themselves, but its symbolic spaces affect the specific mechanisms and processes under which collective-action occurs. The chapter concludes that digital symbolic spaces of social media networks are conducive to articulations of a plural, dialogic and post-foundational politics built upon diffuse struggles for global justice.

The Information Society: Reality or Ideology?

How has digitisation transformed contemporary society? Has it changed the structure of society into a social configuration that is qualitatively new? An answer to these questions can be found in a utopian strand of a contemporary discourse which views digital technology as inaugurating a new societal epoch, a qualitatively distinct societal configuration rooted in a new knowledge economy that is typified by new technological systems of innovation, new modes of information production and new occupational structures with distinct cultural systems (Leadbeater, 1999: 6; Masuda, 1990: 3). These technological transformations designate a qualitative shift to a new macro-sociological category: the information society (Webster, 2006: 9; Duff, 1995: 390). The idea of the information society has its intellectual roots in the concept of a postindustrial society. In The Coming of Post-Industrial Society, Bell (1973) argues, that modern societies, largely in the West, have experienced widespread transformations to their social structures viewed in a shift from heavy industrial mass-manufacturing, within economies of scale, to a postindustrial service-sector characterised by information, knowledge and economies of scope (1973: 14). While the traditional industrial manufacturing base of the economy was organised around mass production plants with heavy machinery, rigidity and commodity-standardisation, in contrast, the new service-base of the postindustrial economy is organised around the use of information. For Bell (1973), this transition signalled changes to 'occupational distributions' where the type of work shifted from blue-collar manual to white-collar professional, technical and knowledgebased services from trade, marketing and finance to customer service, IT and education, thus, in postindustrial societies '[w]hat counts is not raw muscle power or energy, but information'

(1973: 15-127). Information is the defining characteristic of the postindustrial society: it is an 'axial principle' in which 'the centrality of theoretical-knowledge—the primacy of theory over empiricism and the codification of knowledge into abstract systems' is increasingly used for means of 'social control' vis-a-vis within societal forecasting, decision-making, planning and technological-scientific innovation (Bell, 1973: 20). This primacy of information means that, in essence, 'the post-industrial society is an information society' (Bell, 1973: 467). Indeed, in contemporary societies, information is a more valuable productive resource, as Castells (2000) claims, dominant sources of productivity now lie 'in the technology of knowledge generation, information processing and symbol[ic] communication' (2000: 17). Within the UK, the service sector now accounts for 79.6% of GDP (ONS, 2020). This is also seen in the internet-economy which has reached \$US 4.2 trillion within the G20 countries. But, does the growth of a service-sector necessarily signify a shift to a new distinct type of societal configuration?

This gives credence to the macro-sociological concept of the postindustrial society as an analytic device to understand the structural changes to industrial economies brought on by a shift from mass-manufacturing to information services. But, this utopian strand within the postindustrial society thesis extends beyond these structural transformations: it entails an uncritical optimism that reflects a modernist ideology where technology is tied to social progress with reference to its status as a panacea to the social problems of class, status and inequality that beset industrial capitalist societies. It is within these changes to its social structure and occupational distribution which is said to create a new axis of stratification in which class is less hierarchically-organised around property ownership and more horizontally-organised around status tied to acquisitions of knowledge, technical skills and competence (Bell, 1973: 374). With the postindustrial society the class structure, according to Bell (1973), has become increasingly democratised: it has shift from an ascriptive-hereditary bourgeois property class to an achieved professional-technical class based on educational credentials (1973: 374). This democratisation of class signifies the meritocratic nature of the postindustrial society: the codification of a new social order around a shift in the traditional landscape of power from ascriptive nobility to educational achievement (Bell, 1973: 426). Likewise, in contrast to the centrifugal power and hierarchical classes within industrial society, Masuda (1990) suggests, the information society is 'horizontally functional, maintaining social order by the autonomous and complementary functions of a voluntary civil society' (1990: 5). These transformations also extend to the political ethos of the postindustrial society which is typified by its communal nature that directs national policies toward attaining its social priorities: '[i]t is sociologi[s]ing rather than economic' where 'individual utility and profit maximi[s]ation become subordinated to broader conceptions of social welfare and community' (Bell, 1973: 481). Thus, this utopian strand of the postindustrial society paints an egalitarian image which liquidates the social inequalities rooted within hierarchical systems of class, status and power prevalent in industrial capitalist society and, therefore, in Bell's (1973) own words: '[i]nevitably the post-industrial society gives rise to a new Utopianism' (1973: 488).

These structural changes—especially to the industrial class structure—is implicated in ideas of an ostensible shift to a postcapitalist economy. Dahrendorf (1959) viewed transformations to the occupational structure as directly reconfiguring power differentials in which bureaucratic, administrative and governmental authority had diluted private property as a central locus of class domination wherein the dialectical motor of societal conflict between labour and capital in industrial society is now 'institutionally isolated' (1959: 271). It is this liquidation of property

ownership as a site of power which typifies the postcapitalist society. This postcapitalist thesis is, therefore, rooted within changes to class, a diversification of its structure, but, class itself is not the defining principle of capitalism: it is surplus-value that defines capitalism, as a distinct sociohistorical mode of production, as Marx (1990) illustrates:

32

'The ... thing that particularly marks the capitalist mode of production is the production of surplus-value as the direct object and decisive motive of production with the transformation of surplus-value into profit, we have seen how a mode of production peculiar to the capitalist period is based on this—a particular form of development of the social productive powers of labour' (1990: 1019-1020).

The fundamental mechanics distinguishing capitalism, as a sociohistorical mode of production, is not, therefore, its class structure, but its maximum extraction of absolute surplus-value as the 'direct object and decisive motive of production' (1990:1019). Absolute surplus-value is, thus, created within the labour-process where the value of the commodities produced by workers throughout the working-day is greater than the value of their labour-power, as Marx (1990) describes, 'the prolongation of the working day beyond the point at which the worker would have produced an exact equivalent for the value of his labour-power ...this is the process which constitutes the production of absolute surplus-value' (1990: 645). In other words, it is not its class structure, but its valorisation processes of accumulating capital, assets and profit through the creation of absolute surplus-value which is the defining characteristic of capitalism. This can be highlighted by the 'general formula for capital' as 'M-C-M where $M = M + \Box M'^{15}$ which is at the root of Marx's labour theory of value (1990: 251). By this definition of the capitalist mode of production, a postcapitalist society would need to be qualified by a shift beyond labour, at the very least, as a primary source of surplus-value, and, to this effect, Drucker (1993) argues that knowledge, instead of labour, is the 'new factor of production' in the postcapitalist society where 'value is now created by productivity and innovation both applications of knowledge to work' (1993: 6-8). Likewise, Bell (1999) posits that 'knowledge is [now] the source of invention and innovation' and, in the postindustrial society, Marx's labour theory of value is replaced by a 'knowledge theory of value' (1999: xvii). This postcapitalist thesis also extends into cyberspace where peer-to-peer production, the commons and the sharing-economy is said to 'supersed[e] capitalism' by constituting an incumbent type of postcapitalist economy—a virtual gift economy as a mode of 'cyber-communism' (Barbrook, 1994: 48). Moreover, Mason (2015) posits, that the virtual spaces created by digital technology restores the postcapitalist project by giving rise to these non-market forms of economic exchanges and, likewise, Rifkin (2014) argues that the digital commons facilitates a 'transition from the capitalist era to the Collaborative age' that can create 'a more just, humane and sustainable global economy' (2015: 4; 2014: 380). However, these more recent commentaries collapse into a soft techno-determinism which fetishises the virtual by maintaining that digital technology itself will create a better world beyond capitalism, as Fuchs (2016) comments, these utopian narratives 'underestimate the antagonistic character of digital capitalism and its imperialistic tendency to create new inner colonies of exploitation' (2016: 234). Digital technology has giving rise to new p-to-p exchanges, but it is far away from superseding capitalism because, as a whole, it accounts for a fraction of the internet-economy,

 $^{^{15}}$ Formula describes the generative process of surplus-value where M= (Money) used to buy variable capital as Lp= (Labour-Power) + constant capital as Mp= (Means of Production: instruments of production + subjects of labour) in the labour-process to produce C= (Commodities) exchanged to create M= (Money: capital invested in production) + \Box M (incremental increases in capital) equating to the creation of surplus-value (Marx, 1990: 251).

approximately 15billion in 2014 out of an estimated \$4.2trillion (Statista, 2020c). Unless there is a dramatic change, the chances of p-to-p exchanges over the internet replacing its dominant capitalist logics of commercialisation, commodification and valorisation appear remote.

With reference to the optimistic strand of the information society thesis, the concept itself is no longer just confined to macro-sociological theory, as an analytic tool, but is, today, hypostasised as an actually existing social reality where the concept is used to direct, shape and justify social policy frameworks as by its inscription into the European Commission and United Nations Educational, Scientific and Cultural Organisation's (UNESCO) national policy agenda and the UK's new industrial strategy (EU Science Hub, 2018; UNESCO, 2018; Gov.uk, 2017). It is within this now dominant narrative where the information society is believed to have overwhelmingly positive effects on society as if the concept itself were the exclusive pathway toward the actuality of a techno-egalitarian world, as de Miranda (2009) illustrates, it is now 'equated with progress towards a better society in which social problems will be solved by technological means and in which human beings will be better off and freer' (2009: 4). It is, thus, viewed as a type of 'silicon idolatry' with 'sacred' or 'mythical' qualities—a 'digital sublime' in which digital technology in its mythical status 'glosses [over] conflicts, struggles and divisions' where its technical wonders dissolve class, status and power asymmetries (Shallis, 1984; Mosco, 2004: 34). This egalitarian image of the information society constitutes a modernist utopia which inhabits 'sociologi[s]ing' tendencies which democratises class, status and power in its creation of an idyllic meritocracy as if it were an innate teleological trajectory of technology itself. This application of the concept pinpoints the ideological dimensions of the information society; it obscures its invested interests, disguises its inequalities, conflicts, tensions and new power asymmetries that roots technology within a metanarrative of societal progress with a model of unlimited economic accumulation (Lyon, 1988: 18-19). It, thus, resembles a legitimating neoliberal ideology which 'den[ies] the continued existence of exploitative class relations' and obfuscates the continuity of 'power elites, social inequalit[ies], unemployment, poverty, concentrations of control in the economy [and] social antagonisms' (Garnham, 2000: 151; Stehr, 1994: 55). Its social policy subscriptions of enhanced freedom 'is ascribed to the power of technology, the de-regulation of markets and the rolling-back of the state—the cornerstones of neoliberal ideology' (de Miranda, 2009: 4). The very ideas of flexibility, deregulation and enhanced freedom that is promised by new technology reflects the dominant ideology which 'tends to imply that the neoliberal message is a universalist message of liberation' (Bourdieu, 1998: 31).

This type of information society euphoria is, thus, one-dimensional and uncritical as it 'ignore[s] the role of information, the media and communication in capitalism' (Fuchs, 2016: 2). After all, the information society does not signify an egalitarian shift beyond the exploitative, alienating and dehumanising nature of the capitalist mode of production, as Friedman (2002) comments, 'capitalism has not changed in its general tendencies to the deepening of commodification, the increase in the rate of accumulation ... the increasing lumpeni[s]ation of large portions of the world's population [and] [a]ll these processes are abetted by new high technology' (2002: 302). Digital technology has not given shape to a qualitatively new postcapitalist society—instead it is embedded within the incumbent logics of a capitalist system, that is, a 'political and economic framework that confirms and accentuates existing patterns rather than giving rise to new ones' (Kumar, 1995: 116). In contrast to an epochal social shift beyond the mode of capitalism, digital technology is a part of reconfiguring its productive forces by which a new digital infrastructure

accompanies new forms of cognitive, communicative and cooperative labour which form new socio-culturally exploited sources of commodification, valorisation and capital accumulation (Fuchs, 2013: 419). These changes show a shift to a neo-Fordist mode of flexible-accumulation typified by 'new sectors of production, new ways of providing financial services, new markets and ...intensified rates of commercial, techn[ical] and organi[s]ational innovation' that signifies 'a continuity of substance [alongside] a discontinuity of form' (Harvey, 1990: 147; May, 2002). In the context of capitalism as a global system, these informational productive forces entangle within agricultural and industrial forces, across different geographical regions, which compose the global capitalist economy (Fuchs, 2013: 419). This underscores the most damaging critique of the information society thesis: its inability to contextualise the informational economy within 'the international division of digital labour' where highly dangerous, exploitative and alienating forms of agricultural and industrial labour—and in a literal sense blood, sweat and tears—are extracted from global value chains and objectified in productions of its technical infrastructure, ie, the raw materials extracted from mines in Indonesia and the Democratic Republic of Congo (DRC) to the manufacturing assembly lines across China (Fuchs, 2014b: 8).

At the bottom of this global value chain is the exploitation of agricultural labour appropriated to extract the natural minerals of Cassiterite (Tin), Coltan (Tantalum and Niobium), Cobalt and Wolframite (Tungsten) used in manufacturing the components (i.e. batteries, microprocessors, capacitors and circuit-boards) in the digital hardware of smartphones, televisions, laptops and computers. With rising global demand from technological societies, across the OECD, this agricultural labour as a form of artisanal mining is not just performed by men, but also children (as young as 7 years old), which extends to 12-15 hours a day, in intense heat, often on either pontoons with 'throat-itching exhaust fumes' or in unstable mines with heavy exposure to dust, chemicals and radioactivity where the excavation of Tin, Coltan and Tungsten is extracted by shovels, pickaxes or, in many cases, with bare hands (Hodal, 2012; Faggoto, 2014). This exploitative work yields daily earnings from \$3-\$5 and is performed under the constant threat of being buried alive by landslides or mine collapses, as Faggoto (2014) describes, in Bangka (Indonesia) 53 miners died in 2012 (roughly one a week), but, activists contend that many deaths go unreported and the actual average is 'closer to 100-150 deaths a year' (2014). Because of increasing global prices of these minerals, they are very profitable sources for financing conflict and civil war in the DRC equipping local armed groups, militia and government armed forces of the FARDC (World Vision, 2017). With 80% of the world's cobalt deposits, out of the 13 major mines, in the DRC, 12 are controlled by armed groups where mining labour is recruited, controlled and exploited by force, violence and the threat of death under complex systems of forced, debt-bonded, peonage and child slavery¹⁷ (Prendergast and

¹⁶ For Fuchs (2013), these changes constitute a 'subject-object dialectic' in which subjective forms of cognitive, communicative and cooperative labour imbricated in objective technologies, networks and commodities recursively objectify these types of labour as modern sources of capitalist profit (2013: 419).

¹⁷ In research by Free the Slaves (2011), these specific types of slavery were shown to exist across the mining industry, in the DRC, as it was reported that (a) villagers, in close proximity to mines, were rounded-up at night and forced, at gunpoint, to work in the extraction of cobalt; (b) a high proportion of miners, 90% of the population of Bisie in 2008, were in situations of debt-bondage working to payoff debts used to purchase food, tools and equipment required for employment; (c) a number of miners were performing work as part of a conviction for a fabricated or false crime and (d) the targeting of children was reported to be a common practice in mines, in the DRC, as a source of cheap (if not free) labour with UNICEF estimating that approximately 40,000 children across southern DRC are working under conditions of slavery (2011: 12-22).

Lezhnev, 2009: 2; Kelly, 2016). These expressions of artisanal and conflict slave labour found in mines across Indonesia and the DRC have been shown to be deeply embedded within the global supply chains of the biggest ICT companies from Apple, Samsung, Sony, LG, Lenovo, Dell to Microsoft, HP and Huawei (Amnesty International, 2016: 9).

Once mined across Indonesia and the DRC, these minerals are smelted into metals and shipped by global conglomerates to 'export processing zones' which are then used to manufacture electronic components (motherboards, ion-batteries, sim-cards, microprocessors) in industrial assembly (Klein, 2010: 204; Prendergast and Lezhnev, 2009: 1). With the most export processing zones and huge population, China has an abundance of cheap, docile and highly exploited digital labourers, many of whom, work for illegally long hours, under coercive conditions for low wages to supply the global demand for digital media devices. On the assembly lines in Wintek, Foxconn and Pegatron, workers are exposed to harmful chemicals and substances without suitable safety equipment, as Barboza (2011) reported, at Wintek, in 2010, 137 factory workers were injured, with many hospitalised, due to overexposure to the poisonous chemical n-Hexane used to clean iPhone screens and, again, in 2011, it was reported that 3 workers were killed and 15 injured in a factory explosion from combustible aluminium dust within the production environment at Foxconn (2011). Under these poor production conditions, digital labourers are intimidated, threatened and coerced into obligatory overtime working 12 hours a day, 7 days a week, without a rest day for 13 days while, under conditions of exhaustion, performing repetitive and monotonous tasks on regimented Taloristic assembly lines (SACOM, 2010). With wages at Foxconn below the living wage in the cities of Tianjin, Wuhan, Hangzhou and Kunshan, many workers are compelled to work overtime¹⁸ just to achieve basic levels of subsistence, but, according to an analysis of pay stubs by China Labour Watch (2016), the actual wages of Pegatron workers has declined from an hourly wage of \$1.85 USD in 2015 to \$1.60 USD in 2016 (SACOM, 2010: 7; China Labour Watch, 2016). In this study, SACOM (2010), highlighted the extent, to which, digital labourers both lived and worked under a dictatorial 'military-management style' at Pegatron and Foxconn with workers exposed to a strict regime requiring complete obedience to rules, curfews and production targets with inhumane punishments, verbal and physical intimidation, threats of non-payment of wages and harassment for any perceived contravention of these rules (2010: 2-3). These dictatorial working and living conditions of workers had attributed to increases in suicides, as SACOM (2010) shows, there were 14 suicides, at Foxconn, between January and August 2010 with young workers jumping from floors of the high-rise complex in Shenzhen (2010: 2). The response by Foxconn was not to address the inhospitable conditions under which its employees worked, but to install external nets to catch jumpers.

Moreover, the dangerous, harmful and exploitative labour inscribed within technological hardware is again reemployed in dangerous, harmful and exploitative labour practices involved in the unregulated processing of the e-waste produced by wealthy consumer-based societies across the G20. E-waste is the new pathology of the information-economy as it is now the fastest growing source of waste in the world. According to a UN Environmental Programme report

¹⁸ By being illegally forced to sign a 'voluntary overtime pledge' as a condition for employment, the workers, at Foxconn, were averaging 120 hours a month of forced involuntary overtime, exceeding Article 41 of the Labour Law in China stipulating a monthly maximum of 36 hours and the International Labour Organisation's convention of 32 hours per month in China (SACOM, 2010: 8)

(2019), there is an estimated 50 million tons of electrical and electronic waste produced globally every year and it is on track to reach 120 million tons by 2050 (UN, 2019). Out of the 50 million tons, 80% is often illegally shipped to developing countries—from Nigeria, Tanzania, Ghana, Ukraine and Thailand to Pakistan and Hong Kong. In a study on this 'leakage' of e-waste from the European Union, Basel Action Network (2019) found that 11 out of 19 e-waste shipments were illegally exported to developing countries and, with its annual production of 1,632,000 tons of e-waste, the UK was the biggest exporter with 5 shipments: 3 to Ghana, 1 to Tanzania and 1 to Pakistan (BAN, 2019). According to the World Health Organisation (WHO), the infomal labour involved in e-waste is tied to serious health risks from direct contact with hazardous materials, inhalation of toxic fumes and accumulations of harmful chemicals in local soil, water and food (WHO, 2014; Heacock et al, 2016). Is this really what was envisaged by the egalitarian world of the postcapitalist information society?

These transformations to the nature of global capitalism are also felt within wealthy information based economies, across the G20, where the widespread shift toward labour-market flexibility has shaped a 'political economy of insecurity' in which employment is precarious, social welfare is increasingly eroded and social risks are redistributed away from the state toward individuals (Beck, 1999: 3). For Castells (2000), this new informational economy has built a 'dual society' between 'a core labour force' of skilled 'information-based managers' and 'symbolic analysts' and 'a disposable labour force that can be automated ... or hired/fired/offshored' (2000: 295). Growth of the service-sector may have seen rises in quantities of jobs, but a decline in the quality of jobs with new jobs as increasingly 'McJobs' which are low-skilled, low-paid, low-quality and highly routinised (Ritzer, 1998: 5). Instead of its promise to democratise class, the informationeconomy has created a new category to the class structure—the 'precariat' class with a distinct relationship to production in which their labour is highly insecure, unstable and low-paid and tied to rising patterns of casualisation, informalisation, part-time and phony self-employment (Standing, 2011: 3; Klein, 2010: 232). This type of class is evident in the rise of the gig-economy which now employs 4.7 million of the UK workforce, but its workers do not have the status, rights and benefits of employees: they are classified as either self-employed or as independent contractors and, therefore, are not covered by UK employment law which means they are not entitled to its legal protections covering minimum-wage, statutory sick pay, unfair dismissal or holiday pay. Recent HM government research (2018) showed that 24% of people who work in the gig-economy earn less than £7.50 an hour, below the minimum wage of £8.72 (2018: 48).

Even outside of the gig-economy workers with employee status still remain on insecure zero-hour contracts with 974,000 workers in the UK now employed on these contracts (ONS, 2017). The growth of this political economy of insecurity typified by insecure, low-paid and part-time work has led to sizable sections of the working population to become excluded from mainstream society. This section of the working population constitute 'the new poor' where '[t]he poor of a consumer society are people with no access to a normal life, let alone a happy one' and are 'flawed consumers' who 'are socially defined ... as blemished, defective, faulty and deficient' (Bauman, 2005: 38). This new information-economy has, thus, produced a 'cyber-proletariat' whereby information technology intensifies 'a fundamental [dual] dynamic of capitalism—its drive to simultaneously draw people into waged labour and expel them as superfluous un-or-under-employed' (Dyer-Witheford, 2015: 15). Within this new economy, information is also the basis for new forms of surveillance in which 'the circuits of communication are the supports

of an accumulation and a centralisation of knowledge ... [and] the [new] anchorages of power' (Foucault, 1979: 217; Deleuze, 1992; Ceyhan, 2012).

Digital-Labour, Surveillance Capitalism and New Modes of Power

Within its broader regimes of flexible accumulation, these informational productive forces have built a new digital political-economy organised around a 'discursive [media] apparatus' where 'cultural circuit[s]' form dominant spaces within which to commodify the cultural knowledges transmitted through social relations—from gossip, chat and small-talk to general thought—as new profitable sources of surplus-value (Thrift, 2005: 6). Alongside agricultural and industrial labour, the virtual spaces in which contemporary sociability is now organised constitutes a type of unpaid digital labour, as Terronova (2019) points out, '[l]ife itself ... ha[s] been shown to be biopolitically productive through the integration of free-work ... affect, and bodily virtualities into economic valorisation' (2019: 4). This biocognitive stage of information capitalism extends systems of production, valorisation and absolute surplus-value to the heart of life and its forms. Digital labour extends to all modes of online activity and constitutes a neoliberal capitalist logic that collects, retains and harvests the metadata created from this activity as new forms of profit. This online activity extends to (a) all browsing-purchasing data (Amazon, E-bay and Alibaba); (b) all confessional data on social media (Facebook, Twitter and YouTube) and (c) all opinionviewpoint and crowdsourced data (Wikipedia, OpenStreetMap) (Beer and Burrows, 2013: 30). With increased digital mobility, this activity extends offline to geospatial data from our spatial histories, real-time locations and our post-consumptive behaviours (Google, Bing and Yahoo) (Leszczynski and Crampton, 2016: 1). In contrast to content-data, this metadata is a much more valuable commodity as it gives intimate insights into our lives, behaviours and inner thoughts (Schneier, 2015: 26). This raw material of human experience is fed into machine processes data-mining, data-analysis and data-analytics—that build prediction products as a 'proprietary behavioural surplus' that will 'anticipate what you do now, soon and later' (Zuboff, 2019: 8).

These knowledge-commodities generate surplus-value for platform owners, their advertising clients and third-party data-brokers by appropriating user populations for greater advertising revenue, targeted advertising and by trading them on a new marketplace of behavioural futures (Fuchs, 2014: 108; Zuboff, 2019: 8). Digital labour—the object of these capitalist processes now represents a type of prosumption which relies upon a new quality in the organisation of work as cultural knowledge, creativity and thought that presupposes a non-separation of the spheres of production and consumption. This prosumptive labour, therefore, necessitates a 'dedifferentiation of the workplace and the social realm' where productive logics of the former come to increasingly colonise the latter (Andrejevic, 2013: 157). This deepening commodification of culture through neoliberal logics foregrounds the idea of the 'social factory' where 'the whole of society lives as a function of the factory' in which its logics of accumulation engulfs 'all of social production' of which is 'turned into industrial production' and 'the sociality of production is nothing more than the medium for private appropriation' (Tronti, 1962: 56). In the Fragment on Machines, within Grundrisse, Marx (1993) anticipates this shift toward the information economy as the accumulation logics of the productive forces of capitalism infiltrate the realm of the 'General Intellect' where capital extend to 'the accumulation of knowledge and of skill of the general productive forces of the social brain' (1993: 622). These productive forces have created a 'neurocapitalism' in which 'the cognitive and immaterial dimensions of labo[u]r

becomes dominant from the ... view of value-creation and the competitiveness of companies' (Griziotti, 2019: 223). It is this transformation to its productive forces where the nature of 'latecapitalism is characteri[s]ed by a prodigious expansion of capital into hitherto uncommodified areas' (Jameson, 1984: 78). Lupton, 2015). As with wage-labour, prosumptive-labour relies on 'private enclosure of productive resources' that demand (in-exchange for access to platforms) the surrender of our data as a productive activity which itself contributes to the accumulation of capital for those who own these productive resources (Andrejevic, 2013: 162). To maximise accumulation, the digital economy requires the creation of its content by this unremunerated free-labour of its users that is itself 'pleasurably embraced and at the same time ... shamelessly exploited' (Terronova, 2013: 37). The moment where consumptions of culture is translated into excess productive activities is the point at which it becomes effectively an estranged, alienated and exploited activity because it (a) no longer belongs to us; (b) it exists outside of us and (c) is 'systematically turned upon us' with 'every message we write, every video we post, every item we buy or view' (Andrejevic, 2013: 159). Instead of signifying a shift to a qualitatively distinct postcapitalist knowledge theory of value, Marx's labour theory of value remains relevant to our understanding of the current logics of accumulation which operate in social media platforms. Today, this formula can be expressed as: M-C (v+c)—P1—P2—C'— M^{19} (Fuchs, 2014b: 218). This formula underscores how social media sites exploit free-labour to maximise surplus-value.

The organisation of online cultural activity now represents data points in algorithms, analytics and metrics that function to collect, sort, predict and control our behaviour. The embeddedness of these electronic systems of measurement within major sociocultural currents today embodies an 'everyday neoliberalism' which operates in tendencies toward 'quantification, measurement and competition' rooted within 'everyday attitudes, imaginaries and practices' that spreads in a 'politics of circulation' through which these systems recursively fold-back into culture and are then reconstituted by data, metrics and algorithms (Beer, 2013: 95). Big-data sets now feedback into AI, algorithms and programs that not just reflect, but also reinforce existing cultural stereotypes, as was recently seen by a Google image recognition program that labelled faces of several black people as gorillas; a LinkedIn advertising program that revealed preferences for male names in searches and Microsoft chatbot that learnt from Twitter and then spouted anti-Semitic messages (Buranyi, 2017). The datafication of contemporary culture signifies a quantification of society through data, algorithms and metrics which shape new technologies of power that now operate in electronic systems of dataveillance (Beer, 2015: 92). Datafication is, therefore, tied to rises in dataveillance systems constituting a massifying mode of digital surveillance that monitors entire populations by amassing databases of data from cultural activity to predict, manage and control behaviour (Andrejevic, 2013: 158; Lyon, 2015). Dataveillance systems operate electronically, remotely and surreptitiously within spaces of mobility that track all movements, itineraries, communications, consumption and biometrics through big-data sets. For Ceyhan (2012), this is a 'new modality of (bio) power' which collects, monitors and controls all biosociological aspects of our digital life by organising the speciesbody via micro-units of digital code (2012: 39). These systems point to distinct techniques of power: flexible, subtle and diffuse mechanisms of power with 'ultra-rapid forms of free-floating

¹⁹ Labour theory of value can be viewed when social media corporations invest money (M) for levying capital (C) distilled in variable capital or paid labour (v) and constant capital or technological infrastructures (c) producing social media services (P1) which generates unpaid free-labour of its users (P2) creating user-generated content sold as a commodity (C') with deductions in initial investments of (v+c) creating surplus (M') from both the paid and unpaid labour of (v+P2) (Fuchs, 2014b: 218-219).

control' which operate through new spaces of mobility, speed and access with digitised 'language of control ... made of codes that mark access to information' (Deleuze, 1992: 5). This new species of power is, thus, exercised through a ubiquitous computational architecture of digital devices, things and spaces as instruments of control which 'knows and shapes human behaviour toward others' ends' (Zuboff, 2019: 8; Andrejevic, 2013).

In an assessment of the social consequences presented by this new species of power, Stiegler (2019) argues that this societal shift to an '[a]utomatic and reticulated society ... becomes 'the global cause of a colossal social disintegration' (2019: 7). By increasingly automating social relations through algorithms feed by personal metadata, Stiegler (2019) suggests that individuals have become 'disindividuated' or dispossessed of 'their own desires, expectations, volitions, will and so on' (2019: 7). In sum, Stiegler (2019) claims that this 'algorithmic governmentality' signals our move into an 'extreme stage of rationalisation' that destroys reason by the manner in which these algorithms 'depriv[e] individuals of their own existence ... [by] emptying them of meaning while feeding the business models of the data economy' (2019: 8). Does this mean the digital is nothing, but a space for exertions of power, control and domination? Is there something intrinsic to digital technology that makes it susceptible to surveillance? It is true that metadata is an inherent by-product of computing, but this does not ipso facto mean technology per se is the issue as the digital is not inherently bad. Instead, it is a distinct type of instrumental rationality, a neoliberal capitalist logic which is the driving force behind the commodification of culture as its highly competitive-market-profit dynamics drive the construction of ubiquitous systems of surveillance as 'it is capitalism that assigns the price tag of subjugation and helplessness not the technology' (Zuboff, 2019: 15). This is a significant distinction and to think otherwise may actually be traps in the ideological thinking of the information society that attempts to normalise or naturalise its inevitability, as Zuboff (2019) argues, the idea that 'surveillance capitalism is a logic in action and not a technology is a vital point because surveillance capitalists want us to think that their practices are inevitable expressions of the technologies they employ' (2019: 15). Indeed, as Feenberg (2019) reminds us, 'two different types of rationality [or logics] coexist in societies, [an] instrumental rationality and [a] democratic rationality, one orientated toward efficiency and control, the other toward public information and deliberation' (2019: 238).

The neoliberal capitalist logic behind this particular application of digital technology is a type of 'authoritarian-technics' ie, 'system-centred, immensely powerful, invisible and omnipresent that seeks to exert control over people' (Mumford, 1964: 3-6). But, are we powerless in the face of this authoritarian technics? Should we throw up our hands in defeat, be resigned to the idea that nothing can be done and, thus, be complicit in our own domination? Or should we pursue a return to non-digital forms of life by relinquishing our devices? With its social embeddedness, to think it is possible to mobilise mass support for a boycott on the use of social media platforms is unrealistic, nor is it desirable. How would we mobilise mass support without its networks? To use its platforms to mobilise support to stop using its platforms seems a bit counter-intuitive. This is not a quick fix as surveillance capitalism is not confined to the digital: it is a logic typified by an endless pursuit to exploit all resources in its end to maximise the accumulation of capital. Digital Surveillance does indeed subvert democratic politics, but it is not totalitarian: it does not directly control its subjects. To challenge this neoliberal logic is to do so through collective resistance in sociopolitical action. Social media networks have proven to be effective spaces in

which to organise collective actions and, therefore, must be used in the fight against surveillance capitalism. As Feenberg (2019) points out, the internet and social media networks are 'not a commercial or social medium, but both at the same time' (2019: 229). In this respect, social media cannot simply be reduced to just one of its dimensions ie, its neoliberal commercial logics because 'the fact that social media networks profit from its users' communications does not detract from the social function those communications fulfil (Feenberg, 2019: 232). After all, surveillance capitalism is not a natural nor inevitable outcome of the digital: it is 'socially constructed and, thus, can be challenged, [dismantled] and reconstructed' (Lyon, 2017: 835). In other words, 'the digital can take many forms depending on the social [or] economic logics that bring it to life' (Zuboff, 2019: 15). The digital does inhabit a social logic—a discursive space for creativity, synergy and conviviality, a space in which to envisage alternative imaginaries of sociopolitical futures: a space in which to experiment with possible utopias.

Because of this social logic, the digital harbours an emancipatory potential that takes shape in the cracks, fissures and interstitial spaces opening in bottom-up networks of resistance in civil society. It is in this sense where social media networks play a significant part in the mobilisation of a democratic rationality (Feenberg, 2019: 240). Digital resistance to the logics of surveillance capitalism have extended to (a) individual uses of privacy-enhancing tools from Tor browser, GPG email encryption and phone encryption software; (b) increased presence of civil society groups challenging dataveillance from Privacy International, Big Brother Watch, Liberty and Open Rights Group to European Digital Rights; (c) the use of digital tools to engage in acts of sousveillance or bottom-up surveillance against systems of authority and (d) the use of digital networks to organise collective-actions as in the 'Stop Watching Us' protest in which thousands of activists marched against dataveillance practices. These challenges to authoritarian technics comprise a 'democratic-technics' people-centred, resourceful and durable in which technology is redirected toward a social-logic by democratising processes (Mumford, 1964: 3-9). It is this 'counter-trend to proletarian[s]ation [which explicitly] forbids dystopian conclusions even it is does not promise revolution in the foreseeable future' (Feenberg, 2019: 240). Notwithstanding these challenges to neoliberal logics, resistance against dataveillance has often struggled to gain traction in civil society, but, as Hintz et al (2019) suggests, anti-surveillance movements need to connect with larger social and environmental justice movements to build more collectivist forms of resistance (2019: 139). In other words, struggles against dataveillance need framing as struggles for justice—a framework for resistance as a 'data-justice' movement (Hintz et al, 2019: 139). In part, this is due to the most promising practices of digital resistance against broader effects of this neoliberal capitalist logic: its worldwide deepening of inequality, poverty and ecological destruction which can be located in digital technology and political resistance. What role does digital technology have in contemporary protest politics?

Cyberactivism, Social Media Networks and Networked Social Movements

Digital technology has been the core of contemporary activism. Its digital spaces have given rise to new articulations of cyberactivism where digital platforms can open spaces to organise online political campaigns through the mass signing of online petitions. From MoveOn.org and GetUpI to Change.org, these online platforms have often been criticised for reducing politics to a form of 'clicktivism' or 'slacktivism' by inspiring an 'easy-come, easy-go politics' (Fenton, 2016: 44).

But, online campaigns have shown to be an effective tool in digital activism. In January 2012, the global movement Avaaz gathered 3million signatures which opposed an internet censorship bill, in the US, that was later dropped by the White House due to large-scale public opposition. Likewise, in the UK, 38 Degrees collected 500,000 signatures against government plans to sell the municipal estates of the Forestry Commission which led government to abandon its plans. The criticisms directed at this type of cyberactivism presuppose that activists are only engaging in political action online and that the virtual world is less real where its effects are also felt less. Moreover, the nature of cyberactivism is not necessary as simple as clicking, as Tufekci (2017) posits, '[i]n a repressive country, tweeting may be a very brave act while marching on the streets may present few difficulties in a ... democracy' (2017: xxvi). Besides this form of cyberactivism, digital technology—from smartphones, HD cameras and social media networks have also been widely used by activists to mobilise collective actions throughout urban spaces across the world. These technologies have enabled activists to connect with other people, to circulate information across large geographical areas, to schedule protest events and to coordinate them in real-time.

On local political issues, the utilisation of social media spaces have enabled activists to organise protest events against the imposition of neoliberal policies. In demonstrations against the North Dakota Access Pipeline, in the US, activists drew on Facebook pages, Twitter hashtags and livestreams to YouTube in order to organise a mass protest in opposition to corporate plans to run an oil pipeline through the Standing Rock Indian reservation (Dreyfuss, 2017). Likewise, in a small community in Benkley, New South Wales, Australia, local activists used Facebook, Twitter and Flickr to schedule, mobilise and coordinate, in real-time, 2,000 people in protests, marches and blockades against corporate Coal Seam Gas (CSG) fracking which led to it being suspended due to local resistance (Organ, 2014). On national political issues, these digital platforms were used in Iceland to mobilise 6,000 activists in mobilisations against government handling of the 2008 financial crisis that led to its resignation in the 'Pots and Pans Revolution' (Bowers, 2013), in Spain, they were used organise around 2.2million protestors in a series of marches against austerity policies (Ainger, 2013) and, in the Middle East, they were used to organise millions of pro-democracy activists authoritarian regimes across Yemen, Libya, Kuwait, Lebanon, Oman and overthrew dictators in Tunisia and Egypt through the Arab Spring uprisings (Eaton, 2013).

In Egypt, the 'WAAKS' (We are all Khalid Said) movement highlights this use of social media platforms as it was utilised as part of a multiplatform strategy integrating Facebook, Twitter and YouTube into a three-dimensional repertoire of collective action, as one of its members describes 'we use[d] Facebook to schedule the protest ... Twitter to coordinate and YouTube to tell the world' (Eaton, 2013: 13). But, uses of social media in the Arab Spring protests have seen exaggerated narratives that have called them 'Facebook and Twitter revolutions' (Taylor, 2011). This overly optimistic commentary exhibits a technological determinism by explaining the role of social media in collective action as a relationship of causality ie, as a universal narrative of technological causation without reference to sociohistorical, cultural and political specificities. However, if social media platforms are not the cause of collective actions, then, what impact do they have in the mobilisation of social movements? *In Networks of Outrage and Hope*, Castells (2012) claims, that social movements emerge on the internet and across its 'space of flows' translating into the 'space of places'—a hybridisation of cyberspace and urban space—that creates a third space: a space of autonomy for new spatial forms of networked social movements (2012: 222-223). For Castells, (2012), these networked social movements—as exhibited in the

Occupy, Los Indignados and Arab Spring mobilisations—originate within space of flows where its transnational circulations of digital voices of dissent, calls to action and sparks of indignation take shape in the decentralised, open and horizontal spaces of communications networks (Castells, 2012: 224). He contends:

42

'[f]rom the safety of cyberspace ... movements spread by contagion in a world networked ... and marked by fast, viral diffusion of images and ideas' and, thus, '[d]igital social networks ... are decisive tools for mobilising, organising, deliberating, coordinating and deciding' (Castells, 2012; 222-229).

The language that Castells (2012) uses in explaining the origin of networked social movements is littered with deterministic vocabulary which implies they originate exclusively from the space of flows as he describes: '[t]wenty-first century social movements, purposive collective-actions ... manifest themselves on and by the Internet' and '[t]he networked social movements of our time are largely based on the internet' (Castells, 2001: 138; 2012: 229). These comments suggest that movements originate in the space of flows in which a 'global electronic agora' comes to determine collective-actions throughout the space of places (2002; 138; 2012: 229). But, this presupposes fixed, separate and asymmetrical relations between these two spatial categories where global spaces reshape the local in its own image as 'in the space of flows, the structural domination of its logic essentially alters the meaning and dynamic of places' (Castells, 2000: 458). Collective-actions within the space of places simply mirror its symbolic production within the space of flows which ignores the complex ways in which the exposure, visibility and momentum of social movements can be sparked by on-the-ground activist networks that plan, organise and coordinate actions within local milieux.

This suggests more complex, entangled and imbricated relations between the virtual (flows) and the actual (places) in terms of a global-local dialectics in which the two are mutually constitutive²⁰ (Robertson, 2012: 197). Therefore, these two spatial categories in contemporary movements constitute complex overlapping fields of action where its geographies of resistance disperse throughout entangled spaces of the virtual and the actual and, in this sense, 'it is clear now that movements are [both] online and offline ... and one does not cause or prevent the other' (McCaughey, 2014: 2). It is on this very point where Castells' (2012) thesis collapses into a soft techno-determinism that explains collective-actions without reference to other contingent factors such as the influences of collective identities, opportunity structures and the 'deeply sedimented histories and politics of place' (Juris, 2012: 260). The problem, then, is that Castells (2001; 2012) attributes too much explanatory power to internet-based communications and social media technology, as Margetts et al (2016) points out, 'we cannot prove that the type of mobilisation today is due to social media, rather than any of the other factors ... such as the intensity of domestic or global financial crises ... or culmination of decades of declining trust in political institutions' (2016: 20). Instead of attributing collectiveaction exclusively to the networking technology and social media networks per se, what needs to be examined is the specific impact of social media on the mechanisms under which collective-action is mobilised. Moreover, the relations between digital technology and the structure of social movements is an equally problematic point, in Castells' (2012) thesis, as it is by virtue of organising across diffuse configurations of horizontal, mobile and multimodal communications wherein the nature of social movements is ostensibly reconstituted by a

²⁰ This implies that 'the global is in the local' and 'the local is in the global' (Robertson, 2012: 197).

networking logic: they are now distinctly non-hierarchical, leaderless and spontaneous (Castells, 2012: 225; 2013: xli). In his argument, these distinct networking characteristics foreground the emancipatory potential of social movements signifying the core sources of counterpower in networked societies (Castells, 2012: 221; 2013). By this understanding, the emancipatory potential of networked social movements—lies not in the relational mechanisms through which collective-action is mobilised—but, in the technical capability of technology to intensify the speed, volume and geographical scope in information-communications distribution across horizontal digital networks. This line of reasoning is at the root of optimistic commentaries explaining contemporary forms of political unrest, dissent and activism, occurring around the world with recourse to these technical properties: '[t]he driver of behavioural change [vis-à-vis political activism] has been technology' in that '[t]he impacts of social networks on knowledge, community and individuals constitutes a challenge to [the] hierarchies [of] repressive states, corporations and hermetically-sealed ideologies' and, therefore, 'networked activism challenges the old methods—parties, trade unions, leaders and hierarchies' (Mason, 2013: 133; 147; Shirky, 2008).

In these commentaries, it is the distinct capabilities intrinsic to networking technology that is liberating, as Diamond (2012) suggests, the internet is a 'liberation technology because of [its] demonstrated potential to empower citizens to confront, contain and hold accountable authoritarian regimes—and even liberate societies from autocracy' (2012: xi). But, again, these narratives collapse into a central problem: they attribute too much explanatory power to distinct properties of networking technology which is believed to determine the specific nature, mobilisation and emancipatory potential of networked social movements. These positions constitute an 'equalisation thesis' which envisages the internet and its networks as a unique technology that revolutionises communications and institutes a qualitative change to society by democratising power relations through equal access, and distribution of information across its horizontal networks (Hara and Huang, 2013: 494). As Mosco (2005) describes, 'the [i]nternet provides the basis for a powerful myth' where the 'Information Age ... makes power available to everyone ... [and] technologies help to reali[s]e with little effort those seemingly impossible dreams of democracy' (2005: 30-35).

Thus, these optimistic perspectives fetishise digital technology by endowing it with mystical qualities which obfuscates the meaning-work of activists to construct shared antagonisms, common meanings and collective-identities all of which are essential to the mobilisation of collective actions. Likewise, as Commaerts (2007) notes, 'an overemphasis on the internet and communication as such tends to obscure that social change and achieving political aims has to be fought for beyond the media too' (2007: 86). This claim constitutes what Gerbaudo (2012) calls 'an ideology of horizontalism' which 'obscures the fact that processes of mobili[s]ation are constitutively ridden with imbalances and asymmetrical relations between those leading and those following' (2012: 40). Indeed, digital technology can increase the volume, speed and scope at which horizontal communications can disperse across networks, but it certainly does not liquidate all hierarchies within networks of resistance and, to suggest otherwise, may promote more hidden, dangerous and ubiquitous asymmetries of power operating within an anti-neoliberal politics that informs a 'tyranny of structurelessnes' where soft, informal and discreet modes of power are neither visible nor accountable (Freeman, 1970; Gerbaudo, 2012: 43). Accompanying a techno-determinism, these optimistic narratives ignore the long-standing

traditions of radical politics that renders it susceptible to a type of technological fetishism—an illusion of political emancipation exclusively through the contemporary media of communication (Harvey, 2003: 11).

These narratives too overlook the fact that digital networks themselves are a double-edged sword: they empower capitalist elites as much as activists, as Juris and Khasnabish (2013) point out, 'networks are also associated with imperial domination, repression and informational capitalism they are the new mechanisms of control that have replaced the hierarchical instruments of the Fordist period' (2013: 12; Soborski, 2018: 100). But, this is at root of an equally problematic counter-narrative in which social media are effectively anti-democratic because they are colonised by state power structures for propaganda, censorship and surveillance which maintain institutional systems of domination (Morozov, 2011: 203; Gladwell, 2010). These arguments rest on the idea of a 'networked authoritarianism' where authorities colonise communications networks to exert power over populations which extend to military-grade cyberattacks on Gmail accounts of activists, device and network control, domain name control, localised disconnection and restriction coupled with 'astroturfing' in a counter-politics of bottom-up propaganda campaigns where personal management software is used to generate authentic-looking profiles to create online quasi-pro-government support to manipulate public opinion (Carty, 2015: 30; Mackinnon, 2012: 78).

This extreme position is at the opposite end of the normative spectrum: a type of cyberdystopianism in which these networks are seen as a dominant locus for power, control and domination and, thus, are anti-democratic. But, these countervailing currents do not necessarily negate its democratic possibilities. The use of UHD cameras in conjunction with social media networks in protest events enable activists to capture 'authentic transparency' of collectiveaction that militates against attempts by systems of authority to delegitimise social movements through propaganda (Carty, 2015: 10). Moreover its capacity for 'accelerated pluralism' means that information can reach a critical-mass quickly which can strengthen social movements by reaffirming its values, assist recruitment of activists and revalidate its legitimacy to a global audience (Bimber, 1998). By rejecting this zero-sum logic in which social media are either positively democratic or negatively anti-democratic, these social dynamics, as with counterposing tensions between power and resistance, entangle in a dialectic within which the antagonistic character of social media and its social relations exhibits both positive and negative possibilities as co-existing sites of domination and resistance (Fuchs, 2014: 127; Fenton, 2016: 49). Social media networks, thus, are 'embedded into the antagonisms of contemporary society and, therefore, has no in-built effects or determinations ... [its] actual implications depend on contexts, power relations, resources, mobilisation capacities, strategies and tactics as well as the complex and undetermined outcomes of struggles' (Fuchs, 2014b: 781). In other words, social media are now major spaces for power and counterpower.

In alternative approaches to new types of digital activism—escaping the weaknesses associated with this normative zero-sum logic—social media platforms are viewed as 'organising agents' which facilitate technologically-mediated social configurations that are highly individualised, fluid and transient (Bennett and Segerberg, 2012: 752). As organising agents, social media are utilised by individual activists to pursue political actions which crystallise into broader social aggregations. This primacy of the individual as a central unit of social analysis is contextualised

within structural transformations that extend to institutional flows of individualisation where increasingly fluid, plural and transient social formations lead to flexible political identifications rooted in personal lifestyles, life-projects or life-politics (Beck, 2001; Giddens, 1991; Bauman, 2001). This change, according to Bennett and Segerberg (2012), reflect the changing nature of contentious politics which has shifted from an organisational 'logic of collective-action' to the fluid 'logic of connective-action' typified by personal, diffuse and transient social networks (2012: 748). This connective logic operates through individualised and technologically-organised sets of processes which no longer necessitate symbolic constructions of a collective-identity (Bennett and Segerberg, 2012: 750). The problem, however, is this logic suggests a type of natural collectivity, spontaneity or myth of us that reduces complex mobilisation mechanisms to techno-organisational affordances without recourse to the interactive dynamics rooted in sociability, as '[in] aggregations of self-propelled units ... there is no exchange, no cooperation and no complementariness' (Bauman, 2007: 77).

Because it is no longer entails a stable structurally rooted class position with a totalising ideological identity, this identity-politics is more fluid, diffuse and plural, but this does not result in an isolated politics: it does rest on individual pursuits, but entails shared belonging in a 'personalised collective-identity' arising out of discursive interactions in a social process (Milan, 2015: 7; Fenton, 2016). Similar to Bennett and Segerberg (2012), Margetts et al (2016) contends that social media have injected turbulence into politics and deeply affected mobilisations of political activism with its diffusion of social information, heightened visibility and anonymity (2016: 11). They argue that these characteristics have considerably reduced the personal costs associated with protesting which has improved the willingness of individuals to participate in political action (2016: 11-16). From a rational choice model, Margetts et al (2016) is unable to appreciate the highly charged emotional politics at the centre of justice movements a la Iceland, Los Indignados and the Arab Spring which impoverishes its explanatory value as this politics is visceral; it elicits strong emotional responses in a democratic politics that informs a politics of 'outrage and hope' where 'the big bang of a social movement starts with the transformation of emotion into action' (Castells, 2012: 13). It is this emotional investment within radical politics which gives shape to a collective-identity as a sense of common unity cannot be reduced to a cost-benefit calculation, but to 'mobilis[ing] emotions ... passions, feelings, love, hate, faith and fear' (Melucci, 1996: 71). Furthermore, as Haunss (2015) points out, 'this homo economicus model is thus not well suited to explain collectiveaction or its obstacles' (2015: 20).

These positions marginalise the senses of collectivity emerging within identity-politics, as Fuchs (2014) posits, 'networked action has a collective dimension—the common coming-together ... through which collective values, [identities], demands and goals are formed ... in discussion, [conviviality] and communication processes' (2014: 38). After all, one of the first steps in collective-action is 'the identification of an enemy, the definition of a purpose and an object at stake in the conflict' all of which rest on communicative structures that act to fuse activists into a common social body, a symbolic process where 'different fragments join ... together to form a movement' (Melucci, 1996: 292). It is in communicative structures where collective-identifications—as feelings of belongingness—take shape in a social process in which meanings of group boundaries are symbolically and imaginatively constructed (Cohen, 1985: 114; Anderson, 1991: 7). In this process, a diverse constituency is condensed into a common

subjectivity with the capacity to 'act as a unified and delimited subject' (Melucci, 1996: 72). In other words, collective-identity presupposes collective-action and, as Hands (2011) posits, theorising radical politics as the aggregation of individual decisions is flawed as 'it cannot escape the confines of its individualist presuppositions' (2011: 141). Overall, these approaches to digital activism exhibit two core weaknesses: (a) they mistakenly view social media as neutral tools which ignore its encoded politics that impose 'strategies, mechanisms and economies' and (b) they attribute too much explanatory power to its technical affordances which fails to examine its impact on the mechanisms that underpin collective-action (Gillespie, 2010: 347). What mechanisms are important to the mobilisation of social movements across social media?

Social Media Networks and its Symbolic Politics

In contrast to its techno-neutrality, the material architectures of social media are 'entangled in complex techno-cultural and politico-economic relations' (Poell, 2014: 717). As sociotechnical and politico-cultural artefacts, the 'medium specific infrastructure' of social media creates algorithmic environments with encoded design choices that enable, but also shape and constrain its users' actions by imposing pre-defined conditions, possibilities and limitations on its uses (Gerlitz and Helmond, 2013: 1361; Langlois et al, 2009: 417). By profiling, ranking and personalising its users and content, social media shape a specific type of sociality based on predefined activities from recommending, liking and sharing to emphatic exchange that foster participation by default (Milan, 2015: 3; Gerlitz and Helmond, 2013: 1362). Acknowledging the non-neutrality of social media highlights the neoliberal capitalist logic imbued within the design of its material architectures and this determines its technological affordances, that is, the scope of human action that social media makes possible (Tufekci, 2017: xi). It is in this material substratum of social media—its software, hardware, network systems, codes and algorithms that enable its users to build social milieux where circulations in semiotic exchanges coalesce into social interactions, relations and practices from hashtagging, tweeting, posting and liking to hyperlinking that offer the cultural ingredients from which expressions of solidarity and feelings of belonging can build a sense of collective-identity (Milan, 2015: 54). It is in this capacity to produce, transmit and receive symbolic meanings across time-space where social media affects collective-action. As the social world is a symbolic universe, these meaningful symbolic forms permeate into regularised social practices constituting a vehicle through which individuals fashion a sense of selfhood, engage in self-reflections and participate in mediated sociability (Thompson, 1995: 15; Feenberg, 2019). In other words, it is through its material infrastructures where social media—as dominant cultural spaces—mediate social interactions that constitutes a fundamental vehicle of meaning work: a process in which the symbolic is constituted and permeates into physical spaces that can mobilise 'new forms of [collective] action ... in the social world' by 'condensing symbolic assemblages that can materialise into bodily assemblages' (Milan, 2015: 3; Thompson, 1995: 4; Gerbaudo, 2012: 14). To capture this process of meaning-work, Milan (2015) uses the metaphor of the 'cloud' to describe the way in which social media constitutes 'digital symbolic space[s]' that opens up in-between material terminals or devices within which the soft resources of cultural ingredients—from narratives, know-how and identities to solidarity networks—are brought to life, exchanged and stored (2015: 3). This cultural dimension is important to collective action as a site of symbolic struggle, subversion and resistance to dominant codes, as 'struggles of contemporary movements are

aimed at the foundation of power ... to impose codes governing our relation to the world' (Melucci,1996: 357; Baker, 2015).

Social media are a powerful tool to engage in these cultural dimensions of a symbolic politics a digital symbolic space(s) within which to challenge, resist and subvert dominant capitalist logics. This is not to suggest, however, that collective-action is simply a spontaneous outcome of this specific affordance. Instead, this affordance has greatly affected the relational and cognitive mechanisms that underpin collective-action. With its digital communications ecology, social media alters connections between social actors, groups and interpersonal networks by facilitating 'relational diffusion' or pre-existing connections and opens possibilities for new networks in forms of 'brokerage' (Tarrow and McAdam, 2005: 127). In the context of collective-action, the relational diffusion and brokerage between social actors in digital symbolic spaces offer sites for cognitive processes in which actors attach meanings to situations or occurrences in ways that persuade themselves and others that collective-action is justified, necessary and timely (Edwards, 2014: 94). Out of a discursive process, these procedures of framing enable activists to engage 'in the production and maintenance of meaning' that act to bring together 'grievances ... and larger frames ... that will resonate with a population's cultural dispositions and communicate a uniform message to power holders and others' (Benford and Snow, 2000: 613). The circulations of cultural resources across social media play an important role in shaping these cognitive processes, as they refer to a 'world of shared symbolic meanings out of which social action is constituted' (Edwards, 2014: 92). It is in these meaning-making processes where actors identify common-antagonisms, articulate values and a radical imaginary with a shared grammar to contest dominant definitions of reality by imagining alternative futures and, as Lievrouw (2011) points out, these spaces constitute 'actual fields of action [where] concerns are articulated and struggles are played out' (2011: 50). Thus, it is in its affordances to produce, transmit and receive meaningful symbolic forms where social media are conducive to a symbolic politics. But, this is not to say that these symbolic and cultural dimensions to collective-action take place exclusively in digital spaces as the materialisation of action in urban spaces is an important site to consolidate, reaffirm or even reconstitute common-antagonisms, values, purpose, strategy and tactics. In contrast to opposing spatial categories, collective-action, today, takes shape across the entangled and recursive nature of the virtual and the actual. Moreover, one of the most fundamental characteristics of social media is its availability of cultural resources on a global scale as it stretches these relational and cognitive dimensions, its symbolic forms and spaces of the political across national frames of reference. Social media networks are, therefore, important spaces for activists to mobilise transnational activism in response to the rise of global issues rooted within the transnational context a 'complex internationalism' (Della Porta and Tarrow, 2005).

Complex Internationalism, Global Flows and Transnational Politics of Global Justice

Transnational activism is far from a new phenomenon as it has a long history in internationalist struggles from anti-slavery movements, labour movements to women's movements, but what is new about transnational activism, today, is its 'connection to the current wave of globali[s]ation' (Tarrow, 2005: 5). By stretching technological, cultural, political and economic activities across national frontiers, globalisation, as a process, has transformed the international environment within which transnational activism is now contextualised. This new international environment

is firmly embedded within neoliberal politico-economic framework of international institutions (WTO, IMF and WBG), states and transnational corporations. This new neoliberal world order has been implicated in the worsening of global issues—from world poverty, inequality, war and environmental destruction against which social struggles now mobilise collective actions. This type of 'complex internationalism' has, thus, produced new threats, resources and opportunities for transnational social movements (Della Porta and Tarrow, 2005: 235). Globalisation itself is a dialectical process that creates new threats, but also new opportunities to challenge them as its social, cultural and technological flows have given shape to new forms of global awareness and new means by which to mobilise and coordinate collective actions on an international scale. What role do social media play in creating new opportunities for transnational activism? As a new global communications ecology, the global cultural flows of resources which circulate across social media networks have contributed to expanding our consciousness of global issues in new forms of 'mediated worldliness' where our spatial horizons now routinely extend beyond national frames of reference (Thompson, 1995: 34). This heightened awareness of global risk from poverty and inequality to climate change—associated with these global issues has opened new spaces of the political across digital networks where multiple, diverse and geographically diffuse activists can come together to build global campaigns in response to these global issues. The digital symbolic spaces of social media networks as transnational spaces are dominant sites within which activists, across the world, engage in the symbolic-meaning-work of constructing collective action frames necessary to mobilise collective actions. As Benford and Snow (2000) illustrate, collective action frames are fundamental to the mobilisation of sociopolitical actions as it is in discursive interactions where activists negotiate the shared meanings around common antagonisms, shared values and collective imaginaries of alternative futures (2000: 615-623).

As a critical prognosis of social conditions, the imagination is central to collective action as it consists in exploring different ideas or visions of utopia through shared meaning-making. This does not mean utopia in the sense of a perfect world which is impossible to attain, but an image of a better world with a claim about what it should be which can become a conviction that the world can be different, as Levitas (2011) highlights, '[u]topia is ... not just a dream to be enjoyed but a vision to be pursued' (2011: 1). These counter-spaces are arenas for alternative normative codes and for the experimentation with new sociopolitical forms of life where 'new democratic imaginaries, political symbolism, vocabularies, concrete practices of cooperation, dialogue [and where] forms of inclusion ... are formed and exercised' (Volk, 2019: 108). Digital symbolic spaces with its global cultural flows have now become the central locus for the imagination as a social practice that is rooted within meaning-work where activists build alternative 'imagined worlds' (Appadurai, 1996: 33). Social media networks are, thus, the central battle ground today for the emancipatory side effects of world risk society as it signifies dominant sites for new normative horizons with global frames of perception and action (Beck, 2015: 79). This new normative horizon is evidenced by the increasing volume of political struggles framed around global justice in which sociopolitical actions extend across borders in response to global issues. The concept of 'global justice' as 'a concern for matters of justice that extend beyond the borders of nation-states' represents a master-frame around which multiple, diverse and diffuse activists unite in a common frame of reference that defines shared struggles. Digital symbolic spaces, thus, provide cultural and symbolic resources for these activists to build common frameworks of meaning around shared struggles for global justice. It is in this sense where the digital symbolic spaces within social media networks constitute 'spaces of discussion, compassion, of

affinity and affiliation, spaces of experimentation [where] lines of affinity and association crystallise into multiple resistances and actions' (Tormey, 2005: 404). These spaces within social media networks also enable activists to build local-to-local networks in translocal configurations of 'transnational advocacy networks' that connect them across borders in spaces of discourse, shared values and exchanges of information and support (Khagram et al, 2008). The transnational character of its digital symbolic spaces means that social media networks are effective arenas to facilitate relational diffusion and open opportunities for the virtual brokerage of new ties, connections and relations across borders. It is within these networks where activists, groups and social movements can connect with organisations to form 'transnational coalitions' with a-view to organise, mobilise and coordinate collective action in 'transnational campaigns' (Khagram et al, 2008: 8). This can be seen in the transnational networks of Extinction Rebellion, a cross-national social movement that brings together environmental activists, movements and organisations through the use of social media networks in transnational campaigns against the dominant codes of industrialised states which devastate ecospheres and worsen climate change. In these transnational campaigns, activists rooted in local contexts utilise social media networks to engage in scale-shifting, that is, a dialectical process by which activists organise collective actions from both the local-level to the global-level and from the global-level to the local-level. This use of social media encapsulates the entangled relations between the virtual and the actual.

These counter-spaces represent arenas in which a distinct type of politics can be found today: a minoritarian politics where designs for alternative futures are not closed in predefined topdown ideological systems with a fixed universal social blueprint best suited to the majority, but an alternative world that is open, negotiated and changeable. Rather than its size, the minority is defined by the different interests, visions or worldviews to which it proscribes and, therefore, '[t]he power of minorities is not measured by their capacity to enter and make themselves felt within the majority system ... but to bring to bear the force of the non-denumerable sets ... [or] struggles around axioms' (Deleuze and Guattari, 1987: 471). In contrast to the old majoritarian politics of class with its universal social blueprints of socialism or communism, the politics of global justice is typified by the multiplication of various interests, positions and standpoints: it is a politics of multiplicity plurality, creativity and alterity in which digital symbolic spaces are spaces of collaboration where 'differences of affect and standpoint are ... the basis on which meaningful dialogue, discourse and discussion can take place' (Tormey, 2005: 404). This points to a radical politics which is no longer bound to an a priori essentialistic conception of identity that subsumes multiple markers of identification under a fixed, unitary and universal category of class and more toward a politics that is intersubjectively formed by the ongoing discursive construction of 'flexible identities' ie, 'identities characterised by inclusiveness and a positive emphasise upon diversity and cross-fertilisation ... nurtured by a search for dialogue' (Laclau and Mouffe, 1985: 160; Della Porta et al, 2006: 240). But, this multiplicity does not necessarily mean a political condition of fragmentation as this dialogical politics enables the strengthening of democratic struggles where transnational advocacy networks, coalitions and campaigns across different political issues, discourses and identities—can unite in 'chains of equivalence' by which disparate publics come together in a single protest movement by becoming 'equivalent symbols of a unique and indivisible struggle' (Laclau and Mouffe, 1985: 175). These equivalent symbols upon which transnational actions mobilise are drawn from common elements in value systems, a shared ethics and a collective commitment and dedication to matters of global justice.

Social media networks are essential spaces for a global justice politics as it is a vital tool used to internetwork transnational social movements, organisations and activist networks—from the WSF, and PGA to ATTAC—into a single movement which can be evidenced in demonstrations, rallies and marches at the summit meetings of international institutions—from the G8 in Genoa (2001), the European summits in Barcelona and Florence (2002), the G20 in London (2009), the G20 in Brisbane to the G20 summit in Hamburg (2017). These collective actions mobilised toward global justice illustrates the heterogeneous social base of these sociopolitical struggles where its activists were drawn from socialist, feminist, environmentalist and anarchist networks that cut across different classes, ages, genders, ethnicities, cultures, languages and nationalities. The dialogical nature of this justice politics, thus, mobilises diverse activists around flexible social identities with 'multiple belongings' in which activists inhabit 'overlapping memberships linked within loosely structured polycentric networks' (Della Porta and Tarrow, 2005: 239). It is, therefore, best seen as a post-foundational politics that cannot be rooted within overarching ideological systems of thought with a universal social blueprint of emancipation, but one which is dialogic, contingent and contested with competing claims and forces that is 'an open-ended process with neither a clear beginning nor a determined end' (Marchart, 2007: 3). It is, thus, a politics built on 'resistances in negation as opposed to resistances as affirmation in the name of some determinate fixed alternative world' (Tormey, 2005: 405). Today, social media networks are major sites for resistance as they offer counter-spaces in which dominant neoliberal codes are challenged, rejected and subverted in favour of alternative cultural, political and ecological worlds built around a justice politics. This specific type of transnational politics can be seen in the recent examples of the Occupy Everywhere, the Global Frackdown and the Friday-For-Futures movements all of which built diverse sociopolitical struggles toward global justice.

In Conclusion

This chapter has presented a case for a view of social media networks as complex sociotechnical, cultural and political assemblages with a material-technical substratum of codes, protocols and algorithms that embed both an encoded politics and a capacity to produce, receive and circulate meaningful symbolic forms across time-space. As private infrastructures, its encoded politics is the site for a neoliberal capitalist logic built upon the massifying modes of dataveillance which impose a new technology of power. As its central argument, this chapter presented a specific case for social media networks as significant arenas in which transnational collective action is now mobilised. It argued that its digital symbolic spaces provide cultural resources for activists to engage in the meaning-work of building collective action frames across borders. These spaces open counter-spaces where activists can experiment with different ideas or visions of utopia in discursive expressions of critical imaginaries that envisage possibilities to actualise alternative sociopolitical futures. These digital symbolic spaces are significant spaces for a cultural politics. This chapter also argued that the transnational character of these spaces within social networks open possibilities for the virtual brokerage of new ties, networks and relations which are vital to the mobilisation of cross-national political projects of global justice. To conclude, this chapter has argued that the use of these digital symbolic spaces within social media networks supports a distinct expression of subpolitical activity: a politics of multiplicity which is diffuse, dialogical and post-foundational that organises collective actions in response to global problems. The next chapter draws on the recent empirical cases of the Occupy Everywhere, the Global Frackdown and the Fridays-For-Future movements to corroborate this central argument.

Chapter 3: Social Media and a Radical Politics: the Digital Mediation of a Transnational Politics of Global Justice

'Contemporary social movements ... hinge on the symbolic capacity to reverse meaning and demonstrate the arbitrariness of the power and its domination' (Melucci, 1996: 358).

'[C]ommunications media is, in a fundamental sense, a reworking of the symbolic character of social life, a re-organisation of the ways in which information and symbolic content are produced and exchanged in the social world' (J. B. Thompson, 1995: 11).

The aim of this chapter is to offer an analysis of the Occupy Everywhere, the Global Frackdown and the Friday-For-Futures movements to support the specific claim that social media networks are conducive to mobilisations of collective action across national borders. This extends to the way in which activists it is claimed use the digital symbolic spaces within social media networks to engage in meaning-making processes and also to how its transnational character is used to brokerage new ties across borders. These concrete cases will also be used to substantiate the claim that this type of politics is diverse, dialogical and postfoundational as it is organised on the values of difference, multiplicity and morality which stretch the ethical, civic and political obligations of nation-states beyond its borders. This chapter is divided into four parts. The first part will critically analyse the origin, context and internal dynamics of the Occupy Everywhere movement. The second part explores the origin, context and formation of the Global Frackdown movement. The third part looks at the most recent movement: the Fridays-For-Future movement and to conclude the final part provides an analysis of these movements in relation to the central argument that social media networks are conducive spaces in which a justice politics organises.

Example 1: The Occupy Everywhere Movement—15th October, 2011

On the 15th October 2011, a global protest was organised with thousands of activists occupying strategic urban spaces, across 951 cities, in 82 countries (Kasperkevic, 2015). This global event was organised in opposition to the deepening worldwide socioeconomic inequalities produced by the hegemonic laissez-faire model of neoliberal globalisation. The specific roots of this global movement can be traced back to the month prior to the October 15th global protests, in the formation of the Occupy Wall Street (OWS) movement where thousands of activists occupied Zuccotti Park, in downtown New York, close to Wall Street in the US. The OWS movement took shape out of the social, political and economic context of the 2008 financial crisis in which the US government spent \$700 billion to bail-out an unscrupulous self-regulated financial system during mass-unemployment which then imposed austerity measures on citizens to pay for it (Chomsky, 2012). On the OWS website, the main aim of the movement was stated as:

'fighting back against the corrosive power of major banks and multinational corporations over the democratic process and the role of Wall Street in creating an economic collapse that caused the greatest recession in generations' (Occupy Wall Street, 2011).

Within these social, political and economic contexts, the formation of the OWS movement can be traced back to the 13th July 2011, in a social media campaign launched by the Canadian counter-cultural magazine Adbusters which drew its inspiration from the mass-protests and digital activism organised, across social media, in Spain by the Los Indignados and across the Middle East, in the Arab Spring uprisings as witnessed in the Egyptian and Tunisian Revolutions.

From the successes stemming from the widespread use of social media platforms as an integral organising mechanism within these movements, the campaign by Adbusters looked to exploit open political opportunities, in the US, by harnessing social media networks to instigate, organise and coordinate collective actions in order to enact widespread social transformation. Toward this end, Adbusters called upon 20,000 of its 90,000 networks of supporters to mobilise into a social movement by assembling on the 17th September on Wall Street vis-à-vis the US and global citadel of neoliberal capitalism. This strategically important symbolic space mirrors the targeted antagonisms of the OWS campaign to challenge the hegemonic ideology of neoliberal politics responsible for the global financial crisis; increased corporate welfarism; impositions of austerity programmes and its deepening socioeconomic inequalities across the world. This campaign by Adbusters appealed to its existing activist networks with the following statement:

'On September 17, we want to see 20,000 people flood into lower Manhattan, set up tents, kitchens, peaceful barricades and occupy Wall Street for a few months. Once there, we shall incessantly repeat one simple demand in a plurality of voices If we hang in there, 20,000 strong, week after week against every police and National Guard effort to expel us from Wall Street, it would be impossible for Obama to ignore us. Our government will be forced to choose publicly between the will of the people and the lucre of the corporations' (Adbusters, 2019 [2011]).

In the aftermath of the wave of uprisings coordinated through social media platforms across Europe, in Greece, Spain, Portugal, Iceland and across the Middle East in Syria, Tunisia, Egypt and Yemen, this appeal by Adbusters, to its networks of activists, was the first strategic move in its plan to exploit this 'shift in revolutionary tactics' introduced by the movements in Egypt and Spain in a way to build 'a fusion of Tahrir with the acampadas of Spain' (Gerbaudo, 2012: 109). The importance of these social movements to OWS in terms of how its 'revolutionary' successes were viewed with reference to the way in which its social media networks—from Facebook, Twitter, Tumblr and YouTube—were utilised to produce, receive and disseminate information to a mass-audience and also its ability to be able to pre-announce a set-date for collective action. Thus, in its campaign strategy, Adbusters harnessed this emancipatory potential of social media platforms by focusing on disseminating information, communications and iconography across its networks specifically using the folksonomy of Twitter in the hashtag #OccupyWallStreet. This unitary strategy by Adbusters, however, rested on the common misconception—that which is also rooted within the equalisation thesis and its ideology of horizontalism—where the ability of networking technology to disseminate information is all that is needed to create a movement. This assumption premised on a soft techno-determinism by Adbusters neglected the strategic value of material resources and on-the-ground organising necessary to overcome the logistical challenges of coordinating a physical occupation of Zuccotti Park which was required for the social movement to gain traction in terms of its membership and support.

These material resources and on-the-ground organisers emerged, not from Adbusters, but from the initiative of local activist networks composing of writers, artists, organisers and students who built the foundations of protests in grassroots mobilisation, community-based organisation and coordination through forming the first of its New York City General Assemblies (GAs) on the 9th August. From the launch of the virtual campaign until the actual occupation, the social media following of the OWS movement remained relatively low compared to the Los Indignados and Egyptian movements, as Gerbaudo (2012) illustrates, 'the Facebook page of OWS only managed to attract 891 likes whereas the Kullena Khalid Said page in Egypt attracted 36,000 on its first day of existence' (2012: 114). It was, thus, only at the point, in which, the physical

occupation of Zuccotti Park, by a 1,000 people, on the 17th September, and its concomitant appearance, exposure and visibility to mainstream media channels where its interest, presence and trends across social media platforms began to increase, as Chambliss (2011) demonstrates:

'In the first week, average mentions per day were an unimpressive 18.8 mentions per day. Not many people were talking about Occupy Wall Street. After the start of occupation on 9/17 and up until 9/23 ... mentions per day increased by a whopping 2,004%' (2011).

This reveals the complex relationship between digital media and social movements: it is not just a simple matter of collective action springing-out of the use of social media, but its effectiveness relies upon other contingent factors evidenced in the reliance of OWS on (a) the opening of political opportunities; (b) the availability of material resources; (c) the networks of activists organising on-the-ground and (d) the visibility of the movement across mainstream media channels. In the Egyptian movement, the popularity of the Kullena Khalid Said Facebook page was on account of the fact that it was created after the publicised murder of Kullena Khalid Said, in a peaceful protest, and, thus, the Egyptian movement harnessed this widespread public awareness, outrage and condemnation through the use of social media networks to form, organise and coordinate waves of collective action across the city of Tahrir. In the case of OWS, the extremely low levels of participation, presence and awareness of the movement across social media can be explained by the fact that its online campaign began months before the physical occupation and, therefore, widespread public awareness of the movement through mainstream media channels only began to increase after its physical occupation of Zuccotti Park. Similar to the Egyptian movement, the expansion in the scale of OWS would be facilitated by broadcasting two major events: (1) the video recording of police brutality against peaceful protestors and (2) the images of mass-arrests of activists. The first event occurred during a peaceful march, on the 26th September, when an NYPD police officer was recorded, on a smartphone, pepper-spraying three female protestors without provocation. The footage of the incident was then uploaded, publicised and disseminated on YouTube and went 'viral' across social media, through networks of hyperlinks and hashtags and, at which point, the footage was broadcast by mainstream media channels including MSNBC and CNN. This increased the visibility, popularity and support for the movement in response to broad public condemnation of the police response to the peaceful demonstration. This incident created the impetus for the movement to organise a mass-march, on the 1st October, on Brooklyn Bridge with 5,000 people that led to the mainstream media to globally broadcast the second event: the mass-arrests of over 700 activists during the march. On the 5th October, this, in turn, mobilised another demonstration from Foley Square, in Lower Manhattan to Zuccotti Park with over 15,000 people attending (Schneider, 2011).

These two events greatly increased the public awareness, participation and support for the OWS movement both within its encampment in Zuccotti Park and across its social media networks, as Chambliss (2011) shows, from his analysis of social media activity after the Brooklyn Bridge arrests, the average daily mentions of OWS increased by 216% (2011). These two episodes highlight the strategic effectiveness of social media as a means with which to capture, upload and reverberate the events of collective action occurring on-the-ground throughout its social networks and potentially across the world. It was the dissemination of information, images and video content of these events across mainstream and social media networks that created the catalyst for the movement and its occupation of symbolic spaces to spread to over 600 cities, throughout the US, from Washington, Chicago, Boston, Denver to San Francisco, Los Angeles

and North Dakota (Castells, 2012: 163). These Occupy movements were not merely separate, independent nor isolated occupations, but one of many local-to-local networks integrated into a despatialised, dense and interconnected translocal network configuration that composed overlapping hashtags, hyperlinks and web-pages which enabled transmissions of information, communications, tactics, synchronised coordination, sharing of resources, support and solidarity between network nodes of these occupied cities. In a study of the relationship between state oppression and the diffusion of the OWS movement, Suh, Vasi and Chang (2016) found that the reporting of events of state oppression facilitated the opening of Facebook and Twitter accounts across the cities where occupations and protests occurred showing that images of state oppression may have offered the spark that spread the movement across the country (2016).

The Symbolic Production of Occupy 'We are the 99%'

A fundamental dimension in the national diffusion of the movement was the way in which the digital symbolic spaces of social media were used as an integral cultural resource that enabled subnational, national and transnational networks of activists with shared interests to build a collective through the symbolic production of its collective-identity: the 'We are the 99%'. In this case, the social network of Tumblr offered activists a highly reflective space in which to share individual experiences as members of the 99% that humanised its members, constructed a sense of 'we-ness' and strengthened the legitimacy of its cause. On its Tumblr page, the emotional appeal to the 99% was incorporated into its definition:

'We are the 99%. We are getting kicked out of our homes. We are forced to choose between groceries and rent. We are denied quality medical care. We are suffering from environmental pollution. We are working long hours for little pay and no rights, if we're working at all. We are getting nothing while the other 1 percent is getting everything. We are the 99%' (Tumblr, We are the 99%, 2011).

This encouraged members of the 99% to document the specific nature of their biographical experiences of structural violence, inequality and injustice:

'I am 26 years old. I have a 2-year-old daughter and 4 step children. My fiancée works 14 hours a day, 6 days a week and we still can't pay our bills I have no credit and because of this I had to pay a \$700 deposit for my electricity. This is not okay! I have health problems I can't afford to go to the doctor for' (Tumblr, We are the 99%, 19th October, 2011).

'Wells Fargo is foreclosing on my property and I have been paying every single one of my monthly payments. All they have to do to get my property is file a notice of default wait 90 days then announce a sale date. If I want to defend myself I have to hire attorneys that I cannot afford' (Tumblr, We are the 99%, 3rd February, 2013).

This confessional, creative and textual digital symbolic space opened sites for activists to build shared meanings of global injustice through the cross-pollination of experiences that connected biographical narratives to a collective experience of global structural violence. These collective experiences facilitated the dialogic construction of collective-identity, belonging and solidarity. From an analysis of in-depth interviews of OWS activists, Kavada (2015) shows that activists, in the movement, often engaged in expressions of identization—open-ended social processes of emotional, cognitive and discursive interaction by which a collective becomes a collective—evidenced in sets of conversations, shared definitions of the situation, common rituals, practices, goals, values and ethical standpoints codified in texts and codes exhibited in OWS's ratification of the 'Principles of Solidarity' (2015: 876). In OWS, the principles of solidarity represented common points of unity around the core values of the movement including 'engaging in direct

and transparent participatory democracy; [e]xercising personal and collective responsibility; [r]ecogni[s]ing individuals' inherent privilege and the influence it has on all interactions [and] [e]mpowering one another against all forms of oppression' (OccupyWallSt.org). Moreover, Kavada (2015) argues that the digital symbolic spaces of social media supported these processes of identization by enabling arenas in which to articulate, exchange and negotiate boundary-making evidenced in the clear distinctions between those inside 'We' the 99% and those outside 'them' the 1% and this openness and inclusiveness extended to both the inner community (face-to-face) and the outer community (online supporters) (2015: 879). Similarly, from analysing over 5,000 posts on the #occupywallstreet Facebook page, Smith, Gavin and Sharp (2015) showed that interlocutors used the first-person plural pronouns of 'our' 'ours' 'we' and 'us' with assent when discussing the refutation of corporate personhood and, as such, exhibited elements of boundary-making through the linguistic-markers of a shared social identity (2015: 818).

The slogan 'We the 99%' would come to inform the core identity of the Occupy movement as built on the equities of a bottom-up prefigurative politics—an open, inclusive and participatory politics with an enfranchised, decentralised and deliberative structure of democratic decisionmaking. This participatory politics extended to the open, collaborative and deliberative nature of the general assemblies (GAs) where activists deliberated over the shared antagonisms, tactics and objectives of the movement and, through which, the collective authorship of its values and ethics was codified in the text on The Principles of Solidarity. In order to maintain the parity of this politics, the collaborative nature of GAs encompassed its outer community of supporters, across social media, by its inclusive practices of live-streaming the GAs, publishing its minutes, discussing questions online and also publishing its Principles of Solidarity. But, critical questions have also been asked regarding the extent to which access and participation in the movement was actually open, inclusive and democratic as the digitally connected nature of OWS excluded sections of marginalised populations who remain disconnected from the benefits of digital infrastructures where digital inequality not only remains shaped around, but also act to reinforce existing structural inequalities of class, race and gender. This issue was acknowledged by the OWS movement and attempts were taken to specifically mitigate these barriers to access, as one activist remarks:

'For a long time, we were saying that there weren't enough people of colo[u]r, or enough LGBTQ people But, overall, we're also working with people who barley text, let alone vote on a Wiki. If we really want to represent the 99 percent, we have to think about how we can disseminate through low-tech means' (Faraone, 2011).

The concerns that these existing digital inequalities may restrict access to participation in the Wall Street occupation was reflected in the diverse media practices employed by the movement which incorporated both low-tech (offline, analogue and print-based media) and cutting-edge high-tech (autonomous wireless networks, hackathons, tools and platforms) that coalesced into a transmedia mobilisation strategy (Costanza-Chock, 2012: 378). In mainstream media, some counterfactual reports of the movement's demographics exaggerated this perceived lack of diversity by representing its composition as consisting of exclusively young white male students. Although Occupy itself was not completely equitable in terms of activists participation across race, gender and class distinctions, the movement was far from a white male student movement, as Captain (2011) reported, in OWS, its active participants consisted 42% female, 55% male with 33% people of colour and 60% 30 or older (2017). In more general terms, these demographics are a snap shot of the OWS network node ie, a small cross-section of the overall

Occupy Everywhere movement which itself spread across the world to a multitude of different nationalities, cultures, religions and languages that stretched to 951 cities, in 82 countries.

From Occupy Wall Street to Occupy Everywhere

From its physical origins on Wall Street to its national propagation to over 600 US cities, the 'We are the 99%' political slogan informing the core identity of the Occupy movement and its symbolic rallying point has been seen as an explicit expression of American national identity—an imagined sense of national belonging constructed around common experiences of shared structural violence, oppression and injustice—but, the geographical parameters of this shared experience of injustice and its symbolic and imaginative basis of belongingness, identity and political action was not confined to the borders of a national community: it echoed across the globe in the imaginations, language, actions and solidarity of activists mobilising on the basis of a shared global vision of alternative social realities embodied in the slogans 'United for Global Change' 'United for Global Democracy' and 'Human Rights for Everybody'. The movement used the hashtag #occupy to organise protests around the world. Thus, its aims expanded in scope:

'#occupy aims to fight back against the system that has allowed the rich to get richer and the poor to get poorer. We no longer want the wealthiest to hold all the power, to write the rules governing an unbalanced and inequitable global economy, and thus foreclosing on our future' (Occupy Together, 2012).

'#occupy wants to end the relationship built on money and donations between our elected officials and corporate interests. We believe this relationship has led to rampant corruption and criminal activities that undermine our economic and political system. We simply want a system that operates in the interest of the people and to empower people to be a part of the process' (Occupy Together, 2012).

This shared imagination, language and solidarity to these common aims and goals would stretch to over 951 cities, in 82 countries and across 6 continents. These global protests spread from the US to Spain with 500,000 activists on the streets of Madrid, 400,000 in Barcelona, 100,000 in Valencia and 150,000 in Zaragoza marching under banners of 'We are the 99%' and 'United for Global Change'; to Italy with 300,000 gathering in Rome under the banner of 'People of Europe: Rise Up!'; to Germany with 10,000 marching in Berlin, 8,000 in Frankfurt, 5,000 in Stuttgart and 5,000 in Hamburg under the banner of the 'Global Occupy Movement'; to Portugal with 20,000 to 100,000 demonstrating in Lisbon and Porto; to Chile with 10,000 marching in Santiago; to Belgium with 10,000 in Brussels; to Brazil with 2,000 in Porto Alegre and to the UK with 5,000 protesting outside St Paul's Cathedral in London under banners of 'Global Democracy Now' (Addley, 2011). These global protests marching to the banners and political slogans of a universal conception, imagination and vision of global justice swept from cities in Denmark, Croatia, France, Iceland and Estonia to Australia, Nepal, Malaysia, Japan, South Korea and South Africa originating in North America and sweeping across South America, Europe, Africa, Australia to Asia. These global events had a specific commonality: they all mobilised, to varying degrees, around the political slogan 'We are the 99%' encapsulating common experiences of suffering, deprivation and poverty in face of the structural violence of neoliberal policies that operated as the basis with which to express, construct and negotiate transnational networks of solidarity and collective-identity. As Hopke (2016b) suggests, Occupy Everywhere mobilised through the articulations of shared narratives of transnational solidarity viewed within universal appeals to 'the people of the world' and 'We are the 99%'

(2016: 602). A common strategy of Occupy Everywhere, according to Hopke (2016b), was to frame narratives of social movement building around inclusive expressions of solidarity:

'We do this because we understand the power of information, of organisation, of solidarity and numbers. We do this because, as the 99%, we must succeed this time. There is a lot to be gained from all of our conjoined efforts and if we can be just a small link in a much larger chain' (Occupy Together, 2012).

The 'We are the 99%' political slogan certainly operated as a mechanism with which to build (sub)national networks of solidarity, but it was never restricted to national boundaries as its open, inclusive and universal narrative extended to transnational networks whereupon its resonance to shared experiences of a broader spectrum of people was used to make solidaristic connections to a shared worldwide struggle (Hopke, 2016b: 602). Similarly, Schechner (2012) maintains, that Occupy was a solidarity rather than a particularist movement, in that, the 'We are the 99%' as its unifying theme was a solidarity in favour of a redistribution of wealth and power that extended to just about everybody (2012: 8). This global consciousness and vision of Occupy activists to transform structures of inequality by mobilising a collective praxis built on transnational networks of solidarity is evidenced in online survey data regarding its grievances, goals and vision. From the online survey, the political goals of the movement was for a just, fair and equitable society where activists envisaged 'more equitable treatment for all of the people, worldwide' '... structural change towards authentic global equality' 'global social and economic justice' '[a] desire to work together to find ways of organising the world that is sustainable, fair and enriching for human lives' '... a democracy from the ground up based on the ideals of mutual aid and solidarity' '[to] achieve peace and happiness for everyone around the world' (Fuchs, 2014: 57-62). From these responses, the goals of the movement were not just national, but global in scope, vision and orientation as one activist remarked: [Occupy] is a global movement that wants to make a better world' (Fuchs, 2014: 67). In this sense, networks of transnational solidarity seen by Occupy Everywhere sought to (a) raise global consciousness, awareness and understanding of economic injustice; (b) overcome boundaries of class, gender, race, nationality, religious and ideological differences to promote common goals, visions and values of the 99%; (c) build a sense of unity among diversity and (d) encourage inclusive participation as a basis of creating a global community of solidarity that welcomes all people into the global conversation of socioeconomic equity and justice. These discursive expressions of a transnational networked solidarity between Occupy activists also offers a basis for glimpses of a diffuse collective-identity—as the transnational diffusion of the 'We are the 99%' slogan, coupled with activists' global orientation to structural change—stretched common experiences of injustice, a common interpretation of reality, common grievances, values and goals and a shared cognitive sense of 'us' and 'we' as a unified collective movement across national borders. Global injustice, thus, operated as a master-frame around which multiple, diverse and diffuse activists built transnational networks of solidarity and a collective-identity across borders.

This discursive construction of its transnational networks of solidarity and a collective-identity were rooted within the digital symbolic spaces opening-up across the imbricated, overlapping and interconnected channels of social media networks. Instead of constituting a multiplicity of disparate, insulated and isolated national communications networks, the transnational sites of occupations, demonstrations and marches composed a configuration of multiple elements of (sub)national communications nodes that crystallised into a broader integrated transnational

network topology. This sophisticated configuration of transnational communications networks consisted of commercial social media platforms ie, Facebook pages, Twitter hashtags with crosstagging, hyperlink exchanges and designated keywords, Tumblr pages, Wikis and audiovisual streaming, uploading and subscribing on YouTube, but also non-commercial social media platforms including SN-1, Diaspora, TheGlobalSquare and Riseup which built an integrated, dense and despatialised network topology and a means with which to disseminate information, communications and coordinate collective actions across borders. In an analysis of its network topology, Hopke (2016b) showed that the use of social media platforms and websites functioned to bridge activist networks and hyperlinks served as associational endorsements and channels for informational flows within and between different Occupy movements in a way that brought activists together in digital symbolic spaces to build transnational coalitions (2016b: 611). This large-scale use of social media to build the movement illustrates the effectiveness of its networks and digital symbolic spaces to brokerage new activist ties within and beyond national borders.

This complex configuration of social media networks was a significant dimension in organising, mobilising and coordinating this global justice politics as it offered activists a highly interactive, convivial and collaborative digital symbolic space with dense flows of information, knowledge and communications. In an analysis of Occupy's Twitter networks, Gleason (2013) found that the information and communications environments of social media networks represented a generative informal-leaning space which offered an opportunity for both activists and its users to construct knowledge from multiple heterogeneous perspectives (2013: 969). Gleason (2013) argues that Twitter, as a micro-blogging platform with a hashtag classificatory system, supports informal-learning about the politics of Occupy by facilitating intertextual reading exposing activists and users to different perspectives in multiple modalities (text, video, audio and image) in a way that can not only militate against homophily, but also expand the cultural, moral and political horizons of activists and users (2013: 979). This can be viewed in the way in which these communicative digital symbolic spaces were transformed by activists into counter-spaces in which to articulate, construct and negotiate radical imaginaries of alternative futures, worlds and realities which also translated into the physical spaces of occupations in visions of 'showing another way of life, respectful with the other as well as the environment' ... to build an utopia, to create our own world' '... the pursuit of a better world' '[o]ur ideal for the future society is a democracy ... based on the ideals of mutual aid and solidarity' (Fuchs, 2014: 57-60; Hopke, 2016; Smith, Gavin and Sharp, 2015). The global scope of these radical imaginaries also highlighted the global scale of activists' understandings of the moral, civic and political boundaries in obligations and duties of citizenship. In an analysis of the geographical dimensions of citizenship in digital activism, Baek (2018) shows a positive association between the activists' feelings towards a sense of global citizenship²¹ and global participation²² in the Occupy Everywhere movement (2018: 1150). For Baek (2018), this suggests that engagement in transnational activism may allow local activists and individuals to possess an expanded sense of citizenship built on an awareness, consciousness and moral obligation towards those outside their social, cultural and political communities (2018: 1150). Indeed, the sharing of grievances, visions and understandings of global human rights norms in terms of endemic socioeconomic

²¹ The term global citizenship refers to 'a sense of duty or responsibility that may benefit the global community which is outside of one's local community' (Baek, 2018: 1150).

²² The term global participation refers to the online or offline participation in the international Occupy movement (Baek, 2018: 1150).

inequality may assist activists to perform their civic duty beyond their local community and, in this sense, the Occupy Everywhere movement was rooted in various local communities, but with its mobilisations across national territories, it enabled its activists to perform multilevel citizenship encompassing a local and global sense of responsibility (Baek, 2018: 1150).

Example 2: The Global Frackdown Movement—19th October, 2013

On the 19th October 2013, a wave of transnational protests swept across 27 countries in over 200 demonstration events. This transnational day of technologically mediated, organised and coordinated activism entitled 'The Global Frackdown' sought to raise local, national and global awareness of the damaging social-environmental effects associated with the oil and natural gas drilling techniques of high-volume hydraulic fracturing and, therefore, calling for a ban on the worldwide practices of shell fracking. As an invasive natural gas extraction technology, the use of fracturing techniques originated, in the 1990s, in the South and Midwest of the US—regions which have been socio-historically less-susceptible to environmental activism—but then spread throughout the US and then the world as a cost-effective means of energy extraction (Mazur and Welch, 1999). With little public awareness and, thus, resistance to the widespread practice of fracturing, in 2010, the critically-acclaimed documentary film entitled Gasland immediately raised public awareness of the socio-environmental impacts of fracking on local communities including potential contamination of water reservoirs, increased seismic activity, air pollution, risk of gas explosions and the concern over corporate dumping of toxic waste water in local streams (Mazur, 2016: 212; Krause and Bucy, 2018: 323). As a catalyst for increased public awareness, the global distribution of the film exposed these negative consequences associated with fracturing practices which led to the issue to become a topic of debate in the public spheres throughout the world from Canada, US, Germany, Poland to Spain, Russia, the UK and Ireland. For instance, in reaction to a UK government report advising the extension of fracking practices across the country, the increased public awareness of the topic led to it to make the front page in the Guardian newspaper (Harvey, 2012). In 2012, the Global Frackdown movement emerged as a complex configuration of local, national and transnational activist networks originating from a global campaign to end worldwide fracturing practices initiated by the nongovernmental organisation (NGO) Food & Water Watch (FWW). As an independent public interest organisation specialising in food and water security, Food & Water Watch support programmes, campaigns and initiatives focusing on broadening global access to healthy food and clean water as its values, vision and mission statement demonstrates:

'We stand up to corporations that put profits before people and advocate for a democracy that improve people's lives and protests our environment ... We are working to create a healthy future for our families and for generations to come—a world where all people have the resources they need including wholesome food, clean water and sustainable energy. Making this happen requires organi[s]ing people ... to build a large movement with the political power to make our democratic process work. Large numbers of people are a countervailing force to corporations buying public policy' (FWW, 2020).

In its 2013 campaign to organise a transnational day of anti-fracking protest, the organisation focused its energy on building a Global Frackdown movement from support, alliances and networks at the subnational, national and transnational levels by connecting environmental supporters, activists, activist groups and environmental organisations across internet-based and social media communications networks. To this end, its communications strategy extended to its appropriation of two types of digital media: its website globalfrackdown.org used as its main

organising platform to plan events, discuss tactics and raise the awareness, consciousness and visibility of the movement, coupled with its use of listservs as a way to disseminate information, connect activists with each other and link activists to more professional, specialised-knowledge networks of environmental experts. This communications strategy made use of digital symbolic spaces that enabled access to information, knowledge, communications and resources—from specialised training and tool-kits to protest guidance—which offered activists useful resources to bring together multiple, diverse and diffuse environmental activists around the world in shared antagonisms, common values and solidarity. As its mission statement describes:

'We stand united as a global movement in calling on government officials at all levels to pursue a renewable energy future and not allow fracking or any of the associated infrastructure in our communities or any communities' (Global Frackdown, 2013).

As a unifying element of the Global Frackdown movement, these shared antagonisms, common values and solidarity can be seen in the personal communications of a European-based activist:

'What we feel is a solidarity with all the people who are affected and we really try to share the information when something is going on We know how important it is if people from abroad all of the sudden see that you have a problem and they tell other people about it. Just this is a help that is incredible' (Hopke, 2015: 5).

With its inclusive mission statement and its broad and open campaign messaging incorporated into its communications strategy across its website, the Global Frackdown movement enabled autonomy to its local networks to define their own goals in conjunction with their specific circumstances. In mobilising collective actions across localised physical spaces, local activists' networks harnessed this website into a multiplatform communications strategy integrating the social media of Facebook, Twitter and YouTube into a translocal network to share information, transmit communications, offer messages of support and solidarity, organise protests, mobilise supporters and to also monitor industry developments (Hopke, 2016: 392). This multiplatform communications strategy used by subnational networks of the Global Frackdown movement enabled translocal networking activity by connecting its local-to-local activist networks to transnational environmental movements and organisations with shared or overlapping political and ideological frameworks (Hopke and Simis, 2017: 117). These translocal linkages enabled coordinated grassroots mobilisations, internetworking of solidarity and the professionalisation of anti-fracking activist groups through training, tactics and strategy provisions offered by the global Frackdown website. By enacting this multiplatform communications strategy, the Global Frackdown movement built a complex network topology with integrated, overlapping and multiscalr communications networks incorporating websites, listservs and social media networks that connected multiple, transversal and diffuse local activist nodes into a transnational network configuration. In an analysis of its formal network structure, Hopke (2016) identifies that its overall network nodes consisted of 180 hyperlinks and websites of partner organisations spanning across 16 countries and 6 continents (2016: 384). The use of social media networks in its multiplatform communications strategy also facilitated relational diffusion and it opened-up opportunities to virtually brokerage new activist ties, networks and relations across borders in local-to-local links. The topological breadth of this communications network stretched from North America to Asia, however, this analysis did not include the informal rhizomatic assemblage of its translocal activist networks. With its multiplatform structure, local networks appropriated specific platforms for different strategic purposes: the website was used as a central information, organising and rallying hub; listservs functioned as

formal, durable and semi-private networks for core activists and social media served as informal, in-the-moment and open networks to mobilise episodic protest events. The nodes constructing this complex multiplatform topology of communications networks supported the overarching vision of the Global Frackdown movement: to build a transnational anti-fracturing movement around interconnected, diffuse and diverse transnational networks of solidarity.

In a collective and hybrid frame-analysis of the Global Frackdown Twitter communications network, Hopke (2015) identifies the use of six languages across this network—from Spanish, French, Catalan, German to Basque and English—with which its translocal networks articulated expressions of transnational solidarity, shared antagonisms and common values around which a transnational collective-identity was discursively constructed in shared experiences of 'we' emerging in cross-tagging, translations and multilingual hashtagging (2015: 7). This shows the extent to which activists of the Global Frackdown movement utilised the digital symbolic spaces within social media networks in order to engage in the shared practices of multilingual tagging. In her analysis of the Twitter hashtag #Globalfrackdown, Hopke (2015) found that Global Frackdown activists used the network to forge cross-national solidarity links not just with each other, but also with other environmental activists and movements engaged in similar political struggles in a way that enhanced 'a sense of globalness to the day of action' (2015: 7). This was evidenced in the expression of a cross-movement collective-identity, solidarity and support by cross-tagging, cross-promoting and exchanging flows of information with environmental demonstrations by Eisipagtos First Nation activists, in New Brunswick, Canada, before and throughout the Global Frackdown transnational day of protest, as Hopke (2015) demonstrates:

'@NoTarSands: Live updates—tense standoff btw #Elsipogtog FN #AntiFrackers & RCMP follow @XXXX reporting from front line #INM #globalfrackdown' (9:29 a.m 17th October, 2013; Hopke, 2015: 7)

This Tweet highlights how a Global Frackdown activist appropriated, adapted and published the #Elsipogtog hashtag as a means with which to promote the Global Frackdown day of action, coupled with expressing solidarity with the First Nations protest struggles. For instance,

'@RisingTide604: 16+ #Elsipogtog #Fracking blockade solidarity actions planned! http://www.wearepowershift.ca/stand_with_elsipogtog_actions . . . #climatejustice #climate #350ppm #GlobalFrackdown' (4:50pm, 17th October, 2013; Hopke, 2015: 7).

'@XXXX: #Elsipogtog protest adds fuel to #GlobalFrackdown fire http://www.canadians.org/blog/elsipogtog-protest-adds-fuel-global-frackdown-fire #banfracking' (5:45pm, 23 October 2013, Hopke, 2015: 7).

These Tweets exhibited how convergence between the movements through cross-tagging and information sharing can emphasise expressions of mutual support as Elsipogtog activists also appropriated the #GlobalFrackdown hashtag to promote, support and disseminate information regarding their own protest events, in New Brunswick, as way to broaden its appeal and seek solidarity and support from a similar community of environmental activists. As shown below:

'@lastrealindians: Mi'kmaq lawyer XXXX showing bruises inflicted on her by RCMP during their raid on #Elsipogtog#GlobalFrackdown' (7:31pm, 21 October, 2013; Hopke, 2015: 7).

'@XXXX: Let's get #Elsipgtog #mikmaqblockade #mikmaqblockade #IdleNoMore #GlobalFrackdown trending. Don't RT. Steal and repost to trend. #redrising' (1:09pm, 17th October; Hopke, 2015: 7).

'@XXXX: Heading back to the #Elsipogtog protest site. Happy day of #GlobalFrackdown! Support support!' (7:07pm 19th October, 2013; Hopke, 2015: 7).

This series of Tweets show that Global Frackdown activists use Twitter as a communications network to advance the transnational anti-fracking movement, bolster its moral authority and forge both intra(inter)movement local-to-local linkages through the reciprocated discursive practices of cross-tagging, cross-promoting and cross-flows of information (Hopke, 2016: 7). Moreover, these Tweeting practices constitute an articulation of political praxis—a diffuse type of politics typified by openness, inclusivity and plurality. These practices of cross-tagging also exhibited a strong sense of solidarity with other environmental movements in promoting and supporting these collective actions which demonstrated transnational solidarities framed by shared antagonisms, a common interpretation of reality and a critical imagination of alternative sociopolitical realities. The digital symbolic spaces across social media networks offered activists arenas in which to collectively build counter-spaces that articulated a transnational solidarity around common struggles for global justice through these reciprocated cross-tagging practices. Resonating with the Occupy movement, this expression of transnational solidarity supported the development of a collective-identity that emerged out of exchanges in collective narratives of environmental justice creating a shared sense of 'we' and 'us' that was rooted in shared antagonisms, common values and the pursuit of a collective political vision: the worldwide banning of fracking technologies. This transnational solidarity exhibited a moral concern with the environmental condition and sustainability of the planet and its inhabitants that extends far beyond the moral, cultural and civic obligations attached to national borders. This show of transnational solidarity and collective-identity were highlighted in Hopke's (2016) analysis of the networks' use of multilingual tweeting and hashtag indexing that facilitated the cross-flows of cognitive frames between linguistic spheres which enhanced shared feelings of solidarity and the globalness of the movement, as Hopke (2015) highlights:

@XXXX: #GlobalFrackdown MT @Kowalski_Lech: #fracking #occupychevron #pungesti #balcombe one bus made it through and is 20minutes away #gazdeschiste (7:17pm, 19th October; Hopke, 2015: 10).

@AntifrackingCom: #19oct Día Internacional contra la fractura Hidráulica #stopfracking "@gaslandmovie: The GlobalFrackdown is Global! http://youtube.be/wDH9ghBtV31" (12:38am, 19th October 2013; Hopke, 2015: 10).

This activity of multilingual hashtag indexing facilitated cross-flows of information between multiple languages in a way that promoted local demonstration events by rooting them within different events occurring in various countries across the world. This process of transnational frame jumping too promoted expressions of a transnational solidarity and enhanced a shared sense of collective-identity by contextualising local environmental struggles against fracturing practices within wider frames of global environmental struggles that shared a common vision, awareness and goal. As Hopke's (2015) analysis shows, the use of Twitter as an open, interactive and translocal communications network with its digital symbolic space was conducive to the formation of networked counter-spaces through relational diffusion and the virtual brokerage of new ties across borders that supported articulations of transnational solidarity and collective-identity around shared antagonisms, mutual values, a shared imagination and a shared political objective toward the realisation of environmental justice.

Example 3: The Fridays-For-Future Movement—15TH March, 2019

On Friday, 15th March 2019, a transnational protest against climate change was organised by the Fridays-For-Future (FFF) movement; it stretched across 5 continents, to 135 countries, in 2380 cities with 2626 protest events which had over 2.2 million people (Fridays For Future, 2020). The FFF movement is a student-led transnational environmental movement that seeks climate justice by organising transnational protest events on the basis of coordinated civil disobedience in which students boycott compulsory education on selected Fridays to participate in collective-actions calling for states and international institutions to sufficiently address climate change. By planning, organising and coordinating cross-national protests, the FFF movement aimed to raise awareness of the immediate need to tackle the global threats of ecological destruction, biodiversity loss and species extinction associated with the effects of climate change. With its transnational demonstrations, the FFF movement attempted to draw attention to the ecological impact of individual lifestyle habits, but specifically targets political states—across the national and supranational levels—by highlighting state policy abuses and placing pressure on states to initiate measures for climate protection; its fundamental aim was to ensure that all states comply with the goals set-out by the 2015 Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC).

These specific goals set-out in Article 2 of the agreement include: (a) holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels; (b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate resilient development (UNFCCC, 2015: 22). In line with these goals set-out by the Paris Agreement, the main objectives of the FFF movement sought to (a) end fossil fuel depletion as part of an energy transition; (b) abolish subsidies for fossil fuel energy production; (c) increase investment in renewable energy and (d) expand public transport in the context of a change in traffic (FridaysForFuture.org). Thus, the central demand of the FFF movement was to 'Act finally-so we have a future' and, as a social movement, through its strategy of civil disobedience and repertoires of transnational protest, it aimed to enact social transformation toward a sustainable renewables-based global economy.

The historical origins of the FFF movement can be traced back to the 20th August 2018 where Greta Thanberg, a 15-year-old Swedish student began protesting—with a plaque entitled 'school strike for the climate'—outside the Swedish Parliament building that targeted the non-compliance of government policies with the Paris Agreement. This protest continued on a daily basis for a period of three weeks under the hashtag #FridayForFuture at which point the protest gained international attention in mainstream media that precipitated the formation of climate protest groups, in various cities, across the world. From Sweden, the FFF movement gained traction throughout the world—through its transnational social media networks—to Australia, UK, Italy, Germany, the Netherlands, Belgium, Canada, France, Switzerland, Austria and Ireland. Different to Occupy and the Global Frackdown movements, the FFF movement did not start from an online global campaign, but out of a local protest which spread across the world via social media after gaining international exposure in the mass-media (The Guardian, 2019).

Therefore, the FFF movement drew its strength from a rule violation: the refusal of compulsory education in which the media attention of the movement depends on a strike during class. However, similar to Occupy and the Global Frackdown movements, the FFF movement relied heavily on the despatialised digital networks of social media to disseminate information-communications, organise and coordinate protests, rallies and demonstrations across the globe. This was showcased in the capacities of the movement to organise a global climate strike on the 15th March 2019 in which subnational protest networks or groups, dispersed across 135 countries, appropriated multiple social media platforms to communicate, organise coordinate collective-actions in 2380 cities, with 2626 events and among 2.2 million activists on a single day (Fridays For Future, 2020). Prior to the mobilisation of this global strike, the global coordination group of the Fridays-For-Future movement sent out an open letter to the Guardian newspaper outlining its grievances, aims and political objectives:

'....Young people make up more than half of the global population. Our generation grew up with the climate crisis and we will have to deal with it for the rest of our lives. Despite that fact, most of us are not included in the local and global decision-making process. We are the voiceless future of humanity. We will no longer accept this injustice. We demand justice for all past, current and future victims of the climate crisis and so we are rising up On 15th March, we will protest on every continent. Climate change is already happening. People did die, are dying and will die because of it, but we can call a stop to this madness We demand the world's decision-makers take responsibility and solve this crisis. You have failed us in the past. If you continue failing us in the future, we the young people, will make change happen by ourselves. The youth of this world has started to move and we will not rest again' (The Guardian, 1st March, 2019).

On the day of the 15th March, the FFF movement organised the first global environmental strike in which school children, students, parents and other activists took to the streets in their millions to protest against the existential threats associated with climate change. The day of protest extended beyond the geographical regions of the first protest from the Australian and European continents to the continents of North America, South America, Asia and Africa. From Sweden with 10,000 in Stockholm, the protests spread to Italy with 100,000 in Milan; 25,000 in Rome; 15,000 in Padua; 10,000 in Florence; to Germany with 20,000 in Berlin; 7,000 in Hamburg; 10,000 in Cologne and 10,000 in Munich; to Austria with 10,500 in Vienna; to Argentina with 1500 in Buenos Aires; to Belgium with 30,000 in Brussels and 30,000 in Gent; to China with 1000 in Hong Kong; to France with 50,000 in Paris; to India with 500 in Delhi; to Japan with 100 in Tokyo; to Columbia with 2500 in Bogota; to South Africa with 2000 in Cape Town; to South Korea with 100 in Seoul; to Slovakia with 1000 in Bratislava; to Thailand with 50 in Bangkok; to Luxembourg with 15,000 in Luxembourg; to US with 15000 in Washington DC. (Fridays For Future, 2020). These transnational demonstrations swept across 6 continents where translocal activists groups including school children, students, parents and other activists joined together, across 2380 cities, in a united sense of solidarity with a shared set of values and a common vision: to pressure states and international institutions to take immediate policy action against climate change by raising global awareness of its threats to humanity.

Similar to Occupy and Global Frackdown movements, this transnational event had a specific commonality: it mobilised collective-actions around a shared consciousness of the threats faced by climate change and a common commitment towards mitigating it that acted as the basis around which a sense of transnational solidarity and collective-identity was expressed. This fight against climate change reverberated across the world in the shared imaginations, language and actions of activists mobilising on the basis of a common global vision of alternative

socio-ecological realities. This was shown in a survey by the Institute for Protest and Movement Research where Wahlström et al (2019) illustrated that an alternative imagination for the future in which the effects of climate change were no longer a global threat was a major motivation behind the activists' decision to participate in the transnational movement (2019). Unlike Occupy and Global Frackdown, the demographics of the FFF movement, as a studentled movement, showed that the majority of activists were young girls and women composing 57.6% of the activists with 52.8% aged between 14-19 and 55.6% with high school education (Wahlström et al, 2019: 7-8). In contrast to most social movements outside of an overarching feminist identity, the strong female contingent of the FFF movement may be understood with reference to its strong female leaders such as Greta Thanberg who had inspired young women to participate in the 15th March protest as was indicated by Wahlström et al (2019) in which 21% of participants reported to have been inspired by her to join the protest (2019: 13). This survey also showed that the transnational protests constituted a type of political selfempowerment in which activists believed that altering one's own lifestyle and consumption habits was an important contribution to changing the situation on climate change. It showed that 80.5% of activists targeted consumer products that were ethical, ecological and sustainable with 70.5% consuming less for political, ethical and ecological reasons whereas 68.4% reported to have changed their diets toward more ecologically sustainable ways and 61% reported to have consumed less energy by participating in the protests (Wahlström et al, 2019: 18).

Resonating with the Occupy Everywhere and Global Frackdown movements, the organisational structure of the FFF movement incorporated a multiplatform communications strategy that integrated the social media platforms of Twitter, Facebook, Instagram and YouTube, coupled with a website into a transnational configuration of translocal networks through which to share information, exchange communications, resources and transmit expressions of support and solidarity and organise and coordinate protests on a transnational scale. In this communications strategy, the website fridayforfuture.org operated as a central information hub offering activists information on future global protests, advice on how to organise protests and a repository of communications resources (from templates on how to promote strikes to striking letters to school headteachers). This core information hub was internetworked with social media where FridayForFuture, on Twitter, FridayForFuturefb-group, on Facebook and @Fridayforfuture on Instagram, built a complex network topology with integrated, overlapping and multiscalr networks linking multiple, transversal and diffuse translocal activist nodes into a transnational network configuration. These translocal linkages enabled activists to exchange information in activities of cross-tagging, cross-posting and cross-messages, videos, images and support that empowered activist networks to organise and coordinate grassroots mobilisations stretching from North America to Asia. This illustrated the use of social media networks by FFF to engage in relational diffusion and to facilitate virtual brokerage of new ties, networks and relations across borders. These overlapping translocal networks created digital symbolic spaces within which activists built collective action frames through the communicative construction of shared antagonisms, common values and a critical imagination of alternative ecological futures. Digital symbolic spaces opening-up social media networks, therefore, enabled FFF activists to build a transnational movement against a common enemy; the deepening of climate change by nationstates policies and international institutions through exchanges in cross-national solidarity and the construction of belonging in diffuse collective-identities. This use of digital symbolic spaces within social media networks supported the main objective of the movement: to build, connect

and multiple diffuse configurations of translocal networks around which a global solidarity and a collective-identity built a transnational politics toward global climate justice.

Social Media Networks and Global Justice as a Politics of Multiplicity

In the Occupy Everywhere, Global Frackdown and Fridays-For-Future movements, the use of social media networks played a significant role in the mobilisation of collective-actions across national borders: it offered digital symbolic spaces in which activists built shared frameworks of meaning, common values and shared antagonisms through the communicative construction of collective action frames in response to the human and ecological risks posed by global issues. These transnational social movements highlighted the effectiveness of its digital symbolic spaces in opening counter-spaces within which activists experimented with different visions of utopia where an image of a better world was articulated in an imaginary of alternative political futures. This rejection, subversion and reconstitution of dominant cultural codes in the global flows of this symbolic politics is the central space for the imagination as a social practice where activists built alternative 'imagined worlds' through collective meaning-making (Appadurai, 1995: 33). This was evidenced in the Occupy Everywhere movement where the imagination was mobilised in alternative visions of a global society built on 'more equitable treatment for all of the people, worldwide' '[a] desire to work together to find ways of organising the world that is sustainable, fair and enriching for human lives' (Fuchs, 2014: 57-62). The transnational extension of these digital symbolic spaces also enabled activists to virtually brokerage new ties, networks and relations across borders which was highlighted by the Global Frackdown movement who built local-to-local linkages in a translocal network configuration that stretched dense flows of communications, information and solidarities across 27 countries.

This explicitly underscores the effectiveness of social media in the extension in the spaces of the political highlighted by its new normative horizons with cross-national frames of perception and action (Beck, 2015: 79). As transnational communicative spaces, social media networks are, therefore, conducive to the mobilisation and coordination of political projects across borders. In this sense, the master-frame of 'global justice' is an essential mechanism around which multiple, diverse and diffuse activists unite in common frames of reference which collectively define shared struggles. With its socio-technological affordances to produce, transmit and receive symbolic materials across time-space, the digital symbolic spaces within social media networks are now increasingly used to build transnational social movements with a heterogeneous social base by bringing together activists that cut across differences in class, gender, ethnicity, culture, nationality and different ideological positions around the issues of global issues. This was evidenced by the geographical scale of the Occupy Everywhere, Global Frackdown and FFF movements which spread to 82, 27 and 135 countries across 6 continents respectively. This politics maybe more heterogeneous than the homogeneity of a traditional class politics, but its inclusiveness must be understood in relation to the challenges posed by new forms of exclusion across the world by the digital divide. Within this context, it is important to remember that as a whole extra-institutional politics does indeed favour certain demographics around class (middle) ethnicity (white) and age (younger), but if anything this highlights the social, economic, cultural and digital inequalities which still present barriers to participation across societies and from which no current politics can escape.

With this caveat, social media networks, today, are main arenas for the creation of new counterspaces in which a type of politics takes shape around the value of difference, a radical politics that explicitly rejects 'the spectacle of ideological politics in favour of a praxis of micro-power and a micro-politics of ... everyday life (Tormey, 2005: 403). Global justice is, thus, a politics of multiplicity: it is typified by pluralisations of the political where multiple belongings, flexible identities and cross-fertili[s]ation of different cultural models unite around common elements in value systems, a shared ethics, commitment and dedication to a perception of justice in which political projects are mobilised around 'the universali[s]ed demands of humanity, ecology and sustainability' (Rai and Cohen, 2000: 152). This politics is rooted in a transnational imaginary as a social practice that attempts to reimagine anew alternative futures of sociopolitical reality built upon moral principles of justice, equality and democracy. It is, as Fenton (2012) claims, 'a politics that makes a virtue out of a solidarity built on the value of difference which goes beyond a simple respect for otherness and involves an inclusive politics of voice' (2012: 152). Because this politics is communicatively constructed, it is characterised as a postfoundational politics that opens virtual cosmopolitan spaces in which digital connectivity can broaden the cultural, political and moral horizons of activists, movements and projects. To conclude, we can therefore agree with Manuel Castells' (2012) contention that this radical politics 'express[es] an acute consciousness of the intertwining of issues and problems for humanity at large [which] ... clearly displays a cosmopolitan culture' (2012: 223).

In Conclusion

This chapter has presented a specific case that the transnational character of digital symbolic spaces within social media networks are conducive spaces in which activists across the world can come together across borders to mobilise collective actions in response to the threats posed by global problems. More specifically, it has argued that these digital symbolic spaces can open counter-spaces where activists collectively construct shared antagonisms, common values and critical imaginaries of alternative sociopolitical futures. This chapter has argued that its diffuse networks enable activists to build translocal networks by its ability to brokerage new ties, relations and networks among geographically diffuse activists. To this support this argument, the chapter drew on the concrete empirical cases of Occupy Everywhere, Global Frackdown and the Fridays-For-Futures movements. To conclude, the chapter argued that these movements represent a distinct type of politics: a global justice politics typified by its plurality, multiplicity and its morality to collectively act in response to growing challenges presented by global issues. Because of its global outlook, consciousness and translocal spaces in which this politics operates, the next chapter analyses these virtual political communities within the wider interpretation of a critical cosmopolitan perspective. Its central question concerns the following: can the digital symbolic spaces within social media networks support the flows of a virtual cosmopolitanism?

Chapter 4: Global Justice and the Prospects for a Virtual Cosmopolitanism

We do not live in a cosmopolitan age, but we do live in an age of cosmopolitanism [which] maybe understood more as a normative perspective for viewing the potentialities and necessities of our age than as an objective characterisation of the age itself' (Fine, 2007: 19).

The aim of this chapter is to present a specific case for social media as a communications media that provides social, cultural and symbolic resources for the discursive construction of political forms of virtual cosmopolitanism. To this end, this chapter challenges the central premises of the critical-narratives concerning the possibilities of a virtual cosmopolitanism by critiquing its conceptions of the virtual and cosmopolitanism. By advancing an understanding of its status as a dominant cultural mode of sociotechnical mediation, the central argument of this chapter is that social media networks offer global cultural flows where cultural and political cosmopolitan relations emerge in dispositions to cultural openness and in stronger political relations in which a shared normative culture is constructed within a global justice politics dedicated to addressing global issues and within its inclusive politics of recognition. This chapter is divided into three parts. The first part offers a critical analysis of the cosmopolitan conception of justice in which the moral and institutional approaches are examined in relation to a more dialogic conception. The second part offers a critical analysis of the critical narratives of the time-displacement, the weak and the homogenisation theses which reject the possibility of a virtual cosmopolitanism. The third and final part argues that social media as a technological expression of the virtual is embedded within the relational, cognitive and symbolic structure of the social world which its circulation of cultural flows across the local and the global create spaces of openness for these cultural and political relationships to emerge within its digital symbolic spaces.

Global Justice and Cosmopolitanism

Global justice, as a master-frame, is a fundamental dimension of contemporary societies: it is at the centre of collective struggles for transnational social movements as it mobilises action across borders in response to global issues. This can be viewed in the recent transnational movements of the Occupy Everywhere, the Global Frackdown and the Friday-For-Futures which mobilised collective-actions, across the world, in response to: (a) deepening global wealth inequality; (b) the human and ecological implications of global fracturing practices and (c) threats to current biospheres and ecospheres associated with climate change. But, what exactly is global justice? How have different normative perspectives understood the conditions for its realisation? The idea of global justice as a challenge and possibility is a recent topic in the field of political philosophy. The concept of justice was traditionally limited to a notion of political community confined to the geopolitical borders of states in which moral duties and rights extended to the responsibilities attached to citizenship. This bounded conception of justice—as it encompassed an idea of 'peoples' equivalent to the nation—was highlighted by Rawls (1999), in The Laws of *Peoples*, where 'the primary subject of justice is the basic structure of society or, more exactly, the way in which the major social institutions distribute fundamental rights and duties and determine the division of advantages from social cooperation' (1999: 7). In contrast, the notion of global justice expands the institutional scope of justice that not only concerns actions of individual states, but also the global institutional context within which states operate and to which moral questions concerning rights, duties and obligations extend to the global sphere, as

Pogge and Moellendorf (2008) note, 'global justice are moral matters that concern how global and international institutions should be structured so as to ensure that person's justified claims are met' (2008: xxy; Tan, 2004: 21). Thus, the normative task of global justice, then, is to seek alternatives to incumbent international institutions where rights, duties and obligations of justice necessitate standards by which to evaluate and correct the distributive aspects of these institutions so as to address global injustices from poverty, inequality, war to ecological destruction. Global justice, therefore, is understood as a response to perceptions of global injustice. Notwithstanding statist positions that retain a notion of justice exclusively between states, in the cosmopolitan tradition, global justice is understood principally as the extension of rights, duties and obligations across national boundaries—which transcends a bounded notion of peoples—to include all persons in the universal human community, as 'cosmopolitan thinking is on the content and weight of obligations beyond national boundaries' and, thus, social boundaries do not impose 'principled restrictions on the scope of an adequate conception of justice' (Brock and Brighouse, 2005: 3). Cosmopolitanism, therefore, rejects the view that moral principles of justice can be limited by political boundaries as those defined by citizenship or nationality. With a long intellectual history, the cosmopolitan tradition has its roots in the Cynic idea of kosmopolites or 'citizen of the world' but it was the Stoics who gave cosmopolitanism its political orientation: the political community of the polis was defined with reference to the universal human community of the cosmos. It is thus in the Stoic understanding of being a 'citizen of the world' that pinpoints a fundamental dimension of cosmopolitanism in relation to global justice: it is a thesis about responsibility where 'cosmopolitanism guides the individual outwards from obvious, local obligations and prohibits those obligations from crowding out obligations to distant others' (Brock and Brighouse, 2005: 3).

In contemporary theorisations on global justice, there are two dominant positions within the cosmopolitan tradition that concentrate on different levels of analysis: the moral ideal and the institutional ideal. As a moral ideal, cosmopolitanism is viewed as a set of moral universal commitments that morally justifies distinct kinds of institutions we may impose on individuals where conceptions of justice extend to notions of rights that can secure a distinct set of universal human capabilities—such as freedom, practical reason, health and needs—which are believed to be necessary for everyone to fulfil a good human life (Nussbaum, 2008: 497; Sen, 2008). This capabilities approach to global justice focuses on what is fundamentally common to all human beings ie, certain basic capabilities which are believed to cut across cultural, religious, national and ethnic differences, as Nussbaum (2008) claims, 'a life that lacks any one of these capabilities, no matter what else it has will fall short of being a good human life' (2008: 517). From a similar cosmopolitan position, as a moral ideal, global justice is found in the pursuit in relations of equality where a basic political framework can guarantee relations of equal respect, recognition, need satisfaction, freedom and, thus, prospects of a decent life (Brock, 2012: 320). As an institutional ideal, cosmopolitanism is seen as a new political system of global institutions where conceptions of global justice extend to the idea of 'world polity' (Meyer et al, 1997) and 'cosmopolitan democracy' (Held, 1998; Archibugi, 1998; Thompson, 1998) which focus on the project of democratisation within nations, among states and at the global level with the creation of new institutions based on world citizenship. The idea of 'cosmopolitan democracy' is viewed as a direct response to the structural effects of globalisation in which nation-states are entangled within complex interconnected relations as 'overlapping communities of fate where the fate of one country and that of another are more entwined than ever before' (Held, 1998: 24). The rise

of global problems, thus, requires global democratic institutions to sufficiently address them. In contrast to the Rawlsian (1999) idea of 'peoples' as nations, cosmopolitan democracy rests on the inclusive concept of world citizenship with universal human rights where 'citizens should have rights and duties as inhabitants of the world' (Archibugi, 1998: 216). There is, however, incredulity over the possibility of implementing these normative projects, in practice, as Wang Horng-luen (2004) maintains, the 'ideal of cosmopolitan democracy ... depends too much on the presumption of universal world citizens while the definition and classification of these citizens ... hinges on the institutions of the nation-state system' (2004: 31). Notwithstanding critical questions concerning the feasibility of instituting worldwide normative political projects, these formalistic moral and institutional approaches to global justice place too much emphasis on widening the scope of rights to the globe to solve injustices at the expense of neglecting the worldwide institutionalisation of neoliberal governmentality at the root of cultural, economic, ecological and civil-political injustices as well as its hegemonic imposition of biopower: national and international structures that create relations of domination and massive inequalities in the distribution of resources (Kurasawa, 2009: 86). Furthermore, in espousing distinct human capabilities, traits or institutional frameworks that constitute the sin qua non for all humans to lead a good life, these approaches collapse into a universalism and essentialism which explicitly marginalises historical and cultural differences and possesses a neglect of autonomy—in a type of Western ventriloquism—by removing marginal voices, choices and freedoms of non-western citizens to make their own decisions about the good life and, in this sense, as Dallmayr (1996) suggests, the West continues to shape, dominate and control global moral discourse (1996: ix).

Moreover, in its foundational presuppositions of universality, totality and essence, the strong forms of moral universalism—which are rooted within the abstract universal moral principles of these normative approaches—have been seen as representing potential risks by highlighting the 'oppressiveness of abstracted universalism' (Harvey, 2009: 80) with potential to constitute a new totalising metanarrative that may replace previous metanarratives (Lyotard, 1984: xxiv) with the power to 'Otherize, exoticize' and its possible transformation into an ideology where appeals to foundational principles of moral universalism 'runs the constant risk of transmuting from an inspiring vision into an inviolable doctrine of universal salvation [and] ... another threatening modernist ideology of human betterment—a new political religion of immutable truth' (Hayden, 2013: 196). This possible collapse into a global ideological metanarrative means that these cosmopolitan normative projects could serve to 'hegemonically legitimi[s]e Western ideological authority' as '[d]istrust in ... cosmopolitanism ... spring[s] from the perception that it is largely unattainable and therefore an empty rhetorical tool in the hands of the powerful' (Kirtsoglou, 2010: 173; Harvey, 2009).

Cosmopolitanism is not just limited to normative political projects with grand designs of society: it is also a critical-normative perspective rooted in the social processes of dialogical interactions. This idea of cosmopolitanism constitutes a non-elite and rooted category—it is something that people do rather than an abstract idea, a disposition or institutional project, as Woodward and Skrbis (2018) point out, cosmopolitanism is an emergent dimension of social life arising in sets of ethicopolitical practices, outlooks and relations which take shape across a variety of social, cultural and political contexts (2018: 132). It is thus rooted within the social processes of intersubjective interactions within which cultural encounters, exchanges and dialogue with the

Other can produce moments of openness evidenced in a curiosity towards cultural values, a tolerance of diversity and a positive recognition of the Other (Delanty, 2012). This idea of cosmopolitanism is, therefore, rooted within the fabric of everyday social practices as Kurasawa (2011) posits, 'cosmopolitanism underscores the existence of a worldly sensibility from below grounded in ordinary ways of thinking and acting (2011: 281). As cosmopolitanism emerges out of dialogical interactions—in contrast to universal moral principles—it constitutes a type of postuniversalism that is a weak form of universalism shaped by various particularisms within which numerous sociocultural contexts, worldviews and moral systems are discursively evaluated in relation to each other rather than attributing an intrinsic superiority to a particular worldview (Delanty, 2009: 9; Kurasawa, 2011: 287). This relational idea of cosmopolitanism militates against a preconceived top-down notion of justice and, in this sense, its expanded use of dialogue is an important way to counteract Western prescriptiveness (Jordann, 2009: 739). With its commitment to dialogue, this concept of cosmopolitanism is also postfoundational as it avoids appeals to ultimate grounds ie, universal human essence, principles or rights by stressing its contingent grounds whereby it emerges within contexts of risk, uncertainty and contestation, and, in this sense, as Caraus (2016) claims, 'It he contingency of grounds opens the potentiality of contestation of the current order towards a more inclusive cosmos with its cosmopolitan ideals of justice, equality and freedom' (2016: 1). The normative dimension of cosmopolitanism is rooted in a critical and evaluative standpoint on the social world: it focuses less on the external and more on internal transformations produced by interactions between 'self, other and world' ie, moments of self-transformation viewed within self-problematising and reflexive tendencies which give shape to 'the cosmopolitan imagination' (Delanty, 2009: 16; Mignolo, 2000: 741). The cosmopolitan imagination is, thus, a new critical way of seeing, thinking and understanding the world, a new orientation or critical attitude with an evaluation or critical diagnosis of social conditions which recognises immanent possibilities within it for transformations of self/society. (Delanty, 2009: 5; Kurasawa, 2011: 282). This cosmopolitan imagination is located within the context of global-local relations such as the new spaces opening-up across global political flows where cross-border social movements, coalitions and campaigns mobilise around global issues. This critical-normative dimension of the cosmopolitan imagination is, thus, connected with the extension in spaces of the political and the expansion of democracy across the world.

From the normative perspective of a critical cosmopolitan sociology, the idea of global justice is found less in normative political projects and more in the intersections of self, Other and world which is rooted within the transnational field of social relations where symbolic struggles play out in dialogical exchanges. Global justice is, thus, viewed in the transnational articulations of sociopolitical actions which take shape in networks of resistance with social struggles that may not seek official sanction or juridical inscription, but a type of bottom-up emancipatory politics of justice mobilising collective-actions in response to global issues (Kurasawa, 2007: 286). By this understanding, global justice is a reaction to changing social realities: it is a dialogic process in which critical publics respond to changes in the social world. It is less an abstract normative project and more an empirical phenomenon which emerges out of social processes by which a transnational politics is produced and sustained in non-legalistic and extra-institutional claims, discourses and forms of action. Global justice, in this sense, is 'the relentless practice of critical and dialogical cosmopolitanism rather than a blueprint of a future and ideal society projected from a single point of view (that of the abstract universal)' (Mignolo, 2000: 743). In opposition to a monological cosmopolitanism (ie, normative projects), a dialogical cosmopolitanism takes

shape within new spaces across global flows where social actors construct shared frameworks of meaning around global issues of justice that can dialogically produce and interconnect localto-local struggles typified by a global openness toward an alternative world or imaginary. These new spaces opening-up across global flows represent counter-spaces for 'democratic iterations' in which multiple, diverse and diffuse social actors within critical publics can discuss, exchange and reflect where 'universalist rights, claims and principles are contested and contextualised, invoked and revoked, posited and positioned throughout ...civil society' (Benhabib, 2006: 454). Dialogical cosmopolitanism, thus, emerges in a sense of global openness which 'generates new forms of connectivity and solidarity and shapes a common global identity' (Agustín, 2017: 703). From a critical cosmopolitan sociology, global justice can be seen today in two distinct political cosmopolitan relationships: (a) in transnational social movements that attempt to build a shared normative culture around moral commitments to global justice and (b) an inclusive politics of recognition articulated in the extension of solidarity networks across borders. Global justice can therefore be found in critical publics where alternative worlds are imagined in response to the challenges posed by global issues and as a result is a constitutive feature of political community: it is a means in which to critically evaluate, reflect and reimagine the social world that contests the exclusiveness of national borders in deciding the boundaries of justice (Delanty, 2014: 214). From a critical cosmopolitan perspective—as a wider framework of interpretation—the idea of global justice is rooted within the political imaginary of critical publics where dialogic networks can give shape to transnational struggles in which a shared normative culture and an inclusive politics of recognition is mobilised around shared commitments to global issues and, therefore, is a 'project of mediations, not of reductions or of totali[s]ations' (Benhabib, 2006: 20). With the spaces of the political now stretching across electronic networks of social media platforms, what prospects do digital symbolic spaces hold for a virtual cosmopolitanism? In other words, can the digital symbolic spaces of social media networks construct these distinct political types of cosmopolitan relationships in moments of openness?

Virtualising Social Capital: Bonding or Bridging?

Because cosmopolitanism has its roots in the communicative structures embedded within social processes, the prospects for virtual cosmopolitanism are contingent on the socio-technological capabilities of social media to not just mediate, but reciprocate and bridge cross-cultural connections, ties and networks within and across national boundaries. For this reason, the idea of virtual cosmopolitanism as a 'cosmopolitanism...facilitated by mediated social spaces' is framed by a debate on the explicit effects of social media on social capital (Sobre-Denton, 2015: 129). By constituting 'connections among individuals—social networks and ... norms of reciprocity and trustworthiness' the virtualisation of social capital has been a site for a series of critical-narratives rejecting its cosmopolitan possibilities by offering an attenuated conception of the virtual as embodying inauthentic and denigrated expressions of the social and community measured against its face-to-face counterparts (Putnam, 2000: 19). These critical-narratives can be taxonomised under the rubrics of the time-displacement thesis, the weak thesis and the homogenisation thesis. The time-displacement thesis is abstracted from a small cross-section of earlier empirical-theoretical analyses extrapolating digital networks to have corrosive effects on social capital by 'degrad[ing]' 'fragment[ing]' and 'displac[ing]' the 'real' and 'authentic' forms of face-to-face interactions (Nie and Erbring, 2000; McPherson et al, 2006; Turkle, 2011) and losing its 'affective and soul-orientated communion' (Birkerts, 1996) by creating a

depthlessness of superficial, ephemeral and isolated interactions (Barber, 1998; Luke, 1998). This thesis implicates the increasing usage of digital networks in corroding social capital by 'individuali[s]ing' leisure time and 'disrupting opportunities for social capital formation' as it was once contextualised within the thick bonds of face-to-face social relations between friends, neighbours and relatives anchoring a sense of belonging in 'real' communities (Chen, 2013: 407; Putnam, 2000: 9; ; Hlebec et al, 2006).

Along this line of reasoning, this thesis advances its critique to encompass a conceptualisation of virtual community as transmogrifying into a 'pseudocommunit[y]' parasitic on the real-life 'authentic' expressions of belongingness created in face-to-face communities, 'a progressive disavowal of the real...a culture of experiential disengagement [and] a pacification of embodied experience' (Robbins, 1999: 166), responsible for creating a sense of alienation and a loss of 'real' community (Ludlow, 1996: xv; Stoll 1995; Parsell, 2008; Dreyfus, 2001; Galston, 2000). From the logic of its premise, this thesis would not just reject the very idea of a virtual cosmopolitanism, but would also extend to its attrition of corporal cosmopolitanism situated in contiguous communities. But, this premise suffers from presupposing an erroneous dichotomy—setting the virtual in opposition to the real—which romanticises the social as an apotheosis of the latter vis-à-vis rooted in thick, contiguous, face-to-face social relations with the former collapsing into an inauthentic mimesis, simulation or hyperrealisation of the real. But, a study by Woolgar et al (2001), coupled with drawing from modern experiences of mediated sociality suggests the virtual to be every part of the real, not set against or replacing it, but supplementing, if not, enhancing the social (2001: 16-18). By abstracting elements from this argument, the weak thesis challenges the possibilities of a virtual cosmopolitanism, not according to a time-displacement hypothesis, but on the grounds of its failure to replicate the strong, substantive and enduring social connections and experiences—with the cultural Other—emerging out of interactions and communities of co-presence.

In *The Experience of Virtual Communities: Cosmopolitan or Voyeur?* Komito (2010) argues to this effect, by asserting that most online social aggregations constitute 'normative communities' constructed, not out of strong affective ties, but from a highly instrumentalistic, egoistic individualism creating transient connections of reciprocated communications from shallow, fragile and weak cognitive ties codified around idiosyncratic engagements (2010: 146). This virtualisation of community routed across segmented, flexible and individualistic networks, according to Komito (2010), amounts to nothing more than an ephemeral coalescence of disaggregated online 'voyeurs' with a diluted sense of commitment, trust and reciprocity shaping superficial experiences of cultural diversity incapable of replicating the thick and sustained intercultural exchanges essential for cosmopolitan experiences (2010: 149). But, this thesis makes a misplaced assumption about the nature of cosmopolitanism: it is not exclusively rooted in the thick, lasting and propinquitous networks of social ties, but increasingly found in the broader, diffuse and plural networks of weak ties which open-up communicative moments, in digital symbolic spaces, that extend across not just the local, but also the global.

In *The Strength of Weak Ties*, Granovetter (1973) famously highlighted the positive aspects associated with weak ties by arguing that its expansive networks create wider channels through which more heterogeneous ideas, influences and information can disperse beyond localities broadening worldviews, exchanges, knowledge and a sense of belongingness in the world

(1973: 1370-1373). It is, thus, not in the permanence of strong ties, but in the momentariness of weak ties—which stretch across cultural boundaries in despatialised networks—where the greatest prospect for a virtual cosmopolitanism can be found as cosmopolitanism emerges not necessarily from longevity, but in moments of world openness. Likewise, the specific structure of these weak ties is not given its content by a narcissistic moral individualism, but by a convivial networked individualism implicit in shaping complex social configurations around multiple, diverse and diffuse networks of choice creating the intersubjective basis for the discursive and imaginative construction of community. Thus, instead of representing an imitation of a corporal community, the more abstract virtual community is a different way to imaginatively pursue a contemporary sense of belongingness as communities are 'distinguished, not by their falsity/genuineness, but by the style in which they are imagined' (Anderson, 1983: 6). Therefore, as an important basis for virtual cosmopolitanism, the virtual community is neither thick, concrete nor enduring, but just as legitimate as a 'mode of consciousness' shaped by 'a symbolically-constituted level of experience and meaning' with an imaginative structure 'underpinned by the search and desire to pursue a sense of belonging' (Delanty, 2010: 153).

The homogenisation thesis, in contrast, locates its incredulities for virtual cosmopolitanism in a wider sociological tendency toward creating homophilic networks, interactions and groupings. According to Zuckerman (2014), in *Digital Cosmopolitans*, the electronic flows of interactions and ideas may have the theoretical capabilities to promote diverse networks across cultural borders, but, in practice, the concentration of individuals' information flows circulate within the bordered, local and homogeneous networks of one's meaningful lifeworld (2014: 70). This is the unconscious effects of homophily or 'the love of the same' operating as a basic structural principle shaping levels of exposure to diversity in our lifeworlds where networks, exchanges and interactions coalesce around preferences toward commonalities of 'ethnicity, gender, age, religion, education, occupation and social class' (Zuckerman, 2014: 70). Despite its promises of greater diversity, social media, according to Zuckerman (2014), has only created an 'imaginary cosmopolitanism' where most interactions are among 'people with whom we have a great deal in common' (2014: 70). This too extends to the composition of virtual communities which are said to constitute 'socio-spatial enclaves' crystallising around similarities of opinion, belief, taste, interest and also prejudice shaping 'pernicious communities' of polarising thought and extremist ideology evidenced in anti-cosmopolitan movements of right-wing xenophobicethnic nationalisms, white supremacist groups and terrorist networks promoting intolerance, hatred and violence (Calhoun, 1998: 384; Parsell, 2008: 42). The crux of this thesis is that social media networks only strengthen the bonding of social capital vis-à-vis connections that are 'inward looking ... reinforc[ing] exclusive [or] "categorical" identities' (Putnam, 2000: 22; Calhoun, 1998: 388). Despite its more extreme cases, as evidenced in pernicious communities, the homogenisation thesis exaggerates the effects of homophily: its existence does not *ipso facto* presuppose the affirmation of a homogenous categorical identity as homophilic networks also coalesce around common-interests, beliefs or orientations which cut across a wide spectrum of cultural-historical experiences, horizons and categorical differences that intersect with various markers of identity from ethnicity, age, gender to religion class and sexuality. Even Calhoun (2002) himself concedes this point by admitting: 'not all individual identities reflect categories of similarity' (2002: 161). Moreover, recent sociological empirics have shown digital networks to be conducive for 'bridging' social capital, that is, creating 'inclusive, outward looking networks and heterogeneous groups' 'encompassing people across diverse social cleavages'

extending to appropriations of 'e-mail' (Zhao, 2006), 'blogs' (Stefanone and Jang, 2008; Qian and Scott, 2007) and 'social media sites' (Ellison et al, 2007; Putnam, 2000: 22). Digital networks, indeed, enable homophily, but a given type of homophily that is also varied, diffuse and built (not necessarily on homogeneous categorical identities), but on similarities of viewpoint which provide 'the formation of a new kind of political community' (Tufekci, 2017: 268). On reflection, these critical commentaries present an unconvincing case against the idea of a virtual cosmopolitanism by (a) advancing a narrow concept of the virtual as an imitation of the real and (b) presupposing cosmopolitanism as a mere zero-sum condition.

It is important to remember that Social media networks too have been used as dominant spaces for the pernicious communities of neo-Nazi, white supremacist and extreme nationalist groups to circulate racist, xenophobic, homophobic, Islamophobic and anti-Semitic opinions, ideas and discourses across its platforms. This was seen more recently in the hashtag #WhiteLivesMatter which circulated across Twitter networks as a racist response to #BlackLivesMatter movement that was also appropriated by the Ku Klux Klan and the Alt-Right. Social media networks are now significant spaces to target citizens in political advertising and, thus, proved instrumental in the spread of a right-wing populist politics by their use in the election successes of Donald Trump, Jari Bolsonaro and in Brexit. But, social media networks also remain important political spaces for populist leaders to shape public discourse, create media attention and appeal to votes. This is seen frequently by the use of Twitter by Donald Trump to appeal to his right-wing voters by posting racist, anti-immigrant, anti-Islamic comments as well as circulating dis-information and mis-information to support his own nationalist-nativist-populist rhetoric, as was the case when he retweeted fake African American crime statistics from a neo-Nazi Twitter account stating that 81% of white people are killed by African Americans or his frequent comparison of immigrants as invaders, criminals and terrorists (Wong, 2019; Greenberg, 2015). In this sense, cosmopolitanism is not a zero-sum condition as anti-cosmopolitan currents are a constitutive feature of the contemporary world and, with the social embeddedness of social media networks within the cultural fabric of our everyday lives, this '[a]nti-cosmopolitanism swims in the flows and scapes of liquid modernity' (Beck, 2006: 112). In other words, anti-cosmopolitan currents do not negate virtual cosmopolitan possibilities: cosmopolitanism is less zeros-sum and more of an emerging condition that arises in degrees of intensity—from cultural encounters, exchanges and dialogue in moments of openness within the virtual spaces of transnational social relations.

The Virtualisation of Cosmopolitanism

This critique is not to contextualise virtual cosmopolitanism within a wider teletopia of Internet-exceptionalism or as a 'technoromanticism' (Coyne, 1999) espousing unique virtual milieux collapsing all ascriptive markers of social differentiation (Barlow, 1996; Rosseto, 1995), disembodying corporal subjectivities (Turkle, 1995) or constructing superior expressions of community (Rheingold, 1999 [1993]: 20). By these accounts, the virtual inhabits a separate realm of social existence and thus fractured from the real in a fixed virtual/real dichotomy. But, this binary is a false dichotomy: the virtual is a constitutive, inseparable and indissoluble dimension of the real which mediates the cognitive, symbolic and dialogic modes of human experience, but with its increasing cultural embeddedness, social media—as a technological expression of the virtual—comprises a major thread in the communication fabric of the social world (Shields, 2003: 23). It is as Castells (2001) describes 'an extension of life as it is, in all its

dimensions and with all its modalities' (2001: 16). As an integral component of contemporary culture, the virtual is entangled within the basic structures of social practice that mediate most expressions of everyday life—from fashioning a sense of subjectivity, organising professional life, creating personal connections, accessing information to enabling artistic expressions, religious worship and forms of political resistance (Castells, 2001: 64). With its roots embedded within the cultural, symbolic and imaginative structures of social relations which connect 'neural networks' across electronic networks of communication, social media are actively used in producing, receiving and transmiting meaningful symbolic materials where its relational and cognitive environments give shape to a dialectics of closure and openness, that is, between the entwined courses of both anti-cosmopolitan trends and cosmopolitan moments (Castells, 2012: 5; Beck, 2006). But, its social capacity to disperse symbolic resources, flows and meanings across cultural boundaries through digital communications that has too greatly enhanced its cosmopolitan possibilities. With social media networks positioned at the centre of a new global communications environment, contemporary expressions of the virtual, in all its banal, routinised and habitual practices, now increasingly takes the shape of hyperchaotic, instantaneous and deterritorialised digital flows 'de-stabliz[ing] old hierarchies of scale' 'compressi[ng] [space] and de-sequencing time' by stretching the contextuality of social life and its cultural and symbolic forms across national frames of reference (Sassen, 2004: 301; Castells, 2000: 77; 2010: 21; 2001: 3; Urry, 2000; Giddens, 1990).

These cultural flows of information, signs, images, ideas and ideologies, circulating throughout global network scapes, contribute to the creation of new imaginaries of the world by expanding the spatial horizons of our cultural experience, meanings and worldviews from outside our immediate locale (Appadurai, 1996: 35). Thus, as an outcome of a banal globalism, the digital mediation of global images, symbols and narratives encourages us to imagine our communities beyond the contiguity of national borders (Szersynki and Urry, 2002: 467). With mobilities in information, images and the imagination through virtual travel, social media networks can endow people with the necessary skills, competence and sensibilities to acquire a cosmopolitan outlook, but this outlook is not a natural outcome of mediated flows and mobilities: it is as outcome of the ways in which its digital networks open spaces of possibility by bringing the world closer and encouraging an awareness of interdependence and cultural difference (Urry, 2000). It is in this sense where 'new forms of global consciousness and cultural competency' arise in the new ways with which we inhabit the world from a distance through new virtual imaginaries and symbolic geographies (Szersynki and Urry, 2002: 117). These processes are rooted in the very concept of openness as 'constituting a cultural outlook and practice' in which increased volume, extensity and velocity of global flows and 'the availability of things of difference' across digital sociocultural contexts create distinct modes of cosmopolitan openness that emerges within transnational experiences of attachment and belonging (in virtual communities), attitudes and experiences of mobility (in virtual imaginative travel) and cultural consumption (in curiosity toward different cultural tastes) (Woodward and Skrbis, 2011: 57). Thus, it is within this 'global [electronic] cultural economy' where the cultural circulations of symbolic flows can open-up multiple, diverse and interactive spaces which can broaden cultural exchanges, consumption and contact around expressions of openness through curiosity, intrigue and commonalities of interest. (Appadurai, 1995: 32).

However, the increased volume, extensity and velocity in digital flows of cultural globalisation do not simply constitute a cultural homogenisation or Westernisation vis-à-vis the subsumption of diverse cultures under a single dominant Western model, but, instead, as Held et al (2000) contends, creates a broadening of opportunities and spaces for cultural pluralism, creolisation and hybridisation with deeper interconnectivity from transnational circulations of international cinema, foreign music, TV, fashion, news, food, radio, languages to communications, exchanges and politics (2000: 374). As Norris and Inglehart (2009) suggest, the intensification of global electronic interconnectivity signals a shift from national to cosmopolitan communications:

'[W]e follow real-time news of events in Darfur or Baghdad on our laptops and Blackberries. Headlines about Barack Obama's victory instantly surged around the globe connecting Kenyans celebrating in local villages with Americans rejoicing in Times Square. Travellers have access to Internet cafés in Bali, CNN in Doha Airport, or Die-Hard movies in Beijing. Satellite TV from Al Jazeera and Al Arabia broadcasts reality television shows, music clips and images to 200 million Arab speakers from Morocco to Syria. People in Belgium ... Netherlands, or Switzerland can receive dozens of foreign-language channels from Britain, Germany, Italy and France' (2009: 7).

Thus, the cosmopolitan potential of social media networks is situated in its cultural status as a core anchorage point for transnational mediations of social practice—contextualised within its rich, imagistic and linguistic virtual landscapes—opening new symbolic spaces of intercultural contact across the local and the global, a type of 'world culture', as described by Hannerz (1990), where 'increasing interconnectedness of varied local cultures [and] 'network[s] of social relationships' have created 'distributed structures of expression' and 'flow[s] of meanings' across borders (1990: 237-349). In this sense, cosmopolitanism implies a 'post-western register of meaning...located neither on the national nor global level, but at the interface of the local and the global' (Delanty, 2012b: 41). However, as cosmopolitanism implies a deeper cultural engagement with the Other, these diverse transnational spaces thus do not ipso-facto constitute cosmopolitanism per se, as it is more than a simple condition of plurality, but offer important preconditions for an ontological framework of specific cosmopolitan relations; a soft cultural cosmopolitanism as a type of 'cultural omnivorousness' can be located in 'mode[s] of managing meaning ... an intellectual and aesthetic stance of openness toward divergent cultural experiences' (Hannerz, 1990: 238-239), a 'curiosity about other cultural values' (Delanty, 2012b: 44) and a reflexivness of one's own culture evidenced in a recognition and tolerance of cultural diversity (Urry, 1995: 167). Generative processes of cultural cosmopolitanism can be found in 'creating new ideas, perceptions and interpretations of problems' which emerge from intercultural contact typify the communicative, symbolic and imaginative structures embedded in shaping virtual cosmopolitan communities. Despite its distinct types of relationships, the two faces of cosmopolitanism—its cultural and political modalities—can be joined in specific modes of ethical consumption in which a 'cosmopolitics of consumption' is rooted in types of consumer practices motivated by an ethical politics of sustainability (Molz, 2011: 49). In our postmaterial societies, culture has now become more significant in the realm of politics as new struggles over issues of identity increasingly take place on the symbolic-level in struggles over dominant codes.

Thus, as Dagnino (2008) posits, 'the simultaneous production of meanings and power relations, culture finds its mirror in politics in which the production and confrontation of power relations always implies cultural meanings. Thus, symbolic production is ... a crucial element in politics' (2008: 17). Within a broader context, this connection between the cultural and the political is informed by the specific way in which global cultural flows can give shape to the cosmopolitan

imagination by cultivating new critical ways of seeing, thinking and understanding the world with a new orientation or attitude that engages in critical diagnoses of social conditions through a heightened awareness of the worldwide risks and injustices associated with global problems. By heightening our consciousness of worldwide issues, global cultural flows can affect political agency across the world. With the use of its cultural and symbolic resources, global flows can invoke a 'radical imaginary' where the institution of society is collectively imagined anew which can shape dialogic spaces of tension, conflict and sociopolitical action (Castoriadis, 1987: 369). From the generative-cultural imaginaries embedded within 'communities-in-themselves' to the transformative-political imaginaries of 'communities-for-themselves', this radical imaginary constitutes 'the staging ground for [collective] action' that is orientated toward the actualisation of 'imagined worlds' (Appadurai, 1996: 3; Castoriadis, 1987). It is this radicalisation of the social imaginary through global flows that informs the critical component of the cosmopolitan imagination: its orientation toward a normative critique of social reality where the search for immanent possibilities of self and societal transformation emerge out of dialogic encounters with the Other (Delanty, 2012b: 41; Agustin, 2017; Mendieta, 2009). Thus, the normativity of cosmopolitanism is rooted in the extension in new spaces of the political (Rumford, 2008: 5).

Global Justice as a Virtual Cosmopolitics

The radical imaginary, as an expression of a global justice politics, increasingly stretches across the geopolitical boundaries of the state by challenging injustices stemming from concentrations of global power embodied in international institutions and its imposition of a socioeconomic model that shapes the 'top-down hegemonic, neocolonial and neoliberal forces of globalisation' (Sobre-Denton and Bardhan, 2013: 136). Because this imaginary is not just embedded, but cultivated, according to Appadurai (1996), in transnational forms of social practice, it not only reflects, but also crystallises around a heightened global consciousness politicising the systemic ramifications of 'global risks' created by incumbent power structures throughout transnational public-spheres across civil-society (1995: 31; Beck, 1999: 39). Discourses of global risk—from war, poverty, famine to inequality and climate change—are now framed around global justice as a master-frame with which to mobilise subversions of dominant cultural codes in an extrainstitutional subpolitics evidenced in the stretching of collective action, resistance and struggles across national borders (Strydom, 1999: 69; Beck, 1999: 39). With its status as an expansive articulation of cultural openness and inclusiveness, global justice as a concern with matters of justice beyond borders is a key expression of critical cosmopolitanism as it connects and unites a plurality of activists with differences in political orientations, across borders, in transnational modes of collective-actions. But, the virtual prospects for these political expressions of a critical cosmopolitanism are framed by a debate on whether political spaces over social media can be democratising or politically polarising? On one side of this debate, social media with its decentred, instantaneous and horizontal communications has been envisaged as conducive to democracy by creating open and inclusive transnational political spaces comparable to a 'global electronic agora' (Castells, 2001: 139), a 'global public-sphere' (Volkmer, 2003: 11) or 'a global civil-society' (Kaldor, 2003: 585) in which the communication field of global politics and the structure of political communities are said to transnationally extend across cultural boundaries. On the other side of this debate, social media are viewed as weakening incumbent democratic structures by creating isolated publics with homogeneous compositions that demarcate political communities with reference to differences in political standpoints, orientations and opinions

where, according to Calhoun (1998), the 'compartmentali[s]ation of community is antithetical to the social constitution of a vital public sphere' (1998: 389). Resonating with Calhoun (1998), Habermas (2006) argues that this deterritorialisation of political publics denigrates politics by splintering, rupturing and fragmenting public-opinion, communication and discourse:

'In the context of liberal regimes, the rise of millions of fragmented chat rooms across the world tends instead to lead to the fragmentation of large but politically focused mass audiences into a huge number of isolated publics. Within established national public spheres, the online debates of web users only promote political communication, when news groups crystallize around the focal points of the quality press, for example newspapers and political magazines' (2006: 423).

Moreover, Sunstein (2001) contends that with its increasing customisation, social media caters distinct political information around personal preferences shaping a 'daily me' that intensifies a personalisation of politics subjectively filtered with 'preferred points of view [structured] along divisions of race, religion, ethnicity, nationality, wealth, age [and] political conviction' which facilitates the formation of 'deliberative enclaves' and polarisations of political publics (2001: 4). This cyber-balkanisation thesis is supported by the current practices in new systems of corporate-state dataveillance that collect, store and use metadata with complex algorithms to construct user profiles. This is seen by the algorithmic architectures used by Facebook which filter selections and sequences of information on systems of probabilistic relevance abstracted from its users' personal metadata. This trend towards the customisation of our digital activity, interaction and experience does present a real challenge to the openness of virtual spaces, but as with the homogenisation thesis, this cyber-balkanisation exaggerates the marginal existence of extreme forms of fragmentation as characteristic, if not totalising of all online political spaces.

Moreover, the cyber-balkanisation thesis presupposes an institutional conception of the political which itself is rooted within structures of representative democracy rather than the extra-institutional field of politics that is 'problematic to a contemporary politics of the multitude' (Fenton, 2016: 42). However, these technological advances relate to another objection to its democratic potential by colonising its networks with new expressions of power with cultural communications subject to a post-panoptic surveillance apparatus that extracts, categorises, retains and commodifies most transactional metadata/content-data (IP addresses, phone numbers, e-mail addresses to the verbatim content of transmissions) (Bauman, and Lyon, 2013: 65). This datafication of users' communications, thoughts and personal activities constitutes, according to Ceyhan (2012), a new power dynamic with velocity and scope—a 'new modality of [bio]power' that influences, shapes and controls most biosociological dimensions of individuals' lives (2012: 39). This technique of power is more embedded, hidden and silent operating on the level of cultural practice as it is algorithmic, protocological and post-hegemonic by manifesting in 'systems of management' as an 'everyday neoliberalism' where metrics, data and analytics now increasingly structure performances of the social world (Beer, 2009: 987; Lash, 2007: 67). Social media networks, however, are not just spaces in which a new species power operates, but also dominant arenas for new forms of social resistance: they enable new means to organise, mobilise and coordinate transnational struggles in a politics of visibility that unite multiple, plural and diffuse activists around global issues. These datafication arguments often fail to frame new technological assemblages of domination within the broader dialectical tensions between new modes of power and new modes of resistance by marginalising the distinct ways in which these virtual spaces create new forms of collective struggle. Despite

its status as a core contextual factor, these dataveillance techniques as a key contemporary anticosmopolitan current does not directly negate mobilisations of a democratic politics.

In contrast to its negative conceptualisation as a system of networks with isolated publics, social media platforms are more accurately described as a type of 'bow-tie structure' where common interests cluster around topical categories intermeshed by networks of hyperlinks structured by peer-recommendations, editing and filtering mechanisms (Benkler, 2006: 27). This intertwined structure does not preclude expressions of a daily me, which do exist, but is more representative of a 'see-for-yourself' culture embodied in practices of sharing, tagging and linking references to political arguments in webs of hyperlinks acting to connect disparate topics, perspectives and orientations across wide spectrum of critical publics (Balkin, 2004; Benkler, 2006). By situating social media in-between the polarities of extreme inclusiveness/openness as a 'global electronic agora' (Castells, 2001) or extreme exclusiveness/closure as isolated publics (Habermas, 2006; Sunstein, 2000), it is more as a constellation of networked publics where communicative spaces form discursive enclaves that can (a) remain isolated and disconnected or (b) can be potentially democratising by connecting to public-spheres both vertically (stretching across time/space in other avenues of the mass-media) and/or horizontally (by overlapping with different publics (Marireder and Schlögl, 2014: 690; Benkler, 2006). Social media networks themselves are not isolated spaces disconnected from wider public-spheres, as Bruns and Highfield (2018) suggest, they constitute both personal 'micro-publics' (friendship ties, info-flows and topical interests) and 'issue-publics' (subsets of wider public-spheres around specific themes) (2018: 63). This was highlighted by the way the Occupy Everywhere movement used social media networks to build a multiplatform, integrated and diffuse transnational network topology that enabled them to brokerage new ties with diverse activists at a distance and produce, dissiminate and exchange information, communications and resources across borders. As illustrated by Hopke (2016), this transnational network structure composing social media networks, websites and hyperlinks served to bridge despatialised activist networks through information flows which brought them together in digital spaces (2016: 611). By connecting to wider INGO networks, activists used social media platforms to build transnational advocacy networks, coalitions and campaigns to challenge the worldwide wealth inequalities created by neoliberal globalisation.

This notion of networked publics better captures democratic potentials of social media networks articulated in the extra-institutional politics of global justice. Its transnational networks enable multiple, diverse and diffuse activists to connect together in a postfoundational politics as a cosmopolitics characterised by a communicative diversity with an inclusiveness of voice which cuts across cultures, languages, religions and political orientations (Marchart, 2007; Johnson et al, 1994: 6-7). The justice politics of Occupy Everywhere was global in scope with shared visions of an alternative global society that acknowledged the need for global change embodied in its slogans 'United for Global Change' 'United for Global Democracy' and 'Human Rights for Everybody'. This global politics was typified by an awareness of global injustice through the deepening polarisation of wealth inequality between the 99% and the 1% around the world:

"#occupy aims to fight back against the system that has allowed the rich to get richer and the poor to get poorer. We no longer want the wealthiest to hold all the power, to write the rules governing an unbalanced and inequitable global economy, and thus foreclosing on our future' (occupytogether.org).

The identification of these global injustices by the activists of Occupy Everywhere points to the shared articulation of a cosmopolitan imagination: a way of seeing, thinking and understanding the world with a moral evaluation, critical diagnosis and prognosis of current social conditions that recognised the social contradictions endemic to the dominant codes of neoliberal capitalism By drawing on the digital networks of social media, the activists in Occupy identified immanent possibilities for self/societal transformation in mobilising collective-actions through acts of civil disobedience, across 82 countries, to actualise an alternative global sociopolitical reality. In its pursuit of global justice, the radical politics of Occupy Everywhere reflects a distinct type of cosmopolitan relationship: the search, desire and dialogic construction of a shared normative culture through 'the formation of a moral consciousness rooted in emotional responses to global issues' built upon shared antagonisms, common values and a collective imaginary that extends politics beyond local horizons by 'putting the non-national interest before the national interest' (Delanty, 2012b: 44). In this sense, cosmopolitanism is constitutive of a new politics that is global in scope, inhabits a concern with distant others and with strong ethical contents of justice which now increasingly mobilise collective-actions across networked publics.

The shared normative culture created within Occupy Everywhere was rooted on its shared commitment to a politics of justice typified by openness, inclusiveness and diversity. This global politics was rooted within shared radical imaginaries that experimented with alternative sociopolitical futures with moral visions of 'showing another way of life, respectful with the Other as well as the environment' and 'the pursuit of a better world ... based on the ideals of mutual aid and solidarity' which demonstrated an ethics of the *summon bonum* or common good that transcended the political, moral and civic boundaries of the nation (Fuchs, 2014: 57-60; Hopke, 2016; Smith, Gavin and Sharp, 2015).

Because these shared radical imaginaries took shape within digital symbolic spaces, social media networks constituted important counter-spaces in which activists in Occupy Everywhere drew on cultural resources to experiment with different ideas of utopia, that is, alternative social, cultural and political models of society. These digital symbolic spaces are, thus, 'spaces of discussion, comparison, of affinity and affiliation, spaces of experimentation' which can 'generate ... an activist rhizomatics ... in which networks can coalesce, develop, multiply and re-multiply' (Tormey, 2005: 404). In Occupy Everywhere, these radical imaginaries exhibited an expanded moral, civic and political idea of citizenship among activists that was built upon a moral obligation to those outside their own cultural and political community. It was through expressions of these radical imaginaries and the 'We are the 99%' throughout its social media networks where activists within Occupy Everywhere constructed a sense of belonging, collective-identity and solidarity rooted in common experiences of injustice, shared antagonisms, common values and mutual visions of society. The politics of Occupy, thus, constituted a 'cosmopolitan discourse aim[ed] to elaborate a moral grammar of justification for the urgent task of global distribution of material resources' (Kurasawa, 2011: 285). Similar to Occupy Everywhere, the radical environmental politics of Extinction Rebellion exhibited a type of global climate justice that built a shared normative culture around common commitments to the transnational project of mitigating the ecospheric and biospheric effects of climate change. Resonating with Occupy, the climate politics of Extinction Rebellion was also rooted within an alternative radical imaginary with a global vision of a more sustainable, renewable low-carbon economy which can reduce threats to human suffering around the world.

The politics of Occupy Everywhere also exhibited a weaker form of cosmopolitan relationship evidenced in opening new digital spaces of the political in its extensions of political community across borders rooted in an inclusive politics of recognition. The specificities of this relationship, are typified by 'the cosmopolitan ethic of a "solidarity among strangers" in which expressions of cross-border solidarities illustrate a level of engagement with the other (Delanty, 2014: 221). A prominent characteristic of Occupy Everywhere was the way in which its brokerage of new ties, connections and networks across boundaries enabled its activists to articulate global flows of solidarity with its different network nodes across 82 countries. This can be seen by the way Occupy Everywhere mobilised collective-actions on the basis of building common narratives of global solidarity located in universal appeals to 'the people of the world' and 'We are the 99%'. As Schechner (2012) suggests, Occupy was a solidarity rather than a particularist movement, in that, the 'We are the 99%' as its unifying theme was a solidarity in favour of a redistribution of wealth and power that extended to just about everybody (2012: 8). The solidaristic politics of Occupy Everywhere supported an intercultural dialogism that engaged with different ways of life, seeing and thinking to create a common vision of a just, equitable and sustainable world in which 'the recognition of the right to individual and collective difference is bound to the assertion of universal equality' (Kurasawa, 2011: 100; Holton, 2009: 8). Similar to Occupy, the #Me-too movement was a recent global solidarity movement that organised a global campaign against institutionalised sexism, harassment and assault which used social media networks to organise a transnational march that consisted of over two million people and spread to over 82 countries, across 5 continents (Khomami, 2017).

These types of cosmopolitan relationships as embodied in a shared normative culture and in an inclusive politics of recognition across borders are indicative of a 'risk-cosmopolitanism' where new spaces of the political opening-up across social media networks are bringing transnational conflicts and commonalities into everyday practices' that build discursive bonds, connections and ties in common commitments to global justice (Beck, 2006: 34). These cosmopolitan moments, as described by Beck (2006), transcend the self-absorption of cultures, languages and religions by activating, connecting and mobilising a plurality of social actors from different geographical and territorial regions in 'coalitions of action'—stimulating 'border-transcending new beginnings with new social imaginaries of political alternatives' (2006b: 34; 2006: 12). Likewise, for Theodossopoulos and Kirtsoglou (2013) these 'new political imaginaries' can offer cosmopolitan political communities of discontent to emerge 'with [a] worldwide consciousness' engaging in cross-cultural and postcolonial critiques of a top-down neoliberal globalisation (2013: 4). Thus, the submerged digital networks across social media platforms can potentially open counter-spaces for 'critical and dialogic cosmopolitan conversations rather than ... blueprints or master plans to be imposed worldwide' (Mignolo, 2000: 743). In contrast to a monological cosmopolitanism, these counter-spaces harbour a dialogical cosmopolitanism as a critical-moral stance toward the world that organise 'political project[s] of transformation of living, being and becoming' in response to the threats of global issues (Agustin, 2017: 703). Importantly, as Kurasawa (2004) rightly claims, these 'transnational modes of practice' diverge from 'thin' top-down institutional models of cosmopolitanism (Held, 2000; Archibugi, 1995) by expressing a cosmopolitanism from below built out of interlacing lines of affinity between civic associations dispersed throughout a 'vast web of shifting nodes of commonality, shared interests and solidarity' negotiated across discursive submerged networks (2004: 234-239). These bottom-up networks of virtual communications, therefore, structure dialogic processes

of intercultural exchange, collaboration and critique which can nurture a cosmopolitanism borne-out of a 'dialogical widening of horizons' in which different cultural models collide eliciting forms of cultural learning, coupled with an appreciation and tolerance toward cultural pluralism (Kurasawa, 2004: 246). It is thus in these bottom-up responses to the human-ecological threats posed by global risks where 'cosmopolitan project[s]' committed to egalitarian universalism and a recognition for cultural pluralism can be found in the 'thick bonds of global solidarity structure[d] around intersecting modes of thought and action [expressed] in values, beliefs, narratives and symbols' (Kurasawa, 2004: 247; Mendieta, 2009). To conclude, it is within the emotional flows which shape cosmopolitan political communities where a shared moral consciousness around the human and environmental risk of global issues provides the dialogic basis for a post-foundational and post-universal idea of a global ethics as a sociocognitive construct 'resid[ing] more in the domain of affect ... evident in ways of thinking feeling, social movements and struggles' and, as a significant feature of online affective practice, constitutes an important articulation of a virtual cosmopolitanism (Delanty, 2009: 109).

In Conclusion

This chapter has presented an argument for social media networks as a significant relational, cognitive and symbolic environments for the discursive construction of cultural and political expressions of a virtual cosmopolitanism. As a basis from which to build this argument, this chapter has challenged common presuppositions shaping understandings of the virtual and cosmopolitanism within arguments against the notion of a virtual cosmopolitanism by asserting that (a) the virtual is not set in opposition to the real nor does it corrode it; (b) social media as a technological expression of the virtual do not exclusively reproduce homophilic networks nor do they create a system of isolated political publics and (c) cosmopolitanism is not a zero-sum condition nor does it presuppose strong ties for its existence. From these arguments, an understanding of social media was advanced in its most abstract terms as a communications media transmitting meaningful symbolic flows, across time-space, in virtual geographies where soft cultural types of cosmopolitan relationships can emerge in expressions of curiosity and openness located in the banal practices of online consumption of different cultural forms. From these cultural forms, this chapter has presented a specific case that harder political articulations of cosmopolitan relationships can be found in two types of radical political activity: (a) in the discursive construction of transnational networks built around commitments to global justice shaping orientations toward a shared normative culture and (b) in symbolic and imaginative constructions of virtual political communities with an inclusive politics of recognition mediated by the emotional flows of communication. To conclude, the emotional flows of communication that are expressed in this global justice politics offer reference points for the sociocognitive basis of a global ethics. The next chapter examines the ethical character of this global justice politics within a stronger normative element of the cosmopolitan perspective and presents an argument that cognitive shifts indicated in the critical evaluations and moral assessments of this politics is indicative of a global ethics rooted in new ways of thinking, feeling and imagining the world.

Chapter 5: Virtual Cosmopolitics and Global Ethics

'With individual states unable to deal with the enormity of [global] issues on their own, a democratic deficit has been created allowing for alternative political cultures to prosper ... [n]ews media is a commonplace and basis for a global consciousness that gives credence to the idea of a global public' (Hensby and O'Byrne, 2018: 342).

This chapter presents an argument for social media networks as counter-spaces where a global justice politics mobilises are sites in which a global ethics can be found as a sociocognitive idea. Many traditional concepts of global ethics ranging from its political to its cultural, religious and responsibility approaches have shown an overreliance on its normative formulation that seeks to root its foundations in strong types of moral universalism: a prescriptive framework of ethical principles which offer top-down universal moral values, norms and standards of judgement. With the digitisation of a radical politics, this chapter argues that a global ethics today resides in global flows of affective practice through which ethicopolitical communication precipitates forms of sociopolitical action that extends across virtual spaces and borders (Kurasawa, 2007). This chapter is divided into four parts: the first part will begin by offering a basic understanding in the specific concept of a global ethics before turning to a critical analysis of its foundational approaches. The second section will offer a critical analysis of a discourse ethics approach to a global ethics while the third part will develop a dialogic approach to emotion out of a critical analysis of affect theory. The final part presents the central argument that a global ethics today arises in the emotional flows of political communications circulating within networked publics across the world: it is exhibited in the critical evaluations and moral assessments of the modern condition of societies that now take shape across its digital symbolic spaces. Global ethics is, therefore, located today in three main indicators: (a) discourses of co-responsibility, (b) transnational networks of solidarity and (c) collective-identities expressed by a justice politics.

The Concept of Global Ethics

Global ethics is an emerging field of enquiry with a distinct global approach to ethical dilemmas which now increasingly confront us in our highly interconnected contemporary society. Global ethics is, thus, about fundamental real-world issues: it concerns real injustice, human suffering and environmental threats that now confront all humanity. Instead of international ethics, it is a specific field of critical ethical enquiry that exceeds the morality of relations between nationstates, to a concern with the nature and justification of global values, norms and responsibilities which ultimately seeks to establish suitable conditions in which incumbent global problems from world poverty, climate change, peace and security to intervention and human rights can be effectively addressed (Widdows, 2011: 3). Global ethics, then, is a call to action: a call to make the world a more safe, equitable and just place for its inhabitants where the scope of these values, norms and responsibilities extend geographically to our relationships with people across the world (Widdows, 2011: 11; Dower, 2014: 8). As the geographic scope of the term implies, the 'global' in global ethics points to it as a response to new dilemmas posed by globalisation, as Hutchings (2018) suggests, the concept implies 'something [that] has global causes or global effects' in which the world is typified by intense global interconnectivity and interdependency where there is 'significant commonalities across all borders of collective-identity, linguistic, cultural, legal and political [flows]' (2018: 12). Similarly, for Widdows (2011), it is the effects of globalisation which is the subject-matter of global ethics as 'globali[s]ation—the increasing interdependence of global society—has created truly global dilemmas that require global solutions' (2011: 5). Indeed, it is this condition of globality ie, compressions and distanciations of time-space that is now indicative of the integrated nature of our moral life by which there is a worldwide consciousness of humankind as a single moral community that shares a common sociohistorical situation and a common fate tied to shared struggles which necessitate collective solutions (Parekh, 2005: 20). Within a more interdependent world, moral questions of justice, fairness, obligations, rights and responsibilities do in fact become increasingly more urgent, as O'Neil (1996) suggests, in this world '[d]istant strangers may be benefitted or harmed ... by our action or inaction' (1995). But, is 'interdependency' an adequate principle to delineate a global ethics? The idea of interdependency as a condition per se is an insufficient criterion with which to determine the moral scope of global ethics: its conceptual parameters need to extend beyond reactions to globalisation where its scope conditions are not exclusively confined or restricted to the 'causes' or 'effects' of global interdependency.

This conceptual delimitation would exclude many legitimate moral problems that would ultimately fall outside of its purview, as van de Anker (1999) highlights, 'filf it is global interdependence that justifies redistribution, does that imply that in a less interdependent world, the plight of poor people across borders could legitimately be ignored?' (1999: 1). Moreover, this narrowness of the concept is underscored by humanitarian cases of natural disasters which do not have their roots in global interdependency, but, as potentially catastrophic events which can inflict harm upon civilian populations, they must fall within the scope and moral responsibilities of a global ethics. In this specific idea of global ethics, the question of 'what' constitutes an ethical dilemma (those caused by global interdependency), is given most treatment, but the normative-ethical question of 'why' they should constitute a dilemma is completely overlooked. This normative question is imperative to global ethics as it is the 'why' which is most fundamental to the moral justification in global responsibilities to act. In a more inclusive conception of global ethics addressing these limitations, Drydyk (2014) extends the concept of global ethics to incorporate perceptions of harm ie, global ethics are 'states of affairs in which perceived harm could begin or continue to occur unless cross-border action is taken to prevent, mitigate or stop it' (2014: 20). By this meaning, the idea of global problems extend not just to the global or 'trans-boundary' but also to 'endemic' problems necessitating 'systematic cooperative redress' (Drydyk, 2014: 20; Twiss, 2011: 205). Thus, it is not just the scope, but also the nature of global problems that constitutes the subject-matter of global ethics and, hence, it must account for everyone's values in a global inclusivity and equal concern for everyone's well-being in global solidarity (Drydyk, 2014: 22).

Global ethics, therefore, implies a broad commitment to justice, but as a distinct concept and a field of enquiry, ethics is often distinguished from justice in occupying a separate level of analysis: ethics is seen to concern—not institutional—but 'interactive moral diagnostics' that focuses on the 'actions and effects of actions performed by individuals and collective agents' (Pogge, 2008: xviii; Widdows, 2011: 13). Instead of an analytic focus on the way in which the social world is institutionally-organised in terms of its laws, conventions and practices, global ethics is seen to concern 'the moral responsibilities of individuals, governments and other agents with respect to issues that have global dimensions' (Pogge, 2008: xxv). As two distinct fields of ethical enquiry, there is a subtle caveat to the distinction between institutional and interactional: justice and ethics often mix, overlap and entangle in theory, but also in practice. In the case of

Justice (as discussed in chapter 4), the notion is not restricted to an institutional level of analysis as normative projects that advance fixed prescriptive frameworks of ethical principles, but also the interactional level where individuals, groups and movements engage in bottom-up ethicopolitical practices in a radical politics that seeks broad institutional reforms. This overlaps with the academic field of ethics as the antagonisms of this global justice politics make explicit moral evaluations about the exact ethical status of global institutions and—in its actions to enact crossnational protests in collective-actions against structures of authority—it vocalises ethical claims regarding the moral responsibilities of governments. Thus, as Dower (2014) points out, 'global justice as an ethical claim is a major part of a global ethic[s] and a global ethic[s] is a major part of a theory [and practice] of global justice' (2014: 12). Overall, global ethics is best understood, as a concept concerning global problems that extends to issues of justice which inflict potential harm and, as a field of enquiry, its analytic focus rests on the moral responsibilities, values and norms of individuals and collective agents and their courses of action in response to these global problems and matters of justice. If global ethics extends to the nature and justification of global norms, values and responsibilities, what can constitute acceptable grounds upon which a global ethics can rest? Is there a universally legitimate basis for ethically just habits of co-existence?

Liberal, Substantive and Responsibility Foundations to Global Ethics

In communitarian political philosophy, the very possibility of global ethics has been challenged. For Walzer (1994), there is two types of morality: a thin, universal and abstract minimalism and a thick, particular and rooted maximalism (1994: 7). Walzer (1994) contends that ethics is a maximalist morality that necessitates thick bonds rooted in a cultural community and hence a thin minimalist morality is an insufficient foundation for a global ethics as '[t]he hope that minimalism, grounded and expanded, might serve the cause of a universal critique is a false hope ... [i]t doesn't make for a full bloodied universal doctrine' (1994: 10). Therefore, a moral minimalism, according to Walzer (1994), is too thin for international cooperation as a response to global ethical dilemmas. In opposition to Walzer's (1994) communitarian position, a political foundation to global ethics is found in a liberal theory of global justice. In *The Law of Peoples*, Rawls (1999) accepts the possibility for a cross-national agreement on the ethical content of liberal principles, norms and practices between different 'peoples' (1999: 33). This is achieved by a hypothetical situation to ensure fair, just and impartial reasoning about the fundamental principles of justice among peoples or an 'international original position' within which sensitive information about them is hidden by a 'veil of ignorance' (1999: 33).

This possibility to achieve a consensus over liberal principles and norms between different peoples was set out in *The Idea of an Overlapping Consensus* in which Rawls (1987) contends that the abstract nature of liberal principles—from baselines of freedom, independence and equality—give scope to negotiate an overlapping consensus among 'reasonable peoples' even with different views on God, life, right, wrong, good and bad within specific 'comprehensive doctrines' (1987: 9). It is this overlapping consensus between different cultures over liberal principles which offers a political foundation to global ethics. In opposition to the communitarian thesis which priorities the local over the global and, therefore, neglects the growing awareness, impact and importance of global issues in contemporary societies, a weakness of Rawls' (1987) overlapping consensus is the extent to which it rests on comprehensive doctrines that slant too much in a liberal direction (Barnhart, 2004: 274). Also,

Rawls'(1999) liberal conception of justice remains restricted to a statist notion of 'peoples' in which the principles of justice extend only to nations and not to its citizens.

Beyond an idea of global ethics as a consensus over abstract universal liberal principles, in its substantive formulation, a global ethics has been seen in universal standards rooted in the most minimal set of fundamental cultural values that are believed to exist across societal boundaries. In *Common Values*, Sissela Bok (2002) contends that there exists minimal cultural values that are indispensable to all human civilisations to the extent that they constitute the very basis upon which human existence is built (2002: 13). For Bok (2002), these cultural values encompass universal categories of positive duties—from mutual support to loyalty and reciprocity—and categories of negative duties—to refrain from violence, deceit and the rudimentary norms of fairness and procedural justice (2002: 13-16). In her thesis, global ethics is rooted in a minimal set of cultural values with a universality that underpins the very existence of our societies today. These culturally rooted universal moral values, according to Bok (2002), establish a common ground, a common language and a common response to common threats (2002: 5).

In other words, these universal cultural values under modern conditions 'provide a basis from which to undertake the dialogue and collaboration now needed' (Bok, 2002: 1). Similarly, Küng (1993), in a *Declaration Toward a Global Ethic*, locates a global ethics in common ethical standards or imperatives embedded within all major religious traditions. It is within these ethical imperatives existing in Christianity, Judaism, Islam and Hinduism which offer a universal moral foundation to create a better world order: a vision that is believed to be able to not only steer societies away from internal chaos, but also address collective global problems (Küng, 1993: 4). In this sense, according to Küng (1993), a consensus already exists across ethical systems of major religions which can root a global ethics within a framework of ethical principles constituting 'a minimal fundamental consensus [with] binding values, irrevocable standards and fundamental moral attitudes' (1993: 4). These ethical principles extend to the fundamental values of humanity by which 'every human being must be treated humanely' and 'what you do not wish done to yourself, do not do to others' both of which offer a basis for the universal moral directives of respect for life, honesty, sincerity and respect for all which lays moral foundations for a global ethics to be rooted (1993: 7-12; 2010: 336-337).

The central limitation of these substantive approaches is the idea that global ethics already exists in universally acceptable frameworks of cultural and religious moral values and what is needed is just the recognition of these values. But, this assumption overemphasises the extent to which cultures and ethical doctrines are compatible without critical-discursive encounters. Küng's (1993) thesis rests on a mistaken premise that religion and ethics are distinct entities in which case if we do not agree on religious beliefs, we can agree on ethics. But, as Cheetham (2007) highlights, this reasoning constitutes a modernistic compartmentalism that dissects different elements of religions into hermetically sealed containers: ethics, religious beliefs and practices which neglects the reality wherein 'religious ethics is not just teleological, but soteriological deriving not from abstract ends, but from a holistic project' (Cheetham, 2007: 22). There is no resource in common ethical principles to resolve disagreements between belief systems and, therefore, we cannot separate ethics from the belief systems to which they are rooted. On a similar point, religious based ethics are also internally contested, as Hutchings (2018) illustrates, religious practices historically distinguish between 'insiders' and 'outsiders' and its

ethical values should only govern relations among members of the religious community, as opposed to both members and non-members (2018: 22). Religious ethical doctrines—as with minimal sets of universal cultural values—are too general to simply offer a foundation for an interreligious and cross-cultural consensus on the moral content of a global ethics as critical engagement in conceptual-theoretical argument would still be needed to determine how these ethical principles are interpreted, accepted and then applied. In other words, the universality of religious ethics and basic cultural values 'do not provide us with a shortcut to answering the why, what, who and how questions of global ethics' (Hutchings, 2018: 22).

Recent approaches to global ethics have drawn attention to the need of individual and collective ideas of responsibility as a basic response to global ethical dilemmas. To address climate change, an environmental ethics as a specific strand of global ethics has sought to root the creation of new regulatory norms of conduct within a microethics of individual responsibility that seeks to establish a moral duty to maintain the inviolability of basic rights (Caney, 2005: 774). As an outcome of individual actions, climate change is an 'individual moral responsibility' because in these acts 'a diffuse group of people [are] now setting in motion forces that will harm a diffuse group of future people' (Jamieson, 2010: 436). For Jamieson (2010), from this individual moral responsibility is a moral duty to value nature as human flourishing, meaning and psychological integrity depend on nature and this 'should motivate people to acknowledge a responsibility to respond to climate change' (2010: 443; Caney, 2005). Instead of an individual responsibility, in a macroethics of collective responsibility, Jonas (1984) argues that a new framework of rights and duties embedded within a new post-Kantian imperative is needed to mitigate technological threats to the environment, nature and human-life as 'these threats ... will run away from us on their own momentum and toward disaster' (1984: viii). For Jonas, (1984) traditional ethics ie, the deontological imperative of the categorical imperative is insufficient for an ethics today as it concerns the immediate actions of individuals without real consequences and, thus, a new imperative necessitates us to: '[a]ct so that the effects of [our] action are not destructive of the future possibility of such life' (1984: 11). This new imperative signals a shift from the individual to the collective as it 'addresses itself to public policy rather than private conduct' (Jonas, 1984: 12). With its collectivity, this ethics is rooted in an idea of global responsibility. Likewise, In One World, Singer (2002) argues that more issues require global solutions as they surpass the national territories of nation-states and, therefore, to address these issues, responsibility needs to be enshrined in an international normative order with global decision-making (2002: 199).

In terms of the individual approaches to responsibility, its central weakness concerns the matter of how individuals can be seen to be accountable for actions when those actions are collective activities shaped by institutions that exceed their influence. Because individual actions are patterned by social systems, the direct remedial actions of individuals will not be sufficient alone to address global problems, but only in a collective sense through its mediation in institutional structures. The fundamental limitation facing collective approaches is an issue which concerns the legitimacy of new regulatory norms or, in other words, how to attain a consensus on new sets of rights and duties. Because the starting point is the collective, not the individual, collective approaches often take a top-down institutional approach in applying new systems of collective responsibility as, seen by Jonas' (1984) undemocratic solution to the implementation problem of a macroethic of responsibility where he argues: '[t]he decisions from the top, which can be made without prior assent from below ... are assured of implementation' and '[o]nly an elite

can assume, ethically and intellectually, the kind of responsibility for the future' (1984: 147). This problem extends to political, cultural and religious approaches to global ethics where an overreliance on normative idea of global ethics rooted in prescriptive ethical frameworks which provide fixed universal moral principles, values, norms and standards of judgement. Global ethics do presuppose a degree of universalism, but the difficulty with these positions stems from a foundationalism upon which a strong moral universalism is rooted. The issue, as Hellsten (2015) contends, is that, this normative foundation to global ethics collapses into claims of its neo-colonial, paternalistic and imperialistic traits where it is seen as enforcing the international order that was created by western powers and justifying a Eurocentric world order (2015: 87). Notwithstanding the inefficacy of remedial action through a limited horizon of individual responsibility nor the illegitimacy of a top-down elitist imperative of collective responsibility, both these approaches root a global ethics in unmediated ontologically fixed categories of the individual and the collective (O'Mahony, 2015: 318). Global ethics needs to be understood less as an individual or collective category and, less as an idea, in which its moral substance is determined by top-down elites in institutional frameworks of prescriptive principles. Instead, it needs to be understood more as a discursive concept, by which, the individual and the collective is mediated through communicative processes and with which its moral content is the outcome of bottom-up, interactive and dialogical practices. Global ethics contains a critical and dialogic character that emerges within the submerged networks of ethico-political practices that operate below the formal institutions of legislative politics.

Discourse Ethics and Global Ethics

This specific type of post-conventional ethics has its theoretical roots in a discourse ethics. Discourse ethics is a communicative ethics of co-responsibility that rests on a shared, public or common sense of responsibility. Co-responsibility—in opposition to the fixed ontological categories of the individual and the collective—operates through a relational mechanism of communicative mediation: it arises out of a social process where actors engage in discursive relations, interactions and cooperation as active members of a communication community (Apel, 1993: 20). Discourse ethics lies on a distinct type of communication—a rational form of argumentation which draws on formal procedures of redeeming validity-claims in moralpractical discourse (Habermas, 1984: 18; Apel, 1993: 20). Global ethics is, thus, an outcome of an intersubjective process of communicative action²³ in which its new regulative principles are collectively determined by consensus that is distilled from rational procedures of moral argumentation within moral-practical discourse (Habermas, 1985: 120; Apel, 1993). It is in the communicative structures of moral argumentation where agreements on validity-claims can set-out the moral boundaries of our responsibility in a common will that can be applied as a universal norm (Habermas, 1990: 67). For a universal norm to be valid moral-practical discourses must be open to all whom it may affect wherein its 'moral principle' is 'to exclude as invalid any norm that could not meet with the qualified assent of all who are or might be affected by it' (Habermas, 1990: 63). To reach an agreement on a valid universal norm, is to

²³ Habermas (1985) speaks of a specific type of social action—as a condition for a global ethics—that is mediated through the structure of language: a type of communicative action in which the linguistic process of reaching intersubjective understanding is contingent upon rational procedures of redeeming validity-claims that intersect distinct worlds to the truthfulness (objective world), rightfulness (social world) and sincerity (subjective world) in a linguistic assertion (1985: 126).

necessitate all affected to participate in the discourse in which 'all affected can accept the consequences and the side effects its general observance can be anticipated to have for the satisfaction of everyone's interests' (Habermas, 1990: 65). The moral validity of a universal norm, thus, must satisfy a 'discourse principle' by which 'only those norms can claim to be valid that meet ... with the approval of all affected ... as participants in a practical discourse' (Habermas, 1990: 66). In other words, the chance for an agreement on regulative principles within a global ethics require a moral-practical discourse which is universally open to all. In this sense, discourse ethics—in contrast to liberal, substantive and responsibility approaches—benefits from a post-foundational position where the moral content of global ethics is not fixed in universal principles, values or norms, but is an open process of intersubjective agreement in which new regulative principles explicitly take account of different sociocultural value systems.

Collective agreement of global ethics within communicative structures provide an escape from imperialistic impressions within the hegemonic impositions of a Western ethical paternalism. However, this pinpoints a scope condition in the 'moral principle' in terms of the practical issue of how all those affected by a universal norm can participate in the discourse especially when it concerns a global ethics to which the entire globe is potentially affected. Discourse ethics fails to offer a solution to this practical problem. Moreover, a fundamental weakness of its formalrational procedures of communication—where validity-claims are redeemed in speech-acts is its overreliance on rational structures of communication that directly marginalises emotion within the communicative domain of ethics: it is the emotional responses to global injustice that underpin discourses around global ethics. Discourse ethics, thus, perpetuates the common view of human beings as rational agents bereft of all emotions which reinforces the false-dichotomy between reason and emotion and rational and irrational which ignores emotion as an embodied dimension of human cognition. In other words, it is embodied in rational acts just as much as irrational ones and, thus, emotion connects human beings to each other and the world around them comparable to 'an unseen lens that colo[u[rs all our thoughts, actions, perceptions and judgements' (Goodwin, Jasper and Polleta, 2001: 10). How, then, should the concept of affect and emotion be understood in relation to global ethics?

Affect Theory and The Emotional Structures of Global Ethics

In psychology, with a distinct psychobiological approach, the concept of affect has been specifically understood as types of basic emotions in which its flows occur through bodies and brains in a way that is patterned in neat, discrete packets or bundles (Tompkins, 2008: 623). The central proposition in basic emotions theory (BET), is that each expression of affect—from anger and fear to happiness—has distinct corresponding neurological and corporeal signatures that can be viewed in specific brain activity and facial expressions and, in this sense, in these experiences, a cascade of changes occur instantly in the emotional signals in the face and voice and in patterns of arousal in the autonomic nervous system that regulates heart rate, finger temperature, galvanic skin response, and muscle activity in the body (Ekman and Cordoro, 2011: 366). This distinct approach presupposes that human experiences of affect which occur throughout everyday life exist universally across cultures as they are primarily a variation of involuntary responses registering a distinct neurophysiological state that is biologically innate, as Panksepp (2000) claims, emotions are 'prepared states of the nervous system' that are 'hardwired' into the brain and body (2000; Izard, 2011; Levenson, 2011). This specific idea of affect,

however, is highly deterministic as it exists as an involuntary biological response to external stimuli and, as Davidson (2003) points out, there is no circuit in the brain that orchestrates a cascade of responses that corresponds to each emotion (2003: 130). Likewise, Cacioppo et al (2000) claims, that this pre-organisation of basic emotions into specific neurophysiological states is highly limited, variable and autonomic measures themselves are poorly correlated with each other (2000). It is, thus, impossible to conclude, as Barrett (2006) claims, that basic emotions can be treated as natural kinds with distinct properties attributed to them and, subsequently, as Wetherell (2012) illustrates, 'the basic emotions hypothesis is just that: a hypothesis' (2006; 2012: 40). Resonating with BET, the affective turn, in cultural studies, has popularised a non-representational approach to affect that locates it within the non-discursive movements of the body as it navigates through social space. Non-representational theory (NRT), then, is an umbrella term that focuses on our more-than-human and more-than-textual multisensual worlds whereby affective structures are embodied in the involuntary, unreflective and pre-conscious processes of the body. NRT is thus built on the proposition that not all human experience is registered by the conscious, reflective mind and, therefore, never crosses the threshold of the symbolic and the representational, as Thrift (2007) claims, consciousness is a narrow window of perception and, in this sense, the 'pre-cognitive ... [is] something more than an addendum to the cognitive' (2007: 6; Lorimer, 2008: 85; McCormack, 2003: 494; Clough, 2007). In this line of reasoning, Massumi (2015) defines affect as the power 'to affect and be affected' that resides not in the psychic phenomena of representations, but in the pre-linguistic capacities and movements of the body that extend to the 'unconscious body knowledge of habits [and] reflexes' rooted in 'the autonomic nervous system ... and the sub-threshold experiences ... populating the body's every move' (2015: 210).

Embedded in its corporal capacity to act or be acted upon, affect, then, accumulates 'in memory, in habit, in reflex and in desire' and is associated with every functioning of the body (Massumi, 2015: 4-7). In this definition, the idea of emotion is not a synonym of affect, but is analytically distinguished as the moment in which the depth of the ongoing experience of affect consciously registers subjectively at any given moment (2015: 4). By this understanding, emotion is an 'established field of discursively constituted categories ... to which the felt experience is articulated' whereas affect is the 'sensible materiality of corporality' as it moves, in flows and rhythms, through social space (Massumi, 2002: 495). In its seminal text, Non-Representational Theory: Space, Politics, Affect, Thrift (2007), thus, attempts to capture this ongoing rhythm and onflow of affect in everyday life by 'trad[ing] modes of perceptions which are not subject-based' with an analytic focus on the 'processual register of experience' whereupon material bodies of work or styles stabilise over-time into corporeal routines or practices (2007: 8). This focus on the corporeality of affective practices is in essence an anti-biographical, unreflective and preindividual model wherein affect exhibits an automaticity—in its autonomic bodily responses in social space—that exists independently of the mind and in-excess of consciousness (Dewsbury et al, 2002: 437). On an ontological level, NRT is rooted in a post-deconstructivist ontology that emphasises the distinct ways in which 'the world emerges from a range of spatial processes whose power is not dependent upon their crossing a threshold of contemplative thought' and, thus, questions 'the epistemological priority of representations as the means by which to recover information from the world' (McCormack, 2003: 488; Hemmings, 2005: 557).

By massively expanding the domain of affect to incorporate all the various ways in which the body responds physiologically, involuntary and unconsciously to its surroundings in the social world, NRT mistakenly narrows its analytic focus to exclude the most basic dimensions of the social: its linguistic field of conscious awareness, meaning-making and representation of which reside in a social process and, as Wetherell (2012) posits, 'separating affect from consciousness and representation forgets the [complex], composite and hybrid nature of social life' (2012: 66). With its specific focus on the prelinguistic nature of affect, NRT undervalues these crucial social processes entangled within our conscious, linguistic and meaningful experience, as Thien (2005) argues, this specific shift towards 'geographies of unconscious affect threatens to marginalise emerging geographies of the personal, emotional subject' and with 'this move to get beyond humanity in all [its] diversity also pushes us past the emotional landscapes of daily life' (2005: 453). But, affect itself does not exist outside of social or cultural meaning nor outside of its processes and, therefore, it does not signify a break in the social, as Hemmings (2005) contends, 'it might in fact be valuable precisely to the extent that it is not [socially] autonomous' (2005: 565). By engaging in the field of affective geographies, it is important not to negate an understanding of how affect actually works by 'examining texts, symbols, material objects and ways of life as linguistic representations of affect' (Katz, 1999: 4).

In this sense, affect does not exist in the realm of the pre-cognitive and pre-social, but, instead, is entangled within patterns of relationships between self and others and between self and world (Burkitt, 2014: 2). In this alternative conception, Burkitt (2014) views affect as emerging out of an emotion or feeling in relation to someone or something else where one can be moved literally or/and metaphorically from one state to another (2014: 6). By this reasoning, affect is rooted in our conscious experience: 'a feeling or emotion that takes us or moves us in ways that we cannot help or prevent' and, in this sense, 'we are always in patterns of relationship to other people and to the world and feelings and emotions form our embodied, mindful sense of different aspects of those relationships' (Burkitt, 2014: 9). In contrast to NRT, affect and emotion exist in how socially meaningful relationships register in our body-minds and thus always contain socio-linguistic elements of the discursive in a way that constitutes a form of 'embodied meaning-making' in relation to human emotion (Burkitt, 2014: 10; Wetherell, 2012: 4). In this sociologically orientated idea, affect is interlaced in the onflow of social activities and practices embedded in the sensible cyclical rhythms of everyday life. In contrast to NRT, then, the body and mind are inseparable as they are infused within affective practices:

'In affective practice bits of the body (e.g. facial muscles ... heart rate, regions of the prefrontal cortex, sweat glands) get patterned together with feelings and thoughts, interaction patterns and relationships, narratives and interpretive repertoires, social relations, personal histories and ways of life' (Wetherell, 2012: 13-14).

Thus, in contrast to NRT, the onflow of affective practices cannot isolate the physiological responses of the body to the social world from its cognitive processes as it is in these very processes by which affective responses are attributed with social meaning as it emerges out of the intersubjective relations of discursive interactions. This nuance understanding of affective practice links human affect with meaning-making mediated through the semiotic and the discursive— '[t]hinking and feeling are social acts mediated through the manifold public and communal resources of language ... [e]motion is signified, negotiated and evaluated in the intersubjective moment and that social relations carries the affect [which] is intimately caught up in the translation process' (Wetherell, 2012: 73-74; Burkitt, 2014). The nature of affect,

then, is relational; it is a social event mediated through dialogic activities where, as an ongoing social practice, it is bound up with the sociocognitive processes of meaning-making. Thus, affective practice is embedded in the discursive fabric of the social world: it is evidenced in the everyday activities of talk, texts, words, utterances, conversations, narratives and discourses (Wetherell, 2012: 52; Burkitt, 2014). In contrast to its mediation through a communicative rationality, co-responsibility is a fundamental part of affective practice: it is articulated, today, within the emotional flows of political communication concerning the human and ecological implications posed by global issues that now circulate increasingly within public-spheres and civil society throughout the world. These emotional flows exist within circulations of discourses concerning global poverty, inequality, war and climate change which highlight a sense of coresponsibility to tackle these global problems. These discourses of co-responsibility are, thus, indicative of cognitive shifts in worldviews, perceptions and emotion among individuals, groups and movements in response to a heightened awareness of global issues as its discursive content informs a moral evaluation, consciousness and orientation with tentative sets of new regulative principles to mitigate their human and environmental consequences. Instead of abstract sets of rational communicative procedures, then, a global ethics is best viewed as in actual existence: it is an emergent realty arising in emotional flows of discourses of co-responsibility evidenced in global public discourse, political communications and critical publics that now increasingly take shape throughout civil society networks across the world (Delanty, 2009: 90). Discourses of co-responsibility which now circulate across civil-society bring actors together around issues of justice where they engage in processes of meaning-making to build collective action frames.

Global ethics is, thus, a key part of this meaning-making process: it is entangled in processes of social construction whereby its 'communicative processes entwine with moral and political standpoints' in constructions of collective action frames (Delanty, 2009: 110). It is within these communicative processes of shared meaning-making where activists across the world build social bonds in transnational solidarity networks around shared values, and commitments to global issues with moral dispositions to alleviate the suffering of others. Transnational solidarity networks, thus, indicate diffuse types of belonging between activists within collective-identities that highlight post-traditional forms of political community. It is the transnational extension of these social bonds, networks and belonging rooted within shared moral commitments to act in response to global problems which represent the central indicators of a global ethics: it is found in (a) discourses of co-responsibility; (b) transnational solidarities and (c) collective-identities. In other words, global ethics is best viewed in sociocognitive terms in which discourses of coresponsibility—as emotional responses to global issues—indicate new ways of thinking, feeling and imagining which emerge in the submerged networks of civil society and shape social bonds and collective-identities in transnational global justice politics. In our contemporary societies, this politics now organises within the digital domain: the digital symbolic spaces of social media.

Social Media Networks and the Possibility of Post-Traditional Ethics

Global infrastructure of digital mediascapes as a new communications ecology is integral to our consciousness of global issues. It is through digital mediascapes where we experience, perceive and understand reality, as Couldry (2020) notes, as a 'complex ... set of institutions, techniques and mechanisms' digital media 'build[s] a landscape, a world' (2020: 6). Feenberg (2019) has also stressed that the internet and its spaces now play a key role in our consciousness especially

around global issues to which 'publics can become self-aware and organi[s]e' (2019: 240). As digital mediascapes, social media platforms now act as dominant cultural spaces through which global flows of world news, images and events disperse throughout its global networks. It within these cultural spaces where discourses of global crises now circulate ie, 'stories about climate change, terrorism, poverty, humanitarian disasters and other threats against humanity' (Cottle, 2009: 494). With a heightened awareness of global crises, digital media is an essential medium through which a global ethics is possible today: it is integral to cultivating our sense of moralpractical reflection toward our collective-fate in which global cultural flows deepen our 'sense of responsibility for the non-human world and the universe of distant others' (Thompson, 1995: 264). Its social affordances to produce, transmit and receive meaningful symbolic forms across borders opens new possibilities to articulate post-traditional ethics by its ability to 'democratise responsibility' whereby our moral concern for distant others is now geographically expanded beyond the limited horizons of our locales as it becomes part of our everyday lives (Thompson, 1995: 263; Shaw, 1999: 215). Globalisation of media communications has certainly deepened our sense of the world as a single place, a digital compression of time-space that has heightened our awareness of global problems and the need to collectively act in order to address them. This awareness is at the centre of a global justice politics: it is this heightened consciousness of global crises and the inactions of political institutions to sufficiently address them which has created an 'age of anger' within which this radical politics is fuelled by global disenchantment toward an inability of political systems to effect social change (Mishra, 2017: 2). With its global flows of world news, images and events, social media networks now represent dominant cultural spaces for circulations in discourses of co-responsibility.

Discourses of co-responsibility necessitate the need for individuals, groups and movements to find solutions to common problems. This points to circulations in discourses of co-responsibility as a moral response to perceived threats, risks and injustices, on a global scale, which involves an emotional call to establish radically altered relations of global justice that is 'sharpened by an ethics toward nature and the human world' (O'Mahony, 2015: 318). Discourses of coresponsibility, thus, indicate a growing awareness, reflexivity and communicative action on part of social agents to mobilise ethical, social and political change in response to global crises. This dimension pinpoints the critical-transformative nature of discourses of co-responsibility: they inhabit critical attitudes, moral evaluations and an awareness of the need to mitigate global crises that precipitates a justice politics with a radical imaginary of alternative socio-political futures to which political projects seek to actualise in the transformation of modern conditions. Emotion is a central dimension of this transformative character as it is flows of anger, outrage and disgust toward institutions as objects of condemnation—be it local authorities, national governments or international organisations—which underpin episodes of collective-action (Ahmed, 2013: 13). This was exhibited in the Friday-For Futures (FFF) movement that mobilised a day of global protest throughout 135 countries motivated by anger toward the inactions of nation-states to sufficiently address the human suffering caused by climate change.

Emotion played a key role in the FFF movement as it was the emotional flows of anger, outrage and hope around climate injustice which motivated collective actions against nation-states throughout the world. This was evidenced in the way in which the FFF movement used emotional speech to frame its central antagonism within its mission statement:

'We demand justice for all past, current and future victims of the climate crisis and so we are rising up Climate change is already happening. People did die, are dying and will die because of it, but we can call a stop to this madness We demand the world's decision-makers take responsibility and solve this crisis. You have failed us in the past. If you continue failing us in the future, we the young people, will make change happen by ourselves'. (The Guardian, 2019).

Instead of a communicative rationality, it is the performative nature of emotional speech-acts viewed in the FFF movement that motivated communicative action as emotion itself inhabits the capacity 'to produce effects that transform the social world' (Reddy, 2001: 105). Global ethics is, therefore, evidenced in bottom-up networks through which a justice politics is mobilised in response to global issues. Discourses of co-responsibility are a mobilisable form of responsibility where individuals, groups and movements engage in processes of meaning-making by which the collectivity of a global justice politics is constructed. The digital symbolic spaces of social media offer valuable cultural resources to engage in this type of meaning-making; they enable spaces for shared negotiations of 'collective action frames' within which shared meanings, worldviews and values crystallise around common antagonisms which evoke an emotional call to arms in collective-action (Benford and Snow, 2000: 614). The multiplatform networks of the FFF movement integrated Twitter, Facebook and YouTube with its core website that offered abundant cultural, logistic and scientific resources—from communicative spaces, tool-kits on how to organise local protest events, reasons for civil disobedience and justification for action with links to articles, papers and videos on the threats of climate change. Its dense symbolic universe of cultural meanings is where activists use resources stored across digital spaces to construct a symbolic politics in which 'project identities' emerge out of making new meanings around the moral need for a justice politics and collective actions to respond to the inaction of institutions (Castells, 2010b: 422; Mishra, 2017; Ahmed, 2013).

Meaning-making opens possibilities for activists to engage in collective-learning where exchanges of new ideas, views and concepts change worldviews by shaping new ways of thinking about the world. It is in this meaning-work as a type of 'cognitive praxis' wherein 'the creation, articulation and formulation of new thoughts and ideas—new knowledge—that a social movement defines itself in society' (Eyerman and Jamison, 1991: 55). Collective learning is an outcome of collective action frames: it is informed by shifts in moral consciousness of social agents from meaning-making processes in which global problems are collectively identified, solutions are collectively proposed and political actions are collectively justified, mobilised and coordinated. Collective learning is, thus, a core aspect of a global ethics: it is through circulations in discourses of co-responsibility that can trigger collective actions out of critical diagnoses of modern conditions which shape ways of seeing society anew, new thoughts, ideas and feelings of a just, ethical and sustainable world.

This also points to the importance of 'hope' as a key emotion that motivates collective-action as it is within digital symbolic spaces as counter-spaces where activists experiment with different ideas of utopia seen in imaginaries that recognise the possibility to actualise alternative futures. Discourses of co-responsibility as contemporary crisis discourses that increasingly circulate throughout social media networks signal a new master-frame which structure the meanings, interpretations and experiences of the social world in ways that increasingly mobilise collective-action in response to global crises (Strydom, 2000: 62). Global ethics is, therefore, a

major dimension in processes of social construction where co-responsibility not only acts to structure and contextualise global public discourse, but also to mobilise collective actions.

This sociocognitive idea of global ethics is a key dimension of a virtual cosmopolitanism. It arises out of a critical attitude, an imagination or way of seeing the world that recognises immanent possibilities for societal transformation (Delanty, 2009: 79; Mendieta, 2009; Mignolo, 2000). This occurs within the cultural and symbolic struggles of a global justice politics which now increasingly play-out though mediated flows of affective practice as seen in the FFF movement and its use of social media networks to organise diffuse collective actions around climate justice. Global ethics, then, emerges out of the ethico-political practices and social labour expended throughout the networks of social media to 'reshap[e] the current world order' and, therefore, is constitutive of critical cosmopolitan projects articulated in 'principles of radical, participatory democracy and egalitarian reciprocity' (Kurasawa, 2007: 206). The digital symbolic spaces of social media networks open counter-spaces to explore alternative visions, ideas and imaginaries of society through discourses of co-responsibility and is thus vital to extending the cosmopolitan imagination around the need to rebuild political, social and ecological worlds (Skillington, 2019: 389). The cosmopolitan imagination is, in this sense, tied to mobility: it arises in virtual, critical and imaginative flows around global crises where texts, images, visuality and symbolic meanings can facilitate 'a transformation of vision tied to media images and [discourses] of the world' (Robertson, 2019: 248). By bringing together social agents in creative, interactive and collaborative spaces, social media networks function as core 'infrastructures of connection' where activists build transnational networks of solidarity and belonging (Couldry, 2020: 13).

Networked Publics, Solidarity and Post-Conventional Belonging

With its affordances to produce, transmit and receive meaningful symbolic forms across space-time, social media networks as 'infrastructures of connection' offer activists a way to 'brokerage' new ties, networks and relations where they can engage in common struggles in transnational solidarity networks (Couldry, 2020; Tarrow and McAdam, 2005). These digital networks can create 'convergence spaces' in which geographically dispersed social coalitions can organise 'a relational politics of solidarity characterised by communication, information-sharing ...actions network coordination and resource mobilisation' (Routledge and Cumbers, 2009: 90-93). The concept of solidarity is vital a global justice politics: it builds bonds of unity in articulations of a shared sense of co-responsibility, accountability and justice. This points to ideas of solidarity as social, ethical and political bonds of cohesion rooted within collective struggles. This implies a type of solidarity with a strong emotional character—a moral solidarity to distant others with emotional relations built on shared moral worldviews, shared politics and mutual commitments to justice (Heyd, 2015: 59). Global ethics is a key aspect of these emotional bonds as entails a moral orientation to others that ties diffuse activists together in commitments to global justice.

These cross-national networks of solidarity are built as a direct response to a democratic deficit at the global level. In response to this deficit, these solidarity networks stimulate new ideas about 'creating new types of ethical accountability that takes upon itself responsibility for the welfare of all peoples around the world' (Held and McGrew, 2007: 157). This is the context in which global ethics emerges today: it arises within social media networks where a moral consciousness of the need for a global ethics to address this deficit motivates collective struggles across borders.

This was illustrated in the solidarity networks of the FFF movement that extended to 5 continents where multiple, diffuse and plural activists cutting across cultures, languages, nationalities and ages united around emotional bonds in struggles for climate justice. This was indicative of a 'project-related solidarity' in which political action was motivated by moral dispositions to help, assist and support others (Rippe, 1998). This foregrounds the critical, dialogical and emotional character of a global ethics as it appears in flows politicisation actively involved in forging new connections, shaping new political terrains and constructing new political subjects. Within the contemporary situations of global crises—awareness of human threats, suffering and ecological destruction—transnational spaces opening-up in the digital symbolic spaces of social media represent distinct types of public-spheres emerging today: networked publics characterised by pluralism, digitalism and diffusion with communicative spaces through which transnational coalition building and campaigns form in connections between configurations of micro-publics and issue-publics (Bruns and Highfield, 2018: 63). These networked publics are now dominant sites in social acts of criticism, translation and accountability which support a 'cosmopolitan politics of transnational associations shap[ing] new spaces of interaction across boundaries' (Bohman, 1998: 214; Köhler, 1997). These networked publics as opening cosmopolitan spaces 'imply new forms of politicisation that no longer answer to traditional state-defined patterns' within which people around the world collectively build transnational networks of solidarity to dissiminate knowledge, raise consciousness, develop common viewpoints and influence intergovernmental decision-making in global affairs (Innerarity and Errasti, 2019: 294). This was highlighted by the way in which the FFF movement used social media networks as discursive spaces to share resources, information and build solidarity. The cosmopolitan character of these spaces is rooted within cross-border political projects to which a shared human condition typified by pluralism extends beyond 'absolutist categories of familiarity, sameness and proximity' (Kurasawa, 2007: 209). These networked publics display a distinct type of solidarity: a cosmopolitan solidarity built on compassion, mutual concern, reciprocity and a moral disposition to alleviate suffering of others. It is exhibited in common struggles over justice wherein social bonds, cohesion and unity form in 'heterogeneous elements and collective action is orientated to what we have in common as human beings' (Fine, 2019: 370).

Cosmopolitan solidarity involves openness, inclusion and a receptiveness which suggests the value of supporting distant others in joint efforts toward democratisation. Global ethics, is, thus, a major dimension of a virtual cosmopolitanism: it is evidenced in transnational solidarity networks that show a moral responsibility for the plight of all human beings in response to the human consequences associated with global crises, that root new forms of belongingness in collective-identity as post-traditional types of political community. This post-traditional community points to a radical, critical and transformative conception of political community: a transnational communication community with a radical impulse that is seen in 'the search for an alternative society which is connected with everyday life and the mobilisation of the resources of the lifeworld' (Delanty, 2018: 144). Global ethics is, thus, found within all political communities that 'consist of a [moral] capacity to look beyond the limited horizon of the local context and, in this respect, a global ethics is a major expression of a cosmopolitan political community' (Delanty, 2009: 103). Cosmopolitan political communities is a sense of belonging among a plurality of actors within digital flows of social, cultural and political relationships 'capable of engendering new processes that can transcend established boundaries' (Nascimento, 2013: 4). The cosmopolitan spirit of this belonging entails a sense of openness, an orientation

to pluralism, feelings of political engagement and an acknowledgment of the connections with the global in the local and, in this sense, cosmopolitanism presupposes multiple belongings 'a sense of belonging to different places at different times or to several places at once and how this belonging remakes places as well as people' (Jones, Jackson and Rhys-Taylor, 2014: 5). Cosmopolitan political community, therefore, as Delanty (2018) suggests, 'produces a powerful sense of community: one of collective empowerment and action ... 'where a sense of belonging is highly discursive as it is constituted around discourses of global issues' (2018: 190-196). As found within the digital domain, global ethics is found in transnational extensions of political community where a sense of belonging in collective-identities is rooted in shared commitments to political projects typified by moral consciousness of the need to find solutions to global crises.

In Conclusion

This chapter has argued that digital symbolic spaces as counter-spaces are arenas in which a global ethics emerges today. In contrast to liberal, substantive and responsibility approaches, a sociocognitive understanding of a global ethics was presented as rooted in new ways of seeing, thinking and imagining which now increasingly circulate across networked-publics around the world. This chapter argues that social media networks as a communications ecology have contributed to heightening our awareness of global crises and its digital symbolic spaces offer sites to produce, circulate and receive discourses of co-responsibility that motivate mobilisations of collective action across borders. Its diffuse networks also enable activists to build social bonds in transnational networks of solidarity which build new forms of belonging in post-traditional political communities that extend beyond the limited horizons of local contexts. To conclude, the central argument of this chapter is that social media networks are dominant counter-spaces in which a global ethics is made possible today: the diffuse character of its networked publics open political spaces in which cosmopolitan political communities take shape in shared moral commitments, mutual values and collective awareness of the need to address global issues.

Chapter 6: Global Ethics and The Virtual Prospects for a Cosmopolitan Citizenship

'Communications media has fuelled a growing awareness of the very interconnectedness and interdependency and a sense of responsibility forming part of a new kind of moral-practical reflection broken free from spatial-temporal limitations of the traditional conceptions of ethics, a kind of reflection in relation to the realities of an increasingly interconnected world' (J. B. Thompson, 1995: 264-5).

Following on from chapter 5, the aim of this chapter is to provide further empirical support for the arguments presented in the previous chapter that the digital symbolic spaces of social media networks represent key sites in which a global ethics as a sociocognitive construct can be found. The chapter will focus on revisiting the main conceptual points of its three main indicators in order to apply them in more detail to the empirical case of the Global Frackdown movement. The chapter is divided into four main sections. The first section recapitulates the specific concept of discourses of co-responsibility and then discusses it in relation to the way in which activists engaged within the shared practices of convergence, declarative and pre-fabricated messaging frames that highlighted the collective meaning-making processes involved in the creation of these discourses. The second section reviews the concept of solidarity and then illustrates how the Global Frackdown movement utilised its Twitter network to participate in cross-tagging and hybrid framing practices that built diffuse solidarities around the banning of fracking. The third section recaps on the conception of collective-identity and then underscores how the activists discursively-imaginatively constructed collective-identity through these network practices. To conclude, the four section links these network practices of a global ethics to a cultural-symbolic politics that informs a social, cognitive and cultural articulation of a cosmopolitan citizenship.

Indicator 1: Discourses of Co-Responsibility as a Global Ethics

The concept of responsibility as it relates to the normative parameters of our moral obligations, duties and accountabilities has been a significant dimension in approaches to global ethics. In response to the worldwide biospheric and ecospheric threats associated with the global issue of climate change, an environmental ethics, as a distinct strand of global ethics has sought to root the creation of new regulatory norms of behaviour in a microethics of individual responsibility that strives to establish moral duties to uphold the inviolability of basic rights (Caney, 2005; Jamieson, 2010) and a macroethics of collective responsibility that seeks to establish a new idea of rights and duties around a new moral imperative or framework (Jonas, 1984; Singer, 2002). In contrast to the fixed ontological categories of individuals and collectives in these approaches, the concept of 'co-responsibility' operates through a relational mechanism of communicative mediation as it arises out of a social process through which agents engage in discursive relations and collaboration as active members of a community of communication (Apel, 1993: 20). But, discourse ethics refers to a distinct type of communication: it is a rational form of argumentation that draws on the formal procedures of redeeming validity-claims in moral-practical discourses (Habermas, 1984: 18; Apel, 1993). Because co-responsibility is a form of communication that is embedded within the rational structures of redeeming validity-claims, it explicitly neglects the emotional structures evoked in the creation, transmission and reception of discourses of coresponsibility especially those in response to global issues. Emotion is essential to social relations as it connects human beings to each other and the world around them through such discourses.

Emotion is infused within affective practices rooted in the discursive fabric of the social world in which '[t]hinking and feeling are social acts mediated through the manifold public and communal resources of language' (Wetherell, 2012: 73-74). In contrast to the formalistic procedures of communication, the discursive articulations of co-responsibility are mediated in emotional flows of affective practice—in particular the emotional and visceral discourses circulating throughout public spheres around the world concerning the human, animal and ecological risks associated with global problems. Entangled within the fabric of affective practices is where discourses of co-responsibility (as expressed in emotional responses invoked by threats created by global issue) require the need for individuals, groups and movements to find solutions to collective problems. Discourses of co-responsibility indicate of an awareness, reflexivity and communicative action among agents to mobilise political change. Discourses of co-responsibility, in this sense, have a transformative dimension where they involve a critical consciousness, attitude or awareness of the need to address global crises which can facilitate radical political projects toward the transformation of social conditions. This is underscored by the way in which its affective practices elicit emotional flows of anger, disgust and outrage toward institutions as objects of condemnation. Discourses of co-responsibility are therefore a distinctly mobilizable form of responsibility through which individuals, groups and movements engage in the shared cultural meaning-work of a radical politics, that is, in a critical diagnosis of social conditions that constructs shared antagonisms.

In the identification of an enemy, the shared construction of collective action frames necessitate the discursive creation of common values, ideas and meanings through emotional expressions of a collective problem and shared antagonisms that evoke a call to arms and motivate collective mobilisations. It is within these processes of collective meaning-making where activists undergo forms of collective learning informed by shifts in their moral consciousness that recognises the need for radical social transformation to mitigate suffering of the natural and social world. This type of collective learning is a central aspect of a global ethics: it is the communicative processes through which global problems can trigger critical diagnoses of current conditions. With these discursive processes, a common moral grammar is articulated in rejecting dominant cultural codes that can produce new forms of knowledge where reality is subject to cognitive processes of social construction found in negotiating shared values, norms and ways of seeing the world anew in radical imaginaries of alternative sociopolitical futures. As a reality constructing process, the shared moral knowledge created in these spaces is what structures collective action frames: it is a counter-space within which problems are collectively identified, solutions are collectively proposed and actions are collectively justified, mobilised and coordinated. Discourses of co-responsibility as contemporary crisis discourse(s) circulating throughout critical publics around the world constitute a new master-frame, that is, a macro-level cognitive structure or frame of reference structuring the meaning, interpretation and experience of the social world that can organise transnational collective resistance against global risks (Strydom, 2000: 62). Global ethics, is, thus, constitutive of forms of normative and sociopolitical action informing modes of social practice that emerge out of the discursive dynamics of radical political projects (Kurasawa, 2007: 209; Strydom, 2000).

Understood in these terms, global ethics is a major expression of critical cosmopolitanism: it is a critical attitude or a way of seeing the world in an imagination that recognises immanent possibilities for self/societal transformation rooted in the transnational field of social relations

where symbolic struggles play-out through dialogical exchanges in moments of openness (Delanty, 2009: 79; Agustín, 2017: 701; Mendieta, 2009). Entangled within these modes of social practice, a critical cosmopolitanism emerges out of the ethico-political activities and social labour involved in 'reshaping the current world order' and its economic, political and cultural structures (Kurasawa, 2007: 206). In opposition to its organisation 'through worldwide networks of dialogue and conferences' (Apel, 1993: 25) rooted in the contiguities of face-to-face co-presence, a global ethics, today, increasingly takes shape within virtual spaces of social media networks that route these discourses and its social practices across the spatio-temporal borders of nation-states. It is in the intensity, extensity and velocity of these symbolic, imaginative and material flows where a global ethics, as modes of social practice, is giving concrete shape in contemporary societies. In the context of globalising forces, social media as a communications media are a fundamental medium through which a global ethics is possible today: they have an important role in fostering a sense of moral-practical reflection toward our collective fate whereby diffusions of cultural flows can encourage, stimulate and deepen 'a sense of responsibility for the non-human world and the universe of distant others' (Thompson, 1995: 264). The importance of communications media in shaping our contemporary condition of globality and its shift toward a post-traditional ethics is rooted in its sociotechnical capabilities to 'democratise responsibility' in the sense that our moral concern for distant others not only becomes geographically expanded beyond the limited horizon of our locales, but also an increasing part of our everyday life (Thompson, 1995: 263).

With the materiality of its worldwide infrastructure, the social affordances of social media networks give shape to digital symbolic spaces through which the production, transmission and reception of cultural flows and its meaningful symbolic forms create networks of interaction, cooperation and communication across national boundaries. In contemporary technological societies, then, the emotional flows in discourses of co-responsibility around global issues circulate throughout the multiple, diverse and diffuse virtual spaces of networked publics. It is in these networked publics where discourses of co-responsibility take shape within the affective fabrics of digital cultures, politics and practices (Kuntsman, 2012: 3). Global justice politics, then, can organise within the digital symbolic spaces of networked publics creating interactive, cooperative and communicative networks opening-up between the local and the global where social agents can build collective action frames through negotiating shared values, ideas and meanings around shared antagonisms, alternative futures and strategies for collective actions. Global ethics as a form of social practice emerging around discourses of co-responsibility circulating across networked publics, then, is a major dimension of virtual cosmopolitanism.

Social Media Networks and Discourses of Co-Responsibility

On the 5th October, 2013, the Global Frackdown movement, a transnational social movement committed to ending the socio-environmental impacts of hydraulic fracturing, drew on social media networks to build networked publics that mobilised collective actions in over 200 events, across 27 countries, in 5 continents, on a single day of global protest (Mazur and Welch, 1999). Origins of the movement trace back to the global distribution of the documentary film Gasland which identified the human, social and ecological risks posed by hydraulic fracturing. With its links to the potential contamination of water reservoirs, greater seismic activity, air pollution and risk of gas explosions, the global practices fracturing became identified as a global problem

throughout public-spheres and, as it circulated in political communications across the world, it became a central topic in global public discourse (Mazur, 2018: 533; Krause and Bucy, 2018: 328; Harvey, 2012). Social media networks were integral to heightening visibility of the threats of hydraulic fracturing: its circulation of videos, articles, reports and memes across its digital symbolic spaces deepened public awareness of its status as a current global problem. With this increased visibility, these creative, interactive and collaborative digital symbolic spaces signified significant counter-spaces in which to produce, transmit and receive anti-fracking discourses across networked publics throughout the world. By highlighting its contributions to deepening climate change and threatening biodiversity through releasing methane gas and poising rivers, these anti-fracturing discourses exhibited a moral sensibility built on an ethics of sustainability: they centred on moral responsibilities to protect ecospheres by reducing harmful emissions, a discursive expression of responsibility typified by an ethics to preserve nature, the environment and human security throughout the world. This was also witnessed within Occupy Everywhere which centred its shared antagonisms upon the hegemonic ideology of neoliberal policies that have deepened socioeconomic inequalities across the world and the movement responded by:

'fighting back against the corrosive power of major banks and multinational corporations over the democratic process and the role of Wall Street in creating an economic collapse that caused the greatest recession in generations' (occupywallst.org).

Moreover, this too was viewed within the Fridays-For-Future movement which built its shared antagonisms upon the inactivity of nation-states and international institutions to address issues of climate change as the movement highlighted by its emotional statement:

'We demand justice for all past, current and future victims of the climate crisis and so we are rising up People did die, are dying and will die because of it, but we can call a stop to this madness We demand the world's decision-makers take responsibility and solve this crisis. You have failed us in the past. If you continue failing us in the future, we the young people, will make change happen by ourselves. The youth of this world has started to move and we will not rest again' (The Guardian, 1st March, 2019).

These antagonisms articulated by Occupy Everywhere and the Fridays-For-Future movements highlight the discourses of co-responsibility of these transnational movements that exhibited a global outlook with a moral consciousness rooted within the pursuit, desire and dedication to act collectively in response to global problems. In terms of the Global Frackdown movement, their ethical articulations as a moral sensibility, these anti-fracking discourses—as constituting discourses of co-responsibility—became entangled within its affective practices which elicited emotive language in challenging dominant codes around hydraulic fracturing practices. These structures of emotional communication with political content point to a global ethics: affective communication displaying a heightened awareness of the need to respond to sociopolitical issues on a global scale. The moral response to perceived risk, threats and injustices with an emotional call to establish radically altered relations of global justice pinpoints anti-fracking as a discourse of co-responsibility. The transformative character of this anti-fracturing discourse was evidenced by the way in which it served as a mobilizable form of responsibility: it invoked a critical awareness of the need to ban hydraulic fracturing that precipitated the mobilisation of collective-actions around a scheduled day of global protest with the aim to radically change its harmful, polluting and ecologically unsustainable global practices of fossil fuel extraction.

With its creative, interactive and cooperative digital symbolic spaces, social media networks were used by Global Frackdown activists to build the movement around the world by linking

local-to-local regions in a diffuse configuration of translocal networks. Because of these digital symbolic spaces, social media networks signified an invaluable resource for Global Frackdown activists to engage in the cultural meaning-work needed to construct collective action frames. The social media platform Twitter was heavily used by Global Frackdown activists to build collective actions frames through its central hashtag #GlobalFrackdown and in combination with its use of local hashtags was able to connect local-to-local networks across the world. Within this Twitter network, activists built collective action frames through the distinct network practices of engaging in convergence frames, declarative engagement frames and prefabricated messaging frames. In building convergence frames, the #globalfrackdown network functioned as a transnational communications channel through which activists engaged in exchanging cross-flows of information with an emphasis on articulating shared commonalities. Within this network, activists expressed common antagonisms against the polluting, damaging and unsustainable practices of hydraulic fracturing through which a radical imaginary of an alternative sociopolitical future was articulated in a world free of fracking and fossil fuels with widespread use of clean renewable energy. In these types of network exchanges, activists collectively built convergence frames in affirmations of a shared enemy, common solutions and justifications for collective action. Therefore, this distinct network practice help build a sense of shared belonging between activists in exchanging shared values, ideas and meanings through reciprocal dispersals of messages promoting collective action, mutual support and inspiration:

'On 10/19 I'm joining the #globalfrackdown to secure a future free from #fracking and dirty fossil fuels' (Hopke, 2015: 9)

'I'm down with the #GlobalFrackdown. Join me on 10/19 to call for a ban #fracking + a future lit w/clean energy' (Hopke, 2015: 9)

'@YYYY: 2013-10-19—GLOBAL FRACKDOWN, WORLD PREPARES FOR PROTEST AGAINST SHALE GAS PRODUCTION' (Hopke, 2015: 9).

These exchanges highlighting shared antagonisms around common problems underscore shifts in the moral consciousness of its activists which was rooted in recognising the need for a radical change in the worldwide practices of hydraulic fracturing. This moral consciousness points to expressions of collective learning central to a global ethics: the mutual recognition of its threats triggered a critical diagnosis of current conditions that created new forms of moral knowledge articulated in new ways of seeing the world—a radical imaginary that envisioned an alternative sociopolitical future with clean renewable energy replacing fracturing and its dirty fossil fuels. The #globalfrackdown network also utilised its digital symbolic spaces to articulate declarative engagement frames through which activists produced personal declarations of commitment, dedication and support for the global day of action as a means to promote its plans for shared political action against hydraulic fracturing:

'@xxxx: In Cape Town to join various organisations in opposing #GlobalFrackdown' (Hopke, 2015: 8).

'XXXX: Putting the final touches to our drilling rig today ahead of #GlobalFrackdown day tomorrow at 12 prompt Perth Concert Hall' (Hopke, 2015: 8).

These declarative framing practices represented a type of political participation where activists shared information, ideas and perceptions about the political issue of hydraulic fracturing in a way that heavily reinforced their sense of belonging to a movement within a networked public. Accompanying these types of frames, activists also engaged in prefabricated messaging frames

in which activists used these networks to recapitulate, reaffirm and consolidate collective action frames by preparing messages on the main website *globalfrackdown.org* through applying the Twitter hashtag #globalfrackdown as for instance:

'Get down with the #globalfrackdown! Join us on October 19 at an event near you by signing up here: http://bit.ly/lesBsZ9' (Hopke, 2015: 9).

These types of frames built from its collective network practices point to the shared articulation of a global ethics rooted in normative and sociopolitical actions mediated in digital exchanges. It pinpoints a global ethics as an expression of a virtual cosmopolitanism embodied in a critical attitude as an imaginary aware of immanent possibilities for societal transformation evidenced in (a) its critical diagnosis of contemporary conditions where the damaging effects of hydraulic fracturing is collectively identified as exacerbating the global issue of climate change; (b) the collective recognition of a solution to these current societal conditions inscribed in a radical imaginary that envisions an alternative sociopolitical reality in which the use of fossil fuels in hydraulic fracturing is replaced with clean renewable energy and (c) the shared construction of collective action frames in these network practices where a shared normative culture is built around prohibiting global fracking and to which cross-national collective action was mobilised.

Indicator 2: Transnational Solidarity Networks as a Global Ethics

In its classical sociological roots, the idea of solidarity was largely employed in descriptive terms as a type of social bond, link or relation that explained social cohesion within industrial societies with specific reference to occupational functions in the division of labour (Durkheim, 2013) or in distinct types of social action around meaningful relationships that built senses of community or vergemeinshaftung (Weber, 1992b). In contrast to its descriptive properties, in its normative uses, the idea of solidarity is entangled in moral evaluations of the world inscribed in ideas of justice, ethics and social critique rooted in spaces of the political. In *The Communist Manifesto*, Marx (2015) spoke of a normative concept in a political solidarity between members of the working-class in which a type of class consciousness was capable of emerging in the mutual recognition of shared relations of injustice and common struggles against oppressive structures under industrial capitalism (2015: 16). In opposition to its descriptive application as an abstract idea of social cohesion that is used to describe what is by affirming its dominant values, systems and structures in the continuity of societies, the conception of political solidarity—as a criticalnormative idea inscribed in moral judgements of what ought to be—is transformative: it describes mechanisms through which the social bonds uniting individuals in common struggles can motivate concrete political actions that open possibilities to institute social transformations.

In contemporary society, the idea of political solidarity is no longer anchored in the common struggles of a uniform class politics, but in multiple and diverse identity politics that takes shape within sociopolitical practices around cultural issues. However, in a specific strand of political philosophy, conceptions of political solidarity have been tied to Rawls' idea of justice in which solidarity is embedded in the common cultural reference points of a shared lifeworld found only among citizens of a nation-state, as Krishnamurty (2013) argues, '[t]o the extent that we are concerned with political solidarity, it is a relation that takes place between those of a shared state, that is, among fellow citizens' (2013: 129). This position reflects similar conceptions of political solidarity which argue that emotional bonds underpinning collective identifications,

mutual support and mutual trust can only emerge among citizens of a nation-state by virtue of common ties from a shared history (Kahane, 1999; Sandel, 1997). But, there is no plausible reason why these cultural reference points—as a basis for the construction of solidarity around common struggles for justice—should be restricted to territorial borders, as Prainsack and Buyx (2017) argue, [i]n times of globalisation, pluralism and multiculturalism, it is difficult to see why fellow citizens shared mutual respect, support and trust that give rise to solidarity simply by virtue of being citizens of a nation-state' (2017: 88). In other words, it is not just the shared cultural universe of our national lifeworld, but the shared symbolic meanings around common struggles which signify the most important reference points for political solidarity. Normative solidarity cannot be delimited by national borders as it offers a basis for an emancipatory politics that can unite people in common struggles across borders for social justice.

Under global conditions, the velocity at which global cultural flows and its symbolic meanings disperse across electronic mediascapes has greatly intensified bringing into form new political networks of transnational solidarity. In these electronic mediascapes, an identity politics, today, is increasingly articulated in multiple, diverse and diffuse ethico-political practices with moral commitments to a justice politics around global issues. Electronic mediascapes have opened digital transnational spaces in new diffuse network configurations of personal 'micro-publics' (friendship networks, info-flows and topical interests) and 'issue-publics' (subsets of wider public spheres around specific themes) (Bruns and Highfield, 2018: 63). These transnational spaces as networked publics take shape within cultural flows of a global justice politics which is symbolic and tied to an identity politics rooted in pursuits of self-fulfilment, commitment, responsibility and solidarity. These networked publics—understood as cosmopolitan spaces are dominant sites in social acts of criticism, translation and accountability through which 'a cosmopolitan politics of transnational associations shapes new spaces of interaction across boundaries (Bohman, 1998: 214; Köhler, 1997). Digital cosmopolitan spaces 'imply new forms of politicisation that no longer answer to traditional state-defined patterns' within which people around the world act collectively to build transnational networks of solidarity to disseminate knowledge, raise consciousness, create common viewpoints and influence inter-governmental decision-making in global affairs (Innerarity and Errasti, 2019: 294). Transnational solidarity is, thus, more than a social bond that binds people together as an outcome of political action: it is entangled within the communicative processes of politicisation where it is actively involved in forging new connections, creating new political terrains and opening spaces for constructing new political subjects. This networked solidarity is, therefore, imbricated in communicative social practices within which discursive interactions of dissent shape political identities around 'common context[s] of struggles against specific exploitative structures and systems' (Mohanty, 2003: 49; Dean, 1996). Networked Solidarity thus contains a transformative, inventive and generative character: it 'produce[s] new ways of configuring political relations and space' which invent new ways of relating, new ways of being in the world and open new possibilities for alternative political futures (Featherstone, 2012: 6).

Global ethics emerges in forging bonds of a networked solidarity that necessitates cross-border political projects around global issues. In contexts of risk, social media platforms, as dominant electronic mediascapes, offer symbolic resources, cooperative and creative arenas to build GJNs as a type of digital convergence space that can bring people together in common values, shared goals and mutual commitments to justice (Routledge and Cumbers, 2009: 197). With a

democratic deficit at the global level, transnational networks of solidarity as a political response can stimulate new ideas about creating new types of ethical accountability and decision-making that can take responsibility for the welfare of all peoples around the world (Held and McGrew, 2007: 157). Global ethics, then, is rooted in a moral consciousness of the need for a global ethics expressed in new ways of thinking, feeling and imagining that emerge in building bonds of solidarity in response to global issues (Delanty, 2009: 90). Unlike the homogeneity of class politics, the diffusion, diversity and difference of a justice politics are core values in the building of transnational alliances, as Mohanty (2003) asserts, mutuality, accountability and recognition of common interests is 'the basis for relationships among diverse communities' and thus 'the practice of solidarity foregrounds communities of people who have chosen to work and fight together' (2003: 7). As a type of reflective solidarity these diverse communities of people emerge out of discursive interactions in situations of dissent and difference which create emotional bonds of commitment in political projects (Dean, 1996).

Global ethics is, thus, entangled in affective practices where emotional responses to global problems create bonds of commitment, trust and solidarity in a global justice politics. This is a transnational solidarity embodying common or cooperative projects that have a global outlook that involves a mutual concern over the human and ecological consequences of global risk. This type of 'project-related solidarity' highlights that collectively organised political acts are motivated by a moral disposition to help, assist and support others in shared justice projects (Rippe, 1998; Mohanty, 2003). In *Community, Solidarity and Belonging*, Mason (2000) connects this idea of mutual concern as a 'caring for others as if it were oneself' to a normative solidarity among members of a moral community (2000: 40). Although undeveloped in his work, this idea of the moral community can extend across national borders to encompass cooperative projects motivated by the elimination of suffering, shared commitments and a moral disposition 'to act towards others who are recognised as different from oneself' (Gould, 2007: 156-7). Normative solidarity is not just a moral disposition, but entails social critique and attention to institutional structures and 'the opportunities that changes in such structures might afford for improving the lot of others' (Gould, 2007: 158).

Global ethics, today, emerges in a networked solidarity as a communicative social practice embedded in processes of politicisation as well as a social bond that binds people together in justice projects with shared commitments, a moral disposition to others and a dedication toward the elimination of suffering. Global ethics, then, is an integral dimension of virtual cosmopolitanism: it is rooted in forging digital networks of transnational solidarity with a sense of moral responsibility for the plight of all human beings in the contexts of the human consequences posed by global problems (Kurasawa, 2007: 207). This transnational solidarity taking shape in social media networks around a global politics of justice suggest a cosmopolitan solidarity—a solidarity built on compassion, mutual concern, reciprocity and a moral disposition to others. Cosmopolitan solidarity is constructed in struggle out of social critique and communicative social practice in which a sense of unity is produced out of 'heterogeneous elements and collective action is orientated to what we have in common as human beings' (Fine, 2019: 370). Cosmopolitan solidarity therefore involves openness, inclusion and a receptiveness which suggests the importance of supporting others in their own efforts at democratisation—a cosmopolitan articulation of a democratic solidarity (Gould, 2007: 160).

Social Media Networks and Transnational Networks of Solidarity

Within its complex configuration of translocal social media networks, the Global Frackdown movement used the #globalfrackdown network to collectively produce, transmit and receive cross-national flows of information, resources and messages throughout its protest events. This Twitter hashtag network opened a diffuse, diverse and digital transnational space within which Global Frackdown activists engaged in ethico-political practices of translocal coalition-building toward a global campaign to ban hydraulic fracturing by connecting an assemblage of different personal micro-publics to #globalfrackdown issue-public. These practices exhibited features of a global ethics by forging cross-national bonds of solidarity around global issues. Within this digital Twitter network, Global Frackdown activists engaged in building collective action frames by utilising its digital symbolic spaces to discursively construct their shared antagonisms against fracturing practices, build their shared values in the need for a shift in renewable energy and collectively affirm their mutual engagement, desire and commitment to the day of global action. These collective action frames which took shape within network practices employed by Global Frackdown activists relied heavily upon reciprocal emotional exchanges in messages of support across different locales, messages of commitment to the anti-fracking global cause and messages of encouragement across its network to engage in political action.

These emotional exchanges in response to global issues creating bonds of commitment, support and solidarity in the Global Frackdown movement exhibited a global ethics as a moral consciousness rooted in articulations of a transnational network solidarity. It is in these discursive processes of meaning-making and politicisation through which Global Frackdown activists built shared social bonds both within and between different local-to-local networks that shaped a transnational networked solidarity. In this sense, these transnational networks of solidarity where its social bonds binding activists together in a moral orientation to others highlights an emerging global ethics. This networked solidarity that disseminated throughout its translocal network extended to other environmental movements through the way in which its activists engaged in practices of cross-tagging. These cross-tagging practices incorporated other movement hashtags within its #globalfrackdown network as a means to build networks of solidarity with wider environmental movements with a goal to promote their political actions, to share information and exchange reciprocal messages of encouragement between environmental movement networks. This building of transnational networks of solidarity occurred with the protests by First Nations—an indigenous movement in Canada—under the hashtag #Elsipogtog. An analysis of these Twitter networks showed that Global Frackdown activists used the #Elsipogtog as a convergence frame to build networks of solidarity with First Nations' activists as well as to cross-promote movements and enhance the globalness of the day of protest. For instance,

'@RisingTide604: 16+ #Elsipogtog #Fracking blockade solidarity actions planned! http://www.wearepowershift.ca/stand_with_elsipogtog_actions . . . #climatejustice #climate #350ppm #GlobalFrackdown (4:50pm, 17th October, 2013, Hopke, 2105: 7)'.

'@XXXX: #Elsipogtog protest adds fuel to #GlobalFrackdown fire http://www.canadians.org/blog/elsipogtog-protest-adds-fuel-global-frackdown-fire #banfracking (5:45pm, 23 October 2013, Hopke, 2015: 7)'.

These cross-tagging practices too highlighted the collective use of these networks to exchange information about the protest events; to build networks of support with First Nations' activists;

to display signs of solidarity, empathy and commitment to its mutual goals and to promote the Global Frackdown movement by spreading calls to action across its networks. For example,

'@XXXX: Let's get #Elsipgtog #mikmaqblockade #mikmaqblockade #IdleNoMore #GlobalFrackdown trending. Don't RT. Steal and repost to trend. #redrising' (1:09pm, 17th October, Hopke, 2015: 10).

'@XXXX: Heading back to the #Elsipogtog protest site. Happy day of #GlobalFrackdown! Support support! (7:07pm 19th October 2013, Hopke, 2015: 10).

Overall, these cross-tagging practices underscored the discursive process through which Global Frackdown activists utilised its #globalfrackdown network to extend its transnational networks of solidarity outward to other environmental movements through sending messages of support, messages of encouragement and messages of commitment to a collectively shared eco-politics. These network practices underscored the emergence of global ethics as an expression of virtual cosmopolitanism by forging a sense of ethical responsibility to all human beings in the context of the negative human and ecological consequences associated with global fracturing practices. In the context of the wider debate on digital spaces as networked publics, these practices also underscore that social media do not ipso facto constitute isolated publics, but, instead, can give shape to a complex intersecting configuration of issues publics tied to different micro-publics that created GJNs by opening convergence spaces for the cross-fertilisation of communication between peoples around the world in order to build networks of solidarity, create common viewpoints and influence decision-making in world affairs through its frackdown campaign (Innerarity and Errasti, 2019: 294). In Global Frackdown, its global campaign against global fracturing practices exhibited a networked solidarity typified by a shared moral consciousness of the need for a global ethics entrenched in attempts to mitigate the impact of its practices on climate change, environmental destruction and human suffering. The emotional bonds binding its transnational activists together in a networked solidarity were built on the key features of a global ethics: a shared commitment to a cooperative project that entails a moral disposition to eliminate suffering to others which reveals new ways of thinking, feeling and imagining about the world in emotional responses to global issues (Delanty, 2009: 90).

Besides cross-tagging practices Global Frackdown activists also utilised its #globalfrackdown network to engage in the hybrid framing practices of multilingual tweeting and hashtag indexing. These specific practices facilitated the cross-flow of frames between linguistic spheres that enhanced a sense of belongingness between activists within its networks of solidarity. As the examples illustrate below, the first tweet is in English, but incorporated the Basque hashtag #FrackingEz, the second too is in English while also including the location of the Romanian demonstrations as well as those in France through the French hashtag #gazdeschiste while the third tweet from its networks in Spain point to how Global Frackdown activists included translations of content through multilingual hashtagging. For instance,

'@XXXX: The Basque Country is also taking part in the #GlobalFrackdown initiative. #FrackingEz' (7:11pm, 19th October 2013, Hopke, 2015: 10).

'@XXXX: #GlobalFrackdown MT @Kowalski_Lech: #fracking #occupychevron #pungesti #balcombe one bus made it through and is 20minutes away #gazdeschiste' (7:17pm, 19th October, Hopke, 2015: 10).

'@AntifrackingCom: #19oct Día Internacional contra la fractura Hidráulica #stopfracking "@gaslandmovie: The GlobalFrackdown is Global! http://youtube.be/wDH9ghBtV31" (12:38am, 19th October 2013, Hopke, 2015: 10).

These hybrid framing practices demonstrated that the multilingual hashtag indexing performed by Global Frackdown activists through its #globalfrackdown network precipitated cross-flows of information in multiple languages that strengthened its transnational networks of solidarity by deepening feelings of belongingness among its multiple, plural and diffuse activists. This networked solidarity which bound its activists together through different national, cultural and linguistic spheres in cooperative political projects—with a moral disposition to others—points to an articulation of a global ethics as a cosmopolitan solidarity: a specific type of solidarity built on common struggles in communicative social practices characterised by openness, inclusion and receptiveness and within which a sense of unity in diversity is produced in collective action orientated toward mobilising transnational efforts in global democratisation.

Indicator 3: Collective Identity as Global Ethics

As a communicative social practice that builds bonds among activists in transnational networks of solidarity, a major dimension of a global ethics is rooted in the means by which these bonds can shape post-traditional types of community rooted in cross-national discourses that inform constructions of collective-identities beyond borders. The idea of collective-identity informs an 'individual's cognitive, moral and emotional connection with a broader community, category, practice or institution' that is constructed and articulated in the cultural artefacts of narratives, symbols and rituals (Polletta and Jasper, 2001: 285). Similar to bonds of solidarity, collectiveidentities are built out of the discursive practices of meaning-making in collective action frames where activists identify a shared enemy, a common objective, defining a purpose and emotional connections to an object at stake in the conflict (Melucci, 1996: 292). At its centre, collectiveidentity is dialogic: 'it is continually emerging, forming and reforming between people ... in multiple sites and places of contentious practice' (Holland et al, 2008: 99). Within its communicative structures, this meaning-making process is entangled within cultural artefacts that induce senses of the *collective* in emotions, sentiments and memories which take shape in contentious practices around shared antagonisms, values and visions. Out of these contentious practices, the collective emerges in common reference points wherein a sense of belongingness gives shape to shared feelings of 'we' (Melucci, 1996: 74).

Important to this sense of 'we' is the meaning-making process where belonging is symbolically constructed in the shared perception of boundaries that demarcates 'us' from 'them' (Cohen, 1985: 12). Because symbols are mental constructs, the construction of boundaries relies on structures of the imagination. Collective-identity thus takes shape in 'an imagined world which is a realm of interpretation and action generated by participants of a movement through their shared activities and commitments that imagines the terrain of struggle, the power of opponents and the possibilities of a changed world' (Holland et al, 2008: 97). Instead of its foundation, collective-identity is an outcome of community—in this case a political community where a sense of belonging in shared feelings of 'we' take shape in a social process within which the meanings attached to group boundaries is symbolically and imaginatively constructed around common struggles in political projects (Cohen, 1985: 12; Anderson, 1991: 6).

With new electronic mediascapes and its digital infrastructures circulating global cultural flows which now increasingly mediate collective actions across its diffuse networks, the importance

of collective-identity in mobilising political projects is believed to be no longer necessary. It is argued that new fluid social networks operate through organisational processes of social media and their new logic does not require the symbolic construction of belonging or a unified 'we'. Digital politics now operates with a logic of connective action characterised by individualised and technologically organised sets of processes that no longer necessitate a collective-identity (Bennett and Segerberg, 2012: 748). By this understanding, digital politics is now governed by a new cultural logic shaping contemporary politics around 'aggregations of individuals' 'smart mobs' or 'crowds of individuals' (Bennett and Segerberg, 2012; Juris, 2012; Rheingold, 2012). Gerbaudo and Trere (2015) point out that these studies erroneously neglect the continuing importance of collective-identity in mobilising digital politics (2015).

In turn, these approaches signify an individualistic politics that marginalises the relational processes in which individuals construct a sense of belonging in common struggles, as Fuchs (2014) asserts, 'networked action has a collective dimension—the common coming-together ... through which collective values, [identities], demands and goals are formed ... in discussion, [conviviality] and communication processes' (2014: 38). Because mobilisation hinges on building collective action frames, one of the first tasks present in the symbolic and imaginative construction of a shared 'we' is 'the identification of an enemy, the definition of a purpose and an object at stake in the conflict' all of which rest on communicative structures that act to fuse activists into a common social body, a symbolic process in which 'the different fragments join ... together to form a movement' that is 'integrated into a new system of relations' (Melucci, 1996: 292). It is in this capacity to produce, transmit and receive shared meanings where social media affects collective-action: they enable activists to build social milieux where circulations in semiotic exchanges coalesce into social conventions, interactions and relations from hashtagging, tweeting, liking to posting and hyperlinking offering cultural ingredients from which expressions of solidarity and feelings of belonging can build a sense of collective-identity (Nahon, 2018: 143; Milan, 2015b: 54). It is in this process where social media are conducive to the symbolic mediation of sociality in which common meanings, narratives and values can inform the communicative construction of a shared 'we' (Gerbaudo, 2012: 14).

In other words, social media—as dominant cultural spaces—filter social interactions constituting an integral vehicle of meaning work: a social process wherein the symbolic takes shape and permeates into physical spaces that can mobilise 'new forms of [collective] action ... in the social world' by 'condensing symbolic assemblages that can materialise into bodily assemblages' (Milan, 2015: 3; Gerbaudo, 2012: 14). Moreover, the spatio-temporal diffusion of social media networks have given rise to new virtual political communities as post-traditional types of communities which build feelings of belonging around common struggles in transnational political projects. New virtual spaces opening-up across social media pinpoint the communicative power of virtual communities in which its discursive networks help shape new critical ways of re-imagining the world as 'social movements have brought about a major transformation in perceptions of the world and new discourses ... around a global ethic of responsibility for the nature and alleviation of suffering' (Delanty, 2018: 186). Global ethics, then, can be witnessed in building cross-national collective-identities rooted in a moral consciousness that seeks to address global issues within transnational political projects. Global ethics is thus found within all political communities that 'consist of a [moral] capacity to look beyond the limited horizon of the local context' and, therefore, a global ethics is a major

example of a cosmopolitan political community (Delanty, 2009: 103). Cosmopolitan political community shapes a sense of belonging among a plurality of actors, within electronic flows of ethico-political relations 'capable of engendering new processes that can transcend established boundaries' (Nascimento, 2013: 4). The cosmopolitan spirit of this belongingness entails a sense of openness, an orientation to pluralism, a feeling of political engagement and an acknowledgment of the connections with the global in the local and, in this sense, cosmopolitanism presupposes multiple belongings 'a sense of belonging to different places at different times or several places at once' (Jones, Jackson and Rhys-Taylor, 2014: 5). Cosmopolitan political community, therefore, 'produces a powerful sense of community: one of collective empowerment and action ... 'where a sense of belonging is highly discursive as it is constituted around discourses of global issues' (Delanty, 2018: 190-196).

Social Media Networks and Collective-Identity

The construction of a collective-identity between Global Frackdown activists emerged out of two basic network practices: (a) articulation of convergence frames in creating collective action frames and (b) enunciation of hybrid frames in forging in transnational bonds of solidarity. Within its Twitter #globalfrackdown network, the practices of convergence framing through reciprocal exchanges of shared commonalities enabled activists to shape a shared sense of belonging on the basis of collective expressions of a common antagonism against hydraulic fracturing. This collective articulation of a shared enemy built joint symbolic reference points around which activists constructed social bonds in dialogic exchanges of shared values, ideas and meanings. In these communicative exchanges, activists drew on cultural artefacts—from narratives, rituals and symbols to hashtags—within the digital symbolic spaces of its social media networks to symbolically construct the shared perception of its group boundaries that demarcated its sense of 'we' against 'them' as its object of condemnation. Out of its symbolic construction, a feeling of belonging was also mediated through the structures of the imagination in which its diffuse virtual spaces stretching across local-to-local networks became more reliant on a sense of 'we' that was largely imagined. This imaginative dimension to the collectiveidentity of Global Frackdown was exhibited in its collective struggles where activists organised collective actions to realise the alternative future of prohibiting fracturing practices.

This symbolic and imaginative construction of a collective-identity among activists within the Global Frackdown movement was highlighted in exchanges within its convergence frames. Moreover, declarative engagement and pre-fabricated messaging practices within its collective action frames reinforced these social bonds among activists through reciprocal transmission in shared messages of support, commitment and encouragement. This sense of 'we-ness' arising between Global Frackdown activists was further deepened through the collective engagement of hybrid framing practices where the social bonds binding activists together crystallised in transnational networks of solidarity. It was through multilingual tweeting and hashtag indexing practices where a sense of belongingness was strengthened among multiple, diffuse and diverse activists by expanding its inclusiveness beyond national, cultural and linguistic spheres through cross-flows of information in multiple languages and multilingual hashtag translations.

These practices helped to broaden the collective-identity of the Global Frackdown movement beyond its networks in English to incorporate common struggles across network locales in

Spanish, Italian, Basque, German, Catalan and French. It was in these convergence and hybrid framing network practices where its sense of belongingness was built on the common struggles tying diverse activists together across borders in translocal networks of solidarity against fracturing. Global Frackdown was, thus, an assemblage of heterogeneous elements—a sense of belonging between a plurality of social actors with ethico-political practices that transcended boundaries. These bonds tying cross-national collective-identities were built out of a moral consciousness to mitigate the global effects of hydraulic fracturing which indicates a collective ethical outlook that extends moral concerns beyond local contexts. This points to a belongingness which entails a sense of openness, an orientation to pluralism and a shared feeling of political engagement. This pinpoints the global ethics of Global Frackdown movement: its building of a cross-national collective identity with a moral capacity to look beyond the horizon of local contexts. It is in this diffuse sense of belongingness among a plurality of actors in its solidarity networks where the Global Frackdown movement exhibited a global ethics as a post-traditional community: a cosmopolitan political community that stretched over 200 collective mobilisations against the corrosive practices of hydraulic fracking across 27 countries over 5 continents. These network practices exhibited loosely in Occupy everywhere and Fridays-For-Future, but more specifically in Global Frackdown points to the emergence of a cosmopolitan citizenship as a cultural politics.

From National Citizenship to Cosmopolitan Citizenship

The concept of 'citizenship' often concerns questions over the issues of membership, belonging, obligations, responsibilities and rights bestowed upon citizens. In its traditional conception, this has meant a distinct understanding of the idea as 'citizenship-as-status' in which the legal right to membership of a political community affords certain rights within that community and, thus, by this meaning, the idea of citizenship operates as an organising principle of political authority (Slaughter and Hudson, 2007: 6). In Citizenship and Social Class, T.H Marshall (1992) argued to this effect by positing that citizenship referred exclusively to a legal status in which members of a community are equal with respect to the rights and duties with which the status is endowed (1992: 149~150). For Marshall (1992) as a legal status citizenship entailed a sense of belonging rooted within nationally-bounded cultures which was given expressions through the political specificities of the nation-state as 'citizenship requires a direct sense of community membership based on loyalty to a civilisation' (1992: 151). This conventional idea of citizenship is a legal, formal and vertical concept that reduces it to a relationship between the territorially-bounded nation-state and the rights, duties and responsibilities bestowed to its legally recognised citizens. The obvious limitation of this conventional view of citizenship is that it erroneously presupposes the nation-state as hermetically-sealed units where citizenship is an exclusive relation between a unitary nation-state and its citizens. Contemporary forms of citizenship, however, have shown this not to be the case as highlighted by postnational articulations of 'transnational citizenship' (Johnston, 2001) or 'multiple citizenship' (Held, 1995) as seen in the status of dual citizenship and 'nested citizenship' with (supra)national identities, rights and obligations as evidenced in European forms of citizenship (Faist, 2000: 13). Under conditions of globalisation, the concept of citizenship cannot be solely understood exclusively as a relationship between state and citizen as Sassen (2002) describes, '[g]lobali[s]ation implies the multiplication and plurali[s]ation of citizenship, practices and understandings' (2002: 287). But, these postnational ideas retain the conventional understanding of 'citizenship-as-status' which overlook new non-legal, informal

and horizontal articulations of citizenship—as a type of active public participation—in which citizens make new claims to rights, obligations and responsibilities on the basis of new identities through extra-institutional political activities. This idea informs an alternative understanding of 'citizenship-as-activity' in which citizens (not restricted to its legal status) engage in civic life and, in this sense, citizenship is not limited to status: it involves sets of practices—social, political cultural and symbolic (Slaughter and Hudson, 2007: 5; Isin and Nielsen, 2008: 2).

In contrast to its conventional understanding, then, citizenship is tied to social struggles as it entails fights over the recognition of different identities, extensions of rights and new ideas of responsibility that take place both within and beyond national boundaries. As an activity that is rooted within collective struggles over new forms of inclusion, citizenship therefore 'results in part from the practices of those who are excluded from it' (Sassen, 2002: 65). Political projects are, therefore, an essential expression of citizenship as it is through the mobilisation of collective actions where citizenship is pursued, constituted and reconstituted. Because these political projects are rooted within expressions of identities, they take place on the cultural-level in struggles over meaning. From the collective struggles over issues of sexuality, race and gender, these emerging political projects draw on cultural resources to engage in alternative notions of citizenship that unsettle, challenge and subvert its dominant meanings. Culture is at the forefront of these struggles today as Clarke et al (2014) illustrates, 'culture is mobilised in citizenship struggles in many ways not least of which is discourses about membership, belonging and entitlements ... [that] represent cultural imaginaries of citizenship and ...manifest in vernaculars and semantics of political life' (2014: 44-45). A major dimension of citizenship, today, then, is cultural—a cultural citizenship that 'signifies a connection with the politics of everyday life that is continually being rewritten by the reflexive incorporation of new ideas, narratives and frameworks' (Stevenson, 1999: 60).

A dominant expression of cultural citizenship is the extent to which new political projects now stretch across national borders in the pursuit of new rights, obligations and responsibilities that extend to all citizens around the world. In this sense, globalisation has opened the need for new articulations of inclusion in the shape of political responsibility, rights, identities and citizenship which extend beyond the state in response to global problems. These social movements indicate the rise in new forms of global identities which can be found in an awareness, commitment and dedication to planetary objectives from sustainability, global justice, climate change and those who experience a responsibility to act (Tijsterman, 2014: 185). These social movements inform a type of 'global citizenship' (Falk, 1994). As a descriptive concept, global citizenship highlights the scale and scope of new non-national cultural practices of citizenship (Tijsterman, 2014). With the transnational character of its digital symbolic spaces, the use of social media networks now represent dominant cultural platforms in which articulations of global citizenship are now increasingly made possible. Within its digital symbolic spaces, the availability of stored culturalsymbolic resources (information, narratives, signs, images) offer activists the means with which to create counter-spaces whereby the discursive construction, negotiation and experimentation with alternative ideas of rights and responsibilities give shape to new struggles over citizenship. Digital symbolic spaces in social media networks are not just arenas in which activists create construct and express alternative narratives, discourses and biographies, but also where action is mobilised in making new claims to rights and responsibilities through the creation of shared antagonisms, common values and imaginaries of alternative sociopolitical futures.

It is through the transnational character of these digital symbolic spaces where activists can collaboratively create discourses of co-responsibility, networks of solidarity and collectiveidentities through the creative use of its cultural resource, symbolic materials and capacities to virtually brokerage new ties, networks and relations across national borders. As central indicators of a global ethics, these mediated processes of cultural politics are indicative of global citizenship struggles today. This was highlighted by the Occupy Everywhere, Global Frackdown and the Fridays-for-Future movements which drew heavily upon social media networks to build collective action frames that mobilised coordinated actions across the world in the pursuit of alternative understandings, ideas and imaginaries of global economic equality, ecological responsibility and climate justice. In the Global Frackdown movement, this was illustrated by the ways in which activists used the digital symbolic spaces of its Twitter network #globalfrackdown to collectively engage in the network practices of convergence, declarative engagement and prefabricated messaging frames in the process of constructing its discourse of co-responsibility around the destructive practices of global fracturing. Furthermore, these network practices extended to cross-tagging, hashtag indexing and multilingual hashtagging in building its transnational networks of solidarity and creating belonging among its activists in a collective-identity rooted in the banning of fracking.

The rise in these new transnational political projects from concerns over socioeconomic, climate and environment justice highlight distinct types of citizenship struggles emerging today that is expressed in new virtual modes of political community: a post-traditional community rooted in communicative structures where multiple, plural and diffuse citizens mobilise collective action over (post) national rights and responsibilities. These collective struggles over global citizenship constitutes a new articulation of sociability: 'a more egalitarian format for social relations at all levels' with new ideas, rules and imaginaries for living together in alternative sociopolitical and ecological futures (Clarke, et al, 2014: 25). The meditated struggles of this global citizenship is best understood as cultural articulations of a 'cosmopolitan citizenship' with post-traditional forms of political community wherein 'citizens and aliens come together as co-legislators within a wider public-sphere' through the creation of 'new communities of discourse' which 'promote human rights, global social justice and environmental management' (Linklater, 1998: 30-36). Moreover, this idea of cosmopolitan citizenship as a type of cultural citizenship is characterised by its social, symbolic and cognitive dimensions concerned with common experiences, learning processes and discourses of empowerment (Delanty, 2007). These dimensions were illustrated by the transnational political projects of the Occupy Everywhere, the Fridays-For-Future and the Global Frackdown movements who utilised available cultural resources (information, flows and semiotic materials) to reject dominant cultural codes by constructing alternative meanings, narratives and discourses in shared frameworks of understanding around the global problems of equality, justice and responsibility which mobilised actions in the pursuit of these demands.

Of particular importance in these cultural processes is the way in which citizens actively engage in meaning-making where concerns over rights and responsibilities are collectively diagnosed, solutions are collectively identified and actions are collectively mobilised. It is in these processes where networks of solidarity and belonging extend beyond state boundaries in political projects. As dominant sites for cultural politics, the digital symbolic spaces within social media networks are fundamental arenas in which a cosmopolitan citizenship is articulated today. Global ethics,

as embodied in the affective practices of sociopolitical actions in response to global issues is also a central dimension of cosmopolitan citizenship as evidenced in discourses of co-responsibility, networks of solidarity and collective-identities that disperse across diffuse networked publics.

In Conclusion

This chapter has argued that the digital symbolic spaces within social media networks represent major counter-spaces where global ethics emerges today. By understanding global ethics as an emergent reality entangled in ethicopolitical practices across national frames of reference, this chapter has argued that these digital symbolic spaces open possibilities for multiple, diffuse and diverse social actors to engage in the dialogic activities that construct a politics of global justice. This argument was supported by the empirical example of the Global Frackdown movement in which its network practices of convergence, cross-tagging and hybrid framing facilitated the construction of collective action frames in anti-fracking as a discourse of co-responsibility and transnational networks of solidarity that offered common reference points to create collective-identities against commons struggles to seek to ban global practices of hydraulic fracturing. To conclude, this chapter presented an argument for these specific network practices as concrete expressions of activities that inform an engagement in a cosmopolitan citizenship: a citizenship characterised by cultural politics centred on new demands for global rights and responsibilities.

Conclusion

One of the main aims of this thesis was to show how social media networks as dominant cultural platforms represent basic mediums through which a global ethics is able to be expressed today. This thesis drew upon an exact idea of global ethics—not as an abstract set of moral principles but as in actual existence: as an emergent reality that arises out of the emotional flows embodied in global-public discourse, political communications and critical publics which exhibit a moral consciousness of the need for global ethics in response to heightened awareness of global issues. Global ethics, thus, is a postfoundational concept: it emerges out of a dialogical process in which tentative regulative principles are not determined by fixed prescriptive ethical frameworks, but by intersubjectively negotiated processes in discursive interactions. This thesis positions itself in opposition to the dominant approaches to global ethics that root it in an 'overlapping consensus' between different 'peoples' or nations (with distinct cultural, religious and value systems) over the universal liberal principles of 'freedom', 'independence' and 'equality' (Rawls, 1987: 847). This liberal conception is contrasted with substantive approaches which view a global ethics as rooted within universal standards embedded in a minimalist set of fundamental cultural values such as universal categories of positive duties from 'mutual support', 'loyalty' and 'reciprocity' (Bok, 2002: 13~16) or in the common ethical imperatives rooted within the moral frameworks of all major religious traditions from 'respect for life', 'honesty', 'sincerity' and 'respect for all' which is viewed to already constitute 'a minimal fundamental consensus [with] binding values, irrevocable standards and fundamental moral attitudes' (Küng, 1993: 4; Annan, 1998). These substantive approaches too are contrasted with a collective-responsibility view to a global ethics evidenced in a macroethics with a new framework of rights, norms and duties embedded within a new post-Kantian imperative of collective-responsibility which necessitates us to: '[a]ct so that the effects of [our] actions are not destructive of the future possibility of life' (Jonas, 1984: 11).

A central argument of this thesis is that transnational extensions of social bonds, networks and belonging constructed around shared moral commitments to address global issues in subpolitics represents the indicators of a global ethics today: it is found in discourses of co-responsibility, transnational solidarities and collective-identities. This dialogic notion of global ethics militates against the top-down normative prescriptions of liberal, substantive and responsibility positions in which a post-traditional ethics is rooted within the foundational principles of fixed universal ethical frameworks with a strong moral universalism. The limitation to these approaches is that its normative prescriptions in predefined frameworks of ethical principles collapses into claims that it functions as a type of neo-colonialism, paternalism and imperialism which reinforces the international order created by Western powers and, in turn, justifies a Eurocentric world order (Hellsten, 2015: 87). From the broader perspective of a critical cosmopolitan sociology, a global ethics is less a fixed set of normative prescriptions and more a sociocognitive construct in which emotional flows of discourses of co-responsibility that circulate within the submerged networks of civil society indicate new ways of thinking, feeling and imagining which build networks of solidarity and collective-identities in transnational political projects in response to global issues. By understanding global ethics through a critical cosmopolitan perspective—as a wider context of interpretation—this thesis focused on the internal transformations produced by interactions between 'self, Other and world' where self-problematising and reflexive tendencies give shape to 'the cosmopolitan imagination' as a new critical way of seeing, thinking and understanding the world, a critical attitude with an evaluation or critical diagnosis of modern social conditions.

(Delanty, 2009: 16; Mignolo, 2000: 741; Kurasawa, 2011: 281). The benefits of this approach is that it offers not only a more open and inclusive idea of global ethics in which new tentative regulative principles are discursively negotiated, but also an empirical analysis of a global ethics evidenced in new transnational social movements that challenge the dominant codes in society through generating alternative imaginaries of sociopolitical futures in response to global crises.

The original contribution of this thesis is the central argument that social media networks are now dominant cultural spaces through which the idea of a global ethics is made possible today. As electronic mediascapes, social media networks now increasingly heighten our awareness of global crises in circulations of 'stories about climate change, terrorism, poverty, humanitarian disasters and other threats against humanity' (Cottle, 2009: 494). It is within these mediascapes where we now experience, perceive and understand the world and, therefore, they are integral to cultivating our sense of moral-practical reflection toward our collective fate in which global cultural flows deepen our 'sense of responsibility for the non-human world and the universe of distant others' (Thompson, 1995: 264; Couldry, 2020). With its global cultural flows of world news, images and events, social media networks now represent dominant cultural spaces for the circulation in discourses of co-responsibility. These discourses exhibit a growing awareness, reflexivity and communicative action on part of social agents to enact sociopolitical change in response to global crises. Discourses of co-responsibility are, therefore, a central indicator of a global ethics as they constitute a mobilisable form of responsibility in which individuals, groups and movements engage in dialogic processes of meaning-making. A key point in this argument is that 'digital symbolic spaces' within social media networks offer social, cultural and symbolic resources to engage in this type of meaning-making by opening arenas for shared negotiations of 'collective action frames' where shared meanings, worldviews and values crystallise around common antagonisms which evoke an emotional call to arms in collective-actions (Benford and Snow, 2000: 614; Milan, 2015: 3). These digital symbolic spaces, therefore, can create arenas in which activists experiment with different ideas or visions of utopia in critical imaginaries of alternative sociopolitical futures. These counter-spaces are arenas for alternative normative codes, imaginaries and for exploring new forms of life in processes of shared meaning-making. It is in these meaning-making processes where new possibilities for activists to engage in forms of collective-learning open-up within exchanges of different ideas, views and concepts which can change worldviews by shaping new ways of thinking, feeling and imagining the world. Collective learning is thus a core aspect of a global ethics: it is circulations in discourses of coresponsibility which trigger collective action in critical diagnoses of social conditions that shape ways of seeing society anew in alternative imaginaries of a just, ethical and sustainable world.

The transnational extension of these counter-spaces across social media networks constitutes distinct types of public-spheres arising today: networked publics typified by pluralism, diffusion and digitalism with informal discursive spaces through which transnational coalition building and campaigns form in connections between configurations of micro-publics and issue-publics (Bruns and Highfield, 2018: 63). Networked publics are now dominant sites in social acts of criticism, translation and accountability that support a 'cosmopolitan politics of transnational associations shap[ing] new spaces of interaction across boundaries' (Bohman, 1998: 214). These networked publics as opening cosmopolitan spaces 'imply new forms of politicisation that no longer answer to traditional state-defined patterns' within which activists around the world construct transnational networks of solidarity to disseminate knowledge, raise consciousness,

develop common viewpoints and influence inter-governmental decision-making in global affairs (Innerarity and Errasti, 2019: 294). The argument of this thesis is that these networked publics display a distinct type of solidarity: a cosmopolitan solidarity expressed in compassion, mutual concern, reciprocity and a moral disposition to mitigate the suffering of others. It is a solidarity exhibited in common struggles where social bonds, cohesion and unity form from the 'heterogeneous elements and collective action[s] ... orientated to what we have in common as human beings' (Fine, 2019: 370). These transnational networks of solidarity provide the basis for the construction of diffuse collective-identities which appear in common reference points around collective struggles that build belongingness in shared emotional bonds, feelings, values and shared recognitions of 'we' (Melucci, 1996: 74). Networked publics pinpoint expressions of a post-traditional type of political community emerging today where belonging is rooted less within local attachments, common culture or class identity—and more in communicative practices around common struggles in response to global crises. The cosmopolitan spirit of this belongingness entails an openness, an orientation to pluralism, a feeling of political engagement and an acknowledgment of the connection with the global in the local where cosmopolitanism presupposes multiple belongings a sense of belonging to different places at different times or to several places at once and how this belonging remakes places as well as people' (Jones, Jackson and Rhys-Taylor, 2014: 5). This thesis has presented the argument that networked publics give rise to cosmopolitan political communities which 'produce a powerful sense of community; one of collective empowerment and action ... 'where a sense of belonging is highly discursive as it is constituted around discourses of global issues' (Delanty, 2018: 190-196). Global ethics, is, therefore, found in transnational extensions of political community where a sense of belonging in a collective-identity is rooted in shared commitments to political projects typified by moral consciousness of the need to find solutions to global crises.

Because it emerges in extra-institutional discourses, claims and actions, this idea of global ethics as signifying the moral responsibilities, values and norms of individuals and collective agents is also tied to a concept of 'justice'. Within the cosmopolitan tradition, the idea of justice has been understood as either a moral or institutional ideal. As a moral ideal, cosmopolitanism is viewed as a set of moral universal commitments that morally justifies distinct kinds of institutions we impose on individuals where justice extends to notions of rights that can secure a distinct set of universal human capabilities—such as freedom, practical reason, health and needs—that are believed to be necessary to fulfil a good human life (Nussbaum, 2008: 497; Sen, 2008). As an institutional ideal, cosmopolitanism is seen as a new political system of global institutions where justice extends to ideas of 'cosmopolitan democracy' (Held, 1998; Archibugi, 1998; Thompson, 1998) which focuses on the project of democratisation within nations, among states and at the global level with the creation of new institutions based on world citizenship. Similar to positions concerning a global ethics, these moral and institutional conceptions of justice as a normative political project are rooted in strong forms of moral universalism ie, in abstract universal moral principles which are seen as representing potential risks associated with 'the oppressiveness of abstracted universalism' (Harvey, 2009: 80) with the potential to constitute a totalising Western metanarrative (Lyotard, 1984: xxiv) that can legitimise a Western international political order as the West continues to shape, dominate and control global moral discourse (Dallmayr, 1996). From the normative perspective of a critical cosmopolitan sociology, the idea of justice is found less in normative political projects and more in the intersections of self, Other and world rooted within the transnational field of social relations where symbolic struggles play out in dialogical

exchanges. In contrast to normative projects, the idea of global justice is, therefore, viewed in transnational articulations of sociopolitical actions which take shape in networks of resistance with collective struggles that may not seek official sanction or juridical inscription, but a type of bottom-up emancipatory politics of justice mobilising collective-actions in response to global crises (Kurasawa, 2007: 286). Global justice is a reaction to changing social realities: it is a communicative process in which networked publics respond to changes in the social world. A central argument of this thesis is that this global justice politics signifies expressions of a virtual cosmopolitanism. This thesis has positioned itself in opposition to critical narratives concerning prospects for a virtual cosmopolitanism that view virtual community as transmogrifying into a 'pseudocommunit[y]' (Robbins, 1999: 166), a community of disaggregated 'voyeurs' with no commitment, trust and reciprocity (Komito, 2010: 149) or homophilic 'socio-spatial enclaves' that form around homogeneous identities (Calhoun, 1999: 384 Zuckerman, 2014: 70).

Instead, this thesis understands virtual community as neither thick, concrete nor enduring, but just as legitimate as a 'mode of consciousness' shaped by 'a symbolically-constituted level of experience and meaning' with an imaginative structure 'underpinned by the search and desire to pursue a sense of belonging' (Delanty, 2010:153). From this idea of community, virtual cosmopolitanism is less zero-sum and more of an emerging condition which arises in degrees of intensity from cultural encounters, exchanges and dialogue that create moments of openness within the digital networks of transnational social relations. One of the central arguments of this thesis is that a virtual cosmopolitanism emerges in two political cosmopolitan relationships: in transnational social movements that attempt to build a shared normative culture around moral commitments to global justice and an inclusive politics of recognition articulated in the extension of solidarity networks across borders (Delanty, 2012b: 44). In contrast to a traditional class politics with its fixed universal blueprints of emancipation global justice politics is typified by the multiplication of interests, positions and standpoints: it is a politics of multiplicity, plurality and creativity in which digital symbolic spaces are mediated arenas of collaboration where 'differences of affect and standpoint are ... the basis on which meaningful dialogue, discourse and discussion can take place' (Tormey, 2005: 404). This points to a global justice politics which is no longer bound to homogeneous national identities and more a politics that is intersubjectively mediated by the ongoing communicative construction of flexible identities, that is, 'identities characterised by inclusiveness and a positive emphasise upon diversity and cross-fertilisation ... nurtured by a search for dialogue' (Laclau and Mouffe, 1985; Della Porta et al, 2006: 240). Based on these arguments, this thesis positions itself between cyber-optimistic and cyber-pessimistic accounts where social media are seen as either inherently positive (equalising power-relations) or negative (reinforces power-relations) by emphasising both in a cyber-realistic position which recognises that social media now signify spaces in which a dialectic between networks of domination and networks of liberation play-out (Lindgren, 2017). By tying together the material and symbolic dimensions of social life in processes of sociocultural mediation, social media networks enable the production, transmission and reception of meaningful symbolic forms across time-space that inhabit neoliberal logics of power, control and domination, but also social logics in new modalities of resistance viewed in a transnational politics of global justice which itself can open conditions of possibility for a symbolic and cognitive expression of a cosmopolitan citizenship: a citizenship with a cultural politics built on new demands for global rights and responsibilities.

Bibliography

Adbusters (2019). '8th Anniversary of #OccupyWallStreet'. Available at: https://www.adbusters.org/campaigns/8th-anniversary-of-occupywallstreet (Accessed: 12 June, 2020).

Addley, E. (2011) 'Occupy movement: from a local protest to a global howl of protest', The Guardian, 18 October. Available at: https://www.theguardian.com/world/2011/oct/17/occupy-movement-global-protest (Accessed: 26th July, 2020).

Agustín, Ó. G (2017) 'Dialogic Cosmopolitanism and the New Wave of Movements: From Local Rupture to Global Openness'. *Globalizations* 14 (5) 700-713.

Ahmed, S (2013). The Cultural Politics of Emotion. Edinburgh: Edinburgh University Press.

Ainger, K (2013). 'In Spain they are all Indignados nowadays'. The Guardian, 28th April. Available at: https://www.theguardian.com/commentisfree/2013/apr/28/spain-indignados-protests-state-of-mind (Accessed on the 10th September, 2020).

Amit, V and Rapport, N (2012) Community, Cosmopolitanism and the Problem of Human Commonality. London: Pluto Press.

Amnesty International (2016). 'Democratic Republic of Congo: "This is what we die for": Human Rights abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt'. Available at: https://www.amnesty.org/en/documents/afr62/3183/2016/en/ (Accessed: 23 May, 2018).

Anderson, B (1983). Imagined Communities. London: Verso.

Andrejevic, M (2007). *ISpy: Surveillance and Power in the Interactive Era*. Kansas: University Press of Kansas.

Andrejevic, M (2013) 'Estranged Free Labor' in Scholz, T (2013) Digital Labor. Oxon: Routledge.

Apel, K. O (1987). 'The Problem of a Macroethic of Responsibility to the Future in the Crisis of Technological Civilisation: An attempt to come to terms with Hans Jonas' Principle of Responsibility'. Man and World 20: 3-40.

Apel, K, O (1993). 'How To Ground A Universalistic Ethics of Co-Responsibility For The Effects Of Collective Actions And Activities?' Philosophica 52(2) 9-29.

Appadurai, A (1996). *Modernity at Large: Cultural Dimensions of Globalization*. Minnesota: University of Minnesota Press.

Appiah, K. A (2006). *Cosmopolitanism: Ethics in a World of Strangers*. London: Penguin Books. Archibugi, D (1998). 'Principles of Cosmopolitan Democracy' in Archibugi, D, Held, D and

Archibugi, D, Held, D and Köhler, M (1998) Re-imagining Political Community: Studies in Cosmopolitan Democracy. Cambridge: Polity Press.

Baek, K (2018). 'The Geographic Dimension of Citizenship in Digital Activism: Analysis of the Relationships Among Local and Global Citizenship: the Use of Social Networking Sites and Participation in the Occupy Movement'. American Behavioral Scientist 62(8), 1138-1156.

Baker, M (2016). Translating Dissent. Oxon: Routledge.

Balkin, J (2004). 'Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society'. New York University Law Review 79:1.

Barber, B (1998). 'Which Technology and which Democracy?' Available at: http://web.mit.edu/m-i-t/articles/barber.html (Accessed: 2 June, 2015).

Barboza, D (2011). 'Workers Sickened at Apple Supplier in China'. The New York Times, February 22. Available at: https://www.nytimes.com/2011/02/23/technology/23apple.html (Accessed: 26 October, 2018).

Barbrook, R (1994). 'Cyber-Communism: How the Americans are superseding Capitalism in Cyberspace'. Available at: http://www.imaginaryfutures.net/2007/04/17/cyber-communism-how-the-americans-are-superseding-capitalism-in-cyberspace/ (Accessed: 12 November, 2015).

Barbrook, R and Cameron, A (1996). 'The Californian Ideology'. Accessed on the 06/07/15 from www.comune.torino.it/gioart/big/bigguest/riflessioni/californian_engl.pdf.

Bardhan, N and Sobre-Denton, M (2015) 'Interculturality, Cosmopolitanism and the Role of the Imagination: A Perspective for Communicating as Global Citizens' in Rozbicki, M.J (eds) *Perspectives on Interculturality*. New York: Palgrave Macmillan.

Bargh, J.A and McKenna, K.Y.A (2004). 'The Internet and Social Life'. Annual Review of Psychology 55, 573~590 https://doi.org/10.1146/annurev.psych.55.090902.141922

Barlow, J. P (1996). 'A Declaration of the Independence of Cyberspace'. Available at: https://www.eff.org/cyberspace-independence (Accessed: 23 November, 2014).

Barney, D. (2004). The Network Society. Cambridge: Polity Press.

Barnhart, M (2004). 'An Overlapping Consensus: A Critique of Two Approaches'. The Review of Politics 66(2), 257-284 DOI: 10.1017/S0034670500037293.

Barrett, L.F (2006). 'Are Emotions Natural Kinds?'. Perspectives on Psychological Science 1(1), 28-58 https://doi.org/10.1111/j.1745-6916.2006.0003.x.

Bartky, S. L (2002) Sympathy and Solidarity. Lanham: Rowman and Littlefield.

Bartlett, J (2015). The Dark Net. London: Windmill Books.

Basel Action Network (2019). 'Holes in the Circular Economy: WEEE leakage from Europe'. Available at: http://wiki.ban.org/images/f/4/Holes in the Circular Economy-weee Leakage from Europe.pdf (Accessed: 15 May, 2020).

Bauman, Z (2001). *The Individualized Society*. Cambridge: Polity Press.

Bauman, Z (2005). Work, Consumerism and the New Poor. Berkshire: Open University Press

Bauman, Z (2007). Consuming Life. Cambridge: Polity Press.

Bauman, Z and Lyon, D (2013) Liquid Surveillance. Cambridge: Polity Press.

Bayertz, K (1999) Solidarity: Philosophical Studies in Contemporary Culture. Dordrecht: Springer.

Baym, N. (2010). Personal Connections in the Digital Age. Cambridge: Polity Press.

Beck, U (1999). World Risk Society. Cambridge: Polity Press.

Beck, U and Beck-Gernsheim, E (2001). Individualization. London: Sage Publications.

Beck, U (2006). *Living in The World Risk Society.* Retrieved on the 09/08/2014 from www.skidmore.edu/~rscarce/Soc~Th~Env/.../Beck~WorldRisk.pdf.

Beck, U (2006b) Cosmopolitan Vision. Cambridge: Polity Press.

Beck, U (2011). 'Cosmopolitanism as Imagined Communities of Global Risk'. American Behavioural Scientist 55(10) 1346~1361.

Beck, U (2015). 'Emancipatory catastrophism: What does it mean to climate change and risk society?' Current Sociology Vol 63(1) 75-88.

Beer, D (2009) 'Power through the algorithm? Participatory web cultures and the technological unconscious'. *New Media & Society* 2009 11:985

Beer, D (2013). 'Public Geography and the Politics of Circulation'. Dialogues in Human Geography 3(1) https://doi.org/10.1177/2043820613486427.

Beer, D and Burrows, R (2013). 'Popular Culture, Digital Archives and the New Social Life of Data'. Theory, Culture and Society 30(4) 47-71 DOI: 10.1177/0263276413476542.

Bell, D. (1973) The Coming of Post-Industrial Society. USA: Basic Books.

Bell, D (1999). The Coming of Post-industrial Society. USA: Basic Books.

Benford, R. D and Snow, D. A (2000). 'Framing Processes and Social Movements: An Overview and Assessment'. Annual Review of Sociology 26-611-39.

Benhabib, S (2006). Another Cosmopolitanism. Oxford. Oxford University Press.

Benkler, Y (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom.* Yale University Press.

Bennett, L. W and Segerberg, A (2012). 'The Logic of Connective Action: Digital Media and the personalization of contentious politics'. Information, Communications & Society 15(5) 739-768.

Berners-Lee, T, Cailliau, R, Groff, J and Pollermann, B (1992). 'World-wide Web: The Information Universe'. Internet Research 2(1) 52-58.

Berry, D. M (2012). Understanding Digital Humanities. Basingstoke: Palgrave Macmillan.

Berry, D. M and Dieter, M (2015). *Post-Digital Aesthetics: Art, Computation and Design*. Basingstoke: Palgrave Macmillan.

Berry, D. M. (2015) Critical Theory and the Digital. London: Bloomsbury.

Bers, M.U and Chau, C (2006). 'Fostering Civic Engagement by Building a Virtual City'. Journal of Computer-Mediated Communication 11 (2006) 748–770 a 2006 International Communication Association.

Bertot, J. C. (2003). 'The multiple dimensions of the digital divide: More than the technology haves and have nots'. Government Information Quarterly, 20(2), 185–191.

Bijker, W. B, Hughes, T. P and Pinch, T. J (1989). *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology.* Cambridge, Massachusetts: MIT Press.

Bimber, B. (1998). 'The Internet and Political Transformation: Populism, Community, and Accelerated Pluralism'. *Polity*, 31(1), 133~160. doi:10.2307/3235370.

Bingham, N (1996). 'Object-lons: From Technological Determinism towards Geographies of Relations'. Environment and Planning D: Society and Space 14(6) 635-657.

Birkerts, S (1994). 'The Electronic Hive: Refuse It'. Accessed on the 07/10/14 from kk.org/mt-files/writings/embrace_it.pdf.

Blanchard, A and Horan, T (1998). 'Virtual Communities and Social Capital'. *Social Science Computer Review* 1998 16: 293 DOI: 10.1177/089443939801600306.

Boase, J, Horrigan, J.B, Wellman, B and Rainie, L (2006). 'The Strength of Internet Ties'. Accessed on the 14/04/15 from http://www.pewinternet.org/.

Bohman, J (1998). 'The Globalisation of the Public Sphere: Cosmopolitan Publicity and the Problem of Cultural Pluralism'. Philosophy and Social Criticism 24: 2-3 199-216.

Bok, S. (2002) Common Values. Missouri: Missouri University Press.

Bourdieu, P (2000). Acts of Resistance: Against the New Myths of Our Time. Cambridge: Polity Press.

Bowen, J.P and Gianni, T (2014). 'Digitalism: The New Realism?' Accessed on the 21/08/16 from http://dx.doi.org/10.14236/ewic/eva2014.38.

Bowers, S (2013). 'Iceland rises from the ashes of banking collapse'. The Guardian, 6th October. Available at: https://www.theguardian.com/world/2013/oct/06/iceland-financial-recovery-banking-collapse (Accessed on the 10th September, 2020).

Bowker, N. and Tuffin, K. (2002). 'Disability discourses and online identities'. Disability and society 17 (3) 327-344.

Boyd, D (2011). 'Social Network Sites as Networked Publics: Affordances, Dynamics and Implications' in Papacharissi, Z (2011) *Networked Self: Identity, Community and Culture on Social Network Sites.* London: Routledge.

Brock, G (2012) 'Equality, Sufficiency and Global Justice' in G Delanty (2012) Routledge Handbook of Cosmopolitanism Studies. Oxon: Routledge.

Brock, G and Brighouse, H (2005). *The Political Philosophy of Cosmopolitanism*. Cambridge: Cambridge University Press.

Bruns, A and Highfield, T (2016). 'Is Habermas on Twitter?: Social Media and the Public Sphere in Bruns, A, Enli, G, Skogerbo, E, Larsson, A.O and Christensen, C (2016) *The Routledge Companion to Social Media and Politics.* London: Routledge.

Buranyi, S. (2017) 'Rise of the Racist Robots—How AI is Learning All our Worst Impulses', The Guardian, 8th August. Available at: https://www.theguardian.com/inequality/2017/aug/08/rise-of-the-racist-robots-how-ai-is-learning-all-our-worst-impulses (Accessed on the 21/08/20).

Burkitt, I (2014). Emotions and Social Relations. London: Sage Publications.

Cacioppo, J.T, Berntson, G, Larsen, J, Poehlmann, K and Ito T. (2000). 'The Psychophysiology of Emotion' in Lewis, R and Haviland-Jones, J.M (2000) *The Handbook of Emotion*. New York: Guildford Press.

Calhoun, C (1998). 'Community Without Propinquity Revisited: Communications Technology and The Transformation of the Urban Public Sphere'. Sociological Inquiry, Vol. 68, No. 3, August 1998, 373-397.

Calhoun, C (2002). 'Imagining Solidarity: Cosmopolitanism, Constitutional Patriotism and the Public sphere'. Public Culture 14(1): 147-171.

Caney, S (2005). 'Cosmopolitan Justice, Responsibility and Global Climate Change'. Leiden Journal of International Law 18(4) 747-775.

Captain, S (2011). 'The Demographics of Occupy Wall Street'. Fast company, 19 October. Available at: https://www.fastcompany.com/1789018/demographics-occupy-wall-street (Accessed: 10 May, 2019).

Caraus, T and Paris, E. (2016) Re-Grounding Cosmopolitanism. Oxon: Routledge.

Carty, V (2015). Social Movements and New Technology. Boulder: Westview Press.

Castells, M (2000). The Rise Of The Network Society. Oxford: Blackwell Publishing.

Castells, M (2000b). 'Materials for an explanatory theory of the network society'. Retrieved on the 28/5/2015 from faculty.georgetown.edu/irvinem/theory/Castells-NetworkSociety.pdf.

Castells, M (2001). *The Internet Galaxy*. Oxford: Oxford University Press.

Castells, M (2010). Communication Power. Oxford: Oxford University Press.

Castells, M (2010b) The Power of Identity. Oxford: Blackwell Publishing.

Castells, M (2012). *Networks Of Outrage and Hope: Social Movements In The Internet Age.* Cambridge: Polity Press.

Castells, M (2014). 'The Impact of the Internet on Society: A Global Perspective'. Available at: http://aasa.ut.ee/augsburg/literature/CASTELLS_BBVA-OpenMind-book-Change-19-key-essays-on-how-internet-is-changing-our-lives-Technology-Internet-Innovation.pdf (Accessed: 21 May, 2015).

Castoriadis, C (1987). The Imaginary Institution of Society. Cambridge: Polity Press.

Ceyhan, A (2012) 'Surveillance as Biopower' in Ball, K and Haggerty, K (2012) *Routledge Handbook of Surveillance Studies*. Oxon: Routledge.

Chambliss, E (2011). 'Occupy Twitter: Data Reveal Passion'. Available at: http://blog.attentionusa.com/2011/10/occupy-twitter-datareveals-passion (Accessed: 23 May, 2019).

Cheetham, D (2007). 'The Global Ethic: Criticisms and the Possibilities of Post-secular Thinking'. Islam and Christian—Muslim Relations 18(1) 19-32.

Chen, W (2013). 'Internet Use, Online Communication and Ties in Americans' Networks. Social Science Computer Review' 2013 31: 404 originally published online 15 March 2013.

Chen, W and Choi, A.S.K (2011). 'Internet and social support among Chinese migrants in Singapore'. New Media & Society 13(7) 1067–1084

China Labor Watch (2017). 'Violations of Apple Supplier Code of Conduct found in Pegatron Factory in Shanghai, China'. Available at: http://www.chinalaborwatch.org/newscast/632 (Accessed: 21 November, 2018).

Chomsky, N. (2012) Occupy. New York: Zuccotti Park Press.

Cisco (2014). 'The Internet of Things'. Available at: https://www.cisco.com/c/dam/en us/solutions/trends/iot/docs/iot-aag.pdf (Accessed: 12 July, 2020).

Cisco Annual Internet Report (2018-2023). Available at: https://www.cisco.com/c/en/us/solutions/collateral/executive-perspectives/annual-internet-report/white-paper-c11-741490.html (Accessed on 24 June, 2020).

Clarke, J, Coll, K, Dagnino, E and Neveu, C (2014). Disputing Citizenship. Bristol: Policy Press.

Clough, P. T (2007). The Affective Turn: Theorizing the social. USA: Dune University Press.

Cohen, A. P (1985). The Symbolic Construction of Community. London: Routledge.

Cohen, R and Rai, S. M (2000). Global Social Movements. London: Athlone Press.

Comer, D. E (2007). The Internet Book. India: Pearson.

Commaerts, B (2007). 'Jamming the Political: Beyond Counter-Hegemonic Practices'. Journal of Cultural and Media Studies 21(1), 71-90, DOI: 10.1080/10304310601103992

Costa, R. D. (2006) 'On a New Concept of Community: Social Networks, Personal Communities and Collective Intelligence'. Translation from Interface - Comunicação, Saúde, Educação, Botucatu, v.9, n.17, p.235-248, Mar./Aug. 2005.

Costanza-Chock, S (2012). 'Mic Check! Media Cultures and the Occupy Movement'. Social Movement Studies 11(3) 375-385.

Cottle, S. (2009) 'Global Crises in the News: Staging New Wars, Disasters, and Climate Change', International Journal of Communication 3 494-516. doi:1932-8036/20090494

Couldry, N. (2020) Media: Why it Matters. Cambridge: Polity Press.

Coyne, R (1999). Technoromanticism: digital narrative, holism and the romance of the real. Cambridge, Massachusetts: MIT Press.

Cramer, F (2015). 'What is Post-Digital?' in Berry, D and Dieter, M (2015) *Post-Digital Aesthetics: Art, Computation and Design.* Basingstoke: Palgrave MacMillan.

Crang, Crang and May (1999). Virtual Geographies: bodies, space and relations. Oxon: Routledge.

Curran, J, Fenton, N and Freedman, D (2012). Misunderstanding The Internet. Routledge: London.

Dagnino, E. (2008) 'Civic driven change and political projects', in A. Fowler and K. Bierkhart (2008) *Civic driven change: Citizen's imagination in action*, The Hague: Institute of Social Studies, Holland.

Dahrendorf, R (1959). Class and Class Conflict in Industrial Society. California: Stanford University Press.

Dallmayr, F (1996). Beyond Orientalism: Essays on Cross-Cultural Encounter. Albany: SUNY Press.

Datareportal (2020). Digital 2020: July Global Statshot. Available at: https://datareportal.com/reports/digital-2020-july-global-statshot (Accessed: 5 July 2020).

Davidson J. (2003). *Phobic Geographies*. Ashgate: Aldershot.

De Miranda, A (2009). 'Technological Determinism and Ideology: Questioning the Information Society and the Digital Divide'. Available at: https://www.researchgate.net/publication/252087059 Technological Determinism and Ideology Questioning the 'Information Society' and the 'Digital Divide' (Accessed: 29, May 2018).

Dean, J (1996) Solidarity of Strangers. Berkeley: University of California Press.

Delanty, G (1999). Social Theory In A Changing World: Conceptions of Modernity. Cambridge: Polity Press.

Delanty, G (2006) 'The Cosmopolitan Imagination: critical cosmopolitanism and social theory' The British Journal of Sociology 57(1) 25-47.

Delanty, G (2007). 'Theorising citizenship in a global age' in Hudson, W and Slaughter, S (2007) Globalisation and Citizenship: The Transnational Challenge. London: Routledge.

Delanty, G (2009) The Cosmopolitan Imagination: The Renewal of Critical Social Theory. Cambridge: Cambridge University Press.

Delanty, G (2012). 'Introduction: the emerging field of cosmopolitanism studies' in Delanty, G (2012) Routledge Handbook of Cosmopolitanism Studies. Oxon: Routledge.

Delanty, G (2012b) 'The idea of critical cosmopolitanism' in Delanty, G (2012) Routledge Handbook of Cosmopolitanism Studies. Oxon: Routledge.

Delanty, G (2014) 'The Prospects of Cosmopolitanism and the Possibility of Global Justice'. Journal of Sociology 50(2) 213-228.

Delanty, G (2018). Community. Oxon: Routledge.

Deleuze, G (1992). 'Postscript on the Societies of Control'. October Vol 53, 3-7 https://www.jstor.org/stable/778828.

Deleuze, G and Guattari (1987). *A thousand Plateaus: Capitalism and Schizophrenia*. Minnesota: Minnesota University Press.

Della Porta, D and Tarrow, S (2005). *Transnational Protest and Global Activism*. Oxford: Rowman and Littlefield Publishers.

Della Porta, D, Andretta, M, Mosco, L and Reiter, H. (2006). *Globalization From Below: Transnational Activists and Protest Networks.* University of Minnesota Press: London.

Della, D and Tarrow, S (2005). *Transnational Protest & Global Activism*. Oxford: Rowman & Littlefield Publishers.

Dery, M (1994). Flame Wars: The Discourse of Cyberculture. Durham: Duke University Press.

Dewsbury, J.D, Harrison, P, Rose, M and Wylie, J (2020). 'Enacting Geographies'. Geoforum 33(4), 437-440 DOI: 10.1016/S0016-7185(02)00029-5.

Diamond, L and Plattner, M (2010). *Liberation Technology: Social Media and the Struggle for Democracy.* John Hopkins University Press: Baltimore.

Diani, M (2000). 'Social Movement Networks: Virtual and Real'. Information, Communication and Society 3:3 386-401.

Dougherty, J (2019). 'Internet Growth + Usage Stats 2019: Time Online, Devices and Users'. Available at https://www.clickz.com/internet-growth-usage-stats-2019-time-online-devices-users/235102/ (Accessed: 10 June, 2020).

Dower, N (2014). 'Global Ethics: dimensions and prospects'. Journal of Global Ethics 10(1) 8-15.

Dreyfus, H. L (2001). On The Internet. London: Routledge.

Dreyfuss, E (2017). 'Social Media made the World Care about Standing Rock—and Helped to Forget'. Wired. Available at: https://www.wired.com/2017/01/social-media-made-world-care-standing-rock-helped-forget/ (Accessed: 13 July, 2020).

Drucker, P. (1993). Post-Capitalist Society. New York: Harper Business.

Drydyk, J (2014). 'Foundational Issues: how must global ethics be global?'. Journal of Global Ethics 10(1) 16-25.

Duff, A.S (1995). 'The Information Society as Paradigm: A Bibliometric Inquiry'. Journal of Information Science 21(5), 390-395 DOI: 10.1177/016555159502100506.

Durkheim, E (2013). The Division of Labour in Society. London: Palgrave MacMillan.

Dyer-Witheford, N. (2015) Cyber-Proletariat. London: Pluto Press.

Eaton, T (2013). 'Internet Activism and the Egyptian Uprisings: Transforming Online Dissent into the Offline World'. Westminster Papers in Communication and Culture 9(2), 3-24.

Edwards, G (2014). Social Movements and Protest. Cambridge: Cambridge University Press.

Ekman, P and Cordaro, D (2011) 'What is Meant by Calling Emotions Basic'. Emotion Review 3(4) 364-370.

Elliott, A and Urry, J (2010) Mobile Lives. Oxon: Routledge.

Elliott, A (2019) The Culture of AI: Everyday Life and the Digital Revolution. London: Routledge.

Ellison, N.B (2013). 'Future Identities: Changing Identities in the UK – The Next 10 Years'. Accessed on the 21/02/15 from https://www.gov.uk/...data/.../13-523-future-identities-changing-identities-report.pdf.

Ellison, N.B, Steinfield, C and Lampe, C (2007). 'The Benefits of Facebook "Friends:" Social Capital and College Students' Use of Online Social Network Sites'. Journal of Computer-Mediated Communication 12(4), 1143-1168.

Ellison, N.B, Vitak, J, Gray, R and Lampe, C (2014). 'Cultivating Social Resources on Social Network Sites: Facebook Relationship Maintenance Behaviors and Their Role in Social Capital Processes'. Journal of Computer-Mediated Communication 19 (2014) 855–870.

Ellul, J (1964). The Technological Society. New York: Vintage Books.

Elwell, J.S (2014). 'The Transmediated Self: Life Between The Digital and The Analog'. Convergence: The International Journal of Research into New Media Technologies 2014, Vol. 20(2) 233–249.

EU Science Hub—European Commission (2018). 'Information Society'. Available at: https://ec.europa.eu/jrc/en/science-area/information-society (Accessed: 1 July, 2020).

Eyerman, R and Jamison, A. (1991) *Social Movements: A Cognitive Approach*. Cambridge: Polity Press

Fagotto, M (2014). 'Casualties of ore: tin mining is devastating the Indonesian island of Bangka'. Post Magazine, 13th April. Available at: https://www.scmp.com/magazines/post-magazine/article/1473532/casualties-ore-tin-mining-devastating-indonesian-island (Accessed: 12 October, 2016).

Fairlie, R. W (2004). 'Race and the Digital Divide'. The Journal of Economic Analysis & Policy 3(1) 1-40.

Faist, T (2000). 'Social Citizenship in the European Union: Residual Post-National and Nested Membership?' Institute fur Interkulturelle and Internationale Studien.

Falk, R (1994). 'The Making of Global Citizenship in Steenbergen, B.V (1994) The Condition of Citizenship. London: Sage Publications.

Fall, K. R and Stevens, W. R (2012). *TCP/IP Illustrated, Volume 1: The Protocols 2nd Edition*. USA: Pearson.

Faraone, C. (2011). 'Inside the Occupy Boston media struggle'. Available at: http://thephoenix.com/ boston/news/128992-inside-the-occupy-boston-media-struggle/eurl.axd/7894824e8e3a1940b6ea6b6ee1c23a 8a/ (accessed 20 May 2018).

Featherstone, D (2012). Solidarity: Hidden Histories and Geographies of Internationalism. Zed Books: London.

Feenberg, A (1999). Questioning Technology. London: Routledge.

Feenberg, A (2002). *Transforming Technology: A Critical Theory Revisited*. Oxford: Oxford University Press.

Feenberg, A (2019). 'The Internet as network, world, co-construction and mode of governance'. The Information Society 35(4) 229-243.

Fenton, N (2012). 'The Internet and Radical Politics' in Curran, J, Fenton, N and Freedman, D (2012) *Misunderstanding the Internet*. Oxon: Routledge.

Fenton, N (2016). Digital Political Radical. Cambridge: Polity Press.

Fernback, J (2007). Beyond The Diluted Community Concept: A Symbol Interactionist Perspective On Online Social Relations. New Media & Society Copyright © 2007 Sage Publications London, Thousand Oaks, CA and New Delhi Vol 9(1):49–69.

Fine, R (2007). Cosmopolitanism. London: Routledge.

Fine, R (2019). 'The idea of cosmopolitan solidarity' in Delanty, G (2019) 2nd Edition *Routledge International Handbook of Cosmopolitanism Studies*. Oxon: Routledge.

Fleming, N (2012). 'Quantify Thyself: Tracking your life from food to mood'. NewScientist, 1 August, 2012. Available at: https://www.newscientist.com/article/mg21528761-800-guantify-thyself-tracking-your-life-from-food-to-mood/ (Accessed: 23 November, 2014).

Food and Water Watch (2020). 'Our Mission, Vision and Values'. Available at: https://www.foodandwaterwatch.org/about (Accessed: 12 June, 2020).

Foucault, M (1979). Discipline and Punish: The Birth of the Prison. London: Allen Lane.

Free the Slaves (2011). 'The Congo Report: Slavery in conflict minerals'. Available at: https://www.freetheslaves.net/wp-content/uploads/2015/03/The-Congo-Report-English.pdf (Accessed: 12 October, 2016).

Freeman, J (1970). The Tyranny of Structurelessnes. London: Merlin Press.

Fridays For Future (2020). 'Who we are'. Available at: https://fridaysforfuture.org/what-we-do/who-we-are/ (Accessed: 25 June, 2020).

Friedman, J (2002). 'Modernity and other traditions' in Knauft, B.M (2002) *Critically Modern*. Indiana: Indiana University Press.

Frost, M. (2009) *Global Ethics*. London: Routledge.

Fuchs, C (2013). 'Capitalism or Information Society? The fundamental question concerning the present structure of society'. European Journal of Social Theory 16(4) 413-434 doi: 10.1177/1368431012461432 est.sagepub.com.

Fuchs, C (2014). OccupyMedia! Zero Books: Alresford.

Fuchs, C (2014b). Social Media: A Critical Introduction. London: Sage Publications.

Fuchs, C. (2015). 'Power in the Age of Social Media'. Heathwood Journal of Critical Theory 1 (1): 1-29.

Fuchs, C (2016). 'Henryk Grossmann 2.0: A Critique of Paul Mason's Book "PostCapitalism: A Guide to Our Future". TripleC 14(1): 232-243.

Galston, W (2000). *Does the Internet Strengthen Community?* National Civic Review, vol 89, no. 3, Fall 2000.

Gane, N (2004). The Future of Social Theory. London: Continuum.

Gardiner, M. E (2000). Critiques of Everyday Life. Routledge: London.

Garnham, N (2000). 'Information Society as Theory or Ideology: a Critical perspective on Technology, Education and Employment in the Information Age'. Information, Communication & Society 3(2), 139-152.

Gates, B (1996). 'Content is King'. Available at: eb.archive.org/web/20010126005200/http://www.microsoft.com/billgates/columns/199 Gessay/essay960103.asp (accessed: 12 October, 2014).

Gauntlett, D. (2011) Making is Connecting. Cambridge: Polity Press.

Gerbaudo, P (2012). Tweets and Streets: Social Media and Contemporary Activism. London: Pluto Press.

Gerbaudo, P and Treré, E (2015). 'In Search of the 'we' of social media activism: introduction to the special issue on social media and protest identities'. Information, Communication & Society 18:8, 865-871.

Gerlitz, C and Helmond, A (2013). 'The Like Economy: Social buttons and the data-intensive web'. New Media & Society 15(8) 1348-1365 https://doi.org/10.1177/1461444812472322

Giddens, A (1990). The Consequences of Modernity. Cambridge: Polity Press.

Giddens, A (1991). Modernity and Self-Identity: Self and Society in the Late Modern Age. Cambridge: Polity Press.

Giddens, A (2000). Runaway World: How Globalisation is Shaping Our Lives. London: Profile Books.

Gillespie, T, Boczkowski, P and Foot, K (2014). *Media Technologies: Essays on Communication, Materiality and Society.* Massachusetts: MIT Press.

Gillespie, T (2010). 'The Politics of Platforms'. New Media & Society 12(3), 347-364 https://doi.org/10.1177/1461444809342738.

Gladwell, M (2010). 'Small Chance: why the revolution will not be tweeted' The New Yorker, 4 October, 2010. Available at: https://www.newyorker.com/magazine/2010/10/04/small-change-malcolm-gladwell (Accessed: 12 January, 2013).

Gleason, B (2013). '#Occupy Wall Street: Exploring Informal Learning About a Social Movement on Twitter'. American Behavioural Scientist 57(7) 966-982.

Global Frackdown (2013). 'Global Frackdown! An International Day to Stop Fracking'. Available at: http://www.globalfrackdown.org/org-endorsement-form/ (Accessed: 5 June, 2020).

Goffman, E. (1990) The Presentation of Self in Everyday Life. London: Penguin Books.

Goldman, E (2010). 'Kozinski and Goldfoot on Cyberspace Exceptionalism and Internet Regulation'. Available at: https://blog.ericgoldman.org/archives/2010/02/kozinski and go.htm (Accessed: May 2015).

Goodwin, J Jasper, J.M and Polletta, F (2001). *Passionate Politics: Emotions and Social Movements*. Chicago: University of Chicago. Gould, C. (2007) 'Transnational Solidarities'. Journal of Social Philosophy 38: 148-164.

Graham, M and Dutton, W. H (2014). Society and the Internet: How Networks of Information and Communication are Changing our Lives. Oxford: Oxford University Press.

Gralla, P (2007). How the Internet Works. Indianapolis: Que Publishing.

Granovetter, M. S (1973) 'The Strength of Weak Ties'. American Journal of Sociology 78(6) 1360-1380.

Greenberg, J (2015). 'Donald Trump says crime statistics show blacks kill 81 percent of white homicide victims' PolitiFact, 23 November. Available at: https://www.politifact.com/factchecks/2015/nov/23/donald-trump/trump-tweet-blacks-white-homicide-victims/ (Accessed: 12 August, 2020).

Griziotti, G. (2019) Neurocapitalism. Colchester: Minor Compositions.

Habermas, J (1984). *The Theory of Communicative Action: Reason and the Rationalisation of Society Volume 1.* Boston: Beacon Press.

Habermas, J (1985). The Theory of Communicative Action Vol 2: Lifeworld & System: A Critique of Functionalist Reason. Boston: Beacon Press.

Habermas, J (1990). Moral Consciousness and Communicative Action. Cambridge: Polity Press.

Habermas, J (1998). On the Pragmatics of Communication. Cambridge: Polity Press.

Habermas, J (1999). Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy. Cambridge: MIT Press.

Habermas, J. (2006). 'Political Communication in Media Society: Does Democracy Still Enjoy an Epistemic Dimension?' The Impact of Normative Theory on Empirical Research. *Communication Theory* 16(4) 411-426.

Hagerty, B.M.K, Lynch-Sauer, J, Patusky, K, Bouwsema, M and Collier, P (1992). 'Sense of Belonging: A Vital mental health concept. Archives of Psychiatric Nursing 6, 172-177.

Hamburger, Y.A and McKenna, K.Y.A (2006). 'The Contact Hypothesis Reconsidered: Interacting via the Internet'. Journal of Computer-Mediated Communication 11 (2006) 825–843.

Hamelink, C.J (1997). 'New Information and Communication Technologies, Social Development and Cultural Change'. Accessed on the 02/02/15 from http://hdl.handle.net/11245/2.35518.

Hands, J (2011). @ is for activism: Dissent, Resistance and Rebellion in a Digital Culture. London: Pluto Press.

Hannerz, U (2005) 'Two Faces of Cosmopolitanism: Culture and Politics' Statsvetenskaplig tidskrift.

Hannerz, U (1990). 'Cosmopolitans and Locals in World Culture'. Theory, Culture & Society 7(2-3), 237-251 https://doi.org/10.1177/026327690007002014.

Hao, X. and Chow, S.K. (2004) 'Factors Affecting Internet Development: An Asian Survey', First Monday 9 (2). Available at: http://firstmonday. org/issues/issue9_2/hao/index.html (Accessed: 12 October, 2014).

Hara, N and Huang, B-Y (2013). 'Online Social Movements'. Annual Review of Information Science and Technology 45(1) 489-522.

Haraway, D. J. (2016). Manifestly Haraway. Minnesota: University of Minnesota Press.

Hardt, M (1993). Gilles Deleuze: An Apprenticeship in Philosophy. Minneapolis: University of Minnesota Press.

Harvey, D. (1990) *The Condition of Postmodernity*. Oxford: Blackwell Publishers.

Harvey, D (2003). 'The Fetish of Technology: Causes and Consequences'. Macalester International 13(7). Available at: http://digitalcommons.macalester.edu/macintl/vol13/iss1/7

Harvey, D. (2005) A Brief History of Neoliberalism. Oxford: Oxford University Press.

Harvey, D (2009). Cosmopolitanism and the Geographies of Freedom. New York: Columbia University Press.

Harvey, F (2012). 'Protestors attempt to set up coalition against fracking'. The Guardian, 16 March. Available at: https://www.theguardian.com/environment/2012/mar/16/protesters-coalition-against-fracking (Accessed: 25 June, 2018).

Haunss, S (2013). 'Promise and Practice in Studies of Social Media and Movements' in Dencik, L and Leistert, O (2013) *Critical Perspectives on Social Media and Protest.* London: Rowman & Littlefield.

Haunss, S (2015). 'Promise and Practice in Studies of Social Media and Movements' in *Critical Perspectives on Social Media: Between Control and Emancipation* edited by Dencik, L and Leistert, O (2015). Rowman and Littlefield: London.

Hawkins, E.T. (2005) 'Creating a National Strategy for Internet Development in Chile', Telecommunications Policy 29 (5/6): 351–65.

Hayden, P (2013). 'Albert Camus and Rebellious Cosmopolitanism in a Divided World'. Journal of International Political Theory, 9(2) 2013, 194–219 DOI: 10.3366/jipt.2013.0055.

Hayles, N.K (2005). *My Mother Was A Computer: Digital Subjects and Literary Texts.* University of Chicago Press: Chicago.

Heacock, M, Kelly, B.M, Asante, K.A, Birnbaum, L. S, Bergman, A.L (2016). 'E-Waste and Harm to Vulnerable Populations: A Growing Global Problem'. Environmental Health Perspectives 124(5) https://doi.org/10.1289/ehp.1509699.

Heidegger, M (1977). *The Question Concerning Technology and other essays*. New York: Garland Publishing Inc.

Heim, M (1993). The Metaphysics of Virtual Reality. Oxford University Press: Oxford.

Held, D. (1995). *Democracy and the Global Order*. Cambridge: Polity Press.

Held, D (1998). 'Democracy and Globalization' in Archibugi, D, Held, D and Köhler, M (1998) *Re-Imagining Political Community*. Cambridge: Polity Press.

Held, D (2010) Cosmopolitanism: Ideals and Realities. Cambridge: Polity Press.

Held, D, McGrew, A, Goldblatt, D and Perraton, J (2000). *Global Transformations: Politics, Economics and Culture.* Cambridge: Polity Press.

Held, D and McGrew, A (2007). *Globalization/Anti-Globalization: Beyond the Great Divide.* Cambridge: Polity Press.

Hellsten, S. K (2015). 'Ethics: universal or global? The trends in studies of ethics in the context of globalization'. Journal of Global Ethics 11(1) 80-89.

Hemmings, C. (2005). 'Invoking Affect: Cultural theory and the ontological turn'. Cultural Studies 19(5) 548-567.

Hensby A and O'Byrne, D.J (2012). 'Global Civil Society and the Cosmopolitan Ideal' in Delanty, G (2012) *Routledge Handbook of Cosmopolitanism Studies*. London: Routledge.

Herbrechter, S (2013). Posthumanism: A Critical Analysis. London: Bloomsbury Publishing.

Heyd, D (2015). 'Solidarity: A Local, Partial and Reflective Emotion'. Diametros 43, 55–64 doi: 10.13153/diam.43.2015.714 55.

Hilbert, M (2012). 'How Much Information is There in the "Information Society"?' Accessed on the 16/08/15 from http://www.significancemagazine.org http://onlinelibrary.wiley.com/doi/10.1111/j.1740-9713.2012.00584.x/abstract

Hilbert, M and Lopez, P (2011). 'The World's Technological Capacity to Store, Communicate, and Compute Information'. Science 332, 60 (2011); DOI: 10.1126/science.1200970.

Hintz, A, Dencik, L and Wahl-Jorgenson, K. (2019) *Digital Citizenship in a Datafied Society*. Cambridge: Polity Press.

HM Government (2018). 'The experiences of individuals in the gig economy'. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/679987/171107 The experiences of those in the gig economy.pdf (Accessed: 25 July, 2020).

Hodal, K (2012). 'Death Metal: Tin mining in Indonesia'. The Guardian, 23 November. Available at: https://www.theguardian.com/environment/2012/nov/23/tin-mining-indonesia-bangka (Accessed: 12 August, 2017).

Holland, D, Fox, G and Daro, V (2008). 'Social Movements and Collective Identity: A Decentred Dialogic View'. Anthropological Quarterly 81(1) 95-126.

Holton, R. J (2009) Cosmopolitanism: New Thinking and New Directions. London: Palgrave Macmillan.

Hopke, J (2015). 'Hashtagging Politics: Transnational Anti-Fracking Movement Twitter Practices'. Social Media + Society 2015: 1-12.

Hopke, J (2016). 'Translocal anti-fracking activism: an exploration of network structure and tie content'. Environmental Communication 10(3) 380-394.

Hopke, J (2016b). 'Occupy is not a place: A cross-case comparison of the 15M and Occupy movements'. Convergence: The International Journal of Research into New Media Technologies 22(6) 596-615.

Hopke, J. E and Simis, M (2017). 'Discourse over a contested technology on Twitter: A case study of hydraulic fracturing'. Public Understanding of Science 26(1) 105~120 https://doi.org/10.1177/0963662515607725.

Howcroft, D and Fitzgerald (1996). 'From Utopia to Dystopia: The Twin Faces of the Internet'. Accessed on the 04/04/15 from iteseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.472.5291&rep=rep1...

Hudson, W and Slaughter, S (2007) Globalisation and Citizenship: The Transnational Challenge. London: Routledge.

Hull, G. A, Stornaiuolo, A and Sahni, U (2010) 'Cultural Citizenship and Cosmopolitan Practice: Global Youth Communicate Online'. English Education 42(4) 331-367.

Hunt, S.A and Benford, R.D (2004) 'Collective Identity, Solidarity and Commitment'. Retrieved on the 12/6/2014 from wiki.zirve.edu.tr/sandbox/groups/.../Hunt%20and%20Benford.pdf.

Hutchings, K (2018). Global Ethics: an introduction. Cambridge: Polity Press.

IDC (2018). 'The Digitization of the World: From Edge to Core'. Available at: https://www.seagate.com/files/www-content/our-story/trends/files/dataage-idc-report-final.pdf (Accessed: 18 June, 2020).

Innerarity, D and Errasti, A (2019). 'Cosmopolitan Public Space(s)' in Delanty, G (2019) 2nd Edition *Routledge International Handbook of Cosmopolitanism Studies*. Oxon: Routledge.

International Telecommunications Union (ITU) (2019). 'Measuring Digital Development: Facts and Figures'. Available at: https://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx (Accessed on the 14th May, 2020).

Internet World Statistics (2020). 'Internet Growth Statistics'. Available at: https://www.internetworldstats.com/emarketing.htm (Accessed: 14 October, 2014).

Internet World Statistics (2020b). 'World Internet Usage and World Population Statistics'. Available at: https://www.internetworldstats.com/stats.htm (Accessed: 10 May, 2020).

Isaacson, W (2014). *The Innovators*. London: Simon and Schuster. Isin, E. F and Nielsen, G.M (2008). *Acts of Citizenship*. London: Zedbooks.

Izard, C. E (2011). 'Forms and Functions of Emotions: Matters of Emotion-Cognition Interactions'. Emotion Review 3(4) 371-378.

Jameson, F. (1991) Postmodernism or The Cultural Logic of Late Capitalism. London: Verso.

Jamieson, D. (2010). 'Climate change, responsibility, and justice'. Science and Engineering Ethics 16, 431–445. doi:10.1007/s11948-009-9174-x

Johnston, H, Larana, E and Gusfield, J. R (1994). New Social Movements: From Ideology to Identity. Philadelphia: Temple University Press.

Johnston, P (2001). 'The Emergence of Transnational Citizenship among Mexican Immigrants in California' in Aleinikoff, T.A and Klusmeyer, D (2000) *Citizenship Today: Global Perspectives and Practices*. Washington DC: Carnegie Endowment for International Peace.

Jonas, H (1984). The Imperative of Responsibility: In Search for an Ethics for the Technological Age. Chicago: University of Chicago.

Jones, H, Jackson, E and Taylor, A. R (2014). Stories of Cosmopolitan Belonging: Emotion and Location. London: Routledge.

Jones, Q and Rafaeli, S (2000). 'Time to Split, Virtually: Discourse architectures and community building create vibrant publics'. Electronic Markets 10(4), 214-223.

Jordaan, E (2009). 'Dialogic Cosmopolitanism and Global Justice'. International Studies Review 11 736-748.

Juris, J and Khasnabish, A (2013). *Insurgent Encounters: Transnational Activism, Ethnography and the Political*. London: Duke University Press.

Juris, S. J (2012). 'Reflections on Occupy Everywhere: Social media, public space and emerging logics of aggregation'. American Ethnologist 39(2) 259-279.

Kahane, D (2002). 'Symposium: Diversity & Civic Solidarity: Diversity, Solidarity and Civic Friendship'. The Journal of Political Philosophy 7(3) 267-286.

Kaldor, M (2003). The Idea of Global Civil Society'. International Affairs 79(3) 583-593 https://doi.org/10.1111/1468-2346.00324

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. Business Horizons, 53(1), 59–68.

Karagiannis, N (2007) 'Multiple Solidarities: Autonomy and Resistance'. In *Varieties of World Making: Beyond Globalisation* edited by Karagiannis, N and Wagner, P (2007). Liverpool: Liverpool University Press.

Kasperkevic, J. (2015) 'Occupy Wall Street: four years later', The Guardian, 16th September. Available at: https://www.theguardian.com/world/ng-interactive/2015/sep/16/occupy-wall-street-four-years-later-timeline (Accessed on 26th July, 2020).

Katz, J (1999). On How Emotions Work. Chicago: University of Chicago Press.

Kavada, A (2015). 'Creating the collective: social media, the Occupy Movement and its constitution as a collective actor'. Information, Communication & Society 18(8) 872-886.

Keen, A. (2012) Digital Vertigo. New York: St Martin's Griffin.

Keen, A (2015) The Internet is Not the Answer. London: Atlantic Books.

Kelly, A (2016). 'Children as young as seven mining cobalt used in smartphones, says Amnesty'. The Guardian, 19 January. Available at: https://www.theguardian.com/global-development/2016/jan/19/children-as-young-as-seven-mining-cobalt-for-use-in-smartphones-says-amnesty (Accessed: 20 October, 2016).

Kelly, K (1994). 'The Electronic Hive: Embrace It'. Accessed on the 07/10/14 from kk.org/writings/the-electronic-hive-embrace-it.php.

Kendal, L (1998). 'Meaning and Identity in Cyberspace: The Performance of Gender, Class and Race Online'. Symbolic Interaction 21(2) 129-153.

Khagram, S, Riker, J. V and Sikkink, K (2002). 'From Santiago to Seattle: Transnational Advocacy Groups Restructuring World Politics' in *Social Movements: A Reader* 'edited by Ruggiero, V and Montagna, N (2008). London: Routledge.

Khagram, S, Riker, J.V and Sikkink, K (2008). 'From Santiago to Seattle: Transnational Advocacy Groups Restructuring World Politics' in Ruggiero, V and Montagna, M (2008) *Social Movements: a Reader.* Oxon: Routledge.

Khazraee, E and Novak, A. N (2018). 'Digitally Mediated Protest: Social Media Affordances for Collective Identity Construction'. Social Media + Society 2018: 1-14.

Khomami, N (2017). '#MeToo: How a hashtag became a rallying cry against sexual harassment'. The Guardian, 20 October. Available at: https://www.theguardian.com/world/2017/oct/20/women-worldwide-use-hashtag-metoo-against-sexual-harassment (Accessed: 10 July, 2020).

Kitchen, R (2014). The Data Revolution: Big Data, Open Data, Data Infrastructures & their Consequences. London: Sage Publications.

Kivisto, P and Faist, T (2007). *Citizenship: Discourse, Theory and Transnational Prospects*. Oxford: Blackwell Publishing.

Klein, H.K and Kleinman, D. L (2003). 'The Social Construction of Technology: Structural Considerations'. Science, Technology & Human Values 27(1) 28-52.

Klein, N (2010) No Logo. London: Fourth Estate.

Knorr-Cetina, K (2003). 'From Pipes to Scopes: The Flow Architecture of Financial Markets'. Distinktion, (7) 7-23.

Kögler, H-H (2005) 'Constructing a Cosmopolitan Public Sphere: Hermeneutic Capabilities and Universal Values'. European Journal of Social Theory 2005 8:297.

Köhler, M (1997). 'Towards a Cosmopolitan Public Sphere'. Peace Review: a Journal of Social Justice 9(3) 385-391

Köhler, M (1998) 'From the National to the Cosmopolitan Public Sphere' in Archibugi, D, Held, D and Köhler, M (1998) *Re-imagining Political Community: Studies in Cosmopolitan Democracy*. Cambridge: Polity Press.

Komito, L (2010) 'The Experience of Virtual Communities: Cosmopolitan or Voyeur?' *In The Claims of Cosmopolitanism* P, O'Donovan, L, Rascaroli and P, Lang 2010 135-149

Kranzberg, M (1995). 'Technology and History: Kranzberg's laws'. Bull. Sci. Tech. Soc Vol 15(1) 5-13.

Krause, A and Bucy, E.P (2018). 'Interpreting images of Fracking: How Visual Frames and Standing Attitudes Shape Perceptions of Environmental Risk and Economic Benefit'. Environmental Communication 12(3) 322-343 DOI 10.1080/17524032.2017.1412996

Kraut, R, Patterson, M, Lundmark, V, Kiesler, S, Mukophadhyay, T and Scherlis, W (1998). 'Internet Paradox: A Social Technology that reduces social involvement and Psychological wellbeing?'. American Psychologist 53(9), 1017-1031.

Kraut, R, Kiesler, S, Boneva, B, Cummings, J.N, Helgeson, V and Crawford, A.M (2002). 'Internet Paradox Revisited'. Journal of Social Issues 58(1) 49-74.

Krishnamurthy, M (2013). 'Political Solidarity, Justice and Public Health'. Public Health Ethics 6(2) 129-141.

Kumar, K. (1995) 'From Post-Industrial to Post-Modern Society' in Webster, F (2004) *The Information Society Reader*. London: Routledge, pp 116-117.

Küng, H (1993). 'Declaration Toward a Global Ethic'. Parliament of the World's Religions.

Küng, H (2010). 'The age of globalization requires a global ethics'. Theology Vol CXIII 875.

Kuntsman, A (2012). *Digital Cultures and the Politics of Emotion*. Basingstoke: Palgrave MacMillan.

Kurasawa, F (2004) 'A Cosmopolitanism from Below: Alternative Globalization and the Creation of a Solidarity without Bounds'. *Arch. Europ. Social.* XLV (2): 233-55.

Kurasawa, F (2007). *The Work of Global Justice: Human Rights as Practices.* Cambridge: Cambridge University Press.

Kurasawa, F (2009). 'Global Justice as Ethico-Political Labor and the Enactment of Critical Cosmopolitanism'. Rethinking Marxism 21(1) 85-102

Kurasawa, F (2011). 'Critical Cosmopolitanism' in *Ashgate Research Companion to Cosmopolitanism* edited by Rovisco, M and Nowicka, M (2011). London: Routledge

Laclau, E and Mouffe, S (1985). Hegemony and The Socialist Strategy Towards a Radical Democratic Politics. London: Verso.

Langlois, G. et al. (2009) 'Networked Publics: The Double Articulation of Code and Politics on Facebook'. Canadian Journal of Communication, 34 (3). Retrieved from http://www.cjconline.ca/index.php/journal/article/viewArticle/2114

Lanier, J (2018). Ten Arguments For Deleting Your Social Media Accounts Right Now. London: Vintage.

Lash, S (2007) 'Power After Hegemony: Cultural Studies in Mutation' Theory, Culture & Society 24(3): 55–78

Laville, S, Taylor, M and Hurst, D. (2019). 'It's our time to rise up': youth climate strikes held in 100 countries', The Guardian, 15th March. Available at: https://www.theguardian.com/environment/2019/mar/15/its-our-time-to-rise-up-youth-climate-strikes-held-in-100-countries (Accessed on 7th September, 2020).

Leadbeater, C. (1999) 'Living On Thin Air' in Webster, F (2004) *The Information Society Reader.* London: Routledge, pp 26-30.

Lefebvre, H (1991). Critique of Everyday Life. London: Verso.

Leiner B.M, Cert V.G, Clark D.D, Kahn R.E, Kleinrock L, Lynch D.C, Postel J, Roberts L.G, Wolff S (2000). 'A Brief History of the Internet'. Available at http://www.isoc.org/Internet/history/brief.shtml (Accessed: 11 October, 2014).

Leistert, O (2013). From Protest to Surveillance—The Political Rationality of Mobile Media: Modalities of Neoliberalism. Oxford: Peter Lang.

Leszczynski, A and Crampton, J (2016). 'Introduction: Spatial Big Data and Everyday Life'. Big Data and Society 3(2) DOI https://doi.org/10.1177/2053951716661366

Levenson, R. W (2011). 'Basic Emotions Questions'. Emotion Review 3(4) 379~438.

Levitas, R (2011). *The Concept of Utopia*. Witney: Peter Lang.

Lèvy, P (1998). Becoming Virtual: Reality in the Digital Age. New York: Plenum Publishing.

Lèvy, P (2002). Cyberdemocracy. Paris: Odile Jacob.

Liberman, M (2003). 'Zettascale Linguistics'. Available at: http://itre.cis.upenn.edu/~myl/languagelog/archives/000087.html (Accessed: 12 May 2020).

Lievrouw, L (2011). Alternative and Activist New Media. Cambridge: Polity Press.

Lindgren, S. (2017) Digital Media & Society. London: Sage Publications.

Linklater, A (1998). 'Cosmopolitan Citizenship'. Citizenship Studies 2(1), 23-41 DOI: 10.1080/1362102980840668

Lorimer, H (2008). 'Cultural geography: non-representational conditions and concerns'. Progress in Human Geography 32(4) 551-559.

Ludlow, P (1996). High Noon on the Electronic Frontier: Conceptual Issues in Cyberspace. Cambridge, Massachusetts: MIT Press.

Luke, T (1998). 'The Politics of Digital Inequality: Access, Capability and Distribution in Cyberspace' in Toulouse, C and Luke, T (1998) *The Politics of Cyberspace*. Oxon: Routledge.

Lupton, D (2015). Digital Sociology. London: Routledge.

Lyon, D. (1988) The Information Society: Issues and Illusions. Cambridge: Polity Press.

Lyon, D. (2015) Surveillance After Snowdon. Cambridge: Polity Press.

Lyon, D (2017). 'Surveillance Culture: Engagement, Exposure and Ethics in Digital Modernity'. International Journal of Communication 11, 824-842.

Lyotard, J. F. (1984) *The Postmodern Condition: A Report on Knowledge.* Manchester: Manchester University Press.

MacKinnon, R (2012). Consent of the Networked: the worldwide struggle for internet freedom. New York: Basic Books.

Maireder, A and Schlögl, S (2014). 24 Hours of an Outcry: The networked publics of a sociopolitical debate. European Journal of Communication Vol. 29(6) 687-702.

Manovich, L (2001). The Language of New Media. Cambridge: MIT Press.

Marchart, O (2007). Post-Foundational Political Thought. Edinburgh: Edinburgh University Press.

Marciano, A (2014). 'Living the VirtuReal: Negotiating Transgender Identity in Cyberspace'. Journal of Computer-Mediated Communication **19** (2014) 824–838 © 2014 International Communication Association.

Marcuse, H (1941). 'Some Social Implications with Modern Technology'. Studies in Philosophy and Social Sciences Vol. IX

Marcuse, H. (1964) One Dimensional Man. Boston: Beacon Press.

Margetts et al (2016). *Political Turbulence: How Social Media Shape Collective Action*. Oxford: Princeton University Press.

Marshall, T.H (1992). 'Citizenship and Social Class' in Manza, J and Sauder, M (2009) *Inequality and Society*. New York: W.W Norton.

Marx, K (1990). Capital Volume 1. London: Penguin Books.

Marx. K (1993). Grundrisse. London: Penguin Books.

Marx, K (2015). The Communist Manifesto. London: Penguin Books

Mason, A (2000). Community, Solidarity and Belonging: Levels of community and their Normative significance. Cambridge: Cambridge University Press.

Mason, P (2012). Why It's Still Kicking Off Everywhere. London: Verso.

Mason, P (2015). PostCapitalism: A Guide to our Future. London: Penguin Books.

Massumi, B (2015). Politics of Affect. Cambridge: Polity Press.

Massumi, B (2002). Parables for the Virtual: Movements, Affect, Sensation. Durham, NC: Duke University Press.

Masuda, Y. (1990) 'Image of the Future Information Society' in Webster, F (2004) *The Information Society Reader*: London: Routledge, pp 16-20.

Matzat, U (2010). Reducing Problems of Sociability in Online Communities: Integrating Online Communication with Offline Interaction. American Behavioral Scientist 2010 53: 1170

May, C (2002). The information Society: A Sceptical View. Cambridge: Polity Press.

Mazur, A and Welch, E (1999). 'The geography of environmentalism'. Environmental Science & Policy 2: 389–396.

Mazur, A (2016). 'How did the fracking controversy emerge in the period 2010-2012?' Public Understand. Sci. 25, 207-222 DOI: 10.1177/0963662514545311.

McAdam, D (1982). *Political Process and the Development of Black Insurgency 1930-1970* in *Social Movements: A Reader* edited by Ruggiero, V and Montagna, N (2008). London: Routledge.

McCaughey, M (2014). Cyberactivism on the Participatory Web. Oxon: Routledge.

McCaughey, M and Ayers, M. D (2003). Cyberactivism: Online Activism in Theory and Practice. New York: Routledge.

McCormack, D. P (2003). 'An Event of geographical ethics in spaces of affect' Royal Geographical Society 28 488-507.

McEwan, B and Sobre-Denton, M (2011) 'Virtual Cosmopolitanism: Constructing Third Cultures and Transmitting Social and Cultural Capital Through Social Media'. Journal of International and Intercultural Communication 4(4): 252-258

McKenna, K.Y.A and Bargh, J.A (2004). 'The Internet and Social Life'. Annul. Rev. Psychol. 2004. 55:X—X doi: 10.1146/annurev.psych.55.090902.141922.

McPherson, M, Smith-Lovin, L and Brashears, M.E (2006). 'Social Isolation in America: Changes in Core Discussion Networks over Two Decades'. American Sociological Review 71(3) 353-375 https://doi.org/10.1177/000312240607100301

Melucci, A (1996). *Challenging Codes: Collective action in the information age.* Cambridge: Cambridge University Press.

Mendieta, E (2009). 'From Imperial to Dialogical Cosmopolitanism'. Ethics and Global Politics 2(3) 241-258.

Meyer, J.W, Boli, J, Thomas, G.M and Ramirez, F.O (1997). 'World Society and the Nation-State'. American Journal of Sociology 103(1) 144-181 https://doi.org/10.1086/231174

Mignolo, W (2000) 'The Many Faces of Cosmo-polis: Border Thinking and Critical Cosmopolitanism'. Public Culture 12 (3) 721-748.

Milan, S (2013). *Social Movements and Their Technologies: Wiring Social Change*. Basingstoke: Palgrave Macmillan.

Milan, S (2015). 'When Algorithms Shape Collective Action: Social Media and the Dynamics of Cloud Protesting'. Social Media + Society DOI: 10.1177/2056305115622481

Milan, S. (2015b) 'Mobilizing in Times of Social Media' in Denick, L and Leistert, O (2015) Critical Perspectives on Social Media and Protest. London: Rowman and Littlefield.

Mishra, P (2017). Age of Anger: A History of the Present. UK: Penguin

Mohanty, C. T (2003) Feminism without Borders: Decolonizing theory, Practicing Solidarity. Durham: Duke University Press.

Molz, J.G (2011). 'Cosmopolitanism and Consumption' in Rovisco, M and Nowicka, M (2011) *The Ashgate Research Companion to Cosmopolitanism*. London: Routledge.

Moreno, J (2013). 'From analog to digital: How digitization affects the production, distribution and consumption of information, knowledge and culture in the network society'. Accessed on the 18/05/15 from www.academia.edu/.../From_analog_to_digital_How_digitization_affects_the_produc...

Mosco, V. (2005) The Digital Sublime: Myth, Power and Cyberspace. Cambridge: MIT Press.

Mumford, L (1964). 'Authoritarian and Democratic Technics'. Technology and Culture 5(1) 1-8

Mumford, L (1964). The Pentagon of Power. London: Harcourt Brace Jovanovich.

Nahon, K (2018). 'Where There Is Social Media There Is Politics' in *The Routledge Companion to Social Media and Politics* edited by Bruns et al (2018).

Nakamura, L. (2002). Cybertypes: Race, Ethnicity and Identity on the Internet. London: Routledge.

Nascimento, A. (2013) *Building Cosmopolitan Communities: A Critical and Multidimensional Approach*. Basingstoke: Palgrave Macmillan.

Negroponte, N (1995). Being Digital. London: Coronet Books.

Nie, N. H and Erbring, L (2000). 'Internet and Society: A Preliminary Report'. Society 1(1) 275-283.

Nie, N.H (2001). 'Sociability, Interpersonal Relations and the Internet: Reconciling Conflicting Findings'. American Behavioural Scientist 2001 45: 420.

Norris, P (2001). Digital Divide: Civic Engagement, Information Poverty and the Internet Worldwide. Cambridge University Press.

Norris, P and Inglehart, R (2009) *Cosmopolitan Communications: Cultural Diversity in a Globalized World.* New York: Cambridge University Press.

Nussbaum, M. C (2008). 'Human Capabilities, Female Human Beings' in Pogge, T and Moellendorf, D (2008) *Global Justice: Seminal Essays.* St Paul, MN: Paragon House.

O'Mahony, P. O (2015). 'Climate Change: Responsibility, Democracy and Communication'. European Journal of Social Theory 18(3) 308-326.

O'Neil, O (1996). Towards Justice and Virtue: A Constructive Account of Practical Reasoning. Cambridge: Cambridge University Press.

Occupy Together (2012). 'Background and Timeline'. Available at: https://web.archive.org/web/20130502073425/http://www.occupytogether.org/aboutoccupy/#issues (Accessed: 10 May, 2020).

Occupy Wall Street (2011). 'About'. Available at: http://occupywallst.org/about/ (Accessed: 12 August, 2020).

Office for National Statistics (2017). 'People in employment on a zero hours contract: March 2017'. Available at: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworking-hours/articles/contractsthatdonotguaranteeaminimumnumberofhours/mar2017 (Accessed: 12 July, 2020).

Office for National Statistics (2019) 'Exploring The UK's Digital Divide' Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetandsocialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04 (Accessed: 13 August, 2020).

Office for National Statistics (2020). 'Services Sector UK: 2008 TO 2018'. Available at: https://www.ons.gov.uk/economy/economicoutputandproductivity/output/articles/services-sectoruk/2008to2018 (Accessed: 14 July, 2020).

Olsen, T (2005) 'Transnational Publics: New Spaces of Social Movement Activism and The Problem of Global Long-Sightedness'. *Current Sociology* 53(3) 419-440.

Organ, M (2014). 'New Tactics see Coal Seam Gas Protests gain Upper-hand'. The Conversation. Available at: https://theconversation.com/new-tactics-see-coal-seam-gas-protests-gain-the-upper-hand-26645 (Accessed: 12 May, 2020).

Ormerod, K (2018). *Why Social Media is Ruining Your Life*. London: Cassel Panksepp, J (2000). 'Emotion as a Natural Kind within the Brain' in Lewis, M and Haviland, J. M (2nd edition) (2000) *Handbook of Emotions*. New York: Guilford University Press.

Papacharissi, Z (2011). *The Networked Self: Identity, Community and Cultures on Social Network Sites.* Oxon: Routledge.

Parekh, B (2005). 'Principles of a Global Ethic' in Eade, J and O'Byrne, D (2005) Global Ethics and Civil Society. Aldershot: Ashgate.

Parsell, M (2008). 'Pernicious Virtual Communities: Identity, Polarisation and the Web 2.0'. Ethics and Information Technology (2008) 10:41–56.

Peng, T-Q and Zhu, J.J (2010). 'A Game of Win or Lose? Revisiting the Internet's influence on Sociability and Use of Traditional Media'. 2011 13: 568 originally published online 16 December 2010 New Media Society.

Pew Research Center (2013). 'Digital Divide'. Available at: https://www.pewresearch.org/topics/digital-divide/ (Accessed: 23 May, 2015).

Plant, S (1997). Zeros + Ones. London: Fourth Estate.

Poell, T (2014). 'Social Media and the transformation of Activist Communication: exploring the social media ecology of the 2010 Toronto G20 protests.' Information, Communication and Society 17(6) 716-731 https://doi.org/10.1080/1369118X.2013.812674

Pogge, T and Horton, K (2008) Global Ethics: Seminal Essays. USA: Paragon House.

Pogge, T and Moellendorf, D (2008). Global Justice: Seminal Essays. USA: Paragon House.

Polletta, F and Jasper, J. M (2001). 'Collective Identity and Social Movements'. Annual Review Sociology 27: 283-305

Postill, J (2008). 'Localizing the Internet beyond Communities and Networks'. New Media Society 2008 10: 413.

Postman, N. (1993) *Technopoly*. New York: Vintage Books.

Prainsack, B and Buyz, A (2017). *Solidarity in Biomedicine and Beyond.* Cambridge University Press.

Prendergast, J and Lezhnev, S (2009). 'From Mine to Mobile Phone: The conflict minerals supply chain'. Available at: https://enoughproject.org/files/minetomobile.pdf (Accessed: 2 May, 2016).

Putnam, R.D (2000) Bowling Alone: The Collapse and Revival of American Community. New York: Simon and Schuster.

Qian, H and Scott, C.R (2007). 'Anonymity and Self-Disclosure on Weblogs'. Journal of Computer-Mediated Communication 12 (2007) 1428–1451 ^a 2007 International Communication Association.

Quinion, M. (2002). Ologies and Isms. Oxford: Oxford University Press.

Radin, P (2006). 'To me, it's my life: Medical Communication, Trust and Activism in Cyberspace'. Social Science and Medicine 62(3), 591-601.

Rainie, L (2011). 'The Social Side of the Internet'. Accessed on the 21/05/15 from http://pewinternet.org/Reports/2011/The-Social-Side-of-the-Internet.aspx Pew Research

Räsänen, P and Kouvo, A (2014). 'Linked or Divided by the Web? Internet Use and Sociability in Four European Countries'. Information, Communication & Society, 10:2, 219-241, DOI: 10.1080/13691180701307461.

Rawls, J (1987). 'The Idea of An Overlapping Consensus' Oxford Journal of Legal Studies 7(1).

Rawls, J (1999). The Laws Of Peoples. London: Harvard University Press.

Reddy, W (2001). The Navigation of Feeling. Cambridge: Cambridge University Press.

Rheingold, H (1993). *The Virtual Community: Homesteading On The Electronic Frontier*. Cambridge: The MIT Press.

Rheingold, H (2002) Smart Mobs: The Next Social Revolution. London: Basic Books.

Rifkin, J (2014). The Zero Marginal Cost Society. New York: Palgrave Macmillan.

Rippe, K. (1998). 'Diminishing Solidarity'. Ethical Theory and Moral Practice, 1(3), 355-374 http://www.jstor.org/stable/27504040.

Ritzer, G (1998). The McDonaldization Thesis: Explorations and Extensions. London: Sage Publications.

Robertson, A (2019). 'Media Cultures and Cosmopolitan Connections' in Delanty, G (2019) 2nd Edition *Routledge International Handbook of Cosmopolitanism Studies*. Oxon: Routledge.

Robertson, R (2012). 'Globalisation or Glocalisation?'. The Journal of International Communication 18(2) 191-208 https://doi.org/10.1080/13216597.2012.709925

Robins, K (1999). 'Against Virtual Community for a Politics of Distance' accessed on the 20/7/16 from http://dx.doi.org/10.1080/09697259908572045.

Robins, K and Webster, F (1999). *Times of the Technoculture: From the Information Society to the Virtual Life.* London: Routledge.

Robinson, W. I. (2004) *A Theory of Global Capitalism: Produciton, Class and State in a Transnational World.* Maryland: The Johns Hopkins University Press.

Rossetto, L (1998). 'Change is Good'. Wired 6.01(January). Accessed on the 15/6/2020 at http://www.wired.com/wired/archive/6.01/toc.html

Routledge, P and Cumbers, A (2009). *Global Justice Networks: Geographies of transnational solidarity*. Manchester: Manchester University Press.

Royal Geographical Society (2015). 'Digital Divide in the UK'. Available at: https://www.rgs.org/geography/online-lectures/digital-divide-in-the-uk/ (Accessed: 15 May, 2015).

Rumford, C (2008) Cosmopolitan Spaces: Europe, Globalisation, Theory. Oxon: Routledge.

Ryan, J (2010). A History of the Internet and the Digital Future. London: Reaktion Books.

SACOM (2010). 'Workers as Machines: Military Management in Foxconn'. Available at: https://goodelectronics.org/workers-as-machines-military-management-in-foxconn/ (Accessed: 15 October, 2016).

Salter, L (2004). 'Democracy, New Social Movements and the Internet'. In *Cyberactivism: Online Activism in Theory and Practice*, edited by McCaughy, M and Ayers, M (2004). New York: Routledge.

Sandel, M. (1997). Democracy's Discontent. Cambridge, MA: Harvard University Press.

Sandvig, C (2013). 'The Internet as Infrastructure' in Dutton, W (2013) *The Oxford Handbook of Internet Studies*. Oxford University Press: Oxford.

Sassen, S. (2002). 'The Repositioning of Citizenship: Emergent Subjects and Spaces for Politics'. Berkeley Journal of Sociology, 46, 4~26 http://www.jstor.org/stable/41035566.

Sassen, S (2004). Sited Materialities With Global Span in Howard, P. N and Jones, S (2004) Society Online: The Internet in Context. London: Sage Publications.

Saunders, C (2013). *Environmental Networks and Social Movement Theory*. London: Bloomsbury Publishing.

Schechner, R (2012). 'Occupy Solidarity'. MIT Press 56(1) 7-9.

Schneider, N. (2011) 'From Occupy Wall Street to Occupy Everywhere', The Nation, October, 12. Available at: https://www.thenation.com/article/archive/occupy-wall-street-occupy-everywhere/ (Accessed on 26th July, 2020).

Schneier, B. (2015) Data and Goliath. London: W.W. Norton & Company.

Selwyn, N. (2004). 'Reconsidering political and popular understandings of the digital divide'. New Media and Society $6(3)\ 341-362$. doi:10.1177/1461444804042519.

Sen, A (2008). 'Equality of What?' in Pogge, T and Moellendorf, D (2008) Global Justice: Seminal Essays. St Paul, MN: Paragon House.

Severance, C. R (2015). *Introduction to Networking*. Createspace: USA.

Seymour, R (2019). The Twittering Machine. London: The Indigo Press.

Shallis, M (1984). *The Silicon Idol: The Micro Revolution and its Social Implications.* Michigan: University of Michigan Press.

Shaw, M (1999). 'Global Voices: civil society and media in global crises' in Dunne, T and Wheeler, N. (1999) *Human Rights in Global Politics*, Cambridge: Cambridge University Press.

Shields, R (2003). *The Virtual*. London: Routledge.

Shirky, C. (2010) Cognitive Surplus. London: Penguin Press.

Simcox, R (2015). Surveillance After Snowden: Effective Espionage in an Age of Transparency. London: Henry Jackson Society.

Singer, P (2002). One World. London: Yale University Press.

Skillington, T (2019). A deeper framework of cosmopolitan justice: addressing inequalities in the era of the Anthropocene' in Delanty, G (2019) 2nd Edition *Routledge International Handbook of Cosmopolitanism Studies*. Oxon: Routledge.

Slaughter, S and Hudson, W (2007). Globalisation and Citizenship: The Transnational Challenge. Oxon; Routledge.

Smith, L.G.E, Gavin, J and Sharp, E (2015). 'Social identity formation during the emergence of the occupy movement'. European Journal of Social Psychology 45(7) 818-832 https://doi.org/10.1002/ejsp.2150

Snow, D. A, Rochford, E. B, Worden, S. K and Benford, R. D (1986). 'Frame Alignment Processes, Micromobilization and Movement Participation' in *Social Movements: A Reader* edited by Ruggiero, V and Montagna, N (2008). London: Routledge.

Soborski, R (2018). *Ideology and the Future of Progressive Social Movements*. London: Rowman & Littlefield.

Sobre-Denton, M and Bardhan, N (2013) *Cultivating Cosmopolitanism for Intercultural Communication: Communicating as Global Citizens.* New York: Routledge.

Sobre-Denton, M (2015) 'Virtual Cosmopolitanism in a Networked Society' in McEwan, B (2015) Navigating New Media Networks: Understanding and Managing Communication Challenges in a Networked Society. London: Lexington Books

Springer, C (1996). *Electronic Eros: Bodies and Desire in the Postindustrial Age.* Texas: University of Texas Press.

Staggenborg, S (2012) *Social Movements*. Oxford: Oxford University Press. Standing, G (2011). *The Precariat: The New Dangerous Class*. London: Bloomsbury.

Statista (2019). Global Mobile Internet Traffic Available at: https://www.statista.com/statistics/306528/share-of-mobile-internet-traffic-in-global-regions/ (Accessed on 23 April, 2020).

Statista (2020). 'Internet Usage Worldwide: Figures and Statistics'. Available at: https://www.statista.com/topics/1145/internet-usage-worldwide/ (accessed: May, 2020). Statista (2020b). 'Mobile Internet Usage Worldwide: Statistics and Facts'. Available at: https://www.statista.com/topics/779/mobile-internet/ (Accessed: 21 July, 2020).

Statista (2020c). 'Digital Economy'. Available at: https://www.statista.com/outlook/994/100/digital-economy/worldwide (Accessed: 1 May, 2020).

Stefanone, M.A and Jang, C-Y (2008). 'Writing for Friends and Family: The Interpersonal Nature of Blogs'. Journal of Computer-Mediated Communication 13 (2008) 123–140 a 2008 International Communication Association

Stehr, N (1994). Knowledge Societies. London: Sage Publications.

Stevenson, N (1999). The Transformation of the Media: Globalisation, Morality and Ethics. London: Longman.

Stiegler, B (2019). The Age of Disruption. Cambridge: Polity Press

Stoll, C. (1999). High Tech Heretic. New York: Doubleday.

Strydom, P (1999) 'The Challenge of Responsibility for Sociology'. Current Sociology 47(3) 65-82.

Strydom, P (2000). Discourse and Knowledge: The Making of Enlightenment Sociology. Liverpool: Liverpool University Press.

Suh, C. S, Vasi, I. B and Chang, P. Y (2017). 'How social media matter: Repression and the diffusion of the Occupy Wall Street Movement'. Social Science Research 65 282-293.

Sum, S, Mathews, M.R, Pourghasem, M and Hughes, I (2008). 'Internet Technology and Social Capital: How the Internet Affects Seniors' Social Capital and Wellbeing'. International Communication Association 202–220

Sunstein, C. R (2001). Republic.com. New Jersey: Princeton University Press.

Szerszynski, B and Urry, J (2002). 'Cultures of cosmopolitanism'. The Sociological Review 50(4).

Tan, K-C. (2004). *Justice Without Borders: Cosmopolitanism, Nationalism and Patriotism*. Cambridge: Cambridge University Press.

Tarrow, S (2005). The New Transnational Activism. Cambridge: Cambridge University Press.

Tarrow, S and McAdam, D (2005). 'Scale Shift in Transnational Contention' in *Transnational Protest and Global Activism* by Della Porta, D and Tarrow, S (2005). Oxford: Rowman and Littlefield Publishers.

Taylor, C (2011). 'Why Not Call It a Facebook Revolution?' CNN, 24 February, 2011. Available at http://articles.cnn.com/2011-02-24/tech/facebook.revolution_1_facebook-wael-ghonim-social-media? (Accessed: 24 August, 2014).

Terronova, T. (2013) 'Free Labor' in Scholz, T (2013) Digital Labour. Oxon: Routledge.

The Guardian, (2019). 'Climate Crisis and a betrayed generation'. Available at https://www.theguardian.com/environment/2019/mar/01/youth-climate-change-strikers-open-letter-to-world-leaders. (Accessed on 7th September, 2020).

Theodossopoulos, D and Kirtsoglou, E (2013). *United in Discontent: Local Responses to Cosmopolitanism and Globalization*. New York: Berghahn Books.

Thien, D (2005). 'Intimate distances: considering questions of us' in Davidson J, Smith M and

Bondi L (2005) *Emotional Geographies*. Aldershot: Ashgate.

Thompson, A (1995) Media and Modernity: A Social Theory of the Media. Cambridge: Polity Press

Thompson, J (1998) 'Community Identity and World Citizenship' in Archibugi, D, Held, D and Köhler, M (1998) *Re-Imagining Political Community: Studies in Cosmopolitan Democracy* Cambridge: Polity Press.

Thrift, N (2005). Knowing Capitalism. London: Sage Publications.

Thrift, N (2007). Non-Representational Theory: Space, Politics, Affect. London: Routledge.

Tijsterman, S (2014). 'Global and Cosmopolitan Citizenship' in van der Heijden (2014) Handbook of Political Citizenship and Social Movements. Cheltenham: Edward Elgar Publishing.

Tomkins, S. S (2008). Affect Imagery Consciousness: The Complete Edition. New York: Springer **Publishing Company**

Tormey, S (2005). 'From Utopian Worlds to Utopian Spaces: Reflections on the Contemporary Radical Imaginary and the Social Forum Process'. Ephemera, Theory & Politics in Organization 5(2): 394~408.

Tronti, M. (1962). Operai e Capitale (Workers and capital). Turin: Einaudi.

Tufekci, Z. (2017) Twitter and Tear Gas: The Power and Fragility of Networked Protest. London: Yale University Press.

Tumblr (2011). 'We are the 99%'. Available at: https://wearethe99percent.tumblr.com/ (Accessed: 12 May, 2020).

Turkle, S (1995). Life on the Screen: Identity in the age of the Internet. New York: Simon and Schuster.

Turkle, S. (2011) Alone Together. New York: Basic Books.

(2017).'Industrial Available Government Strategy'. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_d ata/file/664563/industrial-strategy-white-paper-web-ready-version.pdf (Accessed: 1 July, 2020).

UN Environmental Programme (2019). 'UN Report: Time to seize opportunity, tackle challenge of E-waste'. Available at: https://www.unenvironment.org/news-and-stories/press- release/un-report-time-seize-opportunity-tackle-challenge-e-waste (Accessed: 13 May, 2020).

United Nations Educational, Scientific and Cultural Organisation (2018). 'UNESCO'S basic texts on the information society'. Available at: http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/unescos-basic-texts-on-the-information-society/ (Accessed: 1 July, 2020).

United Nations Framework Conventions on Climate Change (2015). 'Paris Agreement'. Available at: https://unfccc.int/sites/default/files/english paris agreement.pdf (Accessed: 15 August, 2020).

Urry, J (2000). Sociology Beyond Societies. London: Routledge.

Urry, J. (1995). Consuming Places. London: Routledge.

Valenzuela, S, Park, N and Kee, K.F (2009). 'Is There Social Capital in a Social Network Site? Facebook Use and College Students' Life Satisfaction, Trust and Participation'. Journal of Computer-Mediated Communication 14 (2009) 875–901.

Van Den Anker, C (1999). 'Global Justice: The Moral Implications of Globalisation: Knowledge Ethics and Agency' in Shaw, M (1999) *Unset Politics and Globalisation: Knowledge Ethics and* Agency. London: Routledge.

Van Dijk, J.A (1997). 'The Reality of Virtual Community'. Trends in Communication 1(1) 39-

Van Dijk, J.A (2012). *The Network Society*. London: Sage Publications.

Van Dijck, J and Poell, T (2013). 'Understanding Social Media Logic'. Media and Communications Volume 1, Issue 1 2-14. Volk, C (2019). 'Enacting a parallel world: Political protest against the transnational

constellation'. Journal of International Political Theory 15(1) 100-118.

Volkmer, I (2003). 'The Global Network Society and the Global Public Sphere'. Development $46,\,9\text{-}16$ DOI: 10.1177/1011637003046001566

Wahlström, M, Kocyba, P, De Vydt, M and de Moor, J (2019). 'Protest for a future: Composition, mobilization and motives of the participants in Fridays For Future climate protests on 15 March, 2019 in 13 European cities'. Available at: https://protestinstitut.eu/wp-content/uploads/2019/07/20190709 Protest-for-a-future GCS-Descriptive-Report.pdf (Accessed: 10 May, 2020).

Wajcman, J (2015). *Pressed For Time: The Acceleration of Life In Digital Capitalism*. London: The University of Chicago Press.

Walzer, M (1994). *Thick and Thin: Moral Argument at Home and Abroad.* University of Notre Dame Press

Wang, Horng-luen (2004). 'Mind the Gap: On Post-national Idea(l)s and the Nationalist Reality' in Ya-chung Chuang (2004) *Globalization*. Oxford: Berghahn.

Weber, M (1992). The Protestant Ethic and the Spirit of Capitalism. London: Routledge.

Weber, M (1992b). Economy and Society. Berkeley: University of California Press.

Webster, F (2006). Theories of the Information Society 3rd Edition. Oxon: Routledge.

Wellman, B and Haythornthwaite, C (2002). *The Internet In Everyday Life*. Oxford: Blackwell Publishers.

Wellman, B (2002). 'Little Boxes, Glocalization and Networked Individualism' in Tanabe, M, van den Besselaar, P and Ishida, T (2002) Digital Cities II: Computational and Sociological Approaches. Lecture Notes in Computer Science Vol 2362 DOI: 10.1007/3-540-45636-8_2.

Wetherell, M (2012). Affect and Emotion: A New Social Science Understanding. London: Sage Publications.

White, R (2008). How Computers Work. Indianapolis: Que Publishing.

Widdows, H. (2011) Global Ethics: An Introduction. Durham: Acumen.

Williams, D (2006). 'On and Off the Net: Scales for Social Capital in an Online era'. Journal of Computer-Mediated Communication 11 (2006) 593–628 a 2006 International Communication Association

Winner, L (1996). 'Who will be in Cyberspace?'. The Information Society 12(1) 63-72.

Wolfson, T and Funke, P (2017). 'Contemporary Social Movements and Media' in *Social Movements and World-System Transformation* edited by Smith et al (2017). Oxon: Routledge.

Wong, J.C. (2019). 'Trump referred to immigrant 'invasion' in 2.000 Facebook ads, analysis revels' The Guardian 5 March. Available at https://www.theguardian.com/us-news/2019/aug/05/trump-internet-facebook-ads-racism-immigrant-invasion

Wong, P (2002). ICT Production and Diffusion in Asia: Digital Dividends or Digital Divide? Information Economics and Policy 14(2) 167-187.

Woodward, I and Skrbis, Z (2019). 'Performing Cosmopolitanism: the context and object framing of cosmopolitan openness' in Delanty, G (2019) 2nd Edition *Routledge International Handbook of Cosmopolitanism Studies*. Oxon: Routledge.

Woolgar, S (2002). Virtual Society? Technology, Cyberbole, Reality. Oxford: Oxford University Press.

World Economic Forum (2019). 'How much Data is generated each day?' Available at: https://www.weforum.org/agenda/2019/04/how-much-data-is-generated-each-day-cf4bddf29f/ (Accessed: 25 July, 2020).

World Health Organisation (2014). 'e-waste on children's health'. Available at: https://www.who.int/teams/environment-climate-change-and-health/settings-populations/children/e-waste (Accessed on 14 July, 2020).

World Internet Statistics (2020). 'World Internet Usage'. Available at: https://www.internetworldstats.com/stats.htm (Accessed on 12 May, 2020).

World Vision Action (2017). 'Tainted Technology: Forced and child labour in the electronics industry'. Available at: https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheets/forced-and-child-labour-in-the-technology-industry-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://www.worldvision.com.au/docs/default-source/buy-ethical-fact-sheet.pdf?sfvrsn=2">https://

Yu, L (2006). 'Understanding Information inequality: Making sense of the literature of the information and digital divides'. Journal of Librarianship and information Science 38(4) 229-252. Available at: https://doi.org/10.1177/0961000606070600 (Accessed: 15 April, 2015).

Yum, Y-O and Hara, K (2006). 'Computer-Mediated Relationship Development: A Cross-Cultural Comparison'. Journal of Computer-Mediated Communication 11 (2006) 133–152 a 2006 International Communication Association.

Zhao, S (2006). 'Do Internet Uses Have More Social Ties? A Call for Differentiated Analyses of Internet Use'. Journal of Computer-Mediated Communication 11 (2006) 844–862 2006 International Communication Association.

Zuboff, S. (2019) *The Age of Surveillance Capitalism*. London: Profile Books.

Zuckerman, E (2013) *Digital Cosmopolitans: Why We Think the Internet Connects Us, Why it Doesn't, and How to Rewire It.* New York: W.W. Norton & Company.

Zúñiga, H.D.G, Jung, N and Valenzuela, S (2012). 'Social Media Use for News and Individuals' Social Capital, Civic Engagement and Political Participation'. Journal of Computer-Mediated Communication 17 (2012) 319–336.