Re-evaluating the Spatio-temporal Relationships of Habermas's "public sphere", Bourdieu's "field", and McLuhan's "medium": Implications for Media Theory

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Certification of Authorship/Originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text. I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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ABSTRACT

The thesis is an evaluation of the influence of the long-standing hermeneutics/positivist schism on explanations of the spatio-temporal characteristics of "the public sphere", "the field", and "the medium". These are the signature terms in the seminal media-related works of Habermas, Bourdieu and McLuhan - "the public sphere" in *The Structural Transformation of the Public Sphere* by Jurgen Habermas; "the field" in *The Political Field, The Social Science Field, and the Journalistic Field* and *On Television by* Pierre Bourdieu; and the "the medium" in *Understanding Media* by Marshall McLuhan.

The key aim of thesis is to analyze the shaping impact of the long-standing hermeneutics/positivist schism on the methodologies employed. The thesis also considers whether the imbalances in the multidisciplinary methodologies of Habermas, Bourdieu and McLuhan brought about by this divide could have been addressed through the use of references, models and analogies from the sub-sciences of emergence and complexity theory. This evaluation includes the responses by critics and commentators to the methodologies used by Habermas, Bourdieu and McLuhan.

A central argument is that the multidisciplinary methodologies of Habermas, Bourdieu and McLuhan were compromised by their tendency *not* to absorb science innovations, nor access new methodological 'techniques' – a tendency among many twentieth century academics in the humanities, according to media historian and social theorist John Durham Peters.

Close reading analysis exposes the impacts of the hermeneutic/positivist schism on the methodologies of the three theorists. A further argument is that the hermeneutical tendencies present in their methodologies were brought about more by a rejection of positivism and 'scientism' than a conscious leaning towards hermeneutics.

Habermas, Bourdieu and McLuhan some time ago created the sandbox of modern media theory. This thesis argues that the exceptional value of their media-related works will be well-served by the addition of analytical frameworks from the sub-disciplines of science such as emergence and complexity theory.

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CHAPTER 1

INTRODUCTION

The public sphere, the field and *the medium* are three spatio-temporal terms that have been major talking points and foundational concepts in media and communication studies over the past fifty years. However, the originators of these terms - Jurgen Habermas, Pierre Bourdieu and Marshall McLuhan – struggled to complete definitions of what became their *signature*[1] terms. I argue that the hermeneutical/positivist schism that has existed throughout the twentieth century affected their methodologies in a manner that impeded their definitional objectives.

In order to pursue this proposition, this thesis analyses the multidisciplinary methodologies of Habermas, Bourdieu and McLuhan in their seminal media-related works - *The Structural Transformation of the Public Sphere,*[2] *The Political Field, The Social Science Field, and the Journalistic Field* and *On Television*,[3] and Marshall McLuhan's *Understanding Media.*[4]

The schism resulting from the battle between the methodologies of hermeneutics[5] and positivism[6] has had a major impact on social theory. Positivism had its origins in the works of Auguste Comte, the nineteenth century sociologist, and it came "to be identified with empirical

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[1] See Glossary for *signature term*.
[2] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, trans. Burger, Thomas, Cambridge UK, Polity Press.
[3] Bourdieu, Pierre (2005) "The Political Field, The Social Science Field, and the Journalistic Field" in Benson, Rodney & Erik Neveu, Erik, (eds.) (2005) *Bourdieu and the Journalistic Field*, Cambridge UK, Polity Press, and Bourdieu, Pierre (1998) *On Television*, Cambridge UK, Polity Press.
[4] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge Classics.
[5] See Glossary for *hermeneutics*. "Hermeneutics" takes the meaning of 'interpretation ' if used in a biblical studies context.
[6] See Glossary for *positivism.*

methods of investigation and in particular with a unified approach to research that claims universality for the methods of the natural sciences".[7] Hermeneutics had emerged in the 19th century as an anti-positivist philosophy of the humanities sponsored by Wilhelm Dilthey.[8] It was seen as an "epistemological alternative" [9] to both the methodology of natural science and the idealist tradition.

> On the one hand, there is an interest in the human sciences and a willingness to defend the integrity of these sciences as distinct from the natural sciences. On the other hand, there is a deep concern with the problem of making sense of the texts handed over from the past. These are the twin pillars on which modern hermeneutics is built.[10]

The continuing antagonism between the proponents of human sciences (hermeneutics - Dilthey) and natural sciences (positivism – Comte) created a division within social theory. This division was mirrored in the ongoing 'the arts versus science' debate[11] that had attracted academic attention since the Enlightenment.[12] Whilst the conflict within sociology was a theoretical battle in the main, 'the arts versus science' debate was increasingly stimulated by the practicalities of the disciplinary specialization of the sciences and engineering in the nineteenth century. This specialization prompted the cultural divide between the purveyors of science and the arts.

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[7] Holub, Robert C. (1991) *Jurgen Habermas: Critic in the Public Sphere*, London, Routledge (p.20). Holub is a scholar in the German department at the University of California, Berkeley.
[8] 19th century German polymath philosopher.
[9] Leledakis, Kanakis (1995) *Society and Psyche*, Oxford, Berg Publishers (p.45).
[10] Ramberg, Bjørn and Gjesdal, Kristin, "Hermeneutics", The Stanford Encyclopedia of Philosophy (Summer 2013 Edition), Edward N. Zalta (ed.) (p.5) URL = <http://plato.stanford.edu/archives/sum2013/entries/hermeneutics/>.
[11] Historically there were three antagonistic modes of argument - the third one was 'religion'.
[12] The modern remake of this debate is called the 'science wars'. "The `science wars' began in the early 1990s with attacks by natural scientists or ex-natural scientists who had assumed the role of spokespersons for science. The subject of the attacks was the analysis of science coming out of literary studies and the social sciences." Harry Collins, *Cardiff School of Social Sciences.* http://www.cf.ac.uk/socsi/contactsandpeople/harrycollins/science-wars.html. There is an Australian popular music band called *Art v Science.*

The debate remained within academe until it expressed itself as a media phenomenon without notice in 1959 when chemist and novelist C.P.Snow delivered a lecture titled *The Two Cultures*[13] at Cambridge University "in which he lamented the great cultural divide [*the schism*] that separates two great areas of human activity, 'science' and the 'arts'".[14] Science and literary commentator Jon Adams claimed that "Snow was also wary of the multiplicity of sub-disciplines," and Snow believed "that the educational system in the United Kingdom encouraged specialization too early, and he saw this as a wedge keeping the two cultures apart."[15] In *The Two Cultures* Snow did not hold back on the nature of the antagonists:

> The non-scientists have a rooted impression that the scientists are shallowly optimistic, unaware of man's condition. On the other hand, the scientists believe that the literary intellectuals are totally lacking in foresight.[16]

Initially, the response by the academy to Snow's 'schismatic' reference was only discussion. However, when F.R. Leavis challenged Snow's thesis in another Cambridge lecture titled "Two Cultures?" in 1962,[17] the British literary press joined the altercation, followed by U.S. commentators. A media shouting-match ensued between supporters of the 'positivistic' tendencies of Snow and the 'hermeneutics' supporters of Leavis.[18] In 1963, literary biographer

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[13] C.P. Snow (1959) *The Two Cultures*, The Rede Lecture 1959, Cambridge University Press.
http://s-f-walker.org.uk/pubsebooks/2cultures/Rede-lecture-2-cultures.pdf
[14] Krauss, Lawrence M. (2009) "Update on C. P. Snow's 'Two Cultures"
http://www.scientificamerican.com/article.cfm?id=an-update-on-cp-snows-two-cultures
[15] Adams. Jon (2007) *Interference Patterns*, NJ, Lewis Bucknall University Press (p.25) Shortlisted for British Society for Literature and Science Book Prize 2007.
[16] C.P. Snow (1959) *The Two Cultures*, The Rede Lecture 1959, Cambridge University Press(p.3).
http://s-f-walker.org.uk/pubsebooks/2cultures/Rede-lecture-2-cultures.pdf
[17] Leavis, F.R. (1962) *Two Cultures?*, *Spectator*, 9 March 1962.
[18] "It is one of history's small but delicious coincidences that in 1882, nearly eighty years before C. P. Snow's Rede Lecture, [Matthew] Arnold [Leavis's own model and inspiration] was chosen for that honor. Arnold's Rede lecture—"Literature and Science"—was itself a kind of "two cultures" argument. But his point was essentially the opposite of Snow's." http://www.newcriterion.com/articles.cfm/-The-Two-Cultures--today-4882 Kimball, Roger (1994) "'The Two Cultures' Today", *The New Criterion*.

Frederick R. Karl felt that "[Snow's] view is still that of the scientist who somehow wishes the humanities could be less ambiguous and more 'scientific'".[19] What was originally an academic argument became a media argument that has not yet been resolved.

After publishing *The Structural Transformation of the Public Sphere* in 1962, Habermas put forward a not-dissimilar view to Snow's on the interaction between 'science' and the 'arts'. He stated that: "neither analytic philosophy of science nor philosophical hermeneutics takes any notice of each other". He also noted that "occasional attempts to bridge the gap have remained no more than good intentions".[20]

McLuhan's 1972 comments on C.P. Snow were not complimentary:

> C.P. Snow is quite innocent of any knowledge about the dynamic origins of literacy, or of science in relation to literacy. Without the long written tradition of the West there would be no science. What Snow calls two cultures are a figure-ground interface of components of the same culture.[21]

Notwithstanding his views on Snow, McLuhan had previously encouraged an interdisciplinary cross-reading of the humanities and the sciences, and had "proposed a way to overcome the traditional dichotomy that opposes C.P. Snow's two cultures science and humanities – integral awareness".[22]

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[19] Karl, Frederick R. (1963) C.P. Snow: The Politics of Conscience, Carbondale, Southern Illinois University Press, (p.22).
[20] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press.(1967) (p.3)
[21] Cavell, Richard (2002) *McLuhan in Space: A Cultural Geography*, Toronto, University of Toronto Press (p.63)
[22] Lamberti, Elena (2102) *Marshall McLuhan's Mosaic*, Toronto, University of Toronto Press (p.38)

Essayist and novelists Arther Koestler disagreed with Snow on the plurality of cultures. Cultural commentator George Emery reported that:

> Of great interest to both humanists and scientists is Koestler's rejection of C.P. Snow's notion of 'two cultures'. For Koestler there is only one culture – that of human activity and thought. All knowledge is one, and he never lets us forget it."[23]

According to Roger Kimball in a 1994 review of the Snow-Leavis affair, various Snow defenders said Leavis's attack, using phrases like "panoptic-pseudo categories", was "reptilian venom" and "ludicrously overdone".[24] Kimball felt that Leavis's intervention was counterproductive, and Guy Ortolano has since argued that "rather than demolishing Snow's argument, his polemic came to be read as its ultimate confirmation". [25]

Ian McKillop, Leavis's biographer, stated in 1995 that "It was wrong to depict the conflict between Snow and Leavis as one between the scientific and the literary. It was a conflict over history".[26] Ortolano argued the same point in his publication *The Two Cultures Controversy*: "Uncovering the stakes of the argument between Snow and Leavis helps to explain the workings of cultural politics in Britain during the 1960s".[27]

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[23] Emery, George (1993) "Brilliance at Midnight: Arthur Koestler (1905-1983)" *Cross Currents* Volume 12 (p.51).
[24] http://www.newcriterion.com/articles.cfm/-The-Two-Cultures--today-4882 Kimball, Roger (1994) "'The Two Cultures' Today", *The New Criterion.* February.
[25] Ortolano, Guy (2009) *The Two Cultures Controversy*, Cambridge, Cambridge University Press (p.3).
[26] McKillop, Ian (1995) *F. R. Leavis: A Life in Criticism.*, London, Allen Lane (p.325).
[27] Ortolano, Guy (2009) *The Two Cultures Controversy*, Cambridge, Cambridge University Press (p.12).

However, Ortolano has claimed that the "two cultures' formulation has remained influential beyond British historiography, as not only did 'cultural politics' attain the notoriety several of the contributing commentators appeared to seek, but the media, in general, have since commercially benefited from exploiting the "two cultures" schism. [28] Ortolano noted:

> Book reviews, letters to editors, radio talks, intellectual conferences, academic journals and scholarly monographs continually invoke the 'two cultures' to make a point, explain an argument, or initiate a discussion.[29]

'The two cultures' had achieved "bumper-sticker phrase"[30] notoriety in the past half-century according to NASA[31] administrator Michael Griffen in 2007.[32] However, by 2009, the fiftieth anniversary of Snow's lecture, *New York Times* reviewer Peter Dizikes had noted a 'two cultures' variation. He observed that science author John Brockman had been advancing the cause of a 'third culture'. This 'third culture' includes "scientists…who are…superseding literary artists in their ability to 'shape the thoughts of a generation'".[33]

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[28] A more recent notorious media-activated controversy was the so-called 'Sokal hoax'. In 1996, an article called *Transgressing the Boundaries: Towards a Transformative Hermeneutics of Quantum Gravity* by Alan Sokal appeared briefly in the journal *Social Text.* On publication New York University physics professor Sokal revealed that it was a hoax. This conjunction of *hermeneutics* and *quantum gravity* will be discussed later in the thesis.

[29] Ortolano, Guy (2009) *The Two Cultures Controversy*, Cambridge, Cambridge University Press (p.258)

[30] Dizikes, Peter (2009) *Our Two Cultures* http://www.nytimes.com/2009/03/22/books/review/Dizikes-t.html?pagewanted=all&_r=0

[31] National Aeronautics and Space Administration.

[32] In *C.P. Snow and the Struggle of Modernity* (1992) (p.9), author John de la Mothe noted that "[Snow's] heraldic device…depicts a crossed pen and telescope…to suggest the relatiomship between science and literature".

[33]   Dizikes, Peter (2009) *Our Two Cultures* http://www.nytimes.com/2009/03/22/books/review/Dizikes-t.html?pagewanted=all&_r=0

Lawrence M. Krauss noted in "An Update on C.P.Snow's 'Two Cultures'" (2009) that "Snow himself suggested in the 1960s that social scientists could form a 'third culture".[34] The 'third culture' suggestion by Snow seemed to follow from his quirky comment that: "the number 2 is a very dangerous number: that is why the dialectic is a dangerous process. Attempts to divide any thing into two ought to be regarded with much suspicion".[35]

Thomas Brohman noted that in Habermas's 1968 essay, "Technical Progress and Social Life-world", Habermas had argued that "the modern structure of knowledge has become a binary one, a duality implied in the famous 'two cultures problem' addressed by C.P. Snow".[36] Australian culture and social theorist Bob Hodge, from the University of Western Sydney, has warned us about underlying tendencies to 'binarize': "The terms of this course [*Business, Society and Policy*] already have a three-body form, yet students and textbooks often reframe it as a binary".[37] He states that: "Three body systems are inherently unpredictable. This makes them inconvenient tools for linear planning".[38] French mathematical genius Henri Poincare's study of the so-called 'three-body problem' led him to discover a chaotic deterministic system which laid the foundation of modern chaos theory.[39] .

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[34] Krauss, Lawrence M. (2009) "Update on C. P. Snow's 'Two Cultures"
http://www.scientificamerican.com/article.cfm?id=an-update-on-cp-snows-two-cultures
[35] C.P. Snow (1959) *The Two Cultures*, The Rede Lecture 1959, Cambridge University Press (p.5)
   http://s-f-walker.org.uk/pubsebooks/2cultures/Rede-lecture-2-cultures.pdf
[36] Brohman, Thomas H. (2002) *The Transformation of German Academic Medicine*, *1750-1820* , Cambridge, Cambridge University Press (p.195).
[37] Hodge, Bob, Gabriela Coronado, Fernanda Duarte and Greg Teal (2010) *Chaos Theory and the Larrikin Principle*, Copenhage, Copenhagen Business School Press (p.46).
[38] Hodge, Bob, Gabriela Coronado, Fernanda Duarte and Greg Teal (2010) *Chaos Theory and the Larrikin Principle*, Copenhage, Copenhagen Business School Press (p.46).
[39] See Glossary for *chaos theory*.

Social and literary critic N. Katherine Hayles remarked that Poincare's work "implied that a new science was necessary to account for the dynamics of complex non-linear systems". However, unfortunately for Poincare's work, "positivism was in full swing throughout Western Europe and America",[40] and the new science of complexity theory, with minor exceptions, failed to flourish.

Up until now, these comments have not boded well for those pursuing a 'bridging-the-gap' methodology to resolve the hemeneutics/positivist debate. However, in *Communication Matters* (2012), American communications scholar John Durham Peters suggested that "techniques" (methodologies) drawn from "scientific innovations"[41] would enhance the debate. These "scientific innovations" include complexity theory and other new sciences.

For some time, John Durham Peters has observed the longstanding schism between science and the arts and its epistemological partners, positivism and hermeneutics (particularly as represented in the field of sociology). Peters claimed that there has been a failure of the sociological community over the last hundred years to absorb "scientific innovations".[42] He recently suggested ideas for a new methodology for those academics and commentators wanting to resolve the schism. He posed the question: "Why let nineteenth century worries prevent us from considering a central human concern, the meaning of techniques?" [43]

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[40] Hayles, N. Katherine (1990) *Chaos Bound*, Ithaca, Cornell University Press (p.2).
[41] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).
[42] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).
[43] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

In support of Peters' position, this thesis argues that Snow's 1960s contemporaries, Habermas, Bourdieu and McLuhan, acted like many academics and commentators in sociology over the past century in that they did not absorb several important 'scientific innovations' during this time. These were innovations of consequence and potentiality which may have enhanced the explanatory capacity of their concepts and ideas and brought a new awareness to the schism between hermeneutics and positivism.

This thesis will consider the potentiality of these 'techniques' in the analysis of the seminal media-related works of Habermas, Bourdieu and McLuhan. Jurgen Habermas's *The Structural Transformation of the Public Sphere,*[44] Pierre Bourdieu's *The Political Field, The Social Science Field, and the Journalistic Field* and *On Television*, and Marshall McLuhan's *Understanding Media*. These works are among the most valuable and influential expositions of media theory to have appeared in the past half century.

Further to John Durham Peters' suggestion, I argue that 'techniques' from complexity theory, such as network thinking, self-organization, entropy, chaos and feedback, are viable, progressive, analytical resources, worthy of evaluation and implementation by those academics and commentators who critique the works of our media theorists.

However, N. Katherine Hayles warns us that:

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[44] For reader convenience, *The Structural Transformation of the Public Sphere* will appear as *STPS.*

We must be cautious in drawing inferences about what the new sciences imply for the humanities….chaos theory has a double-edge that makes appropriations of it problematic for humanistic arguments.[45]

This thesis is not attempting to replace existing analytical methods of evaluating spatio-temporal models or concepts in media contexts. The thesis will explore complexity theory as an approach to an analytical framework that looks at the characteristics of the potential outcomes that emerge from non-linear[46] change in media contexts. Complexity theorist Chunglin Kwa has emphasized the 'outcomes' potential: "Is there a natural law that predicts the whirls (in a laminar flow that increases)? No, all we have is the empirical certainty that they will appear".[47] Hayles refers to chaotic systems as "both deterministic and unpredictable".[48] This is a state that, at face value, matches the mode of an analytic framework for 'bridging the gap'.

The use of complexity theory has significant implications for media and communication studies. In my opinion, given the current context of dynamic change in media technology and the exponential increase in societal response to that change, it will be propitious to have new analytical frameworks available to assist analysis of the response. Outcome-oriented methodology could be of benefit to future media and communications research.

In this thesis, my argumentation and presentation will be predominantly from a media and communications perspective notwithstanding the other disciplines that will contribute to the analysis. If there is a recurrent stasis within sociology and social philosophy that John Durham

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[45] Hayles, N. Katherine (1990) *Chaos Bound*, Ithaca, Cornell University Press (p.15).
[46] See Glossary for *non-linear*.
[47] Chunglin Kwa (2002) "Romantic and Baroque Conceptions of Complex Holes in the Sciences" in Law, John and Annemarie Mol eds. (2002) *Complexities*, NC, Duke University Press (p.44)
[48] Hayles, N. Katherine (1990) *Chaos Bound*, Ithaca, Cornell University Press (p.14).

Peters thinks comes from 'battling over old ground' in terms of methodology, I argue that a media and communication conceptualization, assisted by some new analytical frameworks , can refresh existing modes of explanation.

Habermas, Bourdieu and McLuhan

The seminal works by Habermas and McLuhan can be viewed at face value as social histories of media, albeit fused with the disciplines of sociology, anthropology, philosophy, ethnography and literature (in McLuhan's case). Bourdieu's interpretation in his media-related work was named by some as "philosophical anthropology".[49]

However, even though there are significant variations in their multidisciplinary approaches to explanations of their signature terms, all three writers shared the fact that they had hermeneutical tendencies - epistemologically speaking – in their methodologies. Whilst these tendencies were not unusual modes for humanities academics to be in, including Habermas, Bourdieu and McLuhan in the 1960s and 70s, such group tendencies are worthy of analysis given the epistemological importance of the *schism*.

Media research, in that period, invoked discussions about the relationship between society and technology. These discussions exposed the many binaries prevalent in the humanities, be it 'the

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[49] Peters, Gabriel (2012) "The Social as Heaven and Hell: Pierre Bourdieu's Philosophical Anthropology", *Journal for the Theory of Social Behaviour*, Volume 42, Issue 1 (p.63)

arts versus science', determinism versus free will, individualism versus universalism or hermeneutics[50] versus positivism.[51]

As indicated earlier, Habermas, Bourdieu and McLuhan joined the commentary on the century-old schism between the practitioners of hermeneutics and positivism.

Bjorn Ramberg and Kristin Gjesdal show that Habermas supports a version of the hermeneutic position that will deliver the aim of his project – human emancipation:

> Habermas does not claim that Gadamer's approach to hermeneutics is completely mistaken. He argues that Gadamer ascribes to hermeneutics an illegitimate kind of universality…what is needed is an effort to work out an adequate standard of validity. …Only thus may hermeneutics, guided by the social sciences, serve the purpose of emancipation and social liberation.[52]

Sociologist Mike Savage comments that Bourdieu struggled to hold the middle ground:

> Bourdieu's intellectual project can be seen as involving a battle on two fronts, against positivist sociology on the one hand, and what he saw as the excesses of the 'cultural turn" on the other. In seeking an anti-positivist social scientific position, "field theory"

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[50] See Glossary for *hermeneutics.*.
[51] See Glossary for *positivism.*
[52] Ramberg, Bjørn and Gjesdal, Kristin, "Hermeneutics", *The Stanford Encyclopedia of Philosophy* (Summer 2009 Edition)**,** Edward N. Zalta (ed.), (p.13) http://plato.stanford.edu/archives/sum2009/entries/hermeneutics/.

became extremely important to him, as a means of recognizing the complex interplay[53] between social and physical space.[54]

A contemporary of McLuhan, communications theorist James W. Carey, had no doubts about McLuhan's hermeneutical stance:

> McLuhan's methodological advance, then, came through his attempt to break through the constraints of conventional North American social and communication theory with a new hermeneutic, a hermeneutic of technology and social life.[55]

According to Carey, instead of establishing a predictable set of beliefs for humanities and science scholars, McLuhan was creating a hermeneutically-inclined methodological fusion - not of culture and science but of culture and technology.

These associations with hermeneutical theory are significant as they indicate that Habermas, Bourdieu and McLuhan may have had predispositions against a comprehensive use of scientific concepts in their commentary on media subjects. A hermeneutical approach also happened to be a complementary methodology for each of the authors to service his own agenda.

However, James Bohman suggests Habermas attempts to avoid the stamp of predisposition by claiming to be "seeking to develop an intermediate level of analysis and a new normative conception in the historical analysis of the emergence of the 'public sphere'".[56]

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[53] The "complex interplay between social and physical space" will be addressed further in the chapter on Bourdieu
[54] Savage, Mike (2011) "The Lost Urban Sociology of Pierre Bourdieu" in Bridge, Gary and Sophie Watson *The New Blackwell Companion to the City*, Blackwell Publishing Ltd. (p.512).
[55] Carey, James W. (1998) "Marshall McLuhan: Genealogy and Legacy" *Canadian Journal of Communication,*Vol.23 No.3 http://www.cjc-online.ca/index.php/journal/article/view/1045/951

This thesis pursues the methodological consequences of these 'predispositions'.

'Nineteenth Century Worries'

A dramatic example of the problematic nature of Habermas's, Bourdieu's and McLuhan's 'predispositions' comes from John Durham Peters. In *Communication Matters* (2012), he proposed that there was an historical pattern of denial of the potential of science in academic discussions on technological determinism and causation, and an unwillingness within the sociological academy over the past one hundred years to absorb scientific innovation.

Peters, in dialogue with editor Jeremy Packer, argues that:

> Ever since [the 1970s], when we discuss technology, you either gotta have the people or structures…it all reproduces the late nineteenth century debate of free will versus infinitely retraceable causation. And the problem is that later twentieth-century debates around technological determinism didn't absorb the scientific innovations that destroyed the nineteenth century debate such as statistical analysis, quantum physics, path dependence and chaos theory…We now know the importance of initial conditions…Small causes, big effects…there's no perfect equality between cause and effect, though the quest for causality remains…There's been a lot of rethinking since [the nineteenth century] about more interesting ways to think about chance, network effects,

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[56] Bohman, James, "Critical Theory", *The Stanford Encyclopedia of Philosophy* (Spring 2013 Edition), Edward N. Zalta (ed.), forthcoming URL = <http://plato.stanford.edu/archives/spr2013/entries/critical-theory/>.

overdetermination, synergies, and positive feedback. Why let nineteenth century worries prevent us from considering a central human concern, the meaning of techniques?[57]

John Durham Peters is concerned about the fact that there have been no signs of absorption of "scientific innovations" in discussions by the sociological academy who have been focused on technological determinism and causation over the past century. Peters lists quantum physics, chaos, statistical analysis and path dependencies, feedback, network effects and chance as "scientific innovations". For the most part these are non-linear concepts and theories, and are part of the family of new sciences that include *emergence* and *complexity* theory..

Habermas, Bourdieu and McLuhan were arguably technological determinists.[58] Therefore one can deduce that Peters included them in the group that did not absorb the "scientific innovations" that he speaks about. This is borne out in a close reading of their works.

Whilst Peters is disappointed that "nineteenth century worries" have continued to shut out contemporary considerations of the new sciences, he comments that: "there's been a lot of rethinking since about more interesting ways to think".[59] His commentary is a clarion call to adopt a more comprehensive multi-disciplinary approach to analysis of social theory and media

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[57] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).
[58] See individual Habermas, Bourdieu and McLuhan chapters for citations on their *determinism.*.
[59] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

theory. Peters is promoting the benefits that can be brought to contemporary analysis by the use of 'techniques'[60] associated with the concepts of chance, synergies, feedback *et alia*.[61]

Habermas, Bourdieu and McLuhan made it known in their works that they employed multi-disciplinary approaches to their concepts, theories and probes. 'Multidisciplinary balance' was a well-known concept to Habermas. Invoking Weber,[62] Habermas commented "the social sciences have the task of bringing the heterogenous methods, aims and presuppositions of the natural and the cultural sciences into balance".[63] Habermas argued that Weber saw the new social sciences combining to present in a balanced way the methodologies of the opposing sciences. The fact that Habermas did not fulfill the Weberian concept was because he had other conceptual fish to fry, as humanities professor Thomas A. McCarthy has pointed out:

> [Habermas] was already able to draw upon the insights developed in the phenomenological (Schutz), ethnomethodological (Garfinkel, Cicourel), linguistic (Wittgenstein, Winch), and hermeneutic (Gadamer) traditions, and…anticipated the subsequent decline of positivism and the rise of interpretism.[64]

In this thesis I make the argument that if the critics and commentators of the seminal works of Habermas, Bourdieu and McLuhan had not burdened themselves with 'nineteenth century worries', and adopted, as a framework of critique, the Peters' 'techniques' from complexity

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[60] *Techniques* are ways-and-means methodologies.
[61] Path dependence, statistical analysis, chaos, chance, network theory, synergies and feedback. All of these are concepts in the family of emergence and complexity theory. Explanations of these terms are in the Glossary.
[62] Social theorist Max Weber.
[63] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press. (p.10).
[64] McCarthy, Thomas (1989) "Introduction" in Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press (c1967) (p.vii).

theory, this may have led to various productive re-evaluations of the methodologies of these authors within media and communications studies.

The public sphere, the field and the medium

The public sphere, *the field* and *the medium* are conceptual images whose spatio-temporal specifics have not been resolved in terms of descriptions or definitions. Habermas used the term "the public sphere" to describe the seventeenth century activities of the men and some women, in Western Europe, who came together in groups in communal locations, like coffee houses and salons, to discuss mutual social and business interests. The term 'the public sphere' evolved by the twentieth century into being a synonym for 'public opinion'. Bourdieu's 'field' is a term that refers to a physical and / or theoretical state of being where agents and social 'forces' interact and are acted upon - such as a journalistic field, a political field and a literary field. McLuhan's 'medium' denotes any entity that involves relationships between humanity and technology, be it television, money, roads, comics, clothing or housing,[65] in fact, any mode that involves the representation and/or distribution of information.

There is a degree of difficulty for researchers, like myself, in presenting a lack of resolution of definitions. To demonstrate an absence of a concept, or to describe the lack of a theoretical input, is an overly abstract process of analytical reporting compared to critiquing existing concepts or inputs.[66]

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[65] These subjects are all chapter headings in *Understanding Media.*
[66] On occasions, arguments of this type can unavoidably give rise to a negative tone in the analysis. This writer asks for your tolerance in your reading of this thesis.

The contemporary relevance of Habermas, Bourdieu and McLuhan

Habermas, Bourdieu and McLuhan have been chosen by many as individual subjects for a thesis because of their stature and influence in communications and media theory. Their works still have great relevance and attraction to many researchers because of the power of their socio-historical narratives and concepts, even though some of their seminal works first appeared fifty years ago, and have come in and out of academic fashion. Their continuing presence in media studies prompted me to re-evaluate the relevance of their early seminal, media-related works to 21st century sociology and media studies.

> In general, it is…around the notion of the public sphere that most fruitful interaction between political theory and media studies has taken place in the last decades…much of the debate on the media and the public sphere draws upon Habermas's early work.[67]

The insights these authors have brought to media studies has been epochal. This can be illustrated by a very contemporary example - the relevance of many of their concepts, theories and probes when applied to the American media involvement in the 2012 presidential elections.

Habermas's *public sphere,* Bourdieu's *field* and McLuhan's *medium* have had both theoretical and practical application in the milieu of media response to the 2012 election campaigns. Habermas's *public sphere* could be seen to be alive and well within the dynamics of social

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[67] Karppinen, Kari (2008) "Media and the paradoxes of pluralism" in Hesmondhalgh, David and Jason Toynbee eds. *The Media and Social Theory*, Oxon, Routledge (p.31).

media where tweeters and bloggers like @DRUDGE REPORT, *The Washington Post*'s @ezraklein, @politico and @KarlRove have a direct line to would-be voters.

Tweeters and bloggers have established their own media genres. If private individuals using social media are coming together on a spontaneous basis to formulate an interactive means of public expression via the computer and the mobile phone, then Habermas's longstanding concern about the dissipation of the public sphere may well be relieved. And if the public sphere "stood or fell with the principle of universal access",[68] then the universal access created by the new digital social media is indeed delivering a public sphere.

A number of America's traditional media – the print media like *The Washington Post* and *The Tampa Bay Times* (previously known as the *St Petersberg Times*) - launched online sites associated with their newspapers to check facts about the candidates. These kinds of sites, known as 'fact-checkers',[69] engaged with the public for distinctly political purposes and encouraged participation by the public as collectors of mistakes by candidates.[70] Some fact-checker sites became so famous that they were quoted by candidates. This *new* medium is the message.

Bourdieu's, McLuhan's and Habermas's theories, probes and concepts could readily be seen as the basis for an interpretation of the processes and mechanisms of the American 2012 presidential campaign. Bourdieu's conceptual contribution to the 2012 election process is

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[68] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, trans. Burger, Thomas, Cambridge UK, Polity Press (p.85).
[69] The *Tampa BayTimes* version is called *Politifact.* http://www.politifact.com/
[70] Fact-checkers are now a business for political purposes in Australia.

arguably more broadly powerful than the others. That is, in this context, Bourdieu's journalistic field *is* the campaign field.

There is a rider on the application of Bourdieu's field theory in the American elections: the weight of the numbers and distribution of factors severely tests analysis and definitions of field autonomy. If one revamped the Russian doll analogy (dolls inside dolls of decreasing size) that Bourdieu's critics and commentators quite often use to describe his model of the journalistic field and its collection of sub-fields, the journalistic field structure in the 2012 campaign would have the complexity of a village of Russian dolls.

The major measure of the longevity of the interest in the media work of our authors is shown by the frequency of their current referencing in contemporary publications that focus on media. Just sampling 'media' and 'space' in a library catalogue can give many examples. One can note Bourdieu has a constant presence in Miyase Christensen, Andre Jansson and Christian Christensen's anthology *Online Territories: Globalization, Mediated Practice and Social Space* (2011).[71] Habermas and McLuhan are well referenced by Scott McQuire in *The Media City: Media, Architecture and Urban Space* (2008)[72] and by the contributors to *MediaSpace: Place, Scale and Culture in a Media Age* edited by Nick Couldry and Anna McCarthy (2004).[73]

Habermas has recently (June 2013) been 'mentioned in dispatches' by no less than the President of Ireland, Michael D. Higgins, who was a sociology academic before entering politics and

[71] Christensen, Miyase, Jansson, Andre and Christian Christensen eds (2011) *Online Territories: Globalozation, Mediated Practice and Social Space*, Peter Lang, New York.
[72] McQuire, Scott (2008) *The Media City: Media, Architecture and Urban Space*, SAGE, London.
[73] Couldry, Nick and Anna McCarthy eds. (2004) *MediaSpace: Place Scale and Culture in a Media Age*, Routledge, Oxford.

becoming a Minister of all things Cultural. Opening an IAMCR[74] conference which featured *interdisciplinarity*, President Higgins recalled his first ministerial policy presentation on broadcasting back in 1995 to which the under-whelming response by one journalist was: "he [Higgins] mentioned someone called Habermas".[75]

Literature Review

This literature review looks at responses by major commentators to Habermas's, Bourdieu's and McLuhan's definitions of *the public sphere*, *the field* and *the medium*. Included are works from Craig Calhoun and Scott Lash, and anthologies from Nick Couldry and Anna McCarthy, and Jeremy Packer and Stephen B. Crofts.

This thesis argues that these critics and commentators have failed to acknowledge the fact that there was 'incompleteness' in the methodologies of the writers. And that, like many in the social sciences over the past century, these critics and commentators either did not comment or failed to see the relevance of 'scientific innovations' to methodology - innovations of consequence and potentiality which may have enhanced the explanatory capacity of concepts and ideas in media and communications.

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[74] International Association of Media and Communication Researchers.
[75] President Michael D. Higgins Opening address at *IAMCR Conference* 26-29 June 2013
http://iamcr2013dublin.org/content/president-higgins-youtube

Critical Social Theory (1995)

Sociology professor Craig Calhoun is a longstanding specialist commentator on Habermas and Bourdieu's spatio-temporal perspectives and, by extension, the characteristics of their signature terms, *the public sphere* and *the field*. His analysis of Habermas and Bourdieu appears in *Critical Social Theory* (1995).[76] Calhoun addressed *the public sphere* in these terms:

> A public sphere, where it exists and works successfully as a democratic institution, represents the potential for the people organized in civil society to alter their own conditions of existence by means of rational-critical discourse.[77]

This is a hermeneutic description of a public sphere. It is not a description of a spatio-temporal model. Using Calhoun's description, "a public sphere" that elides with, or is a substitute for, "a demographic institution", is a flexible rational-discourse-based model only. This suits Calhoun's assertion that the public sphere was important for Habermas because "it offered a model of public communication which could potentially realize the rational guidance of society".[78]

Calhoun's reading of the public sphere would have been greeted as good news for Habermas because it appeared that Calhoun supported Habermas's attempts at spatio-temporal models in *STPS*.[79] Unfortunately for Habermas, Calhoun also argued that the important factors of group bifurcation and population growth combined with institutional change had later hidden a description of the outcomes of spatio-temporal changes in Habermas's initial version of the

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[76] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell
[77] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.248)
[78] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.30).
[79] For reader convenience, *STPS* takes the place of *The Structural Transformation of the Public Sphere.*

public sphere. As well, Calhoun's advice to readers regarding Habermas's hard task of explaining the 'dissolution' of the public sphere, was to think of it "not as the realm of a single public but as a sphere of publics".[80] I argue that Calhoun did not allow for the situation where the public sphere might simply break up over time into smaller units of society following a path of 'entropy'.[81] This is a model where 'an ordered (structured) small group with a firm agenda' turned into 'a less-ordered (loss-of-structure) large group with a flexible agenda'.

Todd Gitlin goes a step further down the 'dissolution' path than Calhoun by introducing practical criteria:

> A public sphere or separate public sphericules? Does the proliferation of the latter damage the prospect for the former? The diffusion of interactive technology surely enriches the possibilities for a plurality of publics. …What is not clear is that the proliferation…of publics contributes to the creation of *a* public.[82]

Calhoun's fellow sociologists, Jeffrey C. Alexander and Ronald L. Jacobs, put forward their version of spatio-temporal change in Habermas's public sphere. They argue that it is reminiscent of Bourdieu's field theory, and these "departures…suggest a multiplicity of public spheres…nested within one another, and also within a putative larger 'national sphere' of civil society".[83]

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[80] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.242).
[81] See Glossary for *entropy*.
[82] Gitlin, Todd (1998) "Public Sphere or Public Sphericules" in Liebes, Tamar and James Curran eds. *Media, Ritual and Identity*, Routledge, London (p.173).
[83] Alexander, Jeffrey C. and Ronald L. Jacobs (1998) "Communication, ritual and society" in Liebes, Tamar and James Curran eds. *Media, Ritual and Identity*, Routledge, London (p.29).

Throughout his comments on change or 'transformation', Calhoun sees Bourdieu's field in the same light as he regards Habermas's public sphere. He comments critically that their fields and spheres change spatio-temporally without any transformational activity of a non-determinist or non-linear[84] kind being accounted for. He notes that at least Habermas works at explanations of 'transformation', whereas "[Bourdieu's] sociology does not offer purchase on the transformation of social systems".[85] Calhoun sums up Bourdieu's theory of habitus, capital and field thus: "it is, at its best, as a theory of reproduction, and at its weakest as a theory of transformation".[86]

Calhoun not only notices similarities between Bourdieu and Habermas, he notes differences as well. One of the main differences is that Bourdieu focuses on "the relationships of power that constitute and shape social fields",[87] whilst Habermas regards power simply as a "steering mechanism and a general social capacity".[88]

Although these arguments by Calhoun point out the indeterminacy of the perspectives of Habermas and Bourdieu on transformation of the public sphere and the field, he provides no alternative paths to more productive explanations. And by neglecting to challenge Habermas and Bourdieu on their failure to pursue comprehensive multidisciplinary analyses of their signature terms, Calhoun's responses are another example of the century-old tradition in sociological discussion of the mode of 'the non-absorption of scientific innovations and techniques' (see John Durham Peters above).

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[84] As noted earlier, the lack of a non-linear reference is a limiting factor in any 'transformation' discussion.
[85] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.141).
[86] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.142`).
[87] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.135).
[88] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.135).

Critique of Information (**2002**)

Scott Lash writes extensively about Habermas, Bourdieu and McLuhan in *Critique of Information* (2002), with a focus on McLuhan. Lash has a self-admitted obsession with *power*, and discussions on power pervade *Critique of Information* (2002).[89] He states the "ownership of hyper real estate [channels, fibreoptics, the air waves]…has been a major determinant of power".[90] These discussions lead him to attempt the parsing of *the medium is the message* and he comes up with a trinity of meanings of this epochal phrase.

> First, the medium is the referent…the object of attention… Second, it can mean the medium is the end [as in means and ends]…The third reading is the most common one: namely that the medium is the meaning.[91]

Lash enthuses over McLuhan's non-linear paradoxes: "the subject is not only in the world with technology. In McLuhan's mechanical anthropology the subject is *fused* with technology…we are the television screen' (*Understanding Media*)".[92]

Because McLuhan promotes a paradox - "expansion-implosion"[93] - Scott Lash spends some time suggesting that McLuhan is a non-linear theorist. Lash highlights the dynamic presence of this

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[89] Lash, Scott (2002) *Critique of Information,* London, SAGE Publications (p.189).
[90] Lash, Scott (2002) *Critique of Information,* London, SAGE Publications (p.81).
[91] Lash, Scott (2002) *Critique of Information,* London, SAGE Publications (p.80-81).
[92] Lash, Scott (2002) *Critique of Information,* London, SAGE Publications (p.177).
[93] See Glossary for *phase change paradox.*

ubiquitous paradox: "There is a spatial, temporal, social and semiotic expansion through differentiation, followed by this implosion".[94]

Lash's explanation of McLuhan's paradox looks comprehensive but comes up short on spatial, temporal or social meaning. On the other hand, science writer M. Mitchell Waldrop's questions have in-built answers about the McLuhan paradox:

> Is the cosmic compulsion for disorder matched by an equally powerful compulsion for order, structure and organization? And if so, how can both processes be going on at once?[95]

Since McLuhan's *probe* in *Understanding Media* was not accompanied by a definition of, nor a theoretical basis for, the spatio-temporal characteristics of the paradox, Lash is left arguing that because McLuhan's expansion/implosion phenomenon is not describable, it is therefore non-linear, hence non-deterministic. It may be non-linear and non-deterministic, but not because it is not describable. What Lash also leaves up in the air are the connections between the paradoxes and the 'outcomes' that follow.

Based on his available knowledge in 1964, McLuhan predicted that there would be a future arrival of an *information technology* media phenomenon. And indeed this came to pass thirty years later. Hence it can be argued that there was a strong degree of linearity underlying his forecast of long-term change in the structural processes of media. McLuhan was either a non-

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[94] Lash, Scott (2002) *Critique of Information,* London, SAGE Publications (p.187).
[95] Waldrop, M Mitchell (1992) *Complexity*, New York, Simon and Schuster Paperbacks (p.9-11)

linear seer, or he was non-linear only in his expansion-implosion references. Whatever the complexities of McLuhan's expansion-implosion *probe*, they were not enough to make him non-linear. In fact, the main problem for Lash in arguing his interpretation of McLuhan's *medium* is that McLuhan had somewhat mystical, unresolved thoughts about it in 1964.[96]

This discussion of the public sphere, the field and the medium by Calhoun and Lash, major long-term commentators on Habermas, Bourdieu and McLuhan, shows that a lack of a comprehensive multidisciplinary approach by our three writers was not a critical issue for commentators. This was an indication that 'scientific innovations' and 'techniques' were a long way from acceptance, much less implementation, by the sociological academy and their observers in the latter half of the twentieth century.

However, there is a postscript to Calhoun's above commentary. In recent years, Calhoun, has shifted his ground. He has admitted, in principle, the present-day existence of the problem expressed in C.P. Snow's 'two cultures' address. In a co-authored essay in *The Oxford Handbook of Interdisciplinarity* (2010*)*, he remarked on the intransigence of the social sciences on the subject of interdisciplinary innovations, thereby foreshadowing aspects of the John Durham Peters' statements about the non-absorbance of science innovation. Calhoun argued that:

> Despite interdisciplinary innovations, the social sciences have retained substantially the
> same basic disciplinary structure since their formation in the late nineteenth and early

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[96] More will be discussed about McLuhan's style in referencing Einstein and Heienberg in the McLuhan Chapter.

twentieth centuries. Interdisciplinary programs have been added, without great effects on the disciplines themselves.[97]

MediaSpace **(2004)**

The first of the two anthologies to be considered is *MediaSpace: Place, scale and culture in a media age* (2004), edited by Nick Couldry and Anna McCarthy. The book is premised on the view that one cannot tell a story of social space "without also telling a story of media, and vice versa".[98] Media and communication academics Couldry and McCarthy complemented Einstein's spatio-temporal neologism[99] of "space-time" in creating "a conceptual realm we call *MediaSpace*".[100] They offer a reason for this neologism by calling on contemporary philosopher Michel Foucault: "One could almost call media and space the *obverse* of each other, necessarily connected but, as Foucault says, 'irreducible to one another'".[101] It could be argued that between them Couldry, McCarthy and Foucault fashioned the hermeneutic/positivist-style binary of 'media-space'.

The *MediaSpace* collection of essays has contributions from media theorists, spatial theorists, sociologists and anthropologists, screen studies and urban studies, political economy

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[97] Calhoun, Craig and Diana Rhoten (2010) "Integrating the social sciences: theoretical knowledge, methodological tools and practical applications" in Frodeman, Robert, Julie Thompson Klein and Carl Mitcham *The Oxford Handbook of Interdisciplinarity*, Oxford, Oxford University Press (p.115).

[98] Couldry, Nick and Anna McCarthy (2004) "Orientations: Mapping MediaSpace" in Couldry, Nick and Anna McCarthy eds.(2004) *MEDIASPACE* Oxon, Routledge (p.4).

[99] See Glossary for *neologism.*

[100] Couldry, Nick and Anna McCarthy eds. (2004) *MediaSpace: Place, scale and culture in a media age*, Oxford, Routledge (p.1).

[101] Couldry, Nick and Anna McCarthy eds. (2004) *MediaSpace: Place, scale and culture in a media age*, Oxford, Routledge (p.1).

perspectives and cultural perspectives. Couldry and McCarthy suggest that Shaun Moores, Fiona Allon, amongst other contributors, make it clear that:

> [A] geographically informed and spatially sensitive analysis of media artefacts, discourses, and practices reveal forms of inequality and dominance, knowledge and practice that are hidden from other analytical techniques.[102]

As well, the editors declare that "the chapters in this volume argue that once we think media and space, communications theory and spatial theory, *together,* we cannot avoid addressing complex interrelations of scale and *ambiguities* of consequence"(original italics).[103] Couldry and McCarthy point out that this last argument is rigorously supported by philosopher and sociologist Henri LeFebvre[104] who noted that "it is precisely the *ambiguities* of place, scale and culture onto which we must retain our hold".[105]

Couldry and McCarthy are implying in their above quotes that there are epistemological limitations on existing methodologies. However, they leave the reader to infer from their indirect terminology – *ambiguities*, *together*, etc. – what methodological path should be taken. One could

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[102] Couldry, Nick and Anna McCarthy (2004) "Orientations: Mapping MediaSpace" in Couldry, Nick and Anna McCarthy eds. *MEDIASPACE* Oxon, Routledge (p.4).

[103] Couldry, Nick and Anna McCarthy (2004) "Orientations: Mapping MediaSpace" in Couldry, Nick and Anna McCarthy eds. *MEDIASPACE* Oxon, Routledge (p.15).

104 There are many shared views on spatio-temporality between the late French philospher and sociologist, Henri LeFebvre, and our theorists. "LeFebvre's concepts of abstract and social space are very close to Habermas's notions of the system and the lifeworld", states Byron A. Miller in Geography and Social Movements (2000) Minneapolis, University of Minnesota Press (p.12). "LeFebvre urging fellow theorists such as Foucault to go and read their McLuhan", reports Richard Cavell in McLuhan in Space: a cultural geography (2002) Toronto, University of Toronto Press (p.92). "[B]oth Lefebvre and Bourdieu emphasise that the existing reality as well as the discourses have determining influence on identity development. In thecase of Bourdieu this means that habitus adapts to fields," argues Katarina Nylund in "Place and cultural identity in the segregated city" in Conference on Centre, Periphery, Globalisation, (2000) Helsinki (p.24) http://www.yss.fi/Nylund.pdf

[105] Couldry, Nick and Anna McCarthy (2004) "Orientations: Mapping MediaSpace" in Couldry, Nick and Anna McCarthy eds. *MEDIASPACE* Oxon, Routledge (p.15).

argue that they are unwilling to be seen moving across the hermeneutic/positivism gap towards what might appear as a form of 'positivist' methodology. Previously, in 2000, Couldry appeared to be avoiding positivist discussion and diverting attention from the 'gap' by retreating to the all-purpose sociological concept of *reflexivity*.[106] In *Inside Culture* (2000) Couldry stated:

> the sources for the attack on 'positivist science are multiple…but they matter less than the consensus across much of the social sciences and humanities on the need for reflexivity about method. [107]

Shaun Moores made a reference in *MediaSpace* to "the 'medium theory' of Marshall Mcuhan which related the development of media technologies to time-space transformations".[108] However, the 'transformations' were not discussed. In a similar mode to Moores, Lisa Parks talks about McLuhan's "annihilation of time/space"[109] phenomenon as a McLuhan contribution to the "accounts of cultural changes wrought by communications technologies in the nineteenth and twentieth centuries".[110] She does not discuss the relevance of this contribution.

Habermas's 'participation' concept is criticized by Mark Andrejevic in *MediaSpace*. He argues that: "The Gemeinschaft-nostalgia[111] that characterizes much of the writing on media and democracy is particularly prevalent in Habermas-inspired discussions of a pre-mass media public

[106] See also Bourdieu's 260 page definition of *reflexivity* in Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press.
[107] Couldry, Nick (2000) *Inside Culture: re-imagining the method of cultural studies*, London, SAGE (p.12).
[108] Moores, Shaun (2004) "The Doubling of Space" in Couldry, Nick and Anna McCarthy eds.(2004) *MEDIASPACE* Oxon, Routledge (p.22).
[109] Parks, Lisa (2004) "Kinetic Screens" in Couldry, Nick and Anna McCarthy eds.(2004) *MEDIASPACE* Oxon, Routledge (p.37).
[110] Parks, Lisa (2004) "Kinetic Screens" in Couldry, Nick and Anna McCarthy eds.(2004) *MEDIASPACE* Oxon, Routledge (p.37).
[111] The German "Gemeinschaft" is approximately equivalent to "community" in English

sphere".[112] Andrejevic is concerned that digital cultures might be contaminated by Habermasian nostalgia for a public participation process that can be easily corrupted by consumerist manipulation. Whether this is the case or not, this view is part proof that Habermas's *public sphere* model has had long-lasting resonance with contemporary critics despite its lack of definition.

However, notwithstanding the claim by the *MediaSpace* editors of the near consensus of the contributors and the potential of 'hidden ambiguities' and 'scale' factors, this group makes no theoretical advances on 'scale' or 'ambiguities', nor on the spatio-temporal perspectives of Habermas and McLuhan.

Communication Matters (2012)

One of the most recent anthologies to discusses spatio-temporal concepts in media and communication contexts is *Communication Matters* (2012) edited by Jeremy Packer and Stephen B. Crofts Wiley. The articles in this anthology came from a symposium on 'materialist'[113] approaches to communication and rhetoric.

It is important to note here that there is little or no discussion of *time* from six contributors to *Communication time/space*, a section in the *Communication Matters* anthology. Understandably,

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[112] Andrejevic, Mark (2004) "The Webcam Subculture" in Couldry, Nick and Anna McCarthy eds.(2004) *MEDIASPACE* Oxon, Routledge (p.206).

[113] Packer, Jeremy and Stephen B. Crofts Wiley (2012) "Introduction" in Packer, Jeremy and Stephen B. Crofts Wiley eds. *Communication Matters*, Oxon, Routledge (p.1). The editors state that " *Communication Matters* presents original work that rethinks communication as material and situates materialist approaches to communication within the broader "materiality turn" emerging in the humanities and social sciences."

discourse on *time* is a difficult subject, added to by the fact that the 'spatial turn'[114]is inordinately dominant in contemporary communications theory. My argument is that the avoidance of *time* is to retreat from an empirical factor. It seems to me that *time*'s role is as a measuring device. *Space*, on the other hand, can act purely relationally. My concern is that these contributors are retreating to hermeneutical interpretations of spatio-temporal modes, particularly as co-editors Packer and Wiley note that "the authors in this volume are struggling with the messiness of materiality conceptually, methodologically, and practically".[115]

Twenty scholars in this anthology have engaged with critical geography, cognitive science and neurobiology, communication history, mobility studies, philosophy, neo-Marxism, media studies, science and technology studies, and cultural studies. It is perhaps surprising then that, in research papers involving such a wide range of communication theorists, not one of them has pursued the potential use of analytic frameworks of emergence and complexity theory with the notable exception of John Durham Peters (see *Nineteenth century worries* section above).

This literature review has demonstrated a negative proposition, shared by this writer and John Durham Peters. The proposition is that, over the past century, neither sociologists or media and communications commentators have sufficiently met the challenge of incorporating relevant analytical frameworks from the new sciences in their spatio-temporal research and analysis. One can argue that, in the current milieu of growth-without-end in the conjunction of media and

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[114] " In a recent book, *The Spatial Turn*, Barney Warf and Santa Arias argue that new spatial thinking related to globalization has changed the lens through which we view space. '[G]eographical imaginations have become commonplace topics in a variety of analytical fields,' they write. New ways of thinking are following broader trends in the "economy, politics, and culture of the contemporary world." http://toolingup.stanford.edu/?page_id=1139

[115] Packer, Jeremy and Stephen B. Crofts Wiley (2012) "Introduction" in Packer, Jeremy and Stephen B. Crofts Wiley eds. *Communication Matters*, Oxon, Routledge.(p.1).

society, research into new interdisciplinary approaches to these questions of media theory is overdue.

The Methodologies of Habermas, Bourdieu and McLuhan

The application of multidisciplinary methodologies by Habermas, Bourdieu and McLuhan in their media-related works have been worked to great advantage for both narrative and explanatory purposes in what have been ground-breaking histories of the emergence of media and communications. I argue that these methodologies have had a secondary duty: their multidisciplinarity gave them a flexible mode to cope with the exigencies of a background of hermeneutics versus positivism that threatened to impede their definitional objectives.

However, as a result, Habermas struggled without resolution to define "the public sphere" in spatio-temporal terms in *STPS*. He presented an ambivalence towards the future of the "the public sphere", having been pushed and pulled by the various theoretical positions of the protagonists of the hermeneutucs versus positivism battle, such as Ernst Cassirer, Heinrich Rickert and Max Weber. Habermas noted in an analysis of the social sciences that:

> Cassirer makes a clear separation between the levels on which the natural and cultural sciences operate…Pickert had accorded both the same status, that of empirical

science…Weber was not interested in the relationship between the natural and cultural sciences from an epistemological point of view.[116]

A methodological problem for Bourdieu and McLuhan was that of tautology. Many commentators have argued that Bourdieu's definitions of the "field" in his many publications were self-referential if not tautologous. For instance, John Levi Martin commented that: "Field theory is often castigated for its necessarily tautological definition of the field".[117] Robin Griller has pointed out that: "This theory…interacts with Bourdieu's methodology to produce a sociology plagued by tautologies".[118] And Alex Martin and Koenraad Geldof noted that Bourdieu established "[a] relationship of tautological circularity".[119]

McLuhan has also been attacked for a circularity of meaning with his use of the word "medium" as he expressed it in *Understanding Media*, especially when the concept of "mosaic"[120] was involved. Francoise Lachance (1996) claims that "McLuhan's conception of metaphor tends to tautology: an extension is a translation is a metaphor is an artefact is an extension".[121] However, tautology, circularity and ambivalence are not always seen as negative factors by authors.

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[116] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press. (p.6)

[117] Martin, John Levi "What is Field Theory?" in forthcoming *American Journal of Sociology* (p.1). http://www.csudh.edu/dearhabermas/lewinkurt01.pdf

[118] Griller, *Robin The Return of the Subject? The Methodology of Pierre Bourdieu*, Abstract. http://crs.sagepub.com/content/22/1/3.abstract

[118] Martin, Alex and Koenraad Geldof (1997) "Authority, Reading, Reflexivity: Pierre Bourdieu and the Aesthetic Judgment of Kant" http://muse.jhu.edu/journals/diacritics/summary/v027/27.1geldof.html *Diacritics* Volume 27, Number 1, Spring (pps.8,10).

[120] McLuhan used the term "mosaic" in *The Gutenburg Galaxy* (1962) to indicate a " field approach" to solving problems and developing ideas. Arguably "mosaic" means an all-in, all-discipline approach to analysis. He credits Harold Innis (Innis, Harold (1930) *The Fur Trade in Canada,* New Haven, Yale University Press)) and George von Bekesy (Bekesy, George von (1960) *Experiments in Hearing,* ed. and trans. Weaver, E.G., New York, McGraw-Hill.) with stimulating his use of the *mosaic* approach.

[121] Lachance, Francois (1996) "Proxemics and Prosthetics" *in sense, orientations, meaning and apparatus* (p.1.). http://homes.chass.utoronto.ca/~lachance/S2D.HTM

Increasingly, the methodological challenge for researchers and academics is being met by exploring the use of multidisciplinary analysis that crosses the boundaries of sociology and science.[122] As sociology is a social science that uses empirical investigation, it may seem redundant to augment sociological analysis with a 'multidisciplinary' field analysis. On the other hand, there are a number of new approaches to analytical frameworks in new science such as those emanating from emergence, complexity, chaos theory, phase transition and universality theory, whose concepts are neglected within the domain of sociological research. This situation has obtained for over a century despite *emergence* being championed by one of sociology's original theorists, Emile Durkheim, circa 1897. R. Keith Sawyer states: "The concept of emergence is a central thread uniting Durkheim's theoretical and empirical work".[123]

The multidisciplinary approaches to methodology by Habermas, Bourdieu and McLuhan will be discussed at some length in their individual chapters.

Aims

A core aim of thesis is to analyze the shaping impact of the long-standing hermeneutics/ positivist schism on the methodologies employed in explanations of the spatio-temporal characteristics of "the public sphere", "the field", and "the medium". These are the signature

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[122] Franks, Daniel, Patricia Dale, Richard Hindmarsh, Christine Fellows, Margaret Buckridge & Patti Cybinski (2007) "Interdisciplinary foundations: reflecting on interdisciplinarity and three decades of teaching and research at Griffith University, Australia" in *Studies in Higher Education*, Vol.32, Issue 2. *Abstract*, (p.167) http://www.tandfonline.com/doi/full/10.1080/03075070701267228,
[123] Sawyer, R. Keith (2002) *Durkheim's Dilemma* (p.1) in http://artsci.wustl.edu/~ksawyer/PDFs/durkheim.pdf

terms in the seminal media-related works of Habermas, Bourdieu and McLuhan - "the public sphere" in *The Structural Transformation of the Public Sphere* by Jurgen Habermas; "the field" in *The Political Field, The Social Science Field, and the* Journalistic *Field* and *On Television by* Pierre Bourdieu; and the "the medium" in *Understanding Media* by Marshall McLuhan.

The thesis also evaluates whether any imbalances or 'incompleteness' in the multidisciplinary methodologies of Habermas, Bourdieu and McLuhan could have been brought about by the *schism,* and whether these imbalances or incompleteness could have been ameliorated through the use of references, models and analogies from the new sciences such as *emergence* and *complexity theory*. This evaluation includes the responses by critics and commentators to the methodologies used by Habermas, Bourdieu and McLuhan in their seminal media-related works.

The identification of any contemporary influences of the schism has implications for media and communications studies.

Research Questions

A number of research questions emerged from the aims of the thesis. These questions helped provide a framework for the research design.

1. What methodology could be used to discern the impacts of the hermeneutic/positivism schism on the analyses of spatio-temporal model-building in a media context?

2. By what criteria could any imbalances or 'incompleteness' in multidisciplinary methodologies of Habermas, Bourdieu and McLuhan be measured?

3. What contribution to the methodologies of Habermas, Bourdieu and Mcluhan could be made by the use of analytical frameworks derived from the new sciences like complexity and emergence theory?

4. What part have the critics and commentators of the media-related works of Habermas, Bourdieu and McLuhan played since the publications of these works?

5. How would the use of an analytical approach derived from complexity and emergence theory enrich contemporary media studies?

The multiplicity of research questions called for a design that would accommodate many contributing entities – the schism, spatio-temporal model-building in media, 'incompleteness', multidisciplinary balance, complexity theories, external critiques, non-scientific and scientific referencing, the signature terms – *the public sphere*, *the* field and *the medium* - and the particular theoretical specialties and aims of their authors. There is a focus on multidisciplinary referencing because my preliminary research had shown that there were actual 'missed opportunities' or 'imbalances' in the authors' science referencing. This observation led to this thesis.

Further research led to the possibility that these shortcomings were connected to the authors' specific relationships to the hermeneutics versus positivism schism. The research design of the thesis therefore needed to accommodate the much-argued disparity inherent in the 'two cultures' debate and the wide spectrum of normative and research-derived references that followed from the arguments.

Research Design

The research design I have employed reflects on the authors and their seminal media-related works as individual case studies. The method is a 'compare and contrast' process for the three authors' works. I was conscious that the approach may have some intrinsic limitations. Outcomes from a three-author comparision may well be of an arbitrary complexity unless the criterion of comparison is a commonality between the three authors. In this instance, the commonality was a particular shortcoming and therefore a case study approach seemed relevant.

Daniel Cordle took a case studies approach in his work on "assessing the shift in the perceived relationship between literature and science as we have moved from the two cultures debate to the science wars".[124] This was Cordle's first aim in *Postmodern Postures* (1999). Contributing to his multifactorial challenge in creating a research design were "two aims", "seven routes [to] form a blueprint", "four levels of argument", and several writers and theories. Cordle concluded that

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[124] Cordle, Daniel (1999) *Postmodern Postures: Literature, Science and the Two Cultures Debate*, Aldershot UK, Ashgate (pps.189). The 'science wars' were a series of intellectual exchanges, between scientific realists and postmodernist critics, about the nature of scientific theory and intellectual inquiry. They took place principally in the United States in the 1990s in the academic and mainstream press. The scientific realists accused the postmodernists of having effectively rejected scientific objectivity, the scientific method, and scientific knowledge.

"even if the studies are rejected in terms of their detail they do at the very least provide a model for how literature and science might be joined together". [125]

'Major differences in their narratives' were the reasons why case studies were the main research tools for social scientist Niilo Kauppi in researching "modifications in the human and social sciences and literature"[126] in *French Intellectual Nobility* (1996). Kauppi argues that: "The fragmentation and multipolarity of the American intellectual field seems to be its basic feature…it cannot be possibly analysed in the same terms as the French intellectual field has been analysed in this study".[127]

Given the aims of the thesis, the use of a case-studies approach is the most informative and productive solution to achieve outcomes that would identify incompleteness in the individual author's multidisciplinary approach to methodology.

The case studies are designed to carry out three tasks. The first task is to show how the thesis methodologies as outlined below might work in practice. The second was to relate the hermeneutics/positivism schism to any methodological tendencies of the authors in their works. The third task was to evaluate the potential use of the sub-sciences of complexity and emergence within the spatio-temporal modelling of the authors. A reminder here is that the potentiality of use of complexity theory-based resources in the case studies was not to be taken as promoting

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[125] Cordle, Daniel (1999) *Postmodern Postures: Literature, Science and the Two Cultures Debate*, Aldershot UK, Ashgate (pps.189-90).
[126] Kauppi, Niilo (1996) *French Intellectual Nobility: Institutional and Symbolic Transformation in the Post-Sartrian Era*, Albany NY, State University of New York Press (p.140).
[127] Kauppi, Niilo (1996) *French Intellectual Nobility: Institutional and Symbolic Transformation in the Post-Sartrian Era*, Albany NY, State University of New York Press (p.140).

these theories as a replacement of existing theory. Rather, the function of these resources would be complementary to the existing methodological modes of the authors.

If all that a research analysis did was to suggest replacing or limiting existing modes, then another juxtaposition or binary situation like C.P. Snow's 'two cultures' or hermeneutics-versus-positivism was likely to emerge. In other words, another challenging binary would result. However, if the case studies exposed the 'incompleteness' factor in the authors' multi-disciplinary methodologies, then this research design was validated in part. This could lessen the astringency of the binary and result in new productive balance within the multi-disciplined methodologies used by Habermas, Bourdieu and McLuhan.

Detailed discussion of focal points including methodological, hermeneutical and complexity references appear as inserts in the general commentary of the authors' text. This process allows a full representation of the contributing research within each chapter. I have also attached a *Glossary* to augment comprehension.

Thesis Methodology

The use of critical reading and the frameworks of multidisciplinarity and complexity theory made up the overarching methodology for these case studies. A critical reading approach meant that the authors' signature terms – *the public sphere*, *the field* and *the medium* - could be on display in many settings and therefore give contextual background and assist comprehension.

This was especially important as there were a host of variations in the names and terminology of the concepts.

More specifically, my methodological framework in this analysis consists of three elements. The first methodological tool is the use of close reading to evaluate spatio-temporal arguments, propositions or research that each writer brings to his media model. This close reading locates the position and frequency of the presence of spatio-temporal references, or lack thereof. For instance, this thesis assumes that for Habermas to use the word 'science' so frequently in *STPS* implies that the criteria of science had to play a part in his methodology.

Secondly, the framework of multi-disciplinarity will be applied to the methodology of each writer to evaluate their 'multidisciplinary balance' in the building of concepts and spatio-temporal models. Particular note will be taken of the authors' responses to the hermeneutics versus positivism schism and identifying their own markers of disciplinary location.

Thirdly, there is the potential use of an analytical framework using the new sciences where, for instance, the outcome might be that there is an absence of explanations of phase change paradoxes denotes a 'non-absorption' of 'science innovation'. This may have contributed to a lack of multidisciplinary balance.

The application of framing theory is a major component of sociological analysis.[128] A typical example of the potential of using a frame that focuses on emergence and complexity theory is the section of *STPS* where Habermas describes the family structure.

Habermas's initial societal model was the family model of the 1700s - 'the intimate sphere'[129] – a model that existed in Western Europe at that time. This 'intimate sphere' model passed through a series of transformations and evolved as the modern concept and practice of 'public opinion'[130] in the twentieth century.

If one uses a framework of complexity theory, an interpretation of these events is as follows: Habermas's transitions of interaction between society and the media began with a set of initial conditions know as the 'intimate sphere'. These transitions - or transformations - have expressions that range from linear change to non-linear change. Both modes may be read as a consequence of growth. The non-linear mode is expressed as a phase change. A simple analogy is that fruit trees grow linearly, but the bearing of fruit is a phase change. And out of the phase changes non-predictable outcomes – such as the public sphere - emerge as probabilities. These outcomes can be prioritized using probability[131] or matrix theories[132].

Notwithstanding these non-predictable outcomes, Habermas's (phase change) model of the 1700s and the growth model of the 21st century are not necessarily at odds with each other. There

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[128] Goffman, Erving (1974) *Frame Analysis An essay on the organization of experience*, Cambridge, MA, Harvard University Press. See Glossary for *framing*.

[129] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.28).

[130] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.1).

[131] Probability theory is the branch of mathematics concerned with the analysis of random phenomena.

[132] Matrix theory is now an important subject focusing on numerical methods with applications in many disciplines including engineering and finance.

are strong functional connections: they both perform representational and communicative functions delivering a not-dissimilar agenda. And, even though it would appear that other phase changes have taken place within the 'public sphere' since the 1700s, the defining characteristics of 'the public sphere' – public opinion and societal response - remain, regardless of their spatio-temporal distribution.[133] If this were the case a question could be raised as to whether the 'bourgeois public sphere' has a discrete lifetime.

The methodological pathway of this thesis starts with the assumption that the hermeneutical/positivist schism impacted on the methodologies of Habermas, Bourdieu and McLuhan. Each of the three writers inclined towards the hermeneutical position, leading to an imbalance or incompleteness in their use of academic disciplines. This imbalance or incompleteness was created by the inadequate or undertheorised use of 'science referencing'. I identify these shortcomings through the use of analytical frameworks from the new sciences.

Other relevant methodological resources will be noted in the introductions to each of the critiques and literature reviews. Definitions and meanings of the various entities used in this thesis are available in the Glossary. However, some of these entities come with their own back-story, and hence I feel the reader will be assisted by the following preliminary notes.

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[133] There are obvious parallels between the paradox of non-linear phase change in complexity theory and Thomas Kuhn's 'paradigm' theory of science where "His account of the development of science held that science enjoys periods of stable growth punctuated by revisionary revolutions." Bird, Alexander, "Thomas Kuhn", The Stanford Encyclopedia of Philosophy (Spring 2013 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2013/entries/thomas-kuhn/>. Abstract. Note also that McLuhan's implosion-explosion *phase change* is one of Thomas Kuhn's "particularly worrying puzzles called 'anomalies"[133].

New sciences – complexity, chaos and emergence

> Emergence is what 'self-organising' processes produce. Emergence is the reason there are hurricanes, humankind, rock concerts and ecosystems. Complexity is an emergent phenomenon.[134]

Emergence, complexity , phase transition, scale invariance, network, and *entropy* theories have their own position and relevance as new sciences. However, my argument in this thesis is that they are also theories that can contribute to sociological analyses by bringing a quantitative element to to multi-disciplinary analysis.

N.Katherine Hayles defines chaos theory as "a wide-ranging interdisciplinary research front [that] can generally be understood as a study of complex systems", [135]and states that "chaos theory is a deeply fissured site within the culture"in a "complex play of gender, individuality and scientific theory".[136] Features of complex systems include: the possibility of emergent phase change phenomena appearing over time; the potential difficulties in determining boundaries; the non-linearity of relationships; complex adaptive sysytems; self-organization; networks; and the occurrence of feed-back loops in relationships. These are features which can be shown to have relevance in sociological contexts as demonstrated in the Habermasian 'intimate sphere' model above.

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[134] Corning, Peter A.(2002) "The Re-Emergence of 'Emergence': A Venerable Concept in Search of a Theory", in *Complexity* 7 (6) (p.18), doi:10.1002/cplx.10043, http://www.complexsystems.org/publications/pdf/emergence3.pdf
[135] Hayles, N. Katherine (1990) *Chaos Bound*, Ithaca, Cornell University Press (p.9).
[136] Hayles, N. Katherine (1990) *Chaos Bound*, Ithaca, Cornell University Press (p.174).

Examples of complex systems are the biosphere, the stock market, ant colonies, manufacturing business, online systems, political parties, and communication networks. This thesis argues that Bourdieu's 'journalists'and Habermas's 'public' are complex systems.

The properties of *emergence* were first voiced by George Henry Lewes in 1875, when he wrote that:

> Emergents [occurs], when, instead of adding measureable motion to measureable motion, or things of one kind to other individuals of their kind, there is a co-operation of things of unlike kinds, and it cannot be reduced to their sum or difference. [137]

Emergence (or *emergents* as Lewes wrote) slowly declined as a concept for academic discussion. Even though legendary sociologist Emile Durkheim was a proponent of emergence theory and practice throughout his work[138]and emergence theory was championed by comparative pschologist Conway Lloyd Morgan in the 1920s,[139] it came under attack from reductionists like Bertrand Russell and retreated.

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[137] Lewes, G.H (1875) *Problems of Life and Mind*, London, Truebner (p.412).
[138] Sawyer, R. Keith (2002) *Durkheim's Dilemma* (p.1). http://artsci.wustl.edu/~ksawyer/PDFs/durkheim.pdf R.Keith Sawyer stated that: "Although many sociologists have acknowledged in passing that Durkheim was an emergence theorist… none has substantively engaged this thread of Durkheim's work. Durkheim 's emergence argument has been widely misunderstood, starting with his contemporaries and continuing through the twentieth century."
[139] Conwy Lloyd Morgan (1923) *Emergent evolution*: *the Gifford lectures, delivered in the University of St. Andrews in the year 1922*, London, Williams and Norgate.

Emergence[140] re-emerged in the 1960s due to work by Nobel prizewinning psychobiologist Roger Sperry. Two decades later, work in *emergence* was formalized by the establishment of the Santa Fe Institute in New Mexico in 1984, supported by physics Nobel Prize winner Murray Gell-Mann and complex system theorist John Holland.

Popular expressions such as 'positive feedback', 'critical mass', 'the tipping point', 'the bandwagon effect', and 'interdependence'are examples of *emergence* brought about by growth. They tell us there is a phase change taking place. Although the outcomes from phase changes and complexity theory are not predictable beyond a set of possible options , this does not prevent these theories and concepts from being put into practice, as this thesis will hopefully demonstrate.

To invoke John Durham Peters, if emergence theory can regularly provide an efficacious outcome (be it non-determinist) from several potential outcomes, do we have to spend all of our time, "with nineteenth century worries",[141]proving or disproving causality in order to satisfy our analytical needs?

Thesis contents

After Chapter 1 (*Introduction)*, the thesis divides into three case-study chapters that embody separate critical readings of our three authors. Chapter Two is a critical reading of Habermas's

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[140] Corning, Peter A.(2002) "The Re-Emergence of 'Emergence': A Venerable Concept in Search of a Theory", in *Complexity* 7 (6) (p.18), doi:10.1002/cplx.10043, http://www.complexsystems.org/publications/pdf/emergence3.pdf
[141] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

The Structural Transformation of the Public Sphere. Chapter Three covers Bourdieu's *The Political Field, The Social Science Field, and the Journalistic Field* and *On Television*. In Chapter Four McLuhan's *Understanding Media* is the subject of the analysis. Each chapter focuses on the spatio-temporal theories and concepts (or probes in the case of McLuhan) and their associated signature terms – *the public sphere, the field* and *the medium*.

Chapter Five (*Conclusion*) is a summary of the shaping impacts of the hermeneutical/positivism schism on the multidisciplinary balance of their methodologies and spatio-temporal modelling by Habermas, Bourdieu and McLuhan in their media-related seminal works. There is an evaluation of how the use of the analytical frameworks of the new sciences analysis may enrich the understanding of our authors' works. The responses by the critics and commentators to these summary items is part of the conclusion along with what the implications would be for media and communication studies if there was an adoption of a new analytical framework incorporating new sciences.

For the assistance of the reader there is a *Glossary* to explain and expand on the terminology used in the thesis. The *Bibliography* follows.

CHAPTER TWO

JURGEN HABERMAS

This chapter is the first of three case studies of our authors, Habermas, Bourdieu and McLuhan. After an historical overview of Jurgen Habermas, there is an introduction to a critical reading of *STPS*. This introduction focuses on the overall methodology and content of Habermas's seminal work. The critical reading follows. Then there is a summary that includes a special segment on the potential of complexity and emergence theory to provide a methodology for critiquing *STPS*.

Historical overview

This brief overview covers Jurgen Habermas's career up to, and including, the 1962 publication of *STPS*.

Jurgen Habermas, sociologist and philosopher (born 1929), was a student in the Frankfurt School of sociology in Germany in the 1950s. The Frankfurt School was led by Max Horkheimer, Theodor Adorno and Herbert Marcuse. They had developed a neo-marxist, interdisciplinary social theory at the University of Frankfurt am Main that became known as *critical theory*.

> Critical theory has a narrow and a broad meaning in philosophy and in the history of the social sciences. "Critical Theory" in the narrow sense designates several generations of

German philosophers and social theorists in the Western European Marxist tradition known as the Frankfurt School.[142]

A 'critical theory' was distinguished from a 'traditional' theory in that it was critical to the extent that itsought human emancipation "to liberate human beings from the circumstances that enslave them". [143]

> The aggressively interdisciplinary way of thinking that the Frankfurt School developed -- "Critical Theory" it was called -- aimed to put philosophic ideas to the task of diagnosing social problems.[144]

The Frankfurt School had taken an anti-positvist stance and as a student Habermas was naturally embroiled in the hermeneutics versus positivist debate that

> created widespread discussion in Germany…[T]he positivist dispute marked a significant turning point. For the first time in the postwar period considerable attention was given to the methodology of the social science.[145]

Whilst in general "Habermas agrees with hermeneuticsthat the wh9ole domain of the social sciences is accessible only through interpretation"[146], he distinguished his sociology from being

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[142] Bohman, James and Rehg, William, "Jurgen Habermas", The Stanford Encyclopaedia of Philosophy (Winter 2011 Edition), Edward N. Zalta (ed), URL = (p.1)
<http://plato.stanford.edu/archives/win2011/entries/habermas/>
[143] Bohman, James and Rehg, William, "Jurgen Habermas", The Stanford Encyclopaedia of Philosophy (Winter 2011 Edition), Edward N. Zalta (ed), URL = (p.1)
<http://plato.stanford.edu/archives/win2011/entries/habermas/>
[144] Stephens, Mitchell (1994) *Jurgen Habermas: The Theologian of Talk,* The Los Angeles Times Magazine.
http://www.nyu.edu/classes/stephens/Habermas%20page.htm
[145] Holub, Robert C. (1991) *Jurgen Habermas*, London, Routledge (p.45-46).
[146] Holub, Robert C. (1991) *Jurgen Habermas*, London, Routledge (p.49).

strictly hermeneutical or empirical in approach, Habermas pragmatically explored hermeneutical concepts[147] because it suited his first major project – his post-doctoral thesis, *The Structural Transformation of the Public Sphere* (1962).

Thomas Hobbes, Locke, the physiocrats, Rousseau, Kant, Hegel, Marx, Mill, de Tocqueville, Weber and many others were on his reference list. John B. Thompson proposed that Habermas's idea of *the public sphere* (*Offentlichkeit*) can be traced back to Kantian concepts, where "personal opinions of private individuals could evolve into a public opinion through a process of rational-critical debate which was open to all and free from domination".[148] Habermas said as much in *STPS*, where "the idea of the bourgeois public sphere attained its theoretically fully developed form with Kant's elaboration of the principle of publicity."[149] *STPS* was an investigation into the development and meaning of 'public opinion' and 'the public sphere'.

Whilst complimenting Habermas on his substantial contribution to the awakening of media studies in the U.S. and U.K., Craig Calhoun, in *Habermas and the Public Sphere* (1992), suggested a reason for this effect in the English-speaking world:

> Habermas tends to judge the eighteenth century by using Locke and Kant, the nineteenth century by Marx and Mill, and the twentieth century by the view of people who watch television in suburbia.[150]

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[147] Habermas's *hermeneutics* perspectives are discussed later in this chapter.
[148] Thompson, John B. (1995) *The Media and Modernity,* Cambridge UK, Polity Press (p.260).
[149] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, trans. Burger, Thomas, Cambridge UK, Polity Press (p.102).
[150] Calhoun, Craig, ed. (1992) *Habermas and the Public Sphere*, Cambridge Mass, MIT Press (p.8).

Habermas may have been impressing the U.S and the U.K. with his work in media studies, but at the same time he was gaining a reputation back home as an importer of Anglo-American thought. John Durham Peters noted in *Distrust of Representation: Habermas on the Public Sphere* (1993) that "A German scholar reportedly called Habermas 'the man who gave us Locke and Mill'".[151]

> On the one side stand poststructuralists, postmodernists, some feminists and others…On the other stand defenders of Enlightenment universalism, modernism and rationality as a basis for communication. Jurgen Habermas is most prominent among them.[152]

Introduction to a Critical Reading of *The Structural Transformation of the Public Sphere (STPS)*

This section outlines Habermas's methodology and 'multidisciplinary' approach in *STPS*. In order to develop clarity in his analytical approach to *the public sphere* and its structural transformation brought about by "difficulties" due to "complexity"[153] of the subject, Habermas applied three methodological tools, or 'modes of knowledge production'.[154]   He used a multidisciplinary approach to his research; he sought a natural 'balance' between history and

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[151] Peters, John Durham (1993) "Distrust of Representation: Habermas on the public Sphere" in *Media Culture and Society*, London, SAGE Vol.15 (1993) 15:541 (p.544). http://mcs.sagepub.com/contant/15/4/541 ,

[152] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.xv).

[153] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xvii).

[154] Hart Cohen used this term to describe critical frameworks in Cohen, Hart (2000) "Revisiting McLuhan" in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy (p.6).

sociology; and he limited his investigation of the various sub-categories of the public sphere to "the *liberal* model". In commenting about the latter, Habermas admitted he had "reservations" about his "limited" investigation.[155]

Multidisciplinary approaches

Habermas's major methodological tool is his 'multidisciplinary' approach. In the opening paragraph of the *Preface* of *STPS*, Habermas puts a caveat on the type of methodology required to analyse 'the bourgeois public sphere". He warns the reader that researchers cannot rely on a specialized, single discipline to analyse the public sphere, and they also must investigate it "within the broad field formerly reflected in the traditional science of 'politics'".[156] It is only through a multidisciplinary approach that one can even begin to tackle the difficult task, according to Habermas. However, he notes that following a multidisciplinary-driven analytical path has degrees of difficulty for the researcher:

> The problem that results from fusing aspects of sociology and economics, of constitutional law and political science, and of social and political history are obvious: given the present state of differentiation and specialization in the social sciences, scarcely anyone will be able to master several, let alone all, of these disciplines.[157]

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[155] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xviii).
[156] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xvii).
[157] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xvii).

Habermas attempts this challenge in *STPS*. Tracy Strong and Frank Sposito in "Habermas's significant other" (1995) note that "Like the participants in the great eighteenth-century *Encyclopedie,* Habermas seeks to bring all human activity under one project".[158]

Although seeking "to bring all human activity under one project", Habermas's aims appear not to be superior nor grandiose, as he believes the public sphere can deliver human emancipation and democracy, and if he can capture its meaning using rationalist methods he will have reached his analytical and intellectual goals.

Todd Gitlin has no doubts that *STPS* delivered an important contribution to modern understanding of *democracy*, and is notable for "transforming media studies into a hardheaded discipline".[159]

Despite his multidisciplinary, 'one project' approach, Habermas admits to historicizing his narrative. He wanted to treat the public sphere mainly as an historical category. At the same time, he believed that sociology had a complementary relationship to history and should have a distinct place in his inquiry. This meant that special sociological references could be called upon when necessary to provide support for an argument. Robert C. Holub claims that *STPS* "fits the paradigm for a sociological study more readily than the works Habermas has subsequently written".[160]

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[158] Strong, Tracy B. and Sposito, Frank Andreas (1995) "Habermas's significant other", in White, Stephen K. ed. *The Cambridge Companion to Habermas,* Cambridge, Cambridge University Press (pps.263-64).
[159] Todd Gitlin (April 26, 2004). "Jurgen Habermas". Time Magazine. http://www.time.com/time/magazine/article/0,9171,994032,00.html.
[160] Robert C. Holub in *Jurgen Habermas: Critic in the Public Sphere* (1991) London, Routledge (p.3).

This thesis argues that, whilst an analogy can be drawn to show the encyclopaedic multidisciplinary structure of *STPS,* its narrative is one of a detective story: Habermas, is the socio-political history sleuth, in a rationalist search for clues in the 'Case of The Public Sphere', which went missing sometime in the nineteenth century. I argue that complexity and emergence theory would suggest the clues to be looked for in Habermas's mystery are the spatio-temporal characteristics of phase change. This phase change emerged from a feed-back driven, fast-growing, diversely-developing, upwardly-mobile group interaction with technology.

"The *liberal* public sphere"

In the *Author's Preface*, Habermas warns the reader that we need to remember that he has a "reservation relating to the subject matter itself".[161] The "reservation" is that the earliest version of *the public sphere* is "the *liberal* public sphere", not the "*plebian* public sphere", nor "the plebiscitary-acclamatory form of the public sphere", nor "a public sphere stripped of its literary garb".[162] The 'liberal' public sphere was a comparatively small and select group compared to the later versions of the public sphere.

The *liberal* public sphere is the seventeenth century activities of the men (and some women) in Western Europe, who came together in groups in communal locations, like coffee houses and salons, to discuss mutual social and business interests, and have their discussions represented, preferably in the print formats of the day. Habemas's investigation into the subject matter is the

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[161] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xviii).
[162] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xviii).

presentation of "a stylised picture of the liberal elements of the bourgeois public sphere and of their transformation in the social-welfare state".[163]

The original text of *STPS* was in German. It took twenty-seven years to arrive in an English version, and all translations suffer syntactical challenges in finding convenient English words and phrases. One has to keep in mind that Habermas's concept of *the public sphere* has degrees of difficulty of explanation even for German speakers. He shows the potential difficulty for English-speakers in the opening sentence of *STPS* where he says, "The usage of the words 'public' and 'public sphere' betrays a multiplicity of concurrent meanings".[164]

A critical reading of *The Structural Transformation of the Public Sphere*

This reading focuses on Habermas's account of the spatio-temporal characteristics of *the public sphere* model and its development since the seventeenth century. Habermas's multidisciplinary methodology will be evaluated in terms of balance, given his ambivalent stance on the hermeneutic versus positivist debate. Also evaluated is the potential for complexity theory and its associated modes such as phase change and non-linearity to contribute to Habermas's methodology, definitions and explanations. Habermas's critics' and commentators' positions on

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[163] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.xix).
[164] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.1).

all of the above will be noted as well. The reading is in step with the layout of the chapters that follow Habermas's socio-historical version of the emergence and development of the public sphere.

Definitions, synonyms and terminology

Chapters One and Two of *STPS* are an historical and linguistic treatise on the meaning of the words 'public' and 'public sphere'.

Habermas's phrase, *the public sphere*, is for the most part synonymous with 'the bourgeois public sphere' in *STPS*. However, having introduced the terms 'public' and 'public sphere' in his opening sentence, Habermas quickly adds 'public opinion', 'publicness', 'public authority', 'publicity', 'informed public', 'public organs', 'public domain' and 'civil society' to the list. Given this multiplicity of sociological synonyms within a history narrative, the multidisciplinarity of *the public sphere* is a negotiable factor for Habermas.

Niklas Luhmann, a systems theorist and 1970s adversary of Habermas, suggests that Habermas is not effectively responding to unproductive outcomes emanating from the factorial complexity of his chosen multidisciplinary model:

> Talk of "public opinion" causes a misunderstanding of complexity within the concept [of the public sphere]. If one raises the empirical question, which concrete states and operations of which social systems are the source of this opinion, the concept in its

conventional understanding dissolves…it needs a reconstruction starting from a radical beginning. Only in this way can one validate the empirical reference and claims of precision of contemporary social sciences.[165]

Other commentators in a sociological context have had to face the complexities of terminology. Luc Goode in *Jurgen Habermas* (2005) suggests that entities like Manuel Castell's 'space of flows', Arjan Appadurai's 'ethnoscapes' and MacKenzie Wark's 'virtual geographies', are "each problematic in [their] own way".[166] An indefinite definition will have an ongoing effect on an extension of a concept.

Habermas pre-empts accusations of terminology failure by naming and shaming disciplines other than history and philosophy that have the same problem:

the sciences - particularly jurisprudence, political science and sociology – do not seem capable of replacing traditional categories like 'public' and 'private', public sphere' and 'public opinion' with more precise terms.[167]

[165] Luhmann, Niklas (2010) "Social Complexity and Public Opinion (1981)" in Gripsrud, Jostein, Hallvard Moe, Anders Molander and Graham Murdock eds. *The Idea of the Public Sphere: A Reader*, MD, Lexington Books (p.174).
[166] Goode, Luke (2005) *Jurgen Habermas*, London, Pluto Press (p.84).
[167] Habermas, Jurgen (1962) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.1).

Science, scientism and positivism

Habermas had a great deal of reservation about science, notwithstanding his constant use of the term. William Outhwaite in *Habermas: A Critical Introduction (2009)* suggests that Habermas inherited an ambivalent attitude towards science because he was immersed in the academy's longstanding hermeneutics/ positivism struggle:

> Habermas's position in the 1960s is clearly marked by the 'positivism dispute' in German sociology, in which [Karl] Popper and his German followers were still trying to hold the line [against critical theory] with a variant of the standard view which was clearly demarcated from hermeneutics, critical theory and everyday life.[168]

David Detmer proposes that: "Habermas's critique of positivism can be succinctly summarized by saying that he objects to positivism's 'scientism,' 'decisionism,' and 'objectivism'"[169] Outhwaite supports this view: "Habermas's concern is with scientism rather than science as such…with the 'scientization' of politics and with technology and science as ideology".[170]

Maurizio Ferraris argues that Habermas's antagonism towards positivism colours his interest in science. Ferraris paraphrases Habermas's view on science and positivism in *The History of Hermeneutics* (1996):

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[168] Outhwaite, William (2009) *Habermas:A Critical Introduction*, Stanford, Stanford University Press (p.34).
[169] Detmer, David (2000) "Habermas and Husserl on Positivism" in Lewis Edwin Hahn ed. *Perspectives on Habermas*, Chicago, Open Court (p.516)
[170] Outhwaite, William (2009) *Habermas A Critical Introduction,* CA, Stanford University Press (p.21).

There is nothing specifically scientific in the call to science of nineteenth century positivism. Positivism sees science in a substantially dogmatic way, as the absolute model for type of knowledge, which, in any case, is considered relative and contingent.[171]

Even though Habermas demonstrated early support in *STPS* for a hermeneutical approach which could service his agenda of emancipation and social liberation, by 1970 he showed no preference between the 'arts' and 'sciences' in the 'two cultures ' debate:

C.P. Snow initiated in1959 a discussion of the relation of science and literature…science in this connection meant the strictly empirical sciences while literature has been taken more broadly to include methods of interpretation in the cultural sciences".[172]

Habermas had found himself making "attempts to carve out a middle position between two competing visions of scientific technology".[173] Larry Hickman wrote that:

On the one hand there was what Habermas termed the 'decisionism' of the scientizing positivists…on the other there was Marcuse…proposing that if human sciences were split off from the natural sciences and politically reformed, then the reform of technology would be not far behind.[174]

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[171] Ferraris, Maurizio (1996) *The History of Hermeneutics*, trans. Luca Somigli, Atlantic Highlands NJ, Humanities Press (p.91).
[172] Habermas, Jurgen (1970) *Towards a Rational Society: Student Protest, Science and Politics*, trans. Jeremy J Shapiro, Boston, Beacon Press (p.50).
[173] Habermas, Jurgen (1973) *Theory and Practice*, trans. John Viertel, Bosten, Beacon Press (p.91).
[174] Hickman, Larry A. (2000) "Habermas's Unresolved Dualism" in Lewis Edwin Hahn ed. *Perspectives on Habermas*, Chicago, Open Court (p.502)

Nonetheless, Hickman felt that Habermas's early position on hermeneutics had hardly varied, in that scientific technology would dismiss questions of practical reason as subjective, and that it was "left to the hermeneutic science to address such matters".[175]

"Traffic in commodities and news"

The opening paragraph of Chapter Three, titled "On the Genesis of the Bourgeois Public Sphere" is Habermas's abbreviated version of the history of Western capitalism from medieval times to the Enlightenment:

> With the emergence of early finance and trade capitalism, the elements of a new social order were taking shape. From the thirteenth century on they spread from the northern Italian city-states… On the one hand this capitalism stabilized the power structure of a society organized in estates, and on the other hand it unleashed the very elements within which this power structure would one day dissolve. We are speaking of the elements of the new commercial relationships: the *traffic in commodities and news*[176] created by early capitalist long-distance trade.[177]

Notwithstanding that it is arguable that the above is a questionable characterization of the emergence of capitalism, from these remarks it appears that *"traffic in commodities and news"* was one of the initial conditions for the emergence of the public sphere. The bourgeois

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[175] Hickman, Larry A. (2000) "Habermas's Unresolved Dualism" in Lewis Edwin Hahn ed. *Perspectives on Habermas*, Chicago, Open Court (p.503)

[176] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.15).

[177] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.15).

participation that began to converge with this 'traffic' in the late fiteenth centuary eventually resulted in the emergence of the public sphere at the end of the seventeenth century.

It is important to note that the "news" is not the medium in this spatio-temporal model. The medium is "traffic", an entity whose content is the socio-political "news" and the techno-economic "commodities".[178] The implied role of "traffic" as a medium has shades of McLuhan's *Roads and Paper Routes* chapter in *Understanding Media* (1964).

There are recent examples of the 'traffic-is-a-medium' mode. In popular discussions about 'boat-people' coming on boats from places like Sri Lanka, it is the word 'boat' that registers with the Australian populace. The 'people' are just societal 'commodities' filling the boats.

Although the above 'capitalism' quote reads as an historical statement, in fact it can be interpreted as a multidisciplinary sociological narrative that includes what I argue is a spatio-temporal media model. "Traffic", "commodities", "news" and "long-distance" are the key elements of the model, which evolves into the paradox of, and the emergence of, 'unleashed/stabilized' capitalism.

After a narrative that annotates several hundred years of what observers would normally see as linear change, Habermas suddenly introduces the 'unleashed/stabilized'[179] phenomenon – a striking non-linear paradox - almost without comment. One would have expected Habermas to have spent more time explaining this 'simultaneity of opposites' mode.

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[178] Shades of McLuhan's *Understanding Media* chapter on *Roads*.
[179] "Unleashed" and "stabilized" belong to McLuhan's 'implosion/expansion' family of non-linear conceptual paradoxes.

Unexplained paradoxes relating to spatio-temporal matters are not uncommon in our authors'

media works. Spatial theorist Henri Lefebvre had a strong and succinct description of paradoxes,

according to Stuart Elden in *Understanding Henri Lefebvre* (2004). Lefebvre stated: "From the

beginning then, a paradox: the generation of difference through repetition" .[180] In the sections to

follow I will comment on paradoxes as they occur as theoretical blind spots in our authors'

narratives. I argue that these blind spots compromise many sociological theories of spatio-

temporal linearity.

The intimate sphere

Having introduced the 'unleashed/stabilized' paradox – one with an indeterminate time-frame -

in the previous chapter, Habermas finds an *inflection point*[181] for his spatio-temporal model late

in the seventeenth cenury. Chapter Four, *The Basic Blueprint,* tells us that by that time the state

and society had 'polarized',[182] and the sphere of the conjugal family became separated from the

'social sphere'. Then the "process of polarization of state and society was repeated once more

within society itself".[183] The repetition is in the structural arrangements of the new entity – the

conjugal family. The conjugal family is the 'intimate sphere' where there is a person (a man)

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[180] In Elden, Stuart (2004) *Understanding Henri Lefebvre*, London, Continuum (p.179). Elden says this comment
from Lefrebvre is his way of showing an interest in Nietzsche's theories on repetition and the conjunction of "the
same and the other", and the application of Nietzsche's theories to spatio-temporal matters. Note: "Difference
through repetition" could sit comfortably as a complexity theorist's definition of a paradox.
[181] See Peters' *inflection point* section later in this chapter.
[182] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press
(p.29).
[183] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press
(p.28).

who is both the head of the family and an owner of commodities – a conjunction of the material and the behavioural.

> The status of private man combined the role of ... property owner with that of 'human being' *per se*. The doubling of the private sphere on the higher plane of the intimate sphere furnished the foundation for an identification of those two roles under the common title of the 'private'…. ultimately, the political self-understanding of the bourgeois public originated there as well.[184]

Does "doubling of the private sphere" imply a fusing of the roles? Are "doubling" and "originated" emergent modes phase changes? These statements are crucial to the building of a creditable spatio-temporal model and so the reader expects to be more informed about such paradoxical events in a 'structural transformation' thesis.

Unheralded phase change was at work in another Habermas explanation of the origins of the public sphere:

> "[T]he public's understanding of the public use of reason was guided specifically by such private experiences as grew out of audience-orientated subjectivity of the conjugal family's intimate domain."[185]

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[184] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.29).
[185] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.28).

The coffee house, the conversation, and print media

Chapter Five, *Institutions of the Public Sphere*, details the first appearances of *the public sphere* in European society in the seventeenth century. The coffee houses, the *salons,* the *tischgesellschaften* (table societies) and the *sprachgesellschaften* (literary societies), even though they were small groups, had a greater reach in terms of public awareness than their numbers would suggest. By the 1680s, the combination of the educated bourgeois and the literati of the time that frequented these soft-drug-driven, leisure and pleasure establishments and institutions, had created a social phenomenon whose apparent size far outweighed their real numbers in their British, French and German populations.

John B. Thompson found a parallel in ancient Greece to Europe of the 1680s in his commentary on *STPS* in *The Media and Modernity* (1995):

> As in ancient Greece, in early modern Europe, the public sphere was constituted above all in speech…Habermas's account of the bourgeois public sphere bears the imprint of the classical Greek assumption of public life: the salons, the clubs and coffee houses of Paris and London were the equivalent…of the assemblies and market places of ancient Greece.[186]

Although Thompson was noting the similarities between ancient Greece and the European 1680s, he was more concerned with Habermas's obsession with face-to-face-conversation in the

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[186] Thompson, John B. (1995) *The Media and Modernity*, Cambridge, Polity (p.131).

context of communication, and for that reason thought Habermas was "inclined to interpret the impact of…radio and television in negative terms."[187] However, Thompson, in discussing Habermas's favourite face-to-face meetings in coffee shops, fails to bring to our attention a critical media phase change taking place in the coffee houses. Habermas states that "the coffee house were so numerous and the circles of the frequenters so wide that contact could only be maintained through a journal".[188] The revelation that the print medium of the day was started up to *distribute* the conversations (an *emergent* modality), as well as being a record of the content of the meeting in the coffee house, is not discussed by Thompson[189] - nor is this *emergent* media phase change acknowledged by Habermas. A strong argument can be made that servicing the increasing numbers of coffee drinkers with information was a core factor in the emergence of the entities of public opinion and *the public sphere* in the 1700s.

Habermas has now mentioned two modes of media that have been activated on the basis of demand. The two modes, "a journal" and "the traffic in commodities and news", are major events in spatio-temporal terms. However, Habermas accepts the growth of these two media modes in a matter-of-fact manner without remarking on their special nature. However, whilst being natural phenomena emerging from population growth, their appearances established substantial phase-changes in the manner of Thomas Kuhn paradigms.[190]

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[187] Thompson, John B. (1995) *The Media and Modernity*, Cambridge, Polity (p.131).
[188] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.42).
[189] Thompson also fails to mention 'letter-writing' as an important factor in communication at the time.
[190] Philosopher of science Thomas Kuhn in *The Structure of Scientific Revolution* (1962), claimed that science enjoyed periods of stable growth punctuated by revisionary revolutions – 'paradigm shifts'.

When faced with paradigmatic change Habermas's response was often to retreat towards a hermeneutic explanation. This was a convenient response because hermeneutics was an inherently flexible methodology, unlike positivism. To simplify socio-philosophical stances at the time of Habermas's writing would be to say that on the one hand there was hermeneutics, on the other was positivism and in between was critical theory. *STPS* demonstrates that Habermas's attitude to explanation was also somewhere in between due to both his involvement with the Frankfurt school of critical theory, and his intrinsic ambivalent approach to methodology.

Hermeneutics

Habermas's leaning towards hermeneutics is revealed through inductive analysis. When one reads constant references to the word 'science' in *STPS* without Habermas providing analogies, evidence or concepts to support the references except for a few media statistics, then 'science' is a qualitative term that adds status to a narrative, not of itself a term that is referencing proof. There is no question that he appreciated in general terms the logic and rationality that science can bring to an argument, but it is a misleading facet of his presentation that *science* is a strand of his multidisciplinary methodology. It is useful here to look at modern hermeneutics and more deeply at Habermas's ambivalence towards the hermeneutics/positivist schism.

As indicated earlier, the battle between hermeneutics and positivism for the status of the most effective means of explanation of social theory and practice has been around for a long time. According to Bjorn Ramberg and Kristin Gjesdal, a modern pillar of hermeneutics from its beginnings in the eighteenth century has been: "an interest in the human sciences and a

willingness to defend the integrity of these sciences as distinct from the natural sciences." [191]

Habermas noted that:

> The historical-hermeneutic sciences, which appropriate and analyze meaningful cultural entities handed down by tradition, continue uninterrupted along the paths they have been following since the nineteenth century.[192]

In the twentieth century Hans-Georg Gadamer made hermeneutics his life project. He published *Truth and Method* (1960) two years before Habermas's *STPS*, and subsequently Habermas engaged Gadamer in a public debate over the contribution of hermeneutics to explanation. Gadamer argued that:

> Human being is a being in language…we cannot really understand ourselves unless we understand ourselves as situated in a linguistically mediated, historical culture. Language is our second nature.[193]

Habermas defined hermeneutics somewhat differently to Gadamer:

> Hermeneutic understanding is designed to guarantee, within cultural traditions, the possible action-orienting self-understanding of individuals and groups as well as a reciprocal understanding between different individuals and groups.[194]

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[191] Ramberg, Bjørn and Gjesdal, Kristin, "Hermeneutics", The Stanford Encyclopedia of Philosophy (Summer 2009 Edition)**,** Edward N. Zalta (ed.), (p.5) http://plato.stanford.edu/archives/sum2009/entries/hermeneutics/.
[192] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press.(1967) (p.1).
[193] Ramberg, Bjørn and Gjesdal, Kristin, "Hermeneutics", The Stanford Encyclopedia of Philosophy (Summer 2009 Edition)**,** Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/sum2009/entries/hermeneutics/ (p.11)

Observing the Gadamer-Habermas debate, John B. Thompson noted that:

> Although the historical-hermeneutic sciences have a distinct and irreducible status, they do not constitute, in Habermas's view, an exhaustive approach to the study of social phenomena.[195]

Habermas did not claim that Gadamer's approach to hermeneutics was completely mistaken. He argued that

> Gadamer ascribes to hermeneutics an illegitimate kind of universality…what is needed is an effort to work out an adequate standard of validity…Only thus may hermeneutics, guided by the social sciences, serve the purpose of emancipation and social liberation.[196]

Habermas's main project was 'human emancipation'. And to achieve this, a conjunction of the methodologies of hermeneutics and the social sciences was necessary. During the 1960s this was a work in progress for Habermas.

It is important to note that in Habermas's above definition of hermeneutical understanding, he does not explain "self-understanding" or "reciprocal understanding". As well, it is observable throughout *STPS* that characteristics of the 'individual' are ineffectually determined. Even in the

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[194] Habermas, Jurgen trans. Shapiro, Jeremy J (1972) *Knowledge and Human Interests*, ,London, Heinemann (P.176)

[195] Thompson, John B. (1981) *Critical Hermeneutics*, Cambridge, Cambridge University Press (p.81).

[196] Ramberg, Bjørn and Gjesdal, Kristin, "Hermeneutics", The Stanford Encyclopedia of Philosophy (Summer 2013 Edition), Edward N. Zalta (ed.), forthcoming URL = http://plato.stanford.edu/archives/sum2013/entries/hermeneutics/   (p.13).

'intimate sphere' individuals have no definition other than occupying a role - that of the 'private man'. The spatio-temporal characteristics of groups are equally under-determined. These epistemic limitations of individuals and groups compromise Habermas's explanations of the public sphere.

Peters' inflection point

The nature of individual participants and the constituencies of groups can become dynamic factors when there is growth in an open context like the coffee-house. . Individual participants and the scale of growth were key subjects in John Durham Peters' 1993 criticism of Habermas's views on discourse. Peters commented on Habermas's failure to address an *inflection point*.[197] Peters commented:

> Habermas does not see the mediated character of face-to-face discourse. He might respond that mediation is not the issue, but participation. But this too is a question of scale. As the number of participants in a conversation keeps growing, at some point not everyone will be able to speak and be heard. An *inflection point* will be reached and most participants will become spectators. *STPS* does not address 'natural' limits on the size of the public.[198]

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[197] See Glossary. As each one of Habermas's spheres grew beyond a critical mass or an 'inflection point'[197] it behaved distinctly differently from the numerically smaller version of the sphere. *Inflection point* is another term for phase change. *Wired* editor Kevin Kelly succinctly describes the numbers rule in phase change: "Emergence requires a population of entities, a multitude, a collective…More is different…large numbers behave differently from small numbers". Klineberg, Erik (2005) "Channeling into the journalistic Field: Youth Activism and the Media Justice Movement" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press

[198] Peters, John Durham (1993) "Distrust of Representation: Habermas on the public Sphere" in *Media Culture and Society*, London, SAGE Vol.15 (1993) 15:541 (p.564). http://mcs.sagepub.com/contant/15/4/541

An "inflection point" where "participants" become "spectators" is a *non-linear,* spatio-temporal mode related to phase change. Peters is introducing this concept to highlight the fact that Habermas is not addressing the characteristics of growth. Peters' critique states plainly that the individual, and the effects of scalar change as groups grow, is not remarked upon in Habermas's analysis.

Peters' 1993 criticism of Habermas is an early appearance of the general criticism made by Peters in 2012 about a widespread academic shortcoming that has existed since the era of Emile Durkheim in the late 1800s. Peters'general criticism has been highlighted in the *Introduction* where he refers to the extremely longstanding practice by sociologists and philosophers *not* to absorb 'science innovations' in their critiques.

In Chapter Five, Habermas showed the public sphere accommodating an individual's interests in literature, art, business, and politics, with the result that by the mid-1700s those interests had sponsored a large growth of print media as well as institutionally-based expressions of culture, like concert and theatre-going.[199]

However, these new media formats caused a dissipation of the face-to-face aspects of the bourgeois public sphere – a disappointment for Habermas. A separate 'literary' public sphere emerged, partly from growth and partly from cannibalising the bourgeois public sphere. A blurring of the bourgeois public sphere's domain lines had begun, leading to dissolution.[200]

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[199] McLuhan would have called all of these cultural exchanges 'extensions of man'.
[200] This claim is repeated in Chapter 16.

The family, its architecture and communication

Chapter Six analyses the physical nature of the *intimate* sphere, the conjugal family's intimate domain. There is a special challenge for Habermas here as he is faced with describing the emergent structure of the model of the public sphere using references to material changes like architecture and coffee houses, and reflexive behavioural changes of individuals and groups to those material changes.

Habermas was informed about the mechanics of architectural change. Early twentieth century English historian George Trevelyan, and late 19th century German historian W. H Riehl, provided Habermas with details of the 'transformation' of the 'intimate sphere' process in a seventeenth century European domestic context:

> [T]he lofty rafted hall went out of fashion. 'Dining rooms" and 'drawing rooms' were now built of one storey's height, as the various purposes of the 'hall' were divided up among a number of different chambers of ordinary size. The courtyard…where so much of the life of the old establishment used to go on, also shrank…the yard was no longer in the middle of the house, but behind it.[201]

> If we look into the interiors of our homes, what we find is that the 'family room', the communal room for husband and wife and children and domestic servants, has become

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[201] Trevelyan, G.M. (1944) *English Social History: A Survey of Six Centuries from Chaucer to Queen Victoria,*London. (p.246) in Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.44).

even smaller or completely disappeared. In contrast the special rooms for the individual

family members have become ever more numerous and more specifically furnished.[202]

Habermas states: "the family room became a reception room in which private people gather to

form a public".[203] He framed his analysis of change *not* in terms of communication theory nor in

the materiality of architecture, but in terms of a private/public differential, because he was

tracking the emergence and development of capitalist democracy. Habermas noted the

architectural aspects of the spatio-temporal change but focussed exclusively on social

outcomes.[204] The outcomes that mattered most were the disclosures of the relational shifts in

status and political potential. And being so occupied, Habermas failed to remark that the physical

transformations of family homes had noticeable effects on communication, which in turn had

knock-on effects on the family's behaviour.

'Shrinking rooms' and individualization of space in a home are not modes of change that one

normally associates with changes in communication, but, if the relationships between people and

their personal 'geography' change and that change affects communicational responses, then

'shrinking rooms' are demonstrably a medium of communication. More than that, 'shrinking

rooms' are a measurable quantity, giving substance to the spatio-temporal quality of the change.

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[202] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.45).

[203] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.45).

[204] The architectural observations by Habermas are revived in *Chapter Seventeen* when he looks at the twentieth century transformation of the public sphere. He quotes William H. White's views on the American model of the suburban world:

> There evolved in the socially homogenous milieu of the prototypical suburb "a lay version of the Army post life". The intimate sphere dissolved before the gaze of the "group": "Just as doors inside house…are disappearing, so are the barriers against neighbours. The picture in the picture window…is what is going on *inside* (Habermas's italics) – or what is going on inside other people's picture windows".

Habermas's contemporary, Marshall Mcluhan, would have seen 'shrinking rooms' as a 'medium' given his broad-brush attitude to what constituted a 'medium'. 'Shrinking Rooms' could easily have been an 'extensions-of-man' section in the *Housing* chapter in McLuhan's *Understanding Media.*

"Ambivalence" and the fictitious roles of the family

In Chapter Seven, concluding his analysis of the *Social Structures of the Public Sphere,* Habermas makes a very important comment on the initial conditions in the process of the emergence of the public sphere. This comment flows from Habermas introducing the term 'fictitious' in order to describe the merging of two roles of the public sphere.

Habermas argues that capitalism and politics had become important and powerful modes in society by the late 1600s bringing with them *the market* and *representation*. He links these elements to the family unit in a structure that reveals the overlapping nature of these entities:

> The sphere of the market we call "private"; the sphere of the family, as the core of the private sphere, we call the "intimate sphere". The latter was believed to be independent of the former, whereas in truth it was profoundly caught up with the requirements of the market.[205]

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[205] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.55).

Habermas attempts to resolve the 'ambivalence' of this 'sphere within a sphere' by inserting the word "fictitious":

> *The fully developed bourgeois public sphere was based on the fictitious identity of the two roles assumed by the privatised individuals who came together to form a public: the role of property owners and the role of human beings pure and simple.*[206] (Habermas's italics).

Robert C. Holub has attacked Habermas on the use of "fictitious" in explanations of the public sphere:

> As an institution mediating between private interests and public power, the public sphere in its bourgeois form and political variant is based on a fundamental ideological obfuscation: the fictional identity of the property owner (*bourgeois*) and the human being pure and simple (*homme*).[207]

There is little that Habermas has said since to counter this accusation. Even if the reader accepts the proposition that a person can have a dual role, Habermas's statement is then an historical comment, not a description of a spatio-temporal phase change. As suggested earlier, Habermas had an ongoing difficulty in finding appropriate expressions for spatio-temporal change. It is surprising to me that Habermas would call his work a 'structural transformation' when there is so

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[206] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.56).
[207] Holub, Robert C. (1991) *Jurgen Habermas: Critic in the Public Sphere,* London, Routledge (p.3). The italics are Hobub's.

little 'structural transformation'. If he does not deliver a 'structural' description of the 'coming together' of the role of property owner and the role of the father of the family, then he does not effectively support his argument that the family is the original model of *the public sphere*. His new category "fictitious" did not bring clarity.

Habermas continues to acknowledge his ambivalence towards the role of the intimate sphere within the development of the public sphere, and looks again for a suitable description of the emergent spatio-temporal structure of the family's roles. He ends up with a circular and hermeneutically-inclined proposition:

> [T]he objective function of the public sphere in the political realm could initially converge with its self-interpretation derived from the categories of the public sphere in the world of letters.[208]

The emergence of the 'political' sphere

In Chapters Eight to Eleven Habermas critiques the 'transformation of the public sphere' over a century and a half. He uses his multidisciplinary methodology in this rigorous study of the interplay of groups in the formative years of capitalism from the late 1600s.

The British model of the public sphere was the most advanced at this time, and provided for Habermas the most productive geography for his transformation narrative. The emergence of

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[208] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.56).

political functions of the public sphere delivered new terminology, such as "the sense of the people", "the common voice", "the public spirit", "common opinion", and "publicity".[209]

Habermas frequently mentions the role of the press and the print media in the unfolding growth of political functionality over this period, with no suggestion that the media are acting in a determinist mode. Whilst Habermas accepts there is a reactive relationship between media and society, he does not reflect on the spatio-temporal nature of the exchange between the two. Political theory and power is now uppermost in Habermas's analysis and he sees the *literary / letters* version of the *public sphere* (the media) as just a handmaiden to the politics of power.

Politics and dissolution

Possibly disillusioned by his analysis of the period, Habermas ends Chapter Eleven displaying a frustration in his account of transformational change:

> [T]he developed public sphere of civil society was bound up with a complicated constellation of social preconditions. In any event, before long they all changed profoundly, and with their transformation the contradiction of the public sphere that was institutionalised in the bourgeois constitutional state came to the fore.[210]

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[209] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.64).
[210] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.88).

With these 'profound' changes came the "contradiction" and this "contradiction" is another paradox. This paradox is an *emergent* dichotomy, a simultaneity of opposites, in a public sphere that has now turned political.

> With the help of its [organizational] principle, which according to its own idea was opposed to all domination, a political order was founded whose social bias did not make domination superfluous after all.[211]

Habermas's narrative has arrived at a momentous point. The contradiction of a single entity expanding and dissolving at the same time in a non-linear mode is an unexplainable dynamic for those using linear parameters. This non-linear mode activated by the growth factor creates a conceptual challenge that Habermas never resolves.

Paul Grosswiler notes Habermas's expansion/contraction paradox in *Jurgen Habermas: Media Ecologist?* (2001). [212]

> In Habermas's analysis, it seems that even as the bourgeois literary public sphere was forming, it was also beginning to collapse….Habermas centres this collapse on the broadening of the reading public to include almost everyone as readers, thereby creating the "mass public of culture consumers".[213]

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[211] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.88).
[212] Grosswiler, Paul (2001) *Jurgen Habermas: Media Ecologist?*, Proceedings of the Media Ecology Association, Volume 2. New York University (p.27).
[213] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.168).

At this point in his narrative, Habermas is far from persuasive. His multidisciplinary approach, which he hoped would have contributed conceptual clarity, has not disclosed much more of an explanation than what we were told in the opening sections of *STPS*. At the same time the historical strand of his methodology is telling us that change has taken place. However, this is done without telling us how. The narrative now has spatio-temporal references couched in terms of the dichotomous paradox of simultaneously 'forming-and-beginning to collapse'. Even though Habermas is aware of a growth factor, according to Grosswiler, it is noticeable that he passively accepts an outcome where the growth factor has delivered a "mass public" – a mode that has a brand new dynamic.

Dissolution and de Tocqeuville

Up to this point in *STPS*, Habermas's multidisciplinary research methodology showed that by the middle of the nineteenth century, the public sphere had dissolved, the political sphere had emerged and the literary sphere had been subsumed by a "mass public of cultural consumers". It would seem the spatio-temporal relationships of the public sphere were now unfathomable for Habermas. He sees the skeleton or ghost of *the public sphere* in the *intimate sphere* - the family unit, but that is all that remains.

Habermas demonstrates a particular case of 'dissolution' of the public sphere in Chapter Thirteen when he notes that German ethnologist Friedrich Georg Forster said in 1793,

Although we have 7,000 authors there nevertheless is no common spirit in Germany, just as there is no German public opinion *(offentliche Meinung)*....everyone asks for explanations and definitions, whereas no Englishman misunderstands the other when there is mention of public spirit, no Frenchman when there is mention of *opinion publique*.[214]

It can be argued that 7000 authors provide lots of opinion. How many authors in agreement are needed to form the entity of 'public opinion'? Forster's statistics only raise further questions about what is 'public opinion', and by extension *the public sphere*.

Dissolution dominates Chapter Fifteen**.** Habermas, with some qualification, shares the view with Alexis de Tocqueville that the future of the public sphere is limited. Comparisons have been made between them because both Habermas and Alexis de Tocqueville, although a century apart, found failure and dissolution in the development of the public sphere.

In a series of comments about Habermas and de Tocqueville, Jude Howell and Jenny Pearce said that:

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[214] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.101). In *Chapter Twelve*, *Public Opinion*, Habermas comments on Rousseau's political philosophy, and says that Rousseau claimed that, "the break between nature and society tore each individual asunder into *homme* and *citoyen"*. He felt it was all very well for Rousseau to say that "*Opinion publique* derived its attribute from the citizens assembled for acclamation, and not from the rational-critical public debate of a *public eclaire* (enlightenment)", but the question can then be asked of Rousseau, what happens to the *opinion publique* when the crowd disperse? The reader might be prompted to ask a similar question of Habermas; What happens to *the public sphere* when the coffee-drinkers go home?

Although Habermas saw a potential model in the idea of a bourgeois public sphere [like de Tocqueville], his objective was to trace its failure and subsequent degeneration. This took place as the sphere was extended.[215]

However, according to Howell and Pearce, Habermas attempted to separate his view from that of de Tocqueville's by saying that de Tocqueville "treated public opinion more as a compulsion towards conformity than as critical force [like Habermas]".[216] De Tocqueville would have equally distinguished himself from Habermas because he "could not imagine public opinion reached through rational and critical public discourse".[217]

Australian sociologist Pauline Johnson sought to get "a clearer sense of what is at stake in the feared loss of a public sphere"[218] by looking at de Tocqueville's nineteenth-century views on socio-political structures. Johnson noted "Alexis de Tocqueville's penetrating observations about the significant difference between the types of modern artificial solidarities",[219] in his comments about American democracy in the 1850's. She also felt that: "He was deeply troubled by the prospect that self-absorbed and atomized individuals wouyld enter into only calculating and instrumentalizing relations with each other."[220] This was a description of a model not unlike Habermas's.

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[215] Howell, Jude and Jenny Pearce (2001) *Civil Society and Development: A Critical Exploration*, Colorado, Lynne Rienner Publishers (p.56).
[216] Howell, Jude and Jenny Pearce (2001) *Civil Society and Development: A Critical Exploration*, Colorado, Lynne Rienner Publishers (p.56).
[217] Howell, Jude and Jenny Pearce (2001) *Civil Society and Development: A Critical Exploration*, Colorado, Lynne Rienner Publishers (p.56).
[218] Johnson, Pauline (2006) *Habermas: Rescuing the Public Sphere*, Oxon, Routledge (p.6)
[219] Johnson, Pauline (2006) *Habermas: Rescuing the Public Sphere*, Oxon, Routledge (p.6)
[220] Johnson, Pauline (2006) *Habermas: Rescuing the Public Sphere*, Oxon, Routledge (p.6)

Social-Structural Transformation

If the section titled *Social Structures of the Public Sphere* describes the birth of the public sphere, the section titled *The Social-Structural Transformation of the Public Sphere* is Habermas's description of the probable[221] death of the public sphere - Chapter Four's *The Basic Blueprint* has morphed into Chapter Nineteen's *The Blurred Blueprint.*

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> [T]he foundation for a relatively homogenous public composed of private citizens engaged in rational-critical debate was also shaken. Competition between organized private interests invaded the public sphere.[222]

Although Habermas implies that the dissolution of public sphere was, in part, brought about by an invasion of competition, and the emergence of a plethora of socio-political entities, he delivers the dynamics of these emergent groups only in historical terms generally using qualitative terms as a methodological tool. There is no spatio-temporal model of the process of dissolution of the public sphere. Growth is not mentioned.[223]

The dissolution and the disillusion

The dissolution continues in Chapter Twenty-one:

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[221] The word "probable" is used here because Habermas never gives up hope for an eventual resuscitation of the public sphere.

[222] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.179).

[223] *STPS* has a minute number of statistical and quantitative references.

Today, occasions for identification have to be created - the public sphere has to be 'made', it is not 'there' anymore.[224]

'Public sphere' researcher Luke Goode feels that Habermas is disillusioned in his search for the public sphere as he gets to the final stages of his project, and only sees the public sphere's future in terms of a statistical event to be used for political purposes:

For Habermas, the public sphere has become merely the aggregate of individualized preferences, an administrative variable brought into the circuit of power only when its presence is functionally required.[225]

Despite this dissolution, Habermas, according to Goode, still appeared to be unwilling to let the apparent negative outcome of his public sphere research overwhelm him. And he eventually responded. This response is what we now know as Habermas's theory of 'communicative action'- a post-*STPS concept*:

What drives much of Habermas's writing after *STPS* is precisely the goal of showing how this trade-off between democratic expansion and degradation might be conceived as something other than fateful tragedy.[226]

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[224] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.201).
[225] Goode, Luke (2005) *Jurgen Habermas*, London, Pluto Press (p.24).
[226] Goode, Luke (2005) *Jurgen Habermas*, London, Pluto Press (p.25).

Jurisprudence and legal fictions

The first part of Chapter 24 is titled *Public Opinion as a Fiction of Constitutional Law*. This title is a reference to Habermas's comments in Chapter One, where he opened with "jurisprudence do[es] not seem capable of replacing traditional categories like 'public' and 'private', 'public sphere' and 'public opinion' with more precise terms".[227] Not only is jurisprudence failing to provide Habermas with definitions, it supports fictionality on the ethical front as well:

> As a fiction of constitutional law, public opinion is no longer identifiable in the actual behaviour of the public itself; but even its attribution to certain political institutions does not remove its fictive character.[228]

This is of some concern to Habermas who expects constitutionalism and the law to act as a norm in the service the democratic process. An example of the compromise of the democratic process is the significant legal fiction that is upheld by the 14th Amendment of the U.S. Constitution.-the entity of 'corporate personhood'. The 'legal fiction' aspect of 'corporate personhood' is the status conferred upon corporations allowing them to have rights like individuals.

The 'jurisprudence ' factor over a century in many countries has established 'public opinion' as an entity accepted by, and potentially measurable by, the legal profession, regardless of any linguistic, philosophical and sociological concerns and doubts about verification.

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[227] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.1). See footnote in *Definitions, Synonyms and Terminology* above.
[228] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.239).

Public opinion

By Chapter 25**,** Habermas's methodology has almost exhausted all its options of arriving at a structural explanation of the transformation process of the public sphere. However, he tries another pathway by marrying the concepts of *public opinion* and *the public sphere* in *A Sociological Attempt at Clarification,* the final chapter in *STPS*:

> A concept of public opinion that is historically meaningful, that normatively meets the requirements of the constitution of a social-welfare state, and that is theoretically clear and empirically identifiable can be grounded only in the structural transformation of the public sphere itself and in the dimension of its development.[229]

It can be argued, that the above option - exploring an "empirically identifiable" *public opinion* – is circular..

Habermas and C. Wright Mills

In the final paragraphs of *A Sociological Attempt at Clarification,* Habermas describes how he looked outside Europe for closure on the subject of public opinion. He found the work of the American sociologist C. Wright Mills, from which he drew the conclusion that Mills had

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[229]   Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.244).

"obtained empirically usable criteria for a definition of public opinion".[230] Critical theorist Douglas Keller *Perspectives on Habermas* (2000) argues that *STPS:*

"contrasted various forms of an active participatory bourgeoise public sphere in the heroic era of liberal democracy with the more privatised forms of spectator politics in a burauecratic industrial society in which the media and elites controlled the public sphere."[231]

Kellner also made the point that:

Although Habermas concludes *STPS* with extensive quotes from Mill's *The Power Elite* (1956) on the metamorphosis of the public into a mass in the contemporary media/consumer society, the vast literature on Habermas's concept of the public sphere overlooks the significance of Mill's work for Habermas's analysis of the structural formation of the public sphere.[232]

Kellner recalls that in 1981 he met Habermas who "acknowledged that indeed conceptions of Horkheimer and Adorno and C. Wright Mills influenced his analysis".[233]

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[230] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.249).
[231] Kellner, Douglas (2000) "Habermas, the Public Sphere, and Democracy: A Critical Intervention" in Hahn, Lewis Edwin ed. *Perspectives on Habermas*, Chicago, Open Court (p.262).
[232] Kellner, Douglas (2000) "Habermas, the Public Sphere, and Democracy: A Critical Intervention" in Hahn, Lewis Edwin ed. *Perspectives on Habermas*, Chicago, Open Court (p.268).
[233] Kellner, Douglas (2000) "Habermas, the Public Sphere, and Democracy: A Critical Intervention" in Hahn, Lewis Edwin ed. *Perspectives on Habermas*, Chicago, Open Court (p.269).

According to Habermas, Mills had created a matrix of four "empirically usable criteria"[234] which had emerged from contrasting the entities of 'public' and 'mass'. Habermas commented:

> These abstract determinations of an opinion process that takes place under the conditions of a collapse of the public sphere can easily be fitted into the framework of our historical and developmental model.[235]

The reader may wonder why Habermas left almost the last word on the definition of one of his key themes, public opinion, to somebody who does not get a mention in the rest of *STPS*.

Habermas positioning the Mills' theories at the end of *STPS* can be interpreted in two ways. Firstly, Mills' theories and ideas were in the same broad range that Habermas held to, in that Mills was distinctly non-positivist and paralleled hermeneutics with his 'sociological imagination' concept.[236] This meant that Mills's 'hermeneutical' concepts (on the last two pages of *STPS*) would be supporting Habermas's 'historical' narrative in the tradition of Critical Theory. Richard E. Palmer spelled out the connection between Habermas and Critical theory:

> Habermas, following the lead of Adorno, developed a Critical theory that, in the face of a growing social science that was scientistic, empirical and ahistorical, put forward an

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[234] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.249).
[235] Habermas, Jurgen (1989) *The Structural Transformation of the Public Sphere*, Cambridge UK, Polity Press (p.249).
[236] Mills, C. Wright (2000) *The Sociological Imagination,* Oxford, Oxford University Press.

account of the development of society that was historical, sociological, and philosophical". [237]

Palmer in *Perspectives on Habermas* (2000) also noted that Habermas was always aware of the 'positivist' opposition from the "scientistic, empirical and ahistorical" version of social science.

The second argument is that even if his rigorous pursuit of definitions of 'public opinion' and the public sphere fell short, Habermas still wanted to show that there were still other possibilities.. He was prepared to tell readers he was pointing the way to Mills's modern era matrix-format of criteria being a potential definition-clarifying option, and that its late appearance in *STPS* could be seen as a kind of 'human science'[238] appendix to his *STPS* research. In other words, he was looking for a bridge between positivism and hermeneutics.

'Bridging the gap'

Throughout the 1960s, the hermeneutic/positivism schism pre-occupied Habermas, who took on an air of responsibility for 'bridging the gap'. Paraphrasing Max Weber, Habermas proposed that: "the social sciences have the task of bringing the heterogenous methods, aims and presuppositions of the natural and cultural sciences into balance".[239]

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[237] Palmer, Richard E. (2000) "Habermas versus Gadamer? Some Remarks", in Hahn, Lewis Edwin ed. *Perspectives on Habermas*, Chicago, Open Court (p.491).
[238] See Glossary for *human science*.
[239] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press.(1967) (p.10).

Even though Habermas sustained what he saw as a responsible attitude towards "balance", by 1971 his views on positivism had become increasingly critical:

> There is nothing specifically scientific in the call to science of nineteenth century positivism. Positivism sees science in a substantially dogmatic way, as the absolute model for type of knowledge, which, in any case is considered relative and contingent.[240]

Habermas's interest in sociology finding a multidisciplinary balanced approach to 'bridging the gap' may have been dashed by social commentator Roger Kimball's comments in *The New Criterion* (1994):

> The gulf between scientists and literary intellectuals…has grown wider as science has become ever more specialized and complex…the gulf is unbridgeable and will only widen as knowledge progresses".[241]

An argument can be put here that if the 'gap' or gulf' that Habermas had noticed in 1962 has shown itself to be increasingly unbridgeable, then a new approach to an analytical framework, like complexity theory, might be worth exploring.

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[240] Habermas, Jurgen (1987) *Knowledge and Human Interest*, trans Jeremy J.Shapiro, Cambridge, Polity Press (p.4).
[241] Kimball, Roger (1994) "'The Two Cultures' Today", *The New Criterion*. February. http://www.newcriterion.com/articles.cfm/-The-Two-Cultures--today-4882

Summary

This preliminary summation of Habermas's explanations of the spatio-temporal characteristics of the public sphere includes the views of several critics and commentators on *STPS* and sections on Habermas's relationship to complexity theory and entropy.

In an *Acta Sociologica* review of John Sitton's *Habermas and Contemporary Society* it was noted that, as of 2006, the LIBRIS database in the Swedish library system had 314 books on Habermas. This is an acknowledgement of Jurgen Habermas's status as one of the world's leading intellectuals.[242] Notwithstanding his exemplary position in the academy, questions about the development of his model of the public sphere still remain unanswered.

This section is an attempt to identify incompleteness in Habermas's approach to spatio-temporal modelling of the public sphere. This incompleteness emerged from his ambivalence towards the hermeneutic/positivist schism – an ambivalence that he shared with Max Weber.

The shared ambivalence was demonstrated by Habermas in his comment in *On the Logic of the Social Sciences* (1967). He stated that his and Weber's belief was that:

> [A] cultural science cannot exhaust its interest in the study of empirical regularities. The overarching interest by which this work is guided is defined hermeneutically…In this

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[242] Acta Sociologica, Vol 49, No.1, Mar.2006 [untitled] (p.113).
http://www.jstor.org/discover/10.2307/20459914?uid=3737536&uid=2129&uid=2&uid=70&uid=4&sid=21101556 383101.

schema for the progress of social-scientific knowledge, causal analytic and interpretive methods alternate.[243]

Habermas, like Weber, did not "expressly link these two conflicting intentions" (hermeneutics and positivism)[244] and neither one of them "clarifies nor completely suppresses his ambivalence of aims."[245] It is worthwhile to note here that this ambivalence underwrote a methodological imbalance in *STPS* that has parallels in the media-related works of Pierre Bourdieu and Marshall McLuhan.

Commentators on *STPS* over the past half-century have pointed to a lack of resolution of Habermas's development of *the public sphere* since the publication of *STPS*. At the same time many of them seem not to have come to terms with the possibility that their own lack of engagement with the new sciences - like complexity and emergence theory - may have contributed to their disappointment at the development of the Habermas project. In other words, the shortcomings of the commentators may have compounded incompleteness in Habermas's methodology.

Nancy Fraser in *The Idea of a Public Sphere* (1992) showed her concern about Habermas's model:

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[243] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press.(1967) (p.13).

[244] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press.(1967) (p.13).

[245] Habermas , Jurgen, trans. Nicholsen, Shierry Weber and Jerry A.Stark (1989) *On the Logic of the Social Sciences*, Cambridge MA, The MIT Press.(1967) (p.14).

Oddly, Habermas stops short of developing a new post-bourgeois model of the public sphere. Moreover he never explicitly problematizes some dubious assumptions that underlie the bourgeois model. As a result, we are left at the end of *Structural Transformation* without a conception of the public sphere that is sufficiently distinct from the bourgeois conception to serve the needs of critical theory today.[246]

Fraser's "dubious assumptions" accusations relate to the qualitative aspects of bourgeois activity in Habermas's original model. Fraser put forward a theory of "weak" (opinion-forming) and "strong" (opinion-forming and decision-making) publics in contrast to Habermas's bourgeois conception of the public sphere. As well, she argued that: "a multiplicity of publics is preferable to a single public sphere".[247] Her argument introduced a more comprehensive set of criteria for evaluating public opinion, but, like Habermas, made no commentary on the spatio-temporal characteristics of change involving public spheres or similar dynamic phenomena. Fraser's 'categorization' of spheres does not offer a solution to Habermas's 'incompleteness'.

Craig Calhoun's critique on Habermas's final phase of inquiry into *STPS* gives his reasons why Habermas's project "stops short" of reaching a satisfactory conclusion:

Habermas's account of the twentieth century undermined his own initial optimism. He showed a public sphere fundamentally diminished by … the progressive incorporation of

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[246] Fraser, Nancy (2010) "Rethinking the Public Sphere: A contribution to the critique of actually existing democracy (1992)" in Gripsrud, Jostein, Hallvard Moe, Anders Molander and Graham Murdock eds. *The Idea of the Public Sphere: A Reader*, MD, Lexington Books (p.129).

[247] Fraser, Nancy (2010) "Rethinking the Public Sphere: A contribution to the critique of actually existing democracy (1992)" in Gripsrud, Jostein, Hallvard Moe, Anders Molander and Graham Murdock eds. *The Idea of the Public Sphere: A Reader*, MD, Lexington Books (p.129).

ever larger numbers of citizens into the public… as the public sphere grew in scale it degenerated in form.[248]

Rodney Benson and Erik Neveu in 2005 were more constructive in their criticism of *the public sphere* concept. They stated that whilst *the public sphere* was easily distinguished from Bourdieu's notion of *the field*, they thought that "'the public sphere', as an empirical concept, would be much improved through the kind of detailed specification of structures and processes that field theory could provide".[249] This comment was another way of suggesting that Habermas's sociological interpretations were thin on the ground in many ways. However it is difficult to see how Bourdieu's qualitative "specifications" would increase the empiricality of structural interpretation of the public sphere if those "specifications" were static (no time component) as in the Bourdieu model of the field. It is also hard to accept that Habermas would shift his hermeneutic stance and move towards a more empirical methodology given his much-stated rejection of positivism.

Rodney Benson again pitted Bourdieu against Habermas in *Shaping the Public Sphere: Habermas and Beyond* in *NYU Academia* (2009) using Bourdieu's so-called empiricality as a measure. Benson begins:

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[248]   Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.31). PS. This quote encapsulates the *growth*, *expansion/contraction dynamics* and *emergence* factors as mentioned in *Chapter One.*
[249]   Benson, Rodney and Neveu, Erik (2005) "Introduction: Field Theory as a Work in Progress" in Benson, Rodney and Neveu, Erik (eds) *Bourdieu and the Journalistic Field* , Cambridge UK, Polity Press (p.9).

In recent years, there has been an explosion of ambitious sociological research that attempts to map and explain the dynamics of media understood not as technologies or individual organizations but rather as systems interacting with other systems.[250]

Benson credits Habermas with lighting the fuse of the "explosion", especially with his concept of *the public sphere*, but argues that Habermas's "empirical model [currently] remains underdeveloped".[251] However, "a new generation of researchers, influenced by Bourdieu and state-oriented new institutionalism is *fortunately* moving to fill in this gap" (my italics).[252] Despite the better-late-than-never optimism of Benson, I argue that although Habermas may not have completed his development of a structure in the public sphere, the only structure Bourdieu structured[253] are a set of Russian dolls[254] called a field.

Benson asks several questions about Habermas and his work including: "How successful have Habermas's concepts been in the sociology of media and communications?" and "What are the crucial gaps or conceptual problems in Habermas's original empirical model of the public sphere?"[255] I argue that the "crucial gaps" include the gap in the hermeneutics/positivist schism,

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[250] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40:175. http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf.

[251] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40:175. http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf.

[252] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40:175. http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf

[253] One of Bourdieu's favourite references is "structured structure", his phrase for objective structure.

[254] See the Benson and Neveu analogy in the *Relationships and Autonomy* section in *Chapter Three.*

[255] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40:175. http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf

and where Habermas has a "conceptual problems" stemming from his ambivalence is in finding a methodology to bridge the gap.

'Conceptual problems' appeared in a pessimistic evaluation of Habermas's project by Elihu Katz, whose criticism in 1996 stated that the notion of *the public sphere* was "little more than an idealized reminder that we have an unsolved problem on our hands".[256] Equally pesimistic about the future of the public sphere was William E Sheuerman. In 1999, he stated that: "the autonomous 'bourgeois public sphere' of the late eighteenth and early nineteenth centuries had been jettisoned for the 'manipulated public sphere' of organized capitalism".[257]

John B.Thompson also appears to be engaging in a discussion about spatio-temporal change over the centuries when he comments that "Habermas's conception of the public sphere is spatial and dialogical"[258] - suitable enough for the eighteenth century - and that "today's actions and communications are widely dispersed in space and time".[259] However, Thompson's commentary is only about an apparent disjunction between the past and the present modes of communication, not phase change in spatio-temporal models. Thompson thinks it is difficult to compare modern communication practices with Habermas's structural transformation mode in *STPS* where people participate in a face-to-face conversation.[260]

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[256] Katz, Elihu (1996) "Mass media and Participatory Democracy" paper presented to Middle Tennessee State University (p.3) in Zelizer, Barbie (2004) *Taking Journalism Seriously*, California, SAGE Publications (p162).
[257] Scheuerman, William E. (1999) "Between Radicalism and Resignation: democratic theory in Habermas's *Between Facts and Norms*" in Dews, Peter (ed) *Habermas: A Critical Reader*, Oxford, Blackwell Publishers (p.154).
[258] Thompson, John B. (1995) *The Media and Modernity,* Cambridge UK, Polity Press (p.261).
[259] Thompson, John B. (1995) *The Media and Modernity,* Cambridge UK, Polity Press (p.261).
[260] Thompson, John B. (1995) *The Media and Modernity,* Cambridge UK, Polity Press (p.131).

Thompson's comments about the eighteenth and twentieth century, however, do not rule out the existence of an underlying spatio-temporal mode that is consistent with emergent phase change. Even with the spatio-temporal variations and the variable physicality and geography of the public sphere, it is arguable that the model is the same in both instances. Audiences - statistically large enough for comparison purposes - were reached and messages were passed on. These outcomes suggest that Thompson's comparison argument does not hold much weight.

Notwithstanding these views, there would be no argument among most analysts of contemporary media that the public sphere – 'democratic expression' - has more than survived. This has occurred despite paradigmatic changes in technology in recent decades where society's reflexive response to those changes has had exponential growth, be it in participation in social media or accommodating convergence.

I argue that Habarmas's 'dissolution tragedy' of *the public sphere* would have been analysed as a redistribution challenge if Habermas had considered an analysis of transformation that was based on *entropy* theory[261] – a member of the complexity theory family.

Habermas and Complexity Theory

Complexity theory and *entropy* were not unknown to the humanities when Habermas was writing *STPS*. According to German Studies academic William Rasch, Habermas was not unaware of complexity, but perceived it as a reductionist mode of science:

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[261] See Glossary for *entropy.*

Habermas's attempts to reconstruct the Enlightenment project of modernity not surprisingly also attempts to reconstruct an essential feature of Enlightenment science, the reductionist effort to explain surface or phenomenon complexity in terms of underlying, normative simplicity.[262]

Rasch argued that Habermas was suspicious of complexity because: "If it is not grounded in the simplicity that is its origin, complexity threatens to become not pluralism, but irrational deviation."[263] Rasch saw Habermas as another of those academics and theorists who, as John Durham Peters commented, "didn't absorb the science innovations".[264]

Since the late 1940's, it has become commonplace…to see science evolving from a science of simple systems to a science of complex systems… Warren Weaver put it in his famous article of 1948, "Science and Complexity"[265]… [that] the science of the first half of the twentieth century learned, by means of statistical analysis and probability theory, to deal with the problems of disorganised complexity.[266]

"[D]isorganised complexity" is a good simile for *entropy*.

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[262] Rasch, William (1991) "Theories of Complexity, Complexities of Theory: Habermas, Luhmann, and the study of Social Systems in *German Studies Review,* Vol.14, No.1 (pp.65-66).

[263] Rasch, William (1991) "Theories of Complexity, Complexities of Theory: Habermas, Luhmann, and the study of Social Systems in *German Studies Review,* Vol.14, No.1 (p.70)

[264] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

[265] Weaver, Warren (1948) "Science and Complexity" in *American Scientist* 36:536-44.

[266] Rasch, William (1991) "Theories of Complexity, Complexities of Theory: Habermas, Luhmann, and the study of Social Systems in *German Studies Review,* Vol.14, No.1 (p.65)

Entropy and 'dissolution'

In order to explain in spato-temporal terms how the model of the intimate family sphere changed into the public sphere model Habermas's explanation relies on whatever explanatory theory he had used to construct his original 'intimate family sphere'. As shown in Chapters Four, Five and Six of the critical reading, Habermas had unresolved issues in his description of the initial conditions of the intimate family sphere.[267]

As these issues were not resolved, nor really come to terms with, by Habermas or his critics, I argue that explanations of the development of Habermas's public sphere would be substantially clarified by using the analytical framework of *entropy*. Entropy theory would provide; alternative explanations; appropriate spatio-temporal analogies; and, especially, 'outcomes', by answering questions about the dissipation and eventual return of the public sphere.

Entropy runs on dissipation. The greater the spread and distribution the greater the entropy. In many cases 'islands' of negative entropy occur in a 'sea' of entropy These 'islands' can be perceived as hubs of activity – such as spheres - that reform and carry on with their work. Sociologist John Urry references the explanation of the entropic effect put forward by Ilya Prigogine who was awarded a Nobel Laureate for his work on complexity systems:

> The accumulation of disorder or positive entropy results from the 2nd Law of Thermodynamics. However there is not a simple growth of disorder. Prigogine shows

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[267] See *The family, their architecture and phase change* in Habermas chapter.

how new order arises but is far from equilibrium. There are dissipative structures, islands of new order within a sea of disorder, maintaining or even increasing their order at the expense of greater overall entropy.[268]

An *entropic* interpretation of the 'dissolution' of the public sphere argues that a collection of beliefs, messages, or conscious attitudes – attributes of a public sphere or opinion - can appear to disappear. In fact, these attributes may be operating but increasingly distributed at lower levels of specificity, refinement or activity, and so appear to be dissolving; and their outcomes may not be recognizable due to a change in format. For example, crafted and detailed policies for a small group may be turning into simple slogans for the masses. In many cases the reverse of entropy occurs – called negative entropy[269] - where hubs of activity (such as spheres) increase in specificity, or achieve greater refinement. There can be lengthy passages of time in phase-changing cycles. Given these potential circumstances, it is not surprising Habermas failed to register some crucial changes.

Habermas may have had 'dubious assumptions', 'ignored significant variations', and suffered disillusion about the development of the public sphere model, but at least he included time as an empirical component in his spatio-temporal observations. Bourdieu, as we shall see in the next chapter, struggled *timelessly* in conceptualising his tautological mine-field of hermeneutic relationships.

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[268] Urry, John (2005) "The Complexity Turn", *Theory, Culture & Society*, 22:1 (p.4). http://www.sagepub.com/content/22/5/1
[269] Noble Laureate in physics, Erwin Schrodinger , coined this term in *What is Life?* (1943).

CHAPTER 3

PIERRE BOURDIEU

This chapter begins with a brief historical overview of the influences and interests that played an important role in the development of Bourdieu's career in sociology and philosophy. Then follows several views by his critics and commentators on his relationship to Habermas. Next are the critical readings of *The Political Field, the Social Science Field, and the Journalistic Field* (*The Fields*) and *On Television*. All but one of the works here were originally presented verbally, so I have provided an introduction to the first critical reading to give the reader an awareness of the nuances of Bourdieu's presentation style. This introduction includes Bourdieu's methodology. The summary includes segments on the potential of network theory and self-organization to assist in explanations of Bourdieu's field.

Historical overview of Bourdieu's academic influences and interests

Pierre Bourdieu (1930-2002), French anthropologist turned sociologist/philosopher, found his way to the highest rank in Parisian academe from obscure beginnings in Algiers, having spent several years in ethnographic work with the Kabyle Berbers.

Bourdieu's approach to knowledge "was formed in the structuralist crucible of 1950s and early 1960s France and remains deeply shaped by it".[270] Although trained as a philosopher, he has remained consistently sociological. Pekka Sulkunen noted: "Originally a structuralist

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[270] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.xx).

anthropologist, Bourdieu has developed a critical sociology of cultural forms".[271] "Bourdieu successfully redefined his sociological project by combining Durkheimian sociology[272] with recent developments in anthropology, linguistics, and art history, among other areas," claimed Niilo Kauppi (*French Intellectual Nobility*, 1996).[273]

Bourdieu built upon the theories of Karl Marx, Max Weber, Émile Durkheim and Ernst Cassirer, among others, which he synthesized into his own body of work.

He drew from Max Weber the concepts of 'domination' and 'symbolic systems' in social life, as well as the idea of 'social orders', all of which would ultimately be transformed by Bourdieu into his theory of fields. In a conversation that took place in a café on the Boulevard Saint-Germain in Paris in the spring of 1999, Bourdieu was asked if Weber[274] was some kind of 'stepping stone' for his (Bourdieu's) *field* project. His response was that after his time in Algeria he started to teach Weber's sociology of religions and

> during the course, everything just fell into place when covering and comparing different religious occupations…Quickly this became a model of interactions, which seemed very plausible: it was the *relations* between them which defined the respective 'types'.[275]

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[271] Sulkunen, Pekka (1982) "Society Made Visible: On the Cultural Sociology of Pierre Bourdieu" in *Acta Sociologica*, Vol. 25, No. 2 Sage Publications Ltd. http://isites.harvard.edu/fs/docs/icb.topic1037816.files/Readings/Feb%2022%20Readings/The%20cult.%20soc.%20of%20P.%20Bourdieu.pdf,

[272] Emile Durkheim, the so-called father of sociology, whose own roots lay in the 'positivism' of Auguste Comte. Durkheim with Karl Marx and Max Weber, are commonly cited as the principal architects of modern social science.

[273] Kauppi, Niilo (1996) *French Intellectual Nobility: Institutional and Symbolic Transformation in the Post-Sartrian Era*, Albany NY, State University of New York Press (p.7).

[274] Bourdieu's closing comments in The Fields: "It's because one has read Max Weber – that one resists crass social demands…and one is able to say: 'The problem is ill-posed, I won't answer that question.'".[274] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press

[275] Bourdieu, Pierre, Franz Schultheis, Andreas Pfeuffer (2011) "With Weber Against Weber: In Conversation with Pierre Bourdieu" trans. Simon Susen , in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.116)

From Karl Marx he gained an understanding of 'society' as the ensemble of social relationships. Randal Johnson[276] pointed out that Bourdieu was Marxian enough "to ground "the agent's action in objective social relations" in his concept of *the field* "without succumbing to the mechanistic determinism of many forms of sociological and 'Marxian' analysis".[277]

Bourdieu has been seen as a contributor to critical theory. However, he also has described the Frankfurt School[278] in derisory terms as "theoretical theorists",[279] possibly because the original Frankfurt theorists followed their German theoretical forbears without much reference to the French.

His work has combined a wide range of empirical work as well as theory. So much so, that the American reception of his works failed to understand Bourdieu's place within the broad context of French human science. Craig Calhoun has noted that his individual works were "separated by distinct boundaries between social science fields in American academia".[280]

Bourdieu's answers to questions about his field theory methodology had a tendency to display hermeneutical intent even though he thought the hermeneutic/positivism schism needed a re-evaluation. This was pointed out by Derek Robbins who claims that in 1968 Bourdieu agreed in a shared publication with sociologists Jean-Claude Passeron and Jean-Claude Chamboredon that

> [T]he legacy of the competing philosophies of social science of the nineteenth century
> offered a false dichotomy between positivism and hermeneutics and that the solution

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[276] Editor of Bourdieu's *The Field of Cultural Production* (1993).
[277] Johnson, Randal (1993) "Editor's Introduction" in Johnson, Randal (ed) *The Field of Cultural Production*, Cambridge, Polity Press, (p.2).
[278] See Habermas's *Historical overview.*
[279] Calhoun, Craig (1995) *Critical Social Theory,* Oxford, Blackwell (p.34).
[280] Calhoun, Craig, LiPuma, Edward and Postone, Moishe, eds. (1993) Bourdieu: critical perspectives. University of Chicago Press, Chicago, IL, USA. Abstract.

should be the establishment of an epistemology which would be particular to the social sciences.[281]

Bourdieu's position on hermeneutics was informed by the writings of philosopher Ernst Cassirer whose books Bourdieu translated in the early 1970s. Cassirer aimed to devote equal philosophical attention to both the natural sciences and to the more humanistic disciplines. "In this way, Cassirer, more than any other twentieth-century philosopher, plays a fundamental mediating role between C. P. Snow's famous 'two cultures'", stated Michael Friedman.[282] Through Cassirer Bourdieu was familiar with the 'two cultures' argument.

In *The Lost Urban Sociology of Pierre Bourdieu* (2011), sociologist Mike Savage saw Bourdieu's intellectual project "as involving a battle on two fronts, against positivist sociology on the one hand, and what he saw as the excesses of the 'cultural turn'[283] on the other".[284]

This thesis argues that despite Bourdieu's interest in finding a resolution to the longstanding battle between hermeneutics and positivism, his 'hermenetical tendency' always won out against the march of science and its 'positivistic' associations.

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[281] Robbins, Derek (2011) "Social Theory and Politics: Aron, Bourdieu and Passeron and the Events of May 1968,w in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.313)

[282] Friedman, Michael, "Ernst Cassirer", The Stanford Encyclopedia of Philosophy (Spring 2011 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2011/entries/cassirer/>.

[283] "Nothing has generated more controversy in the social sciences than the turn towards culture, variously known as the linguistic turn, culturalism or postmoderism" Bonnell, Victoria E. and Lynne Hunt Eds. (1999) *Beyond the Cultural Turn*, University of California Press , Abstract. http://www.ucpress.edu/book.php?isbn=9780520216792

[284] Savage, Mike (2011) "The Lost Urban Sociology of Pierre Bourdieu" in Bridge, Gary and Sophie Watson *The New Blackwell Companion to the City*, Blackwell Publishing Ltd. (p.512).

Bourdieu was a prolific writer, constantly covering the fields of sociology, anthropology, philosophy and culture whilst developing his *field*, *habitus* and *cultural capital* theories and his investigative frameworks and terminologies.[285] The critical readings in this chapter analyse Bourdieu's media-related works, *The Political Field, the Social Science Field, and the Journalistic Field,* and *On Television.*

Bourdieu and Habermas

Bourdieu and Habermas have been contrasted on many fronts. Craig Calhoun (1995) saw that, like Habermas, Bourdieu promoted the links between history and sociology, but argued that, unlike Habermas, "his [Bourdieu's] sociology does not offer purchase on the transformation of social systems. It is geared towards accounts of their internal operations".[286]

Rodney Benson and Erik Neveu, media and communications academics, also found a point of division between Bourdieu and Habermas on the nature of *the field* and *the public sphere*:

> In contrast to Bourdieu's understanding of the journalistic *field* as possessing some autonomy, Habermas portrays the press as completely lacking in defenses against the market and the 'mass-welfare state'.[287]

However, Benson and Neveu think that there are affinities which would have benefited Habermas if he had used Bourdieu's empirical approach:

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[285] See Glossary for *field theory.*
[286] Calhoun, Craig (1995) *Critical Social Theory*, Cambridge, Mass., Blackwell Publishers Inc. (p.141). See Calhoun on Bourdieu and Habermas in *Literature Reviews* section in *Introduction*.
[287] Benson, Rodney and Neveu, Erik (2005) "Introduction: Field Theory as a Work in Progress" in Benson, Rodney and Neveu, Erik eds *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.9).

More crucial for our purposes, however are the empirical and analytical affinities between the two. …[T]he "*public sphere*" as an empirical concept would be much improved through the kind of detailed specification of structures and processes that *field* theory could provide.[288]

Benson again pitted Bourdieu against Habermas in *Shaping the Public Sphere: Habermas and Beyond* in *NYU Academia* (2009). Benson asked: how did Habermas's new version of the public sphere match up with Bourdieu's field theory and the American new institutionalism in contributing to a "nuanced, critical macro-sociology of media"?[289] Benson's own answer to this question was:

For Bourdieu, decline [of the public sphere or field] is not the product of institutionalization…as in Habermas; rather it is the result of *not enough* institutionalization.…contra Habermas, small is not necessarily beautiful in Bourdieu's model. In fact, a field may need to grow bigger in order to amass the cultural and economic resources to assure its continued autonomy.[290]

Benson supported the field model of society in "Three Empirical Models of the Public Sphere" (2009)[291] and also suggested that Bourdieu would have conceptualized the contemporary public

[288] Benson, Rodney and Neveu, Erik (2005) "Introduction: Field Theory as a Work in Progress" in Benson, Rodney and Neveu, Erik eds *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.9).

[289] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40 (p.176). http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf.

[290] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40 (p.183) http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf.

[291] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40 (p.176).

sphere "as a series of overlapping fields…with the center of this complex, the journalistic field".[292]

Nick Couldry compared Habermas unfavourably with Bourdieu in 2005 when he reviewed *Bourdieu and the Journalistic Field.* Couldry wrote:

> When we compare field theory, as represented here, with the historical elisions of Habermas′s ″public sphere″ concept, the inadequate treatment of media power within Castells′s theory of the network society, and the sometimes illuminating but less dynamic understanding of media practice recently emerging from actor–network theory, it is not difficult to believe the editors′ claim that ″field″ is the most useful conceptual tool currently available for understanding the multi-dimensional dynamics of journalistic production, indeed cultural production generally.[293]

Introduction to a critical reading of *The Fields* and *On Television*

Methodology is the main subject in this introduction. It is followed by an analysis of the *time* factor in Bourdieu's model of *the field*.

http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf.

[292] Benson, Rodney (2009) "Shaping the Public Sphere: Habermas and Beyond" NYU, Am Soc 40 (p.176). http://steinhardt.nyu.edu/scmsAdmin/uploads/006/243/Benson%202009%20American%20Sociologist%20FINAL.pdf.

[293] Couldry, Nick (2005) *Review of Rodney Benson and Eric Neveu, editors, Bourdieu and the Journalistic Field.* Cambridge: Polity Press (p.211). Published online: 14 March 2007 http://www.springerlink.com/content/j684184462n12275/

Two of Bourdieu's media-related works in the mid 1990s were oral presentations to an audience: the first, *The Fields*[294] - a university lecture, and the second, a television programme called *On Television*.[295] Given the locations and formats, they are working examples of the medium being the message. *The Political Field, The Social Science Field and the Journalistic Field* (thereafter shown as *The Fields*) interrogates Bourdieu's *field* concepts related to journalism, and *On Television* is a highly detailed profile of the journalistic field relationship to television decision-making and its power structure.

Bourdieu's methodology

Several commentators have highlighted the crucial nature of methodology for Bourdieu. In Bourdieu's methodological guidelines for his media-related works, three perspectives are cardinal: to evaluate sociological subjects through a sociological filter (which means, for Bourdieu, a multidisciplinary methodology); to always view the objects under research with total regard to their relational characteristics; and to keep redefining the terms in order to narrow the gap between understanding and comprehension for the reader/audience.

"[T]he greatest interest of Bourdieu lies in his method", commented the late British anthropologist, Mary Douglas.[296]

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[294] The Political Field, the Social Science Field, and the Journalistic Field.
[295] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.43).
[296] Douglas, Mary (1981) "Good Taste: Review of Pierre Bourdieu, 'La Distinction'", *Times Literary Supplement* (London) February 13 : 163-169 in Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.101).

"His methodological point of view is at one and the same time anti-functionalist, anti-empiricist and anti-subjectivist",[297] stated Finnish sociologist Pekke Sulkunen.

Loic Wacquant prioritized 'methodology' in a quote from his 1992 dialogue with Bourdieu:

> 'However important, the specific object of [this or that] research counts less indeed … than the method which was applied to it and which could be applied to an infinity of different objects'.[298]

It is observable from the above quotations that Bourdieu's methodology is his major sociological agenda item. *The Fields* lecture is an example of this. He argues his aims are twofold: firstly, to satisfy his fellow academics' expectations about analysing social phenomena; and secondly, to satisfy "political or civic interests".[299]

One fellow sociologist was not satisfied with Bourdieu's sociology or methodology. In a paper for *Critical Sociology* (1996), sociologist Robin Griller's abstract summed up her problems with Bourdieu:

> While Pierre Bourdieu is clearly one of the most important living sociologists, there are problems with his theory of practice, his methodology, and his conception of science. In

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[297] Sulkunen, Pekka (1982) "Society Made Visible: On the Cultural Sociology of Pierre Bourdieu" in *Acta Sociologica*, Vol. 25, No. 2 Sage Publications Ltd. http://isites.harvard.edu/fs/docs/icb.topic1037816.files/Readings/Feb%2022%20Readings/The%20cult.%20soc.%20 of%20P.%20Bourdieu.pdf,

[298] Bourdieu, Pierre and de Saint Martin, Monique (1982) "La sainte famille. L'episcopat francais dans le champ du pouvoir." *Actes de la recherché en sciences sociaels* 44/45:2-53. in Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.5).

[299] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.29).

an attempt to overcome the subjectivist/objectivist divide, Bourdieu has developed his theory of human practice. This theory, while seen as an advance by many, interacts with Bourdieu's methodology to produce a sociology plagued by tautologies, contradictions, and a positivistic view of social science.[300]

Despite her accusation of Bourdieu being "positivistic",[301] Griller thought Bourdieu's methods were not empirical or scientific in the sense of indicating spatio-temporal changes:

> Bourdieu uses statistical data often…he does not use statistics in the traditional sociological fashion. …[but] his use of statistics is primarily descriptive…as a result of his epistemological ideas, embodied in his theory of practice, he cannot use survey questions to answer questions of why respondents behave in the way that they do.[302]

However, even though Bourdieu may not act traditionally in the use of statistics, I argue that a more important methodological shortcoming is the absence of the *time* component in his *field* model.

Time

Harold Innis, one of McLuhan's major influences, had a firm view on *time* and social science:

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[300] Griller, Robin (2000) "The Return of the Subject? The Methodology of Pierre Bourdieu". http://crs.sagepub.com/content/22/1/3.short,

[301] This is an unusual accusation given Bourdieu's commonly accepted anti-positivist stance.

[302] Griller, Robin (2000) "The Return of the Subject? The Methodology of Pierre Bourdieu", in Robbins, Derek, ed. *Pierre Bourdieu*, London, SAGE Publications (p.192-3).

The concepts of time and space must be made relative and elastic and the attention given by the social scientist to the problems of space should be paralleled by attention to the problems of time.[303]

Bourdieu's *field* does not have a *time* parameter. One could argue that defining the 'autonomy' of a field in relational and spatial terms is challenging enough for readers without limiting explanations through absenting the time factor.

The absence of time is commented upon by sociologist Lisa Adkins in "Practice as Temporalization: Bourdieu and the Economic Crisis" in The *Legacy of Pierre Bourdieu* (2011). Editor Simon Susen found Adkins had identified that

even though he insists upon the temporal constitution of the social world in general and of social fields in particular, Bourdieu does not examine the process of abstraction and quantification of labour into temporally constructed units.[304]

Avoiding time means he is also avoiding the process of phase change in the field. RMIT anthropologist, John Postill states:

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[303] Innis, H (1942) "The Newspaper in Economic Development" in *Journal of Economic History* (Supplement December) (pps.1-33)
[304] Susen, Simon (2011) "Afterword: Concluding Reflections on the Legacy of Pierre Bourdieu", in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.406)

The received wisdom about Bourdieu's field theory is that it neglects processes of change and overemphasizes social reproduction. …One influential commentator, Richard Jenkins [points] out that in Bourdieu's field theory, process is a 'black box'.[305]

Time is not a fixed factor for Bourdieu. He only uses the term 'time' rhetorically in concert with explaining relational aspects of the field. This treatment shows up in a comment by Adkins: "according to Bourdieu, the future is always already present in the immediate present because agents are ordinarily immersed in the forthcoming".[306]

Not only time but phase change receives Bourdieu's methodology of abstraction. Susen paraphrases Bourdieu on these subjects:

The ineluctable preponderance of the pre-dispositionally constituted and pre-reflexively executed nature of human agency is indicative of the protensive constitution of social temporality.[307]

In *Bourdieu and the Journalistic Field* (2005) Bourdieu makes an unusual statement given his general anti-positivist approach: "The concept of a field is a research tool, the main function of which is to enable the scientific construction of social objects." [308]

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[305] Postill, John *Field theory and the political process black box: analysing Internet activism in a Kuala Lumpur suburb* http://www.antropologi.info/blog/anthropology/html/Postill-Field_Theory.html*, .

[306] Adkins, Lisa (2011) "Practice as Temporalization: Bourdieu and the Economic Crisis", in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.352).

[307] Susen, Simon (2011) "Afterword: Concluding Reflections on the Legacy of Pierre Bourdieu", in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.407)

[308] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.30).

The language and terminology Bourdieu uses indicates that, not only has he discounted *time*, in the above instance he has reduced the dynamics of change to a stage prop in his theatre of the field. The implication for media studies is that Bourdieu's journalistic field is limited to being a description of a set of static relationships.

One of the most striking aspects of Bourdieu's methodology is his hammering away at many definitions of a field. "Pierre Bourdieu is endlessly revising and revisiting the same Gordian knot of questions, objects and sites", [309] notes Loic J. D. Wacquant. One could argue that any one of the first few versions is a suitable working definition of a field, yet Bourdieu brings explanation after explanation, and develops definition after definition in order to get a result. The process of going through "a number of definitions" gives the impression of being a trial-and-error method of analysis.

A critical reading of *The Fields*

In the critical reading of Bourdieu's media-related works, *The Fields* and *On Television*, I have followed Bourdieu's live conversational narratives in order to demonstrate his multidisciplinary approach to both content and media format.

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[309] Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.6).

As with Habermas, the major analytical aim is to evaluate any incompleteness in methodology brought about by responses to the hermeneutics/positivism schism. The critical reading is in step with the delivery of Bourdieu's live performances.

Bourdieu says at the beginning of *The Fields* lecture that he "would like to run very quickly through a certain number of definitions around the concept of field."[310]. It turns out Bourdieu is neither quick nor limited in his definitions of the field. Bourdieu also tells his audience that he is focussing not completely on the field, but "the relationship between the political field, the social science field and the field of journalism" .[311]

The first explicit definition of the field in *The Fields* sounds like a quantum physics reference:

> [A] field is a field of forces within which agents occupy positions that statistically define the positions they take with respect to the field, these position-takings being aimed either at conserving or transforming the structure of relations of forces that is constitutive of the field.[312]

'Statistical definition' and "transforming the structure of relations" are hallmarks of quantum physics and relativity theory. Bourdieu seriously diminishes the explanatory intent of this combination of relativity and the quantum by following it with the abstract phrasing of "the field

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[310] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.29).
[311] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.29).
[312] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.30).

is comparable to a field of physical forces; but it is not reducible to a physical field"[313]. I argue that when relativity and quantum theories are used as methodological tools, there needs to be an appropriate metaphor or analogy and, where possible, a layman's version of the science.

'Field of forces'

When Bourdieu was asked to expand on the meaning of his *field*, *habitus* and *cultural capital* concepts, he often brought forward the term 'field of forces'.[314] Bourdieu's concept of a 'field of forces' was amplified in *An Invitation to Reflexivity* (1992) by co-writer Wacquant: "a field is a patterned system of objective forces (much in the manner of a magnetic field), *a relational configuration endowed with a specific gravity"*.[315] The phrase in italics is as substantial an empirical spatio-temporal reference as one might find in sociology. However, Wacquant then stepped back from the empirical a few pages later, saying Bourdieu ventured that: "*habitus is in cahoots with the fuzzy and the vague…*as the peculiar difficulty of sociology, then, is to produce a precise science of an imprecise, fuzzy, woolly reality".[316]

Bourdieu may have equivocated between quantum's 'fuzzy' field and relativity's field with 'gravity'*,* but Eric Neveu was concerned that some sociologists suspected Bourdieu's field theory of being the opposite to 'fuzzy'; that is, "objectivist and mechanistic, of reducing media

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[313] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.30).
[314] Interestingly, the 'field of forces' phrase was used by polymath Michael Polanyi in 1962 when he was waving the flag for *emergence* theory on his way to developing an overarching philosophy of *emergence*.[314]
[315] Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.17`).
[316] Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.22-23).

and cultural products to simple expressions of relations of force and the morphological structures of the field".[317]

Neveu defended Bourdieu by arguing:

> [Bourdieu's] approach does not become mechanistic.[318] …Field theory and its concepts offer a toolkit whose proper use is to reveal the changing structures of interdependencies, institutional mediations, and the concrete realization of dispositions, not to pose questions containing their own answers.[319]

Even though there is a lack of clarification in Bourdieu's opening comments on the field, he continues his university lecture with: " the concept of the field is a research tool, the main function of which is to enable the scientific construction of social objects".[320] However, this definition is circular, because the concept of *the field* is being used as an analytical tool to explain its existence.[321]

Bourdieu then retreats from this circularity and starts again:

[317] Neveu, Eric (2005) "Bourdieu, the Frankfurt School, and Cultural Studies: On Some Misunderstandings" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.197).
[318] Neveu, Eric (2005) "Bourdieu, the Frankfurt School, and Cultural Studies: On Some Misunderstandings" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.206).
[319] Neveu, Eric (2005) "Bourdieu, the Frankfurt School, and Cultural Studies: On Some Misunderstandings" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.208).
[320] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.30).
[321] Bourdieu's circular definition of *the field* as a "research tool" matches the McLuhan's comments on the role of the *mosaic* in *Understanding Media* in Chapter Four.

[R]ather than showing the relationship of both continuity and rupture…rather than perform scholastic exercises around the concept of field, I should like to put it to work in a kind of exercise in object construction, with all the uncertainty, imperfection, and incompleteness that this entails.[322]

At best, "continuity and rupture" is an indication of incompleteness of the model of the field. At worst, it is another version of the conceptual conflict that was remarked on in the critique of the expansion/contraction paradox in the Habermas chapter.[323]

Bourdieu tries out another definition of the *field*, this time with the assistance of an *agency* concept with agents being historians, journalists and other single individuals related to a field:

[W]hen the historian addresses the journalist it is not an historian who speaks to a journalist - which is already a start in the construction of the object – it is an historian occupying a determinate position in the field of social sciences who speaks to a journalist occupying a determinate position in the journalistic field, and ultimately it is the social science field talking to the journalistic field.[324]

Bourdieu and science

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[322] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.30).
[323] This paradox will be discussed further in *Chapter Four* (McLuhan).
[324] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.31).

A major criticism put forward by this thesis is not that Bourdieu fails to use scientific disciplines in his explanations of the *field* - he often fulsomely introduces a science reference, as can be seen in his quotes - but that he constantly fails to develop or amplify these references into effective analogies, metaphors, or explanations supporting spatio-temporal models.

In an article called *Durkheim and Bourdieu: The Common Plinth and its Cracks* (2000), Loic Wacquant quoted Bourdieu's views on the science discipline:

> [T]he true subject of the scientific enterprise, if there is one, is not the individual-sociologist, but the scientific field *in toto* - that is, the ensemble of the relations of collision-collusion that obtain between the protagonists who struggle in this 'world apart' wherein those strange historical animals called historical truths are born.[325]

However supportive of science Bourdieu really is, the above quote is only one instance of many where Bourdieu exploits science as a rhetorical diversion whilst he explains society (and sociologists) in relational terms.

Science in Bourdieu's world is 'scientism' according to Nedim Karakayali. In an article in *Sociology* (2004), he compared the late Theodor Adorno with Bourdieu. Speaking on behalf of Adorno[326], Karakayali proposed that "he [Adorno] would most probably argue" that:

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[325] Wacquant, Loic (2011) "Durkheim and Bourdieu: The Common Plinth and its Cracks", trans.Tarik Wareh, in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.95)
[326] Theodor W. Adorno, German sociologist, philosopher and musicologist.

Bourdieu…heralds an age-old 'scientism' – which, for Adorno, implies a thought that is preoccupied with its own epistemological schemes – under the mask of a 'reflexive sociology'.[327]

Philosopher Stephen P. Turner suggests that Bourdieu thinks the answer to the problems of the hermeneutic/ positivism schism is to employ 'polymath' type people who will reject positivism and find something new:

> [Bourdieu believes] for…the social sciences generally to progress…this can best be done …by people who are on the one hand masters of the scientific culture and on the other predisposed by their social background to reject this vision of the world.[328]

This paradoxical binary is reminiscent of Bourdieu's "twofold hermeneutics" as noted by Carol A. Stabile in *Pierre Bourdieu: Fieldwork in Culture* (2000):

> In order to understand a text it is necessary to perform what Wacquant describes as a "twofold hermeneutics" in which "we decode the author's mental space" while at the same time "we attain some knowledge of the scholarly space in which his or her writing becomes inserted".[329]

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[327] Karakayali, Nedim (2004) "Reading Bourdieu with Adorno: The Limits of Critical Theory and Reflexive Sociology" in *Sociology* Volume 39 Issue 2 (352). http://www.mendeley.com/catalog/reading-bourdieu-adorno-limits-critical-theory-reflexive-sociology-1/#

[328] Turner, Stephen P. (1996) "Introduction: Social Theory and Sociology" in Stephen P. Turner ed. *Social Theory and Sociology*, Cambridge MA, Blackwell Publishers (p.10).

[329] Stabile, Carol A. (2000) "Resistance, Recuperation and Reflexivity" in Brown, Nicholas and Imre Szeman eds. *Pierre Bourdieu: Fieldwork in Culture*, Lanham MD, Roman and Littlefield Publishers Inc. (p.61). Stabile is using material from Bourdieu's Paris Workshop in Bourdieu's and Loic J. D. Wacquant 's *An Invitation to Reflexive Sociology* (1992).

Simon Susen captures another example of a Bourdieuan paradox: using 'reflexivity' to bridge the unbridgeable gap between the "two irreducible components", hermeneutics and positivism.

> The 'positivist' trust in the explanatory powers of social science and the 'hermeneutic' reliance on the interpretive powers of social actors are two irreducible components of Bourdieu's reflexive conception of social science.[330]

I argue that the above quotes demonstrate the influence of the hermeneutic/positivistic schism on Bourdieu's methodology, and that hermeneutics became his default methodological position. I further argue that exploring the sub-science disciplines of complexity theory would have given him options in his definitional pursuit. The potential of complexity theory will be discussed later in this chapter.

Relationships and autonomy

Halfway through the live delivery of *The Fields,* Bourdieu argued that the relationship between the three fields is "a very important one, both scientifically and politically. ...These three social universes are relatively autonomous and independent, but each exerts effects on the others".[331]

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[330] Susen, Simon (2009) "Notes on Bourdieu's Conception of Social Science: Between Positivist and Hermeneutic Knowledge" Abstract, *9th Conference of European Sociological Association*, Lisbon 02-05 September.

[331] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.29-30).

One can ask the question: if fields are autonomous, but can affect others, where does the autonomy stop, or where does the relationship end? Rodney Benson and Erik Neveu have an answer in their version of field theory in *Bourdieu and the Journalistic Field* (2005) an anthology they shared with Bourdieu. They provide an analogy: "The social world is structured…with fields inside fields inside fields (like a series of Russian dolls) parallel to each other in their internal organization".[332]

Later in *The Fields,* Bourdieu's autonomy-of-fields interest gradually transforms into a narrative that discusses empirical parameters to autonomy, such as:

> [T]he amount that can be explained by the logic of the field varies according to the autonomy of the field. …To understand the currents, tendencies, fractions or factions in a very autonomous political space, one only has to know the relative positions within the microcosm of the agents concerned.[333]

'Only know[ing] the relative positions' is a difficult task. Nick Couldry has suggested as much in his comment on Bourdieu's delegation of answers to autonomy questions: "For Bourdieu, the exact boundaries of fields and sub-fields always remain a contingent question for detailed empirical inquiry rather than a theoretical issue."[334] Bourdieu's 'contingency question' is

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[332] Benson, Rodney and Neveu, Erik (2005) "Introduction: Field Theory as a Work in Progress" in Benson, Rodney and Neveu, Erik eds *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.2).

[333] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.34-35).

[334] Couldry, Nick (2003) "Media Meta-Capital: Extending the Range of Bourdieu's Field Theory, *Theory and Society*, Vol.32, No. 5/6 (p.658). http://www.jstor.org/stable/3649655

exacerbated by the fact that " [Bourdieu argues] that television has altered the function of the entire journalistic field,"[335]…"[and] television has changed the autonomy of all other fields".[336]

A major step in Bourdieu's space-without-time, static field-model building now occurs in *The Fields* when he introduces a structural analogy to the audience. He tells them there are two opposing poles of influence in the field – "the more autonomous pole" and "the more heteronomous pole"[337] – between which agents operate and are 'dominated'.

Scott Lash in *Bourdieu: Critical Perspectives*, agrees with the pre-eminence of autonomy: "The central axis of variation of the fields is their degree of autonomy".[338] However, Lash was more critical about the origin of Bourdieu's autonomy: "Bourdieu is not entirely consistent in his assessment of just what this autonomy is from".[339]

Rodney Benson, in an article in 2006, responds on Bourdieu's behalf:

> In sum, Bourdieu locates the journalistic field within the field of power, caught between cultural and economic power, with the latter, however, generally retaining the upper hand. Autonomy is thus an ongoing, congested space somewhere between non-market

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[335] Szeman, Imre (1998) "Pierre Bourdieu's *On Television*" in *Cultural Logic,* Volume One , Number Two, Spring (p.2). http://clogic.eserver.org/1-2/szeman.html
[336] Szeman, Imre (1998) "Pierre Bourdieu's *On Television*" in *Cultural Logic,* Volume One , Number Two, Spring (p.2). http://clogic.eserver.org/1-2/szeman.html
[337] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.34).
[338] Lash, Scott (1993) "Pierre Bourdieu: Cultural Economy and Social Change" in Calhoun, Craig, Edward LiPuma and Moishe Postone eds. *Bourdieu: Critical Perspectives*, Chicago, The University of Chicago Press (p.198).
[339] Lash, Scott (1993) "Pierre Bourdieu: Cultural Economy and Social Change" in Calhoun, Craig, Edward LiPuma and Moishe Postone eds. *Bourdieu: Critical Perspectives*, Chicago, The University of Chicago Press (p.198).

and market-oriented forms of state regulation, though by necessity it is unable to sustain itself without some degree of dependency on one or the other.[340]

Craig Calhoun is not convinced by Bourdieu's spatio-temporal explanations about autonomy and power: "Bourdieu engages in a good deal of generalization even while he declines to work out a full theoretical basis for it".[341]

The next generalization from Bourdieu is: "The journalistic field is more and more imposing its constraints on all other fields".[342] And not only is the journalistic field becoming the 'constraining' field, it has "low autonomy" and is "increasingly subject to the constraints of the economy and politics".[343] The unusual – arguably paradoxical' - combination of 'constraint' and the accessibility that comes with low autonomy means that journalistic field is politicised. Bourdieu seems to be suggesting that the journalistic field can put up with the 'constraints and 'pressures from the political field as long as it is flexible and it dominates all other fields of importance.

In Bourdieu's live presentation the more he talks about his relational model of field theory, the more obvious it is that political, social science and journalistic interests and activities are more

[340] Benson, Rodney (2006) "News Media as a 'Journalistic Field': What Bourdieu Adds to New Institutionalism and Vice Versa" in *Political Communication 23,* Routledge online (p.197).
http://steinhardt.nyu.edu/scmsAdmin/uploads/000/734/Benson%20field%20theory%20and%20NI%20best%20copy.pdf
[341] Calhoun, Craig (1993) "Habitus, Field and Capital: The question of Historical Specificity" " in Calhoun, Craig, Edward LiPuma and Moishe Postone eds. *Bourdieu: Critical Perspectives*, Chicago, The University of Chicago Press (p.64).
[342] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.41).
[343] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.41).

than flexible in their relationship with an agent. The commonality they share is an ability to negotiate. This latter point is reinforced by Nicholas Garnham in *Bourdieu: Critical Perspectives* (1993): "In effect, the participants in each of Bourdieu's fields are as governed by an ineluctable invisible hand as any participant in the Smithian free market".[344]

The field and power

Despite Bourdieu's 'generalization' habit, Calhoun claims in *Critical Social Theory* (1995) that he has a specific focus on 'power':

> Bourdieu's focus [is] on the relationships of power that constitute and shape social fields. Power is always fundamental to Bourdieu, and involves domination and/or differential distribution. For Bourdieu, in other words, power is always used, if sometimes unconsciously, not simply and impersonally systemic.[345]

In "News Media as a Journalistic Field" (2006),[346] Rodney Benson put forward a not dissimilar view to the above quote from Calhoun: they both see Bourdieu's views on *power* as a spatio-temporal construct or at least its substitute. Benson uses a quote from Bourdieu's *On Television* (1998) to make this point:

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[344] Garnham, Nicholas (1993) "Bourdieu, the Cultural Arbitrary, and Television" in Calhoun, Craig, Edward LiPuma and Moishe Postone eds. *Bourdieu: Critical Perspectives*, Chicago, The University of Chicago Press (p.183).

[345] Calhoun, Craig (1995) *Critical Social Theory*, Cambridge MA, Blackwell Publishers Inc. (p.135).

[346] Benson, Rodney (2006) "News Media as a 'Journalistic Field': What Bourdieu Adds to New Institutionalism and Vice Versa" in *Political Communication 23,* Routledge online http://steinhardt.nyu.edu/scmsAdmin/uploads/000/734/Benson%20field%20theory%20and%20NI%20best%20copy.pdf

[I]f I want to find out what one or another journalist is going to say or write, or will find

obvious or unthinkable, normal or worthless, I have to know the position that journalist

occupies in this space. I need to know, as well, the specific power of the news medium in

question.[347]

Is Bourdieu's power concept a spatio-temporal entity? Benson comments: "The journalistic field

is seen as part of the field of power… a field within a larger field".[348]

According to these readings, Bourdieu's power relationships are only spatial and are not being

discussed in anything other than hermeneutical terms.

Einstein and Bourdieu

In the final section of the *The Fields* lecture, Bourdieu sets up an analogy from Einsteinian

physics to explain the way a journalistic field auspices the relationship between a television

network and a newspaper.

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[347] Benson, Rodney (2006) "News Media as a 'Journalistic Field': What Bourdieu Adds to New Institutionalism and Vice Versa" in *Political Communication 23,* Routledge online (p.190).
http://steinhardt.nyu.edu/scmsAdmin/uploads/000/734/Benson%20field%20theory%20and%20NI%20best%20copy.pdf
[348] Benson, Rodney (2006) "News Media as a 'Journalistic Field': What Bourdieu Adds to New Institutionalism and Vice Versa" in *Political Communication 23,* Routledge online (p.195).
http://steinhardt.nyu.edu/scmsAdmin/uploads/000/734/Benson%20field%20theory%20and%20NI%20best%20copy.pdf

The newspaper *Le Monde* is subjected to the weight of a television network like TF1. To be an agent within a field is to exert effects there, which increase with the specific weight that one has. As Einsteinian physics tells us, the more energy a body has, the more it distorts the space around it.[349]

The use of a science analogy here brings some explanatory elements to a newspaper's relationship to a television station. However, Bourdieu's interest in Einstein is more about adding science credibility to his analogy than real clarification of how television stations interact with newspapers, or agents relate to a field.

Management theorist Edward C. Rosenthal researched the use of analogies drawn from physics and concluded that "Relativity's treatment of different co-ordinate systems were popularized as 'frames of reference'".[350] However, Rosenthal was also aware of the dangers with a populist use of analogies when he pointed out:

> The invariance of the physical laws somehow got lost. Ironically, Einstein's rigorous theory [of relativity], which deepened our understanding of objective truth, seemed to provide ammunition for any amount of subjective interpretation of an event. [351]

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[349] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.43).
[350] Rosenthal, Edward C. (2005), *The Era of Choice*, Cambridge MA, MIT Press, (p.79).
[351] Rosenthal, Edward C. (2005), *The Era of Choice,* Cambridge MA, MIT Press (p. 52).

Analogies

Bourdieu used nine major analogies in trying to explain or define the field in *The Fields*. One was the Einsteinian physics analogy. Three are analogies using sport, the universe, and the theatre. One is a Platonic metaphor. Another is the iron law of oligarchy borrowed from German theorist of social democracy, Robert Michels, and two are of "the field of forces" variety. The ninth is the 'heteronymous pole of autonomy' in the journalistic field.

As has already been noted in this thesis, Bourdieu had an uncomfortable relationship with any scientific analogues that were suggestive of a 'positivist' interpretation. Bourdieu co-author[352] Loic J. Wacquant, commented:

> Bourdieu takes pains to emphasize the discontinuity between a social field and a magnetic field, and therefore between sociology and a reductionist 'social physics': 'Sociology is not a chapter of mechanics and social fields are fields of forces but also fields of struggles to transform or preserve these fields of forces'.[353]

Bourdieu works hard at finding analogies for *autonomy* throughout *The Fields*. The result of this effort is arguably that Bourdieu has a lingering problem with his field theory model in trying to fit a two-dimensional journalistic 'poles' analogy into a three-dimensional field analogy.

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[352] Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.101).
[353] The Bourdieu section of the quote is from "Lecture on the Lecture" in Bourdieu, Pierre (1990) *In Other Words: Essays Toward a Reflexive Sociology*, Cambridge, Polity Press (p.46).

Field Theory in practice

Nick Couldry, in his review of *Bourdieu and the Journalistic Field,* commented on Eric Klineberg's use of field theory in media projects:

> Eric Klinenberg's fine essay on US urban youth media projects draws on ethnographic observation and interviews, wearing its "field theory" lightly…The 'field' concept here operates, quite sensibly, as no more than a useful way of seeing patterns within a messy domain of social action, not a formal model that compels a specific methodology, let alone one that depends on claims to statistical significance.[354]

That is not the end of Couldry's and Klineberg's criticism of Bourdieu. Having reduced his field theory to a methodology,[355] they then attack Bourdieu's methodological criteria. Couldry argued that:

> Some uncertainties (about how we judge whether a field exists, or to which of multiple fields an action belongs) flow directly from the purely heuristic status Bourdieu gives to the concept.[356]

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[354] Couldry, Nick (2005) *Review of Rodney Benson and Eric Neveu, editors, Bourdieu and the Journalistic Field.* Cambridge: Polity Press (p.211). http://www.springerlink.com/content/j684184462n12275/

[355] Some others agree for different reasons. See above quote and footnote in Introduction to the Bourdieu Critique. Douglas, Mary (1981) "Good Taste: Review of Pierre Bourdieu, 'La Distinction'", *Times Literary Supplement* (London) February 13 : 163-169 in Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.101).

[356] Couldry, Nick (2005) *Review of Rodney Benson and Eric Neveu, editors, Bourdieu and the Journalistic Field.* Cambridge: Polity Press (p.212). Published online: 14 March 2007 http://www.springerlink.com/content/j684184462n12275/

Klineberg commented:

> [F]ield theory is vague on certain questions. What for example are the criteria for determining whether activists have entered the journalistic field as participants? If they are outsiders, then do they belong to a field organized around dissent?[357]

From the above it can be argued that accusations of 'uncertainty' and the 'vague' can be accommodated within a hermeneutically-inclined methodology like Bourdieu's, but 'heuristic criteria' seriously limit the possibility of meaningful spatio-temporal 'outcomes' emerging from this methodology.

Introduction to *On Television: Prologue, Preface, Parts One & Two*

On Television is a compilation, the first item being a *Preface*. The next is the printed version of two television lectures - *Parts One* and *Two* - given by Bourdieu at the College de France that were broadcast in 1996.[358] This is followed by an article called *The Power of Journalism* and finally, an *Appendix* on the Olympic Games.

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[357] Klineberg, Erik (2005) "Channeling into the journalistic Field: Youth Activism and the Media Justice Movement" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.174)

[358] Bourdieu, Pierre (1996) *On Television* and *The Field of Journalism* , College de France – CNRS audiovisual production.

The lectures are a critique of television and its consequences for political and social life in France. Bourdieu has two major themes: one, the relationship between the journalist and political fields; and two, his own and others' views on his methodology.

It must be acknowledged here that there are intrinsic problems with the integrity of the *On Television* print project. Firstly, the methodology theme is compromised because Bourdieu is commentating on his methodology both subjectively and objectively, thereby creating a circularity of argument. Secondly, in the *Prologue* to *On Television*, subtitled *Journalism and Politics*, he pre-empts the lectures with a review in the *Prologue* of the unfavourable reviews he received at the hands of several French journalists and commentators.

On Television[359] was Bourdieu's rather late response to the world of commercial television. When it was published in 1996 it ignited a media controversy in France that raged for months and propelled the book to the top of the best-seller lists. Rodney Benson and Erik Neveu in *Bourdieu and the Journalistic Field* (2005) warned readers that: "This slim paperback is best understood as a provocation and an introduction".[360] The controversy surrounding the book boosted Bourdieu's already-considerable personal accumulation of 'cultural capital'[361] as befitted one of the most prominent figures of the French academy.

Prior to presenting *On Television*, Bourdieu's constant proselytizing about the 'relational' interpretation of field theory had led him to work at delivering adventurous academic

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[359] Bourdieu, Pierre (2011) *On Television*, Cambridge, UK, Polity Press.
[360] Benson, Rodney and Erik Neveu (2005) "Introduction: Field Theory as a Work in Progress" in Benson, Rodney and Erik Neveu eds. *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.1).
[361] Bourdieu created the concept "cultural capital". It is a non-financial social asset that exists as a component of a cultural field.

presentations of his field theory. *On Television* was the work that shifted Bourdieu's image from that of a sociological academic writing about the abstractions of *habitus, cultural capital*, and *field* structure, to social commentator writing about the nuts and bolts of contemporary television organizations and their role players, such as journalists.

Before the *On Television* lectures, there is the *Prologue*. The *Prologue* is quite subjective.

> [T]he journalist 'big guns' who went after my book simply bracketed my method (in particular the analysis of journalism as a field) without being aware of what they were doing … But this method is what I want to come back to. Even at the risk of new misunderstandings.[362]

Sociologist Imre Szeman in a review of *On Television* highlights the point that: "The performance aspect of the book, which is easily lost in the printed text, is crucial to an understanding of the overall aim of Bourdieu's critique".[363]

To support this point, Szeman argues that:

> By being 'on television'…Bourdieu's criticism of television and journalism…occurs at the level of form as well as content. The unprecedented freedom granted to Bourdieu to elaborate his points at length…without having to conform to the material and social

[362] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.2).
[363] Szeman, Imre (1998) "Pierre Bourdieu's *On Television*" in *Cultural Logic,* Volume One , Number Two, Spring (p.2) http://clogic.eserver.org/1-2/szeman.html

structures of the journalistic field…without distraction…functions as an implicit critique of the way in which supposedly newsworthy events are normally portrayed.[364]

Bourdieu explored the convergence of media formats with *On Television*. There was the television medium, the printed version, his to-camera presentation, his own mosaic, multidisciplinary style and the conversational approach to an absent but live audience. His own version of media convergence was a mode through which he created a more powerful delivery of his ideas and concepts.[365]

A critical reading of *On Television*

Part One

In the 'preamble' to his first lecture *Part One: In Front of the Cameras and Behind the Scenes*, Bourdieu placed himself centre stage in the opening: "Is what I have to say meant to reach everybody? Do I have something to say? Can I say it in these conditions? In a word, what am I doing here?"[366] Whatever reactions Bourdieu's rhetorical questions might excite in his audience and readers in terms of content, the questions were a media event in themselves. In McLuhan terms, Bourdieu was a 'medium'.

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[364] Szeman, Imre (1998) "Pierre Bourdieu's *On Television*" in *Cultural Logic,* Volume One , Number Two, Spring (p.2) http://clogic.eserver.org/1-2/szeman.html
[365] Bourdieu's convergent radical methodology is particularly apt given that the College de France was an institution founded in 1543 to counter the conservatism of the University of Paris at the Sorbonne
[366] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.15).

Notwithstanding Bourdieu's 'convergence' of media formats to present his work, the television event did not include Bourdieu discussing television as a technology, according to Jonathan Sterne:

> Bourdieu's comments on television relate more to the habits and practices of 'the journalistic field' and its relations to intellectuals and the state of public discourse in France than they do to anything resembling a theory of television as a technology.[367]

However, in two of the reviews of *On Television* (the book), there are several comments made by reviewers Cas R. Sunstein and joeneilortiz (*sic*) that show Bourdieu exposing, in an unstructured way, the effects of the technology of television on viewers. I argue that these comments about the interface of society and technology imply the emergence of phase change.

Firstly, Sunstein wrote that American readers of *On Television* would have no trouble coming up with their own parallels to French talk shows:

> It is illuminating to see an analysis (Bourdieu's) that takes sensationalist talk shows not as deviants but as an extreme example of a trend affecting the news and supposedly more substantive programming as well.[368]

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[367] Sterne, Jonathan (2003) "Bourdieu, Technique and Technology" in *Cultural Studies* 17 (3/4), Routledge (p.372) http://sterneworks.org/BourdieuTechandTech.pdf
[368] Sunstein, Cass R. (1998) "Tube Boobs" , *New York Times: Books* (p.2). http://www.nytimes.com/books/98/08/02/reviews/980802.02sunstet.html

The 'sensational talk show' format is an example of a 'trend' in action. The mode is not a conversation or a long-form interview. More often than not it activates a heightened, non-linear response - indicative of phase change - in both the viewers and the participants.

The second example of a trend is in joeneilortiz's paraphrase of Bourdieu - "the news model itself contributes to the production or reinforcement of a certain kind of world, one that seems unintelligible, spontaneous and unavailable to regulation".[369] These are modes that suggest non-linearity and phase change.

[J]oneilortiz also looks at the cumulative effect of time and speed factors, with a quote from Bourdieu:

> And one of the major problems posed by television is that question of the relationships between time and speed. Is it possible to think fast? By giving the floor to thinkers who are considered able to think at high speed, isn't television doomed to never have anything but fast thinkers.[370]

The references to 'trends' and 'fast thinkers' are signs signalling phase change and emergence. Sunstein gives an ironic example of the emergence of television:

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[369] joneilortiz (2009) "Bourdieu on TV News and the Political Microcosm" *mutually occluded*, 15.02.09 (p.2). http://www.mutuallyoccluded.com/2009/02/bourdieu-on-tv-news-and-the-political-microcosm/
[370] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.28-29).

Mark Fowler, a former head of the Federal Communications Commission [USA] …said television "is just another appliance…it's a toaster with pictures".[371]

Even though the above references about phase change might suggest that *On Television* heralded a 'positivist' shift or drift in Bourdieu's views on the spatio-temporal characteristics of the field, Jonathan Sterne reminds us of the hermeneutic tendencies in Bourdieu's live media presentation:

> While writers like Neil Postman, for instance, have attributed this form of rapid-fire intellectual practice to the technological characteristics of the television medium itself, Bourdieu takes a more sociological view, arguing essentially that the enabling and constraining conventions of the journalistic field, rather than the technology itself, shape the possibilities for action on television.[372]

Peter Dahlgren allows Bourdieu even more latitude than Sterne in which to pursue a hermeneutic methodology in his live analysis of television. Dahlgren suggests that: "If TV news is treated as an agency of socialization…a hermeneutic method of analysis is appropriate".[373]

Part Two

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[371] Sunstein, Cass R. (1998) "Tube Boobs" , *New York Times: Books*, 2.08.98 (p.3).
http://www.nytimes.com/books/98/08/02/reviews/980802.02sunstet.html
[372] Sterne, Jonathan (2003) "Bourdieu, Technique and Technology" in *Cultural Studies* 17 (3/4), Routledge (p.372)
http://sterneworks.org/BourdieuTechandTech.pdf
[373] Dahlgren, Peter (1981) "TV News and the Suppression of Reflexivity" in Katz, Elihu and Tamas Szecsko eds. *Mass Media and Social Change* London, SAGE Publications Ltd (p.102).

Part Two: Invisible Structures and Their Effects begins Bourdieu's detailed description of the practical matters of day-day television in the French television station TF1 as if he were a practising television producer. In his opening phase of this televised course lecture, Bourdieu advanced a definition of the journalistic field:

> [T]he journalistic field…contains people who dominate and others who are dominated. All the individuals in this universe bring to the competition all the (relative) power at their disposal[374]…Even though they occupy an inferior, dominated position in the fields of cultural production, journalists exercise a very particular form of domination since they control the means of public expression".[375]

His methodology continues to be multidisciplinary, analysing the journalists' power relations. There are no spatio-temporal models referenced except for his mantra of 'the field of forces'.

In the above quote, journalists are a dominant group who exert power through being 'gatekeepers' of information. However, when he mentions the other in-house, dominant and powerful group in the journalist field - television management - one expects to hear who has the dominance in decision-making. In an unusual admission, Bourdeau says the decision-makers cannot be identified:

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[374] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.40).
[375] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.46).

[U]nconsciously, those in charge, who are themselves victims of the 'audience ratings mindset', don't really choose. (It is regularly observed that major social decisions aren't made by anyone).[376]

The Wisdom of Crowds

It is very likely that New York columnist James Surowiecki would agree with Bourdieu if asked about decision-making. Surowiecki demonstrates in *The Wisdom of Crowds* (2004) that there are many examples where managers are only as competent as staff in terms of decision-making. Quite often managers make no specific decisions and eventually the decisions emerge from the group in a non-linear fashion. This is an instance of the 'the wisdom of crowds' at work[377] - a complexity theory phenomenon.

This phenomenon can be used to explain a turn of events in contemporary Australian politics. In 2010 the question of whether to 'sack' Kevin Rudd' or not had diametrically opposed answers from two groups intrinsically involved in the process. The first group, the federal Labor caucus, was a relatively small group of decision-makers. They were factionally-based and not independent in terms of informational (media) input. As well, they were not decentralized in attitude due to their representing urban constituencies, even though they may have seen themselves as widely representative. On the question of what to do about Rudd, they voted

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[376] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.52).
[377] "The idea of the wisdom of crowds… implies that if you set a crowd of self-interested, independent people to work in a decentralized way on the same problem, instead of trying to direct their efforts from the top down, their [bottom-up] collective solution is likely to be better than any other solution you could come up with." Surowiecki, James (2004) *The Wisdom of Crowds,* New York, Doubleday (p.70)

overwhelmingly to remove him, on the assumption that this action was a wise decision because it was supported by a large majority of the caucus.

The second group, the body of public opinion of Australia, was a seriously large crowd of people who were self-interested but not factionalized; independent in the sense of being able to choose their information (media) input; and decentralized in socio-economic and geographical terms. The public response was slow in finalizing their answer, but the polls constantly registered that the public saw that 'sacking' to be an unwise decision.

Whether the Australian public made a decision related to its 'morality' or its superannuation returns was not the issue. The question was: should Rudd stay or go? Obviously the Labor caucus thought that public opinion was going to agree with its decision. The caucus was wrong the first time. However, they had a second chance to agree with 'the wisdom of crowds', and Rudd came back.

[J]oneilortoz discovered another non-linear phenomenon in *On Television*. He says the first thing to gather from it is that:

> The news industry is and is not an industry. It's an industry to the extent it's run by corporations…but it's also an industry unlike any other, in that a large percentage of the populace interfaces with its political representatives exclusively through it. This

astounding fact that should give us all pause. We only really know what's going on through the news, the corporation.[378]

Given these observations on the 'invisible' non-linear dynamics of corporations, it is not surprising that Bourdieu stated that: "These are very complicated matters about which knowledge cannot really advance without scientific work".[379] One cannot be sure about what "scientific work" means to Bourdieu.

In a review of *On Television,* social theorist Derek Robbins delivered a qualified defence of Bourdieu's attitude to 'science':

It would be quite wrong to pigeon-hole this text (*On Television*) as 'Bourdieu's contribution to media sociology'. Viewed in this way the book is undoubtedly naive or simplistic. It is much more important to recognize that Bourdieu was… trying to…insert the values of 'science' into media discourse.[380]

After a lengthy discussion in the lecture about his struggle with the details of the 'invisible' structures of French TV corporations, Bourdieu finally retreats from science-based explanations. In the final part of the *Invisible Structures and Their Effects* chapter, the only science analogy Bourdieu employs is a put-down of Bernard-Henry Levi, French philosopher and journalist:

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[378] joneilortiz (2009) "Bourdieu on TV News and the Political Microcosm" *mutually occluded*, 15.02.09 (p.2). http://www.mutuallyoccluded.com/2009/02/bourdieu-on-tv-news-and-the-political-microcosm/
[379] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.50).
[380] Robbins, Derek (2012) "On Television – by Pierre Bourdieu", *The Sociological Review* Vol.60 Issue 2 (p.389). http://onlinelibrary.wiley.com/doi/10.1111/j.1467-954X.2012.02086.x/full

[N]o sociologist worthy of the name talks about Bernard-Henry Levi. It is vital to understand that he is only a sort of structural epiphenomenon, and that, like an electron he is the expression of a field.[381]

In *The Power of Television* section, Bourdieu pursues what is by now a standard for him, the framework of autonomy to explain the workings of his journalistic spatio-temporal 'field' model. Bourdieu argues that, although journalists are pressured - having to exist between fields - journalistic forces can act subtly. Bourdieu exclaims: "Like the Trojan horse, they introduce heteronomous agents into autonomous worlds. Supported by external forces, these agents are accorded an authority they cannot get from their peers".[382]

This explanation, unfortunately, brings a confusion of entities in its wake. There are many too many possible relationships of agents, journalistic forces, external forces and fields for Bourdieu to evaluate empirically, leaving him without a theory of how change can take place in his field model.

At the end of the *Invisible Structures and Their Effects* section Bourdieu seeks a positive outcome from "the intrusion of media demands into the field of cultural production".[383] He argues, somewhat paradoxically:

It is essential to defend both the inherent esotericism of all cutting-edge research and the necessity of esotericizing the esoteric[384]…we have to defend the conditions of production

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[381] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.54).
[382] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.59).
[383] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.65).

necessary for the progress of the universal, while working to generalize the conditions of access to that universality.[385]

Nick Couldry states there is something paradoxical about Bourdieu's field-based media research in that "it avoids *both* a general account of the impacts of media representation on social space *and* a detailed account of media audiences".[386]

A critical reading of *The Power of Journalism*

The Power of Journalism is the only work of Bourdieu covered by this thesis that has its origin in a publication. Bourdieu takes a more formal tone than in his live presentations of *The Fields* and *On Television*. The title of this chapter indicates Bourdieu's thematic pre-occupations of journalism and power.

> The journalistic field exercises power over other fields of cultural production primarily through the intervention of cultural producers located in an uncertain site between the journalistic field and the specialized fields. These journalist-intellectuals use their dual attachments to evade the requirements specific to each of the worlds they inhabit,

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[384] 'Esotericizing the esoteric', 'universalizing' the universal, 'structuring structures' 'theoretizing theory' are prominent examples of Bourdieu's special brand of circular theorizing.
[385] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.66).
[386] Couldry, Nick (2003) "Media Meta-Capital: Extending the Range of Bourdieu's Field Theory, *Theory and Society*, Vol.32, No. 5/6 (p.655). http://www.jstor.org/stable/3649655

importing into each the capabilities they have more or less completely acquired in the other.[387]

This description of the life of a journalist-intellectual hovering between fields and 'importing capabilities' into various 'worlds' sounds like the work-cycle of a pollinating bee.[388]

Sociologist Yves Sintomer emphasizes the pre-eminent position of *power* in Bourdieu's world: "Struggle and power relations, for Bourdieu, constitute the driving forces of all social relations.[389] David L. Swartz has a similar view: "Bourdieu sees *all* of sociology as fundamentally dealing with power. Power is not an independent domain".[390]

As demonstrated throughout this thesis, *autonomy* and *power* are stalwart and constant contributors to Bourdieu's field concept, and *autonomy* gets another strong showing in *The Power of Journalism*. However, explaining the spatio-temporal integration of autonomous and heteronomous poles and fields still remains a conceptual challenge for Bourdieu.[391]

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[387] Bourdieu, Pierre (2011) *On Television*, Cambridge, Polity Press (p.74).
[388] This analogy is not meant to be trivial.
[389] Sintomer, Yves (2011) "Intellectual Critique and the Public Sphere: Between the Corporatism of the Universal and the *Realpolitik* of Reason, trans. Steven Corcoran , in Susen, Simon and Bryan S. Turner eds. *The Legacy of Pierre Bourdieu*, London, Anthem Press (p.340)
[390] Swartz, David L. (2006) "Pierre Bourdieu and North American Political Sociology: Why He Doesn't Fit In But Should" *French Politics* April 2006, Volume 4, Number 1 (p.84). http://www.palgrave-journals.com/fp/journal/v4/n1/full/8200094a.html
[391] It needs to be mentioned here that this writer thinks that the previously-mentioned 'poles of autonomy/heteronomy' are a metaphorical step too far.

Summary

In my analysis of the media-related works of Bourdieu I have identified an incompleteness in the methodology used in the explanation and analysis of spatio-temporal characteristics of his field theory. I have argued that the incompleteness in his methodology was because of his reliance on hermeneutics to mediate any challenges to his theories. I also argue that these shortcomings have been exacerbated by the lack of response to them by critics and commentators.

Bourdieu's model of the field provides no criteria to answer questions about change, much less phase change. His model of a journalistic field, with its components of *habitus, capital* and *the field*, is not concerned with the 'positivist' nuts and bolts of change. It represents an overarching spatial theory[392] about the roles of journalists in society. His 'field of forces' and 'autonomous poles' are intelligible entities in broad-brush relational descriptions, but there is no provision for standard details of the practices by which journalists act, adapt, or respond to change.

Nick Couldry, in "Media Meta-Capital"(2003), looked at the incompleteness of Bourdieu's media field. He argued that "using field theory as an *exclusive* framework creates difficulties, or gaps, in Bourdieu's and his research associates' account of the media".[393]

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[392] I am using 'spatial' rather than spatio-temporal to follow up my point in the earlier Time section about the absence of time in Bourdieu's field theory.
[393] Couldry, Nick (2003) "Media Meta-Capital: Extending the Range of Bourdieu's Field Theory", *Theory and Society*, Vol.32, No. 5/6 (p.660). http://www.jstor.org/stable/3649655

Methodological options

Bourdieu's journalistic field theory in particular, and his field theory in general, have many variable factors due to the multidisciplinary nature of Bourdieu's research. I argue that 'hands-on' concepts, like complexity theory, could bring balance to Bourdieu's disciplinary methodology. For instance, complexity theory analysis can re-interpret the journalistic field relationships through the use of a matrix process.[394] An effective model of a matrix-style analysis is that provided by sociologist C.Wright Mills in *The Power Elite* (1956). Mills developed a model to evaluate 'public opinion'[395] that Habermas thought suitable for evaluating *the public sphere.*

As well, I argue that multi-disciplinary outcomes would have been productively served by employing methodological options such as s*ocial network analysis* – a network theory technique. Whilst network theory is not a one-stop shop for outcomes, it could deliver a probability-based hierarchy of outcomes that could be used as a framework to evaluate phase change in a journalistic field. Social network analysis focuses on the number and distribution of relationships between individuals or entities within a network rather than the characteristics of individuals.

Urban sociologist Mike Savage is one of the few commentators who have put the words Bourdieu and 'complexity theory' into the same sentence. More than that, Savage has not given up on the possibility of the Bourdieusian field concepts and complexity theory coming together.

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[394] See Glossary under *matrix analysis*
[395] See under the *Habermas and C. Wright Mills* section in *Chapter Two*.

His research had shown that urban studies faced a dilemma, because it is "difficult to find a way of staging a dialogue between two currents – popular theoretical frameworks on the one hand and empirical urban studies on the other."[396] Savage saw a possible solution to the dilemma flowing from urban studies' recent interests in mobility, networks, liquidity and fluidity. In an article titled "The Lost Urban Sociology of Pierre Bourdieu" (2011), Savage advances the concept that

> Elements of complexity theory – which are already current in urban theory – can be reconciled with Bourdieusian field analysis in a way which might be empirically productive in developing urban analysis.[397]

It is surprising that commentators and critics of Bourdieu, with some exceptions, have not made reference to network theory when discussing Bourdieu's fields, especially given that his fields have so many interconnections between individuals. 'Interconnected components' and 'complex systems' should have prompted many more references to complexity theory and the science of networks.

Self-organization

As well as network theory, *self-organization* is another complexity theory interpretation of field structure not touched upon by Bourdieu nor most of his critics and commentators. Increased

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[396] Savage, Mike (2011) "The Lost Urban Sociology of Pierre Bourdieu" in Bridge, Gary and Sophie Watson *The New Blackwell Companion to the City*, Blackwell Publishing Ltd. (p.511).

[397] Savage, Mike (2011) "The Lost Urban Sociology of Pierre Bourdieu" in Bridge, Gary and Sophie Watson *The New Blackwell Companion to the City*, Blackwell Publishing Ltd. (p.516).

activity by individuals or absolute growth in a field can lead to a transformation of that field through a process called 'self-organization'. *Self-organization* is a non-determinist, non-linear concept.[398] Even though Bourdieu was arguably a determinist, sociologist Christian Fuchs argued that "Pierre Bourdieu's work withstands charges of determinism and reductionism and that there are certain aspects of his theory that would fit well into the framework of a unified theory of social self-organization".[399] In other words, Fuchs believes the employment of some aspects of Bourdieu's anti-positivist, hermeneutic methodology could be married to the science of self-organization.[400]

The explanatory benefits that complexity theories, like self-organization, may have brought to Bourdieu's field theory, might also assist in the narrowing of the hermeneutic/ positivist gap. This could hopefully overcome C.P. Snow's 1959 concern that "a gulf of mutual incomprehension"[401] existed between the two.

I argue that explanations and analogies can be drawn from the spatio-temporal disciplines of network theory and self-organization to assist in delivering definitions to Bourdieu's fields. The fact that, with few exceptions, commentators on both Bourdieu and Habermas have not explored them remains intriguing.

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[398] See Glossary for *self-organization* and *non-linear.*
[399] Fuchs, Christian (2003) "Some Implications of Pierre Bourdieu's Works for a Theory of Social Self-Organization" in European Journal of Social Theory 6(4) (p.388) https://cartoon.iguw.tuwien.ac.at/christian/bourdieu.pdf
[400] Fuchs, Christian (2003) "Some Implications of Pierre Bourdieu's Works for a Theory of Social Self-Organization" in European Journal of Social Theory 6(4) (p.388) https://cartoon.iguw.tuwien.ac.at/christian/bourdieu.pdf
[401] Snow, C.P. (1959)*The Two Cultures*, The Rede Lecture 1959, Cambridge University Press (p.2). http://s-f-walker.org.uk/pubsebooks/2cultures/Rede-lecture-2-cultures.pdf

CHAPTER FOUR

MARSHALL MCLUHAN

This chapter begins with an historical overview of Marshall McLuhan's interests and influences focussing on the development of *Understanding Media*. Then follows an introduction to the critical reading, including a series of segments that look at methodology, content and structure of McLuhan's work. The critical reading of *Understanding Media* is next. The Summary of the reading includes special segments on McLuhan's paradoxes and non-linearity.

Historical overview

> *Understanding Media* is his worst book – and the best-selling. No pictures, no anthologising, just repetitive non-arguments about the media (from TV to the wheel and nylon stocking) held together by the incantation 'The medium is the message'.[402]

Understanding Media by Marshall McLuhan was a sensation when it was published in 1964.[403] At the time, Herbert Marshall McLuhan (21 July 1911 – 31 December 1980) was an educator, philosopher, English literature and poetry scholar, literary critic and rhetorician at the University of Toronto. William Merrin tried to sum up his literary style:

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[402] Ricks, Christopher (1969) "McLuhanism" in Rosenthal, Raymond, ed. *McLuhan: Pro and Con*, New York, Penguin Books (p.101).
[403] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul.

McLuhan draws on an avante-garde tradition of meaning creation by using puns, satire, verbal acrobatics, metaphors, quotation and misquotation, changes of context, connections, juxtapositions, and the reuse and reworking of ideas to provoke 'insight' in a 'cool' body of work requiring close reader participation and completion.[404]

In the early 1950s McLuhan had organised one of the first multi-disciplinary research projects in North America. Biographer Janine Marchessault wrote that it was through this multidisciplinary experience

in the Communication and Cultural Seminar [1952-53 Toronto] and through the pages of *Explorations* [with anthropologist Edmund Carpenter], that many of McLuhan's central concepts would be developed: acoustic landscape, non-linear modes of thinking… global village and the medium is the message – all interrelated ideas that grew fundamentally out of anthropology.[405]

P. David Marshall critiques McLuhan in *Revisiting McLuhan* (2000)[406] and proposes that "McLuhan could be seen as the individual who expanded the impact of Innis's[407] rather obscure and generally rejected later writings on communication".[408] However, McLuhan indicated he was in debt to Innis by his having written twice in the 1964 edition of Innis's *Bias of*

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[404] Merrin, William (2005) *Baudrillard and the Media*, Cambridge, Polity Press (p.60-61).
[405] Marchessault, Janine (2005) *Marshall McLuhan,*London, SAGE Publications (p.86).
[406] *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy.
[407] Harold Innis, Canadian political economist and communications theorist.
[408] P. David Marshall (2000) "The Mediation ids the Message: The Legacy of McLuhan for the Digital Era? In *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.33).

Communication[409] that McLuhan's own *The Gutenberg Galaxy* (1962)[410] was "a footnote to Innis".[411]

The academy has accused McLuhan of "being a weaker version of the original Innis". For Innis, a key to social change was to be found in the development of communication media. Innis claimed that each medium embodied "a bias in terms of the organization and control of information", and that "any empire or society is generally concerned with duration over time and extension in space.[412]

McLuhan personified paradox. Douglas Kellner argues that "McLuhan can be read in the light of classical social theory as a major theorist of modernity, with an original and penetrating analysis of the origins, nature, and trajectory of the modern world.[413] This is in contrast to the biographical account of McLuhan being religious and conservative and "disliking of change". However, Hart Cohen says these contradictory elements of McLuhan's persona may relate to an older version of positivism where (according to Ray Williams[414]) "'positivism was not only theory of knowledge, it was also a scheme of history and a program of social reform".[415]

Although McLuhan was not complimentary about C.P. Snow's history credentials (see thesis *Introduction*), in the 1950s they had complementary views about academic disciplines. Whilst

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[409] Original edition of *Bias of Communication* was published in 1951.
[410] McLuhan, Marshall (1962) *The Gutenberg Galaxy*, London, Routledge and Kegan Paul.
[411] Duffy, Dennis (1969) *Marshall McLuhan*, Toronto, McCellend and Stewart Limited (p.14).
[412] " Harold Innis: The Bias of Communications & Monopolies of Power" (2014)   http://www.media-studies.ca/articles/innis.htm (p.1).
[413] Kellner, Douglas *Reflections on Modernity and Postmodernity in McLuhan and Baudrillard* http://www.gseis.ucla.edu/faculty/kellner/ (p.1).
[414]   British cultural and literary theorist.
[415] Cohen, Hart (2000) "Revisiting McLuhan" in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.11).

McLuhan was bringing the disciplines together, at the same time Snow feared fragmentation of specialization in the educational system in the United Kingdom and saw this as "a wedge keeping the two cultures apart".[416]

Although McLuhan published two other books of note, *The Mechanical Bride* (1951) and *The Gutenburg Galaxy* (1962), it was *Understanding Media* that invaded the world of media and communications and made him a household name in the 1960s as a communication and media theorist.

However, there was a downside to his newly-found fame. Media historian Paul Heyer commented: "Flying so high outside academe inevitably brought with it disdain within the hallowed halls".[417]

The late Dallas Smythe, whom the Canadian academy has ranked with both Harold Innis and Marshall McLuhan in terms of contribution to communication theory, social science and other disciplines, exemplifies the scepticism and disdain that was meted out to McLuhan by fellow members of the academy. In the introduction to his much applauded *Dependency Road: Communications, Capitalism, Consciousness and Canada* (1981) Smythe wrote, "Far from either the message or the medium being the principal aspect of communications, it is the people with whom communications begin and end".[418] He further noted:

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[416] Adams. Jon (2007) *Interference Patterns*, NJ, Lewis Bucknall University Press (p.25)
[417] Heyer, Paul (2000) "Discussion: Marshall McLuhan", in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.97.)
[418] Smythe, Dallas (1981) *Dependency Road: Communications, Capitalism, Consciousness and Canada*, New Jersey, ABLEX Publishing Corporation (p.xii).

Technology is not determinative of anything except a pernicious mystification of bourgeoise domination. Neither the "medium" nor the ostensible "message" in the ostensibly non-advertising component of the mass media is the realistic basis of mass communication.[419]

"Disdain" was noticeably present in academic circles in Canada in 1981 as McLuhan's name is not mentioned in either the copy, the citations or the index of Smythe's book.

Nick Couldry opens one of his chapters in *The Place of Media Power* (2000) with a quote from sociologist Raymond Williams mocking McLuhan:

Much of the content of modern communications…is a form of shared consciousness…and it is not to be understood by rhetorical analogues like the 'global village'. Nothing could be less like the experience of any kind of village.[420]

Disdain turned to ignore by the late 70s, when the academic world as well as the media itself had moved onto other things. Communications professor Joshua Meyrowitz stated that "McLuhan's non-linear, 'non-scientific style' led many scholars, particularly in the United States, to banish his name and ideas from most scholarly arenas".[421]

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[419] Smythe, Dallas (1981) *Dependency Road: Communications, Capitalism, Consciousness and Canada*, New Jersey, ABLEX Publishing Corporation (p.xv).style

[420] Williams, Raymond (1973) "The Country and the City" in Couldry, Nick (2000) *The Place of Media Power,* Routledge, London (p.23).

[421] Meyrowitz, Joshua (1995) "Taking McLuhan and 'Medium Theory' Seriously: Technical Change and the Evolution of Education" in *Technology and the Future of Schooling,* Chicago, University of Chicago Press (p.81)

There have been continuing accusations of 'technological determinism' in McLuhan's work. Cultural theorist Christopher Horrocks has described *Understanding Media* as "McLuhan's deterministic and monolithic account of media".[422]

John Durham Peters is sanguine about the subject of "technological determinism". He said in a dialogue with Jeremy Packer in *Communication Matters* (2012) that accusations of technological determinism are:

> …a form of intellectual intimidation. Geoffrey Winthrop-Young makes the wisecrack that calling someone a technological determinist is like saying they strangle puppies in their basement. Like positivism it is a term only used as a form of abuse.[423]

This is reminiscent of C.P. Snow's comment about the protagonists' interactions in the 'two cultures' media fracas in 1959: "Anyone with a mild talent for invective could produce plenty of this kind of subterranean back-chat".[424]

Defying criticism, classification and closure were three of several reasons why McLuhan continued to annoy, and remain a constant challenge to, academics in the humanities and the media itself in the 1960s and 70s. However, the tide of criticism eventually turned, noted Janine Marchessault:

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[422] Horrocks, Christopher (2003) "Marshall McLuhan and Virtuality" in Appignanesi, Richard ed. *The End Of Everything: Postmodernism and the Vanishing of the Human*, Cambridge, Icon Books UK (p.195). Mcluhan's 'technological determinism" will looked at in detail later in this chapter.
[423] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.41).
[424] Snow, C.P. (1959)*The Two Cultures*, The Rede Lecture 1959, Cambridge University Press (p.3) http://s-f-walker.org.uk/pubsebooks/2cultures/Rede-lecture-2-cultures.pdf

It is not only the notion that history is constructed through technology that theorists like Henri Lefebvre, Jean Baudrillard and Paul Virilio would appreciate, but it is McLuhan's insights into the reality-making of the media. For Baudrillard (1983) in particular, it is McLuhan's great contribution to have anticipated the function that the media would play in mediating and becoming reality.[425]

Media studies academic William Merrin and cultural studies theorist Gary Genosko agreed with this, and also made a connection between McLuhan's and Baudrillard's methodologies:

McLuhan's contemporary re-appearance has 'a distinctly Baudrillardian glow about it'.[426] McLuhan and Baudrillard also share a similar writing style, both employing the form of their writing as part of their philosophy. More importantly, Baudrillard and McLuhan share an anti-empiricist methodology.[427]

'Anti-empiricist' is a term that seems to connect McLuhan to the hermeneutic versus positivism debate. However, such classifications do not last long under scrutiny as McLuhan not only creates his own socio-philosophical rules and terminology, but shows no interest in formally supporting media concepts.

Media historian Paul Heyer in "Revisiting McLuhan" pointed to the difficulties in categorizing McLuhan. He said, that while McLuhan failed to make *Time* magazine's 1999 list of the century's 100 greatest minds and failed to make the 1998 list of the world's greatest artists, "perhaps this is as it should be", because "[McLuhan] reveled in the fact that his work would be

[425] Marchessault, Janine (2005) *Marshall McLuhan,* London, SAGE Publications (p.93).
[426] Genosko, Gary (1999) *McLuhan and Baudrillard*: *The Masters of Implosion*, London, Routledge (p.117).
[427] Merrin, William (2005) *Baudrillard and the Media*, Cambridge, Polity Press (p.47).

a resource that defies both classification and closure"[428]. As an example of this, McLuhan's image was rebooted when he became the 'patron saint' of the high-profile IT sector magazine *Wired* in 1993.[429]

Hart Cohen curated a *Revisiting McLuhan* set of papers in 2000.[430] The papers mentioned many people whom the various writers thought had either effectively critiqued or contributed to McLuhan's ideas - Raymond Williams and Donald F. Theall in the former group, Harold Innis in the latter. Cohen provided a succinct paraphrase of "the medium is the message" when he said: "Innis's work is a key inspiration for McLuhan's work on the 'medium', in which *the technical form outstrips the cultural content as determinants of social relationships*".[431] (My italics)

In another *Revisiting McLuhan* paper, Geoffrey Sykes stated that McLuhan's Catholic and cultural conservatism "appears highly problematic and unresolved".[432] McLuhan's theology was also under question by English language professor Michael McDonald who noted that "Friedrich Kittler[433] dismisses McLuhan's hermeneutic ideal of understanding media as a humanist delusion produced by his 'silently theological' media theory".[434]

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[428] Heyer, Paul (2000) "Discussion: Marshall McLuhan", in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.103.) NB. Given his unwillingness to be categorized, there is some irony in McLuhan titling chapters *Archetype* and *Genres* in his 1970 publication, *From Cliché to Archetype,* with Wilfred Watson

[429] Meyrowitz, J (2003) *Canonic Anti-Text: Marshall McLuhan's Understanding Media,* Cambridge, Polity (p.205).

[430] Turner, Graeme ed (2000) *Revisiting McLuhan, Media International Australia No.94,* Nathan Qld, Australian Key Centre for Cultural and Media Policy.

[431] Cohen, Hart (2000) "Revisiting McLuhan" in *Revisiting McLuhan, Me*dia International Australia No.94. Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy (p.7).

[432] Sykes, Geoffrey (2000) "'Everyone's deep politics began to show'": Bursting the acoustic space of Herbert M. McLuhan" in Cohen, Hart ed. *Revisiting McLuhan, Media International Australia No.94.* Nathan Qld, Australian Key Centre for Cultural and Media Policy (p.70).

[433] Freidrich Kittler is a German media theorist whom ABC Radio National *The Philosopher Zone*'s comment on him was "Some understand him as a Teutonic version of Marshall McLuhan". http://www.abc.net.au/radionational/programs/philosopherszone/friedrich-kittler/4724990

[434] Michael MacDonald (2011) "Martial McLuhan I: Framing Information Warfare" in *Enculturation* University of Waterloo (p.1). http://enculturation.net/martial-mcluhan

Donald F. Theall, a McLuhan student and associate, underlined the multidisciplinary profile of his late friend:

> From the mid-point of the century, a single name, McLuhan, has brooded ghost-like, over social and cultural understanding of the intersection of communication, computers, persuasion and the emergence of a techno-culture.[435]

Introduction to a critical reading of *Understanding Media*

Understanding Media is an historical, socio-cultural treatise on the interaction of society and technology. As mentioned above, McLuhan has an extremely idiosyncratic style of writing and presentation of ideas.[436] This introduction is a primer on his style and ideas to assist in an evaluation of his work. This introduction also includes a series of sub-sections that focus on McLuhan's methodological characteristics and their development.

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[435] Theall, Donald F. (2000) "Who/What is Marshall McLuhan?" in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.14.)
[436] One of McLuhan's initial opportunities to present himself and his ideas was in November 1955. McLuhan was invited to speak at Columbia University Teachers College on the topic of communications. Philip Marchand in *Marshall McLuhan; The Medium and the Messenger* (1998) tells the story: "The first paragraph of the paper stunned the audience. It began with a reference to Freud, included a complex analogy between psychoanalysis and X-ray photography, and ended with a capsule history of the effects of the ancient Roman road."[436]

Innis's influence

There were a number of people who contributed to McLuhan's methodology. Harold Innis, a political economist and associate of McLuhan's at the University of Toronto, was a major contributor. In *Marshall McLuhan* (1969) Dennis Duffy expanded on Innis's connection to McLuhan: "Innis is, next to [James] Joyce, the most important *direct* influence on McLuhan"[437] and "it may well be that Innis' strongest influence occurs in the the area of methodology".[438] "Both men (Innis and McLuhan) were technological determinists," claimed J. Herbert Altschul.[439]

Duffy commented on Innis's research style, stating that: "Innis presented the evidence he had culled in a highly allusive and compressed manner which had an obvious effect upon McLuhan's method of presentation".[440]

Innis's 'allusive and compressed' methodology led to McLuhan constructing aphorisms like *the medium is the message*, *global village, acoustic space*; terms like *hot*, *cold* (media) *implosion*, *mosaic*; and *the extensions of man* - all of which are wrapped in McLuhan's *mosaic* perspective. In 1995, thirty years after *Understanding Media* was published, McLuhan' son Eric tried again to clarify the meaning of McLuhan's most well-known 'probe'- *the medium is the message*:

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[437] Duffy, Dennis (1969) *Marshall McLuhan*, Toronto, McCellend and Stewart Limited (p.14).
[438] Duffy, Dennis (1969) *Marshall McLuhan*, Toronto, McCellend and Stewart Limited (p.17).
[439] Altschull, J. Herbert (1990) *From Milton to McLuhan*, London, Longman (p.342)
[440] Duffy, Dennis (1969) *Marshall McLuhan*, Toronto, McCellend and Stewart Limited (p.14,17)

The perception of reality now depends upon the structure of information. The form of each medium is associated with a different arrangement, or ratio, among the senses, which creates new forms of awareness. These perceptual transformations, the new ways of experiencing that each medium creates, occur in the user regardless of the program content. This is what the paradox, "the medium is the message," means.[441]

McLuhan's Methodology

This sub-section looks at McLuhan's methodology in general - 'themes', referencing, structure and writing style. There will be an additional focus on his science referencing and complexity theory.

Eric McLuhan and Frank Zingrone highlight the fact that: "McLuhan's writings over a 40-year period are consistently concerned with understanding the contemporary media as a problem of method".[442]

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[441] McLuhan, Eric and Frank Zingrone eds.(1995) *Essential McLuhan*, NY,Basic Books (p.3). Philip Marchand, McLuhan's biographer, states that McLuhan, soon after *Understanding Media* was published, "hit upon a better way of expressing the idea behind 'the medium is the message'"[441] In Marshall McLuhan's "The Invisible Environment", *Canadian Architect* (1966) he wrote that "every new medium created its own environment, which acted upon human sensibilities in a 'total and ruthless' fashion".[441] Marchand, Philip (1998) *Marshall McLuhan: The medium and the Messenger,* Toronto, Vintage Canada (p.172).
[442] McLuhan, Eric and Frank Zingrone eds.(1995) *Essential McLuhan*, NY, Basic Books (p.4).

The mosaic

McLuhan initiates his methodology in the second paragraph of the introduction to *Understanding Media*. 'Mosaic' expressions are the major strand of his methodology. He proposes that:

> [A]fter more than a century of electric technology, we have extended our central nervous system in a global embrace, abolishing both space and time as far as our planet is concerned.[443]

In this quote, McLuhan succeeds in establishing his *mosaic* style of presentation by including several propositions about media in one sentence. These propositions or 'probes' are present in the form of strands that have forebears in any number of disciplines. McLuhan delivers his anthropological strand with the inclusion of 'extensions of the central nervous system'; his media history strand by including 'century of electric technology'; and his 'science' strand by including 'abolishing space and time'. However, this initial appearance of the *mosaic* is only a rehearsal for what is a mainstay in McLuhan's methodology. One needs to note that the *mosaic* style of presentation and narrative brings with it a 'circularity' of explanation - to explain the mosaic process requires one to use the mosaic process to explain it.[444] While this is an obvious governor on the integrity of McLuhan's methodology, the positive aspect of this non-linear 'circularity' is that "the aphoristic technique makes it possible to present several levels of awareness simultaneously." [445]

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[443] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul. (p.3).
[444]   Many commentator and writer have used a 'circularity' or self-referential mode. McLuhan's major literary idol, James Joyce, used it extensively in *Finnegan's Wake.*
[445] Marchessault, Janine (2005) *Marshall McLuhan*, London, SAGE (p.xi).

McLuhan supplied an early description of the *mosaic* in *The Gutenberg Galaxy* (1962), a work which in hindsight looks like a first draft of *Understanding Media*:

> The present book develops a mosaic or field approach to its problems. Such a mosaic image of numerous data and quotations in evidence offers the only practical means of revealing causal operations in history.[446]

The use of the term *mosaic* incorporates the effect of bringing many disciplines together in describing events, elements and entities. 'Mosaic' specialist Elena Lamberti commented that:

> Throughout his daily investigation, McLuhan encouraged an interdisciplinary cross-reading of the humanities and the sciences. McLuhan proposed a way to overcome the traditional dichotomy that opposes C.P. Snow's two cultures science and humanities – integral awareness.[447]

There are two stylistic elements of McLuhan's *mosaic* that stand out in the above quote: firstly, the mosaic of 'interdisciplinary cross-reading' is a style of narrative with an impregnability to argument, and secondly, 'science' references are to be confidently expressed no matter how inadequate they might appear under close reading. These methodological tools are very efficacious options for a writer immersed in sweeping, big-picture commentary about the effects

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[446] McLuhan, Marshall (1962) *The Gutenberg Galaxy*, London, Routledge and Kegan Paul. (frontispiece). The "present book" is, in fact, *The Gutenberg Galaxy,* however this quote works as well for *Understanding Media.*
[447] Lamberti, Elena (2012*) Marshall McLuhan's Mosaic*, Toronto, University of Toronto Press (p.38). McLuhan may have accepted the existence of Snow's *schism*, but, as noted in the thesis *Introduction*, he doubted Snow's history credentials. "Integral awareness" seems to be McLuhan's answer to resolving the hermeneutics/ positivist schism.

and influence of media. One could argue that the mosaic is an effective methodology to assist in 'bridging the gap' of the schism or bypassing it altogether.

Joshua Meyrowitz was very complimentary about the mosaic in *No Sense of Place* (1995): "McLuhan's difficult mosaics remain the richest source of hypotheses that relate specifically to the telephone, radio and television".[448]

Humour and literary references are two of McLuhan's most important methodological tools for shaping his mosaic. They allow McLuhan to lighten the pedagogy that would naturally be present in a person with strong intellect, teaching credentials and an interest in delivering a ground-breaking perspective on almost every aspect of the last two thousand years of world culture. "What is often not understood about McLuhan's methodology is that it is historical",[449] claims Janine Marchessault.

It is noticeable that McLuhan has a strong appreciation of James Joyce, particularly his humour and wordplay. He admitted to adopting Joyce's works as a sometime model for his own mosaic approach. A *mosaic* style of narrative has its own rhythmical nature, normally creating an acceptable level of 'flow' for the reader. On the other hand, McLuhan's irregular appearances of inappropriate 'science' references compromised the 'flow'.

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[448]   Meyrowitz, Joshua (1985) *No Sense of Place,* NY, Oxford University Press (p.23).
[449]   Marchessault, Janine (2005) *Marshall McLuhan,* London, SAGE Publications (p.xiv).

Science referencing

Marshall McLuhan had an unusual approach to science referencing - he used it as an entertaining literary device. McLuhan admired physicists beyond the grand style of rhetoric some of them brought to the table for publication or discussion. McLuhan biographer Janine Marchessault commented that "from the *Explorations* essays [1953] onward McLuhan develops a method that is influenced by the new physics".[450]

His enthusiasm found him entangled in spatio-temporal concepts several times:

> McLuhan's zealous pronouncements about time and space being abolished in the electric galaxy are over-emphasized in order to stress that the experience of time is centrally transformed by the technologization of space. That is space and time are both different and bound together in space-time…McLuhan wishes to retain the multiplicity of times within space without reducing time to space.[451]

This interpretation of McLuhan's statements on spatio-temporality indicated that Einstein's space-time relativity model had become McLuhan's science-referencing model. Unfortunately his version of space-time theory provided no real explanations for his 'probes', nor did it develop into appropriate analogies.

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[450] Marchessault, Janine (2005) *Marshall McLuhan,* London, SAGE Publications (p216).
[451] Marchessault, Janine (2005) *Marshall McLuhan*, London, SAGE Publications (p.209).

McLuhan was impressed by Werner Heisenberg's version of quantum physics, and was looking for a new space-time paradigm to kick-start his ideas on 'acoustic space', according to Janine Marchessault:

> Richard Cavell[452] has maintained that McLuhan's challenge to the hegemony of visual spatial thinking is not a nostalgic return to oral culture…but a new space-time paradigm, heavily informed by physics, which he locates in acoustic space.[453]

McLuhan struggled valiantly in *Understanding Media* to win readers over with his views on acoustic space.[454] He exploited the wave half of the wave-and-particle concept that had emerged from the double-slit experiment on the passage of light by Thomas Young in 1801,[455] and came up with a 'wave' format for his acoustic space 'probe'.

The prescience of McLuhan's 'acoustic space' ideas was commented on by media and communications academic Peter Dahlgren in 1981:

> In the ecology of TV viewing, the aural dimension still remains the most fundamental in this medium's capacity to convey meaning…a recent study of TV

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[452] Cavell, Richard Canadian Journal of Communication 34. 1 (2009): 159-162. http://search.proquest.com.ezproxy2.library.usyd.edu.au/docview/219565757
[453] Marchessault, Janine (2005) *Marshall McLuhan*, London, SAGE (p.206).
[454] See Glossary for *acoustic space.*
[455] By the first half of the twentieth century, both relativists (space-time) and quantum (uncertainty) theorists had agreed that light is both a particle and a wave. The mode of light was a particle when it registered on meters as it passed through two slits side-by-side in a linear mode, and a wave, or waves when it passed through the same two slits and created an interference pattern.

news in Britain[456] found that the visuals could only be understood in terms of the journalistic discourse.[457]

There is no question that the combination of science and media fascinated McLuhan, so much so that he worked with his son Eric until his death in 1980 on a project posthumously published in 1988 called *Laws of Media: The New Science*.[458]

Structure

The layout of the contents of *Understanding Media* is unusual, with thirty-three short chapters occupying only 386 pages.[459] Having a large number of short chapters was a device he had already exploited in *The Gutenberg Galaxy*. The opening seven chapters (*Part One*) introduce the reader to the idea of McLuhan's media being an 'extension of the central nervous system'. On display are his favourite aphorisms and 'probes' such as *the medium is the message, hot* and *cold* media*, implosion* and *the global village.*

To use a McLuhan phrase, these 'probes' are the 'foreground' to a 'background'[460] of the multi-disciplinary mosaic of historical, anthropological, ethnographical, literary, technological and scientific ideas and references. McLuhan was unconcerned about the risk a writer would take in having so many ideas in the one book. He quotes in dismay what his editor said about his

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[456] Glasgow Media Group (1976)
[457] Dahlgren, Peter (1981) "TV News and the Suppression of Reflexivity" in Katz, Elihu and Tamas Szecsko eds. *Mass Media and Social Change* London, SAGE Publications Ltd (p.103).
[458] McLuhan, Marshall and McLuhan Eric.(1988) *Laws of Media; The New Science,* Toronto, University of Toronto Press.
[459] This continued the layout model of *The Gutenberg Galaxy,* where there seemed to be hundreds of chapters only a few pages long (and not indexed). McLuhan's layouts became a phenomenon in the printing world.
[460] "The relation between foreground and background is tremendously important in McLuhan's thought" in *McLuhan, Space and Objects (2010).* http://larvalsubjects.wordpress.com/2010/07/page/2/

writing: "seventy five percent of your material is new. A successful book cannot be more than ten percent new".[461]

In *Part Two* he embarks on another twenty-six short chapters[462](except for *Television*) each of which focuses on an individual topic such as roads, housing, the wheel, clocks, money, clothing and anything else that McLuhan could see as an extension of man's central nervous system. At the same time he is showing the relationships between these topics and media formats such as print, comics, the telegraph, education, the press, radio and television. One can argue that the *mosaic* writing style brings a methodological bonus to McLuhan's work if he can implant in the mind of the reader the idea that *Understanding Media* itself is an example of *the medium is the message*.

Language and literature

McLuhan's language can sometimes be counter-intuitive, as it is with the term 'hot' referencing single-sense audio radio, and 'cool' referencing the dynamics of audio-visual television. This was confusing for many new to the McLuhan style, even though he supported the terms with statements like "Hot media are low in participation, and cool media are high in participation or completion by an audience".[463]

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[461] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul. (p.4).
[462] Rumour had it that McLuhan's chapter number was a whimsical reference to the number of letters in the alphabet.
[463] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul. (p.25).

The opening chapter, *The Medium is the Message*, sets the mosaic methodology for the rest of the book. For instance, "The instance of electric light may be illuminating"[464] is hardly an accident when it appears in this chapter. It is the first sign of McLuhan's pun and games with language, and his literary and poetic references mode that glues the mosaic methodology together.

As the multidisciplinary narrative rolls on, McLuhan's *mosaic* methodology allowed him to explain and entertain at the same time. When devoting a weighty paragraph to electricity and the principle of causality and instantaneity, he then summarises the conflux of these entities with an evolutionary aphorism: "Instead of asking which came first, the chicken or the egg, it suddenly seemed that a chicken was an egg's idea for getting more eggs".[465]

The first of his poetic references - putting metre into his concepts - appears on the third page of *The Medium is the Message* chapter: "A fairly complete handbook for studying the extensions of man could be made up from selections from Shakespeare".[466] If readers think this might be one of McLuhan's humorous remarks, they are mistaken. McLuhan took his poetry seriously. This is noticeable when he follows his mention of Shakespeare with a quote from Shakespeare's *Romeo and Juliet* (p.9) quickly followed by one from *Othello* (p.10), and then *Troilus and Cressida* (p.10).[467] He also quoted from Shakespeare's *As You Like It* (p.64), *Sonnet X* (p.162), *Hamlet* (p.164), *King Lear* (p.191), *Troilus and Cressida* (p.192), and *Julius Caesar* (p.376).

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[464] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.8).
[465] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.12). It's quite possible that this McLuhanism (the combination of McLuhan and aphorism) was the forerunner of the latter-day analogy for an evolutionary principle, 'it seemed like the library was a book's way of getting more books".
[466] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.9).
[467] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.9).

Every chapter in *Part One* has a poetry quote, and there are literary and poetry references in all but two of the 33 chapters. Shakespeare is only one of the poets. Every poet that a well-read reader would expect to see in a favourites list is there, from Donne to Blake to E.E. Cummings. This methodology was not without its critics:

> McLuhan's worst failing: the wholesale reinterpretation of texts to prove his preconceived arguments. He offers lengthy misreadings of *King Lear, The Dunciad* and *Finnegan's Wake*, among others.[468]

Given this wealth of literary and other arts referencing, it is off-putting that McLuhan has not created an index for *Understanding Media* - no doubt his determination "to deny classification and closure"[469] has prevented his inclusion of a regular writing protocol.

Thesis methodology

Finding a starting point for a critique is made complex by the fact that McLuhan unashamedly worked to his own motto of *the medium is the message*. "The relative novelty of his style ensured that it was occasionally criticised for its eliptical, non-sequential, non-academic structure,"stated

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[468] Simon, John (1969) "Pilgrim of the Audio-tactile" in Rosenthal, Raymond, ed. *McLuhan: Pro and Con*, MD, Penguin Books (p.97). Movie and theatre critic.
[469] Heyer, Paul (2000) "Discussion: Marshall McLuhan", in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.103.)

Chistopher Horrocks.[470] It led to McLuhan's circularity of explanation. Joshua Meyrowitz exposed the circularity:

> Scholars who approach McLuhan's work for evaluation are faced with a peculiar paradox: They have to call on their traditional rational critical skills to criticize a work that questions the necessity and universal value of such skills.[471]

As well as this circularity, McLuhan avoided the terminology of the academy, particularly those in the social sciences. However, if one avoids McLuhan's terminology, one is left only with a neverending series of quixotic historical remarks.

In order to face this critical reading task I am using two frameworks of inquiry. The first framework is an analysis of the balance of disciplines in McLuhan's multidisciplinary approach to methodology. The outcome of this analysis will be an evaluation of any effects on McLuhan's methodology caused by the presence of the hermeneutics/positivist schism. My second framework is the potentiality of complexity theory in relation to McLuhan's spatio-temporal referencing. The commentators' and critics' lack of attention to these spatio-temporal and balance issues will also be addressed.

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[470] Horrocks, Christopher (2003) "Marshall McLuhan and Virtuality" in Appignanesi, Richard ed. *The End Of Everything: Postmodernism and the Vanishing of the Human*, Cambridge, Icon Books UK (p.205).
[471] Meyrowitz, Joshua (1985) *No Sense of Place,* NY, Oxford University Press (p.21).

A critical reading of *Understanding Media*

Part One: "The medium is the message" and other phrases

McLuhan launches his major 'probe', the phase change paradox he calls *the extensions of man* in the second paragraph of the Introduction to *Understanding Media*. McLuhan is writing like a sociological guru:

> After three thousand years of explosion…the Western world is imploding…[W]e have extended our central nervous system itself…abolishing both space and time as far as our planet is concerned…[W]e approach the final phase of the extensions of man – the technological stimulation of consciousness.[472]

The *extensions of man* concept proposed that there was a relationship between the brain and the machine. Commentators and critics at the time wanted McLuhan to answer *how* and *what* questions about that relationship. Although a supporter of McLuhan's project, Joshua Meyrowitz had a typical critic's response to McLuhan's answers: "the mechanism through which electronic media bring about widespread social change is not made very clear in his work".[473]

Meyrowritz commented that even though McLuhan claimed that "the introduction of a new medium to a culture, therefore, changes the 'sensory' balance of the people in that culture and

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[472] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.3).
[473] Meyrowitz, Joshua (1985) *No Sense of Place,* NY, Oxford University Press (p.3).

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alters their consciousness",[474] he was "disturbed by the incompleteness" of McLuhan's theory, and said that McLuhan "offers few specific clues as to why people with different sensory balances behave differently".[475]

These *how* and *what* questions were never answered by McLuhan. Inherently they are questions about the spatio-temporality of relationships and phase change. With few exceptions, these questions have not been asked of McLuhan's work by commentators and critics in recent decades.

Chapter One, *The Medium is the Message,* begins with a technological analogy:

> For the 'message' of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs. The railway did not introduce movement or transportation…into human society, but it accelerated and enlarged the scale of previous human functions… This happened whether the railway functioned in a tropical or northern environment and is quite independent of the freight or content of the railway medium.[476]

This quote is one of the better technological analogies in *Understanding Media.* However, a serious clash between his methodological tools of 'science' and literature soon occurs. In

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[474] Meyrowitz, Joshua (1985) *No Sense of Place,* NY, Oxford University Press (p.3).
[475] Meyrowitz, Joshua (1985) *No Sense of Place,* NY, Oxford University Press (p.3).
[476] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.8). McLuhan's use of a train reference invokes the modes of growth, invariance (relativity) and emergence theory to a complexity theorist.

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Chapter Two, *Media Hot and Cold,* McLuhan creates a 'mosaic mesh'[477] of references featuring the ideas of poets William Blake and W.B.Yeats, and scientists Isaac Newton and John Locke:

> Blake's counterstrategy for his age was to meet mechanism with organic myth. Today, deep in the electric age, organic myth is itself a simple and automatic response capable of mathematical formulation and expression, without any of the imaginative perception of Blake about it.[478]

While the Blake reference is a positivistic overreach, McLuhan overreaches hermeneutically with the statement that "We can program twenty more hours of TV in South Africa next week to cool down the tribal temperature raised by radio last week".[479] This works as a realistic, if not politically correct, hermeneutic-mode analogy that flags his themes of a *hot* medium (radio) and a *cool* medium (TV). The hermeneutic aspect of McLuhan's methodology was commented on by Gabriella Hima: "McLuhan's utopia about *Understanding Media* presupposes a hermeneutic and an anthropomorphic approach in relation to the media". Unfortunately for McLuhan, says Hima "he got stuck in the hermeneutic tradition, which is unable to come to terms with the situation of modern media", because "hermeneutics [cannot] describe this new phenomenon within the categorical framework of inerhuman experience".[480]

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[477] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.350).
[478] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.27).
[479] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.30).
[480] Hima, Gabriella : The message of the medium. McLuhan's media theory and the present media situation. In: TRANS. Internet-Zeitschrift für Kulturwissenschaften. No. 10/2001.
WWW: http://www.inst.at/trans/10Nr/hima10.htm (p.1).

In Chapter Three, *Reversal of the Overheated Medium*, McLuhan describes the process of implosion/explosion:

> The stepping up of speed from the mechanical to the instant electric form reverses explosion into implosion…the imploding or contracting energies of our world clash with the old expansionist and traditional patterns of organization.[481]

McLuhan now turns to systems theory founder and interdisciplinary philosopher Kenneth Boulding to help him with spatio-temporal change:

> The present chapter is concerned with showing that in any medium or structure there is what Kenneth Boulding calls a 'break boundary at which the system suddenly changes into another or passes some point of no return in its dynamic processes'. ...[T]he road beyond its break boundary turns cities into highways.[482]

The 'break boundary'[483] version of change is pursued throughout the rest of the chapter. Although McLuhan does not look closely at the close relationship between 'break boundaries' and phase change and emergence theory, his interest suggests he wanted something of contemporary science to have a place in his commentary.

Chapter Five, *Hybrid Energy: Les Liaisons Dangereuses* is another enigmatic chapter.

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[481] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.38-39).
[482] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.42).
[483] Otherwise known as an *inflection point*. See *inflexion point* in Glossary and Inflection point section in Habermas chapter.

McLuhan's narrative is attached to the paradox of phase change[484], the paradox he shares with Habermas and Bourdieu.

McLuhan informs us that hybrid energy emerges from the conjunction of "fission"[485] and "fusion"[486] - the fission/fusion conjunction is an alternative wording for his explosion/implosion, contracting/expansionist paradoxes:

> The stepping-up of speed from the mechanical to the instant electric form reverses explosion into implosion. In our present electric age the imploding or contracting energies of our world now clash with the old expansionist and traditional patterns of organization.[487]

Gary Genosko uses the above quote in *McLuhan and Baudrillard: The Masters of Implosion*.[488] He analyses what appeared to him to be a similar use of *implosion* by McLuhan and the sociologist Jean Baudrillard who was widely seen in academic circles in the 1980s as the new McLuhan. However, neither McLuhan's quote, nor Baudrillard's ideas, nor Genosko's critique advances the comprehension of *implosion*.

Part One of *Undestanding Media* finishes with McLuhan putting himself on equal footing with Warner Heisenberg, Nobel Prize-winning quantum physicist and one of the men who said a lot about technological determinism. McLuhan informs the reader that:

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[484] The paradox is: two contrasting or opposing events using the same constituents are happening at the same time.
[485] 'Fission' is coming apart, 'fusion' is coming together.
[486] McLuhan Marshall (1964) *Understanding Media,* New York, McGraw Hill (p.55).
[487] McLuhan Marshall (1964) *Understanding Media,* New York, McGraw Hill (p.38).
[488] Genosko, Gary (1999) *McLuhan and Baudrillard* , London, Routledge (p.94-95)

Heisenberg is an example of the new quantum physicist whose over-all awareness of forms suggests to him that we would do well to stand aside from most of them. He points out that technical change alters not only habits of life, but patterns of thought and valuation.[489]

Part Two: 'the extensions of man'

McLuhan's 'extensions of man' cover geographical, demographical, anthropological, socio-cultural and technological subjects in Part Two. His first major interaction of man and media technology appears in Chapter Nine, *The Written Word: An Eye for an Ear*. McLuhan states that the basis for an emergence of a writing technology was in the form of Egyptian hieroglyphics and Chinese pictograms emerging around 3000 BC.[490] However, McLuhan was more interested in the phonetic alphabet that was in use by the Seirites west of Mesopotamia, circa 500 BC:[491]

> When combined with papyrus, the alphabet spelt the end of the stationary temple bureaucracies and the priestly monopolies of knowledge and power…It can be argued then that the phonetic alphabet, alone, is the technology that has been the means of creating 'civilized man'".[492]

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[489] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.69).

[490] This time frame is similar to the anthropologist Denise Schmandt-Besserat, whose theory of the emergence of writing proposed that writing appeared as a cuneiform format in West Asia – Mesopotamia around 3300 BC. Nobel Prize-winning physicist Robert Laughlin reported that, at The Interdisciplinary Workshop on Emergence at Stanford in 2002 Schmandt-Besserat's proposed a "highly plausible theory that cuneiform writing evolved out of counting conventions required for commerce".[490]. Laughlin, Robert B. (2005) *A Different Universe {Reinventing Physics from the Bottom Down}*, New York, Basic Books (p.194-195).

[491] http://www.nald.ca/library/research/ltonword/part2/logan/p2-l3.htm There were a number of 'media' phenomenon that occurred in the same era – from 3000 to 500 BC. The first citing of a phonetic alphabet coincides with a paradigm shift in the format of the written word; that is, the shift from poetry to prose by the Greeks in the sixth century BC.

[492] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge (p.90-91).

McLuhan's argument has research support, but it is important to note that times and places for the emergence of 'civilizing technology' are not universal. One of the earliest manifestations of an important interface between technology and social activity and its resultant effect on 'media culture' is chronicled in classicist Alex C. Purves' *Space and Time in Ancient Greek Narrative* (2010).[493] The emergence of prose in early sixth century Greece was concurrent with the development of the first Greek map. Purves argues that "cartography had an important and previously unrecognised influence on prose, especially in relation to its special properties", and that "prose used the scientific properties of the map to create its own distinct identity".[494]

In Chapter Ten, *Roads and Paper Routes*, McLuhan defines *the global village,* avoiding the excesses of the book's opening flourish. However, it is hard work for McLuhan to describe the phase change/ break boundary of an 'organic whole':

> Our specialist and fragmented civilization of center-margin structure is suddenly experiencing an instantaneous reassembling of all its mechanized bits into an organic whole. This is the new world of the global village.[495]

There are too many spatio-temporal concepts struggling to find air here. But McLuhan presses on with his science references in *Chapter Fifteen*, *Clocks*, where he stoically summarizes Einstein's special and general theories of relativity:

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[493] Purves, Alex C. (2010) *Space and Time in Ancient Greek Narrative*, New York, Cambridge University Press.
[494] Purves, Alex C. (2010) *Space and Time in Ancient Greek Narrative*, New York, Cambridge University Press (pps.97,99).
[495] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.101).

As many kinds of time exist for them [Hopi Indians], as there are kinds of life. This, also, is the kind of time-sense held by the modern physicist and scientist. They no longer try to contain events in time, but think of each thing as making its own time and space[496].

As well as harbouring relativity, *Clocks* is also a chapter where McLuhan unexpectedly diverts from a view of one of his major influences, Lewis Mumford, historian, philosopher and social theorist of technology:

Lewis Mumford had previously claimed that the clock preceded the printing press in order of influence on the mechanization of society. But Mumford takes no account of the phonetic alphabet[497] as the technology that had made possible the visual and uniform fragmentation of time.[498]

McLuhan keeps supporting his implosion/ explosion 'probe' against any opposition. And in Chapter Nineteen, *Wheel, Bicycle and Airplane,* he corrects Mumford again, this time accusing him of a total spatio-temporal error:

Lewis Mumford calls this urbanization 'implosion', but it was really an explosion. Cities were made by the fragmenting of pastoral modes…It is too bad that Mr. Mumford has chosen the term 'implosion'…'Implosion' belongs to the electronic age.[499]

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[496] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.160).
[497] See McLuhan's comments on the phonetic alphabet in Part Two: Extensions of Man first section.
[498] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.159).
[499] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.201).

The Arts meet Science

Chapter Twenty, *The Photograph* is of great import to McLuhan. It gives him a forum to demonstrate the range of his mosaic methodology. The multidisciplinary approach now includes the coming together of the stage-play and technology - an arts-meets-science version of the *mosaic*.

It may be a coincidence that French playwright Jean Genet is used as a literary reference by McLuhan in *The Photograph*, but it is probable that Genet's work is the origin of McLuhan's overarching methodology of the *mosaic*. McLuhan's subtitle of *The Photograph* chapter is *The Brothel-without-Walls*. This is a reference to the theme of *The Balcony*, a 1957 play by Jean Genet. McLuhan had found a strong relationship between photography and the theme of Genet's play, and made a point of it in *The Photograph* chapter:

> The brothel remains firm and permanent amidst the most furious changes. In a word, photography has inspired Genet with a theme of the world since photography [is] a Brothel-without Walls.[500]

In the way "photography has inspired Genet", it is equally likely that Genet inspired McLuhan's mosaic methodology. Genet, like another of McLuhan's favourite literary figures Bertolt Brecht, wrote *epic* dramas whose form describes both a type of written drama and a methodological approach to the production of plays. In a letter to the director of his 1966 play, *The Screens*, Genet requested the carrying out of a specific methodological approach to directing his play:

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[500] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.205).

Each scene, and each section within a scene, must be perfected and played as rigorously and with as much discipline as if it were a short play, complete in itself. Without any smudges. And without there being the slightest suggestion that another scene, or section within a scene, is to follow those that have gone before. [501]

The Genet *epic* format is in parallel with the *mosaic* methodology of McLuhan. Supporting this argument is the fact that Genet's quote (above) is remarkably similar to Paul Levinson's description of the methodology of *The Gutenberg Galaxy*:

One can start anywhere in the book, almost in the middle of any slim chapter, and find a set of themes and referents that will serve as ready passport to almost any other part of the book. Each chapter in other words contains a blueprint of the entire book, much like the DNA in each of our cells contains a recipe for our entire organism. [502]

Given McLuhan's interest in Genet's work, one can argue that McLuhan saw that Genet's methodological approach matched his own, and that the employment of the *mosaic* methodology in his previous work, *The Gutenberg Galaxy*, was more than justified. The *mosaic* was also the easiest methodology to service his favourite poets, playwrights and writers.

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[501] Genet, Jean (1966) "Letters to Roger Blin" ,in *Reflections on the Theatre and Other Writings.* Trans Seaver, Richard, London Faber , 1972. 7-60. ISBN 0571091040. Some local colour: Tony Wright, an Age journalist, used the Genet quote in a column (31.1.12) on the *epic* battle between Djokovic and Nadal in the 2012 Australian Tennis Open. Unfortunately he attributed it to Bertholt Brecht (which would not have offended McLuhan) but has since been corrected.
[502] Levinson, Paul (1999) *Digital McLuhan*, London, Routledge (p.31).

Further evidence for the connection between the methodologies of Genet and McLuhan comes from biographer Philip Marchand where he said that: "These beginning and ending sections [of *The Gutenberg Galaxy]* could have been switched around with no loss of coherence to the text".[503]

The association of C. P. Snow's 'two cultures' (literature and science), Genet's format and McLuhan's mosaic, was updated when communications academic Donald J. Gillies was evaluating 'McLuhan's legacy' in 2012. Gillies felt there was potential in the research topic "*Understanding McLuhan* as a medium for the convergence between art and science".[504] The question could be asked: was McLuhan 'bridging-the-gap' between the 'two cultures'?

Science concepts occupy the pages of Chapter 25, *Telegraph: The Social Hormone*. McLuhan was an admirer of the French philosopher and Jesuit priest, Pierre Teilhard de Chardin - having previously referenced his views on electromagnetism in *The Gutenberg Galaxy* - and now argued that de Chardin shared his view that physics and biology were interchangeable,

> The tendency of electric media is to create a kind of organic interdependence among all
> the institutions of society, emphasizing de Chardin's view that the discovery of
> electromagnetism is to be regarded as 'a prodigious biological event'.... It is also

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[503] Marchand, Philip (1998) *Marshall McLuhan: The medium and the Messenger,* Toronto, Vintage Canada (p.165).
[504] Gillies, Donald J. (2012) "Marshall McLuhan's Legacy in Culture and Scholarship" in The Canadian Encyclopedia http://www.thecanadianencyclopedia.com/articles/marshall-mcluhans-legacy-in-culture-and-scholarship

common now for biologists like Hans Selye to think of the physical organism as a communication network.[505]

The ubiquity of electricity and its biological effects in the narrative of *Chapter 25* had a large part to play in classifying McLuhan as a 'technological determinist' by many members of the academy by the 1970s. And determinism was only one analogical step away from the dangers of positivism for some of McLuhan's critics.

Technological determinism

Scott Lash is one of an increasing number of commentators now who argue against McLuhan being a technological determinist despite "the rejection [by contemporary media studies] of his work as technicist and determinist".[506]

> To say 'the medium is the message' is to say that the technology is the content. But this is not technological determinism, because McLuhan disputes linear causation and hence any sort of determinism. Linear causation belongs to the Gutenberg age and the phonetic alphabet.[507]

Ellen Balka in her paper in *Revisiting McLuhan* (2000) wanted us to look at McLuhan's 'technological determinism' again. She called upon her research in the 1990s to show how

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[505] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.268-70).
[506] Cohen, Hart (2000) "Revisiting McLuhan" in *Revisiting McLuhan, Me*dia International Australia No.94. Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy (p.6).
[507] Lash, Scott (2002) *Critique of Information,* London, SAGE Publications Ltd. (p.178)

McLuhan can be read as a social constructivist, who sees society and technology as mutually shaping phenomenon. She wrote that:

> Inherent to a reading of McLuhan is an understanding of technology as the output of social processes, in which humans have agency, and in which social processes, though partly reflecting technology, are not wholly determined by technological change.[508]

This is not dissimilar to Lewis Lapham's position on McLuhan. In his introduction to a 1994 edition of *Understanding Media,* Lapham quoted McLuhan as saying "we shape our tools and afterwards out tools shape us".[509] McLuhan's "shape our tools" rationale can be seen as an expression about 'reflexivity'.[510] It also allows room for McLuhan not to be seen a technological determinist.

Balka's fellow contributor to *Revisiting McLuhan,* P. David. Marshall, was not convinced by the potentially underlying aspect of 'reflexivity' in McLuhan's statement. In *New Media Cultures* (2004) Marshall claimed that "because of the simple relationship between technology and its capacity to transform society, McLuhan is rightly labeled a technological determinist".[511]

In Chapter 28*, The Phonograph*, McLuhan again tries to cloak his 'acoustic space' idea in the status of a relativity/ quantum concept: "That the world of sound is essentially a unified field of

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[508] Balka, Ellen (2000) "Rethinking 'The Medium is the Message': Agency and Technology in McLuhan's Writings" in *Revisiting McLuhan, Media International Australia No.94.* Cohen, Hart ed., Nathan Qld, Australian Key Centre for Cultural and Media Policy. (p.73).
[509] Lapham, Lewis H. (1994) "Introduction" in *McLuhan, Marshall: Understanding Media* MA, MIT Press (p.xi). However, there is some doubt about the source for the original quote.
[510] Non-linearity.
[511] Marshall, P. David. (2004) *New Media Cultures*. London: Arnold (p.31).

instant relationships lends it a near resemblance to the world of electromagnetic waves".[512]

McLuhan's rhetorical style is stimulating, but it does not advance understanding of his 'acoustic space'.

McLuhan's 'science' references are losing their strength by the time the reader looks at the *Radio* chapter. When a writer making an argument about the power of radio uses the phrase "the psychic action of technology",[513] he or she loses credibility.

Television

In the course of Chapter 31, *Television: The Timid Giant,* McLuhan revisits most of the subject matter of the previous thirty chapters of his book in the course of this one chapter. He shows that not only is a "mosaic mesh" [514] *the* methodology for comprehending the content, but the content itself, with its multidisciplinary modes, embodies the mosaic mode.

This chapter is McLuhan's *tour de force.* All of his methodological tools and contextual subject matter are in full array with the exception of science-referencing – a surprise omission given its melodramatic presence up til now. The spatio-temporal, model-building aspect of his 'probes' continues warily in the face of the magnitude of the factors involved:

> The effect of TV, as the most recent and spectacular extension of our central nervous
> system, is hard to grasp for various reasons. Since it has affected the totality of our lives,

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[512] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.300).
[513] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.332).
[514] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.350).

personal, social and political, it would be quite unrealistic to attempt a 'systematic' or visual presentation of such influence. Instead it is more feasible to 'present' TV as a complex *gestalt* of data gathered almost at random.[515]

McLuhan withdraws from the challenge of describing the *how* and the *what* of the effect of TV on society and retreats into the amorphous terms "power" and the little known "adumbrated" (which means 'to indicate faintly').

> The power of the TV mosaic to transform American innocence into depth sophistication, independently of 'content', is not mysterious if looked at directly. This mosaic TV image had already been adumbrated in the popular press that grew up with the telegraph.[516]

TV cameras certainly had a powerful physical presence in 1963, according to McLuhan. McLuhan biographer Philip Marchand wrote: "McLuhan noted[517] that Lee Oswald's murder in the Dallas police station was made posible by the fact that his guards were wholly distracted by the presence of television cameras".[518]

Automation

In the final Chapter 33, *Automation: Learning a Living*, McLuhan has another art-meets-science 'probe':

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[515] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.345-46).
[516] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.353).
[517] McLuhan, Marshall (1964) "Murder by Televion", *Canadian Forum,* January (pps.222-23).
[518] Marchand, Philip (1998) *Marshall McLuhan*, Cambridge MA, MIT Press (p.161).

The tendency [now] is to speak of electricity as painters speak of space: namely, that it is a variable condition that involves the special positions of two or more bodies…Painters have long known that objects are not contained in space, but that they generate their own spaces.[519]

The above definition demonstrates fully his commitment to Einsteinian spatio-temporal concepts. It is of interest to note that this commitment is very similar to Bourdieu's perception of the relationship of 'energy' to *the field*.[520]

McLuhan now goes to author, mathematician and photographer Lewis Carroll to get an art-meets-science explanation of his spatio-temporal model. Invoking again Einstein's relativity concepts, McLuhan visits "*Alice in Wonderland*, in which times and spaces are neither uniform nor continuous".[521]

I argue that application of Einsteinian concepts show an innate conservatism in both McLuhan's (and Bourdieu's) spatio-temporal referencing despite their radical-for-their-times sociological perspectives.

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[519] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.380).
[520] "As Einsteinian physics tells us, the more energy a body has, the more it distorts the space around it, and a very powerful agent within a field can distort the whole space, cause the whole space to be organized in relation to itself"[520] in Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.43).
[521] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.380).

It is striking in the *Automation* chapter how McLuhan has become pre-occupied with the mechanics of media. *Automation* almost reads like a chapter from an edition of *Popular Mechanics* – a favourite 1950s American magazine for schoolboys and do-it-yourself males with a shed to play in. This is not a criticism of McLuhan's content, but to point to the fact that McLuhan's science referencing is more about mechanics, rather than the natural or human sciences as could be assumed from his narrative.

However, he works hard at linking his 'mechanics' to science when he describes 'feedback' and automation:

> Perfecting the individual machine by making it automatic involves 'feedback'. That means introducing an information loop or circuit, where before there had been a one-way flow or mechanical sequence. Feedback[522] is the end of the linearity that came into the Western world with the alphabet and the continuous forms of Euclidean space.[523]

Feedback

Feedback,[524] or 'reflexivity' as it is commonly called, is one of the few non-linear science concepts generally accepted by both sides of the hermeneutic/ positivism schism. Media studies

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[522] With McLuhan having refered to the subject of feedback, I am reminded of one of the prime sub-themes of this thesis – McLuhan's methodology:
> The key to any analysis of the media, which for McLuhan was always connected to the spaces and temporalities of the lifeworld, is a reflexive field approach…this method draws out patterns that render ground assumptions and matrices discernible.

From Marchessault, Janine (2005) *Marshall McLuhan,*London, SAGE Publications (p.xi).
[523] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.387).
[524] See Glossary for *feedback* and *reflexivity*.

academic and McLuhan biographer Janine Marchessault says "the key to any analysis of the media…is a reflexive field approach".[525] As can be seen in this thesis, *feedback/ reflexivity* is common to Habermas and Bourdieu as well as McLuhan.

The feedback/reflexivity concept is challenging to both theoreticians and practitioners. Like other keywords, it carries a substantial conceptual burden, according to Fox Keller and Lloyd in *Adaptive Individuals in Evolving Populations* (1996):

> [It] is precisely because of the large overlap between forms of scientific thought and forms of societal thought that 'keywords'…can serve…as indicators of the ongoing traffic *between* social and scientific meaning, and, accordingly, between social and scientific change[526].

McLuhan and his paradoxes

The most difficult-to-describe entity for McLuhan goes variously under the title of paradox, phase change, break boundary,[527] paradigm shift or "the non-linear aspect of the relationship between media and society" [528] depending on the discipline using it. For that reason, paradoxes are worth a second look.

[525] Marchessault, Janine (2005) *Marshall McLuhan,* London, SAGE Publications (p.xi).
[526] Fox Keller, E., and Lloyd, E.A., eds (1992) "Keywords in Evolutionary Biology"*, in Belew Richard K. and Mitchell, Melanie eds. *Adaptive Individuals in Evolving Populations,* MA, Addison-Wesley Publishing Co, Inc. (p.20).
[527] Tschofen, Monique (2009) "Agents of aggressive order", *Media Tropes* eJournal Vol I (2008): (p.20). "McLuhan observed that in any medium or structure there is a 'break boundary at which the system suddenly changes into another or passes some point of no return in its dynamic processes'".
[528] Logan, Robert K. (2011) "McLuhan Misunderstood: Setting the Record Straight" in *Figure/Ground Communication* (p.1). http://www.google.com.au/#q=mcluhan+non-linear&rlz

According to the editors of *Essential McLuhan,* Frank Zingrone and McLuhan's son Eric, McLuhan was deeply involved with the paradox of change, notwithstanding his unwillingness to engage in definition or detail any of his 'probes':

> [in the 1960s, McLuhan] often referred to the cultural transformation in which paradox was degraded in the interests of the growing illusion of clarity demanded by the rational biases of Empiricism…McLuhan showed that paradox, like metaphor, establishes the ratios of a truth, for truth cannot be just one thing, nor can reality, under electric conditions.[529]

McLuhan's paradoxes were one weapon in his battle with the academy in the 1960s and early 1970s, and, according to Zingrone and McLuhan:

> This general inheritance from particle physics (for McLuhan) reinstated the usefulness of paradox for understanding the chaotic array of conflicting truths that interpretative media created.[530]

With the general acceptance by the academy of quantum physics and its associated non-linear theories like *uncertainty, probability* and *complementarity*[531] McLuhan saw that paradoxes and break-boundaries had a status. This gave him the chance, via the 'probe' method in *Understanding Media*, to exploit his many non-linear paradoxes such as *the medium is the*

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[529] McLuhan, Eric and Frank Zingrone eds.(1995) *Essential McLuhan*, NY,Basic Books (p.7).

[530] McLuhan, Eric and Frank Zingrone eds.(1995) *Essential McLuhan*, NY,Basic Books (p.6).

[531] A group of theories emanating from the work of Werner Heisenberg and Niels Bohr. *Complementarity* refers to the manifestation of energy as both a wave and a particle. An observation that reveals one such characteristic of matter always excludes the other. The two observable phenomena cannot be observed simultaneously. Bohr's Copenhagen Interpretation referred to this not just in the quantum observation, but also to the subject-object separation involved in observation.

message, the global village, implosion/explosion, and *centre-without margins.* McLuhan felt no public discomfort in tempering his determinist hermeneutic methodology with non-linear positivistic paradoxes.

However, Zingrone and Eric McLuhan indicated that McLuhan's favourite quantum and relativity references had reached their use-by date some time before *Understanding Media*: "Our world is fraught with new paradoxes…uncertainty and probability and the latter's statistical approach to truth are now met by the theories of complexity and chaos".[532] This was published in 1995 and in the same discussion there was a foreshadowing of John Durham Peters' 2012 'overdue science innovations and techniques'[533] comments. Zingone and Eric McLuhan argued: "Even the humanities had for too long managed to remain innocent of *uncertainty, probability, complementarity"*.[534]

One of McLuhan's followers, Robert K. Logan, claimed that McLuhan had more than a hidden awareness of phase change as well as complexity and emergence theory. Logan stated that: "Rather than regarding McLuhan as a technological determinist I believe it is more accurate to consider him an early emergentist."[535] This was because McLuhan

> recognized the non-linear aspect of the relationship between media and society and in a
>
> certain sense foreshadowed the notion of co-evolution and complexity or emergence

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[532] McLuhan, Eric and Frank Zingrone eds.(1995) *Essential McLuhan*, NY,Basic Books (p.7).
[533] See Introduction.
[534] This statement is a 1995 pracsimile of John Durham Peters' 2012 reference in the Introduction.
[535] Logan, Robert K (2011) "Mcluhan, Complexity Theory and Emergence".
http://pespmc1.vub.ac.be/ECCO/Seminars/Logan-McLuhan.pdf

theory. There is even a hint of complexity or emergence theory in a 1955 paper of McLuhan.[536]

Despite McLuhan's so-called 'hidden awareness', complexity theory failed to eventuate in *Understanding Media.*

Sociologist Adrian Mackenzie asked whether there was a bigger question than the whereabouts of non-linear metaphors in the future development of complexity theory:

> [Does complexity theory] principally supply new metaphors for theories of the social or are there historically new modalities of knowledge at stake?[537]

 McLuhan's confident presentation in *Understanding Media* indicated that he would have thought he had supplied more than enough "new metaphors of the social" and "new modalities" for his time.

Non-linearity

It needs to be noted here that whilst some commentators accept claims that McLuhan has a non-linear approach to theory,[538] I argue that his methodology was irregular rather than non-linear. McLuhan's historical 'probes' that described media evolving were demonstrably linear until they

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[536] Logan, Robert K. (2011) McLuhan Misunderstood: Setting the Record Straight (p.32).
http://www.mcluhanstudies.com/proposal/issue1.pdf
[537] Mackenzie, Adrian (2005) The Problem of the Attractor**:** A Singular Generality between Sciences and Social Theory in *Theory, Culture and Society* 22 (5) (p.45-6).
http://tcs.sagepub.com.ezproxy1.library.usyd.edu.au/content/22/5/45
[538] See under Scott Lash in the Literature Review in the Introduction.

reached a point where substantial change occurred. This point was variously called a phase change, inflection point, a paradox, or a paradigm shift, depending on the discipline that referenced it. These points were paradoxes in McLuhan's perspective. He did not demystify their mysterious non-linearity through explanation,[539]nor connect them to complexity theory. Janine Marchessault, like McLuhan (Eric) and Zingrone earlier, claims "the oppositions between linearity and non-linearity were exaggerated by McLuhan because these concepts served as schematic tools to make sense of cultural formations".[540]

Non-linearity is a necessary component of discussion for theorists and practitioners interested in the application of the sub-disciplines of complexity and emergence theory. Non-linear theories are at times used as criteria for identifying the new-guard in sociology and media and communication studies. Communication academic Yves Winkin, author of *La Nouvelle Communication,*[541] summarised the attitudes of the radical communication theorists of the 1950s who were rejecting linear equations from old-guard engineers:

'In their view, research in communication should be conceived of in terms of complexity, multiple contexts and circular systems'…The complexity of even the slightest situation

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[539] Many claims have been made that McLuhan's methodology was a 'non-linear' format. Be that as it may, James M. Curtis refers to McLuhan's burden with non-linearity:

> the people who acted so intolerantly to McLuhan's work, called him names and so forth, were using what I will call a linear paradigm, and that McLuhan's non-linear paradigm struck them at best confusion, at worst a put on.

Curtis, James M. (1978) *Culture as Polyphony: An Essay on the Nature of Paradigms*, MO, University of Missouri Press (p.xi).
[540] Marchessault, Janine (2005) *Marshall McLuhan,*London, SAGE Publications (p.xvi).
[541] Winkin, Yves (1981) *La Nouvelle communication*, Paris, Le Seuil.

of interaction is such that it is fruitless to try to reduce it to two or several 'variables' operating in linear fashion.[542]

M. Mitchell Waldrop has stated it took some decades, but the science academy in the 1980s finally became aware of the limitations of the old guard:

> Physicists had begun to realize by the early 1980s that a lot of messy, complicated systems could be described by a powerful theory known as 'non-linear dynamics'. And in the process they had been forced to face up to a disconcerting fact: the whole really can be greater than the sum of its parts.[543]

Summary

The results of the critical reading of McLuhan's work give rise in this summary to several observations about hermeneutics versus positivism, multidisciplinary methodology, and complexity and emergence theory. These are set out below.

Understanding Media is a narrative history of media with strongly represented multi-disciplinary elements of anthropology, ethnography, and literature. By comparison, the disciplines of

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[542] Winkin, Yves (1981) *La Nouvelle communication*, Paris, Le Seuil (pps.24-25).
[543] Waldrop, M. Mitchell (1992) *Complexity: The Emerging Science at the Edge of Order and Chaos*, NY, Simon and Schuster Paperbacks (p.64).

sociology, economics and political studies were all of secondary importance in McLuhan's agenda. When these disciplines appeared in his narrative – scarcely, in the case of economics and politics - they were incidental fragments of his *mosaic* approach to explanation. McLuhan's use of scientific analogies - especially relativity and *the quantum* - was dramatic and excessively theatrical notwithstanding his high regard for science disciplines. However, his 'science' referencing was not persuasive enough to an informed observer for his *mosaic* to be regarded as a bridge between the arts and the sciences. "McLuhan's pretensions to scientific discourse and objectivity…leave him highly vulnerable to technical attacks…He certainly has been discredited as a 'scientist'",[544] claims Daniel J. Czitrom.

Close reading has shown that McLuhan's language describing 'scientific change' in *Understanding Media* is inadequate. This inadequacy is in strong contrast to McLuhan's interpretative use of 'science' references in *The Gutenberg Galaxy* (1962) written only two years earlier. In that book, the references there are enhancing, straightforward, regularly positioned (for McLuhan) and incorporate an equally complex mosaic exposition to those in *Understanding Media*.

Given that *The Gutenberg Galaxy* is seen as the prototype for *Understanding Media*, it is possible that McLuhan may have wanted to go the extra step and make *Understanding Media* accessible to the average reader, as well as outrageous to the academy, and also avant-garde to the emerging techno-specialists. So in order to create a populist version of the *The Gutenberg Galaxy* model, the science-referencing suffered.

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[544] Czitrom, Daniel J. (1982) *Media and the American Mind*, NC, North Carolina Press (p.165).

But despite this kind of criticism, McLuhan delivered ideas and 'probes' in *Understanding Media* as if his *mosaic* methodology was already resolving the hermeneutic/positivist schism

Literary historian Gabriella Hima has argued that "McLuhan…got stuck in the hermeneutic tradition". She stated that this is a tradition of the 'old guard'

> which is unable to come to terms with the situation of modern media. Traditional hermeneutics refer only to communication between human beings. Therefore they cannot be applied to the specific communication between man and machine.[545]

Hart Cohen comments on McLuhan's 'tradition' as well, but arrives at an opposite view to Hima. Cohen proposes that the 'paradox' of McLuhan the man himself "may relate to an older version of Positivism",[546] and adds that "Raymond Williams account of Positivism [in *Keywords*] appears to grasp the simultaneous properties of conservativism/radicalism attributed to McLuhan".[547] The contrasting views of Cohen and Hima suggest that his media attitudes still resist classification.

Ideas involving complexity and emergence theories and other new science sub-disciplines were still a step too far for McLuhan. The methodology of *not* putting forward theories or concepts but using tools, devices and 'probes' to deliver his statements and commentary was explanation

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[545] Hima, Gabriella : The message of the medium. McLuhan's media theory and the present media situation. In: TRANS. Internet-Zeitschrift für Kulturwissenschaften. No. 10/2001.
WWW: http://www.inst.at/trans/10Nr/hima10.htm (p.1).
[546] Cohen, Hart (2000) "Revisiting McLuhan" in Cohen, Hart ed. *Revisiting McLuhan, Media International Australia No.94*. Nathan Qld, Australian Key Centre for Cultural and Media Policy (p.11).
[547] Cohen, Hart (2000) "Revisiting McLuhan" in Cohen, Hart ed. *Revisiting McLuhan, Media International Australia No.94*. Nathan Qld, Australian Key Centre for Cultural and Media Policy (p.11).

enough for him. As well, not seeing himself as a sociologist meant that he was not tied down to a testing of his propositions, 'probes' and ideas. The flexible rationale of the mosaic gave him a wonderful methodological resource. However, McLuhan's lack of explanatory spatio-temporal analogies - other than those from classic physics with a use-by date – in combination with his overconfidence in exploiting neologistic paradoxes, diminished the argumentative power of his work.

McLuhan would be seen by many readers of his books in the 1960s and 70s as something of a sociologist as he dealt with human social activity. However, in his writing on media he took a top-down approach to humanity and dealt in large agglomerations of tribes, villages and nations, which resulted in the exclusion of any analysis of the individual.

No matter how much appeal he had to the media itself and celebrity culture in the 1960s, the provision of only neologistically-complex, non-linear references in *Understanding Media* were reasons enough to deny McLuhan acceptance by the sociological fraternity.

McLuhan was an intellectual with great charm according to countless reports emanating from his media appearances, his university work, and casual social situations. Over his many publications, McLuhan drew upon poetic allusions and literary references. These allusions and references are a major component of his style, and being present in abundance they act as a binding agent for his mosaic of factual information and educational inputs coming from his many disciplines and interests. However, his use of 'science' references in *Understanding Media*[548] is too shallow to

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[548] McLuhan's *science-referencing* in *The Gutenburg Galaxy* was of a higher quality in terms of relevence and positioning in the narrative.

do the same job as his literary flourishes. All of the above adds up to McLuhan's rigorously applied *mosaic* format being more fragile than it first appears.

Whatever criticism this thesis makes of McLuhan missing an opportunity to 'absorb the science innovations' mentioned by John Durham Peters, it should be shared by McLuhan's critics and commentators who failed to register the need to shift from hermeutically-inclined evaluations to more balanced, multidisciplinary-informed critiques.

McLuhan's analysis of media may have been diminished by the limitations of his mosaic, but his prescient 'extensions of man' – roads, clocks, money, the wheel etc – have not been diminished. Peters has noted that in recent years, German scholars have explored such topics as " fireworks, the sea, navigation, geometry, museums, Soviet cybernetics, passports, maps, ballistics, the postal service, acoustics, and the practice of legal documentation" [549] for the purpose of analysing them as 'media' entities.

This thesis argues that a German scholar called Jurgen Habermas would be interested in McLuhan's comments on 'human interaction':

> For McLuhan, human interaction in its present incarnation through the media, has
> the special qualities of a public sphere as Habermas has defined it…" But
> McLuhan goes one step further "The media are the public sphere".[550]

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[549] Peters, John Durham (2009) "Strange Sympathies: Horizons of Media theory in Germany and America", Gottingen, Germany (p.9-10). http://www.electronicbookreview.com/thread/criticalecologies/myopic
[550] Marchessault, Janine (2005) *Marshall McLuhan,*London, SAGE Publications (p.212).

CHAPTER FIVE

CONCLUSION

The major aim of this thesis has been to identify the shaping impact of the hermeneutics/positivism *schism* on the methodologies used by Habermas, Bourdieu and McLuhan when explaining their signature terms – *the public sphere*, *the field* and *the medium*.

Habermas, Bourdieu and McLuhan claimed to be pursuing multi-disciplinary methodologies in constructing the spatio-temporal models supporting these terms. However, their multi-disciplinary approaches were compromised by their tendency *not* to absorb science innovations, *nor* access new analytical frameworks - 'techniques' – a tendency among many twentieth century academics in the humanities, according to John Durham Peters.[551] Their general inclination was to pursue paths of analysis using qualitative relationships – hermeneutics - as the dominant explanatory method.

I have argued that Habermas's, Bourdieu's and McLuhan's association with the century old hermeneutics/positivism *schism* influenced their methodologies. These influences led them to develop hermeneutical tendencies which affected the construction of their ideas, concepts and 'probes' and limited their explanations of *the public sphere,* the *field,* and the *medium*. These limitations, or 'incompleteness', included the noticeable absence of societal and technological growth factors in their analyses; retreat in the face of the phase change paradox and analytical

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[551] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

techniques associated with complexity theory; and the lack of contemporary science references and analogies. It is a reasonable assumption that methdologies like those of Habermas, Bourdieu and McLuhan, would be expected to have contemporaneous inclusion of 'science' metaphors when bringing perspective to contemporary media, sociology and cultural phenomena that have attendant technologies and physical science inputs.

This thesis used the methodologies of close reading and framing to analyse and re-evaluate the theories, concepts and methodologies of Habermas, Bourdieu and McLuhan up to and including their seminal works; to critique the commentary of the critics and commentators of our writers'seminal works; and to note the contribution that the new sciences, like complexity theory, could have played in analysis. These analyses and re-evaluations bring new knowledge to the discussion of the media-related works of these writers, ultimately this is of benefit to media and communication studies.

Research outcomes

Close reading analysis exposed the impacts of the schism on the methodologies of the three theorists. The hermeneutical tendencies present in their methodologies were brought about more by a rejection of positivism and 'scientism' than a conscious leaning towards hermeneutics. Whilst this rejection was understandable given the sometime naïve, one-size-fits-all versions of positivism that were available, and the unpredictability of the practice of science, 'science' is an

entity that has to be continually addressed in both the humanities and the laboratory if one is claiming multi-disciplinarity in methodology.

In this thesis, 'incompleteness' was gauged using the criteria of science referencing. That is, I have asked 'how visible was science referencing in the writers' multidisciplinary mixes, and what form of science referencing was used, be it 'scientism' or one of the disciplines if science. My argument has been that all the writers exhibited 'hermeneutic tendencies', even though at various times Habermas and Bourdieu claimed they were trying to 'bridge the gap' of the hermeneutic/ positivism schism. In McLuhan's case, the *mosaic* had already bridged the gap. The reality was that the 'bridging' was carried out for the most part by the use of analogies from 'scientistic'[552] sources.

I argue that the contribution of complexity theory to the methodologies of Habermas, Bourdieu and McLuhan would provide new approaches to analytic frameworks. Complexity theory would allow the strengths of both the human and natural sciences – and the bounty of the Habermas, Bourdieu and McLuhan analyses - to come into play. This would be more productive in research terms than researching under the mantra of intransigence and the avoidance of change that has been present in the academy for over a century (as noted by John Durham Peters).

The close reading of a number of commentators and critics in the course of this research has disclosed that many critics and commentators of Habermas, Bourdieu and McLuhan failed to register the above-mentioned methodological flaws of these authors. I have argued that the critics' opinions are of equal, if not greater, import than those of our authors. This is because

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[552] See Glossary for *scientism*

these commentators and critics, while accepting the 'incompleteness' in our authors' methodologies, are still influencing the common ground of pedagogy. Because of the passage of time since these seminal works appeared, I argue that the critics and commentators will have substantially affected the ongoing perceptions of the seminal works of our writers whose basic theories and concepts were ground-breaking in media and communication studies. A re-appraisal of the responses of commentators and critics to the incompleteness of the methodologies of Habermas, Bourdieu and McLuhan is long overdue.

Complexity and emergence theories are 'outcomes' oriented. An analytical framework that assists in outcome-creation shifts the focus from the impasses of defining, categorizing and qualifying the paradox of phase change – one that often result in tautology and circularity. This shift would potentially provide more productive explanations of growth and development in media contexts. A shift in focus brings further explanation to the non-linear aspects of change is always advantageous to media studies.

Complexity

In this thesis my argument has been that Habermas, Bourdieu and McLuhan missed the opportunity to seek assistance from the new sciences such as emergence and complexity theory, network theory, entropy and self-organization – because they were particularly focussed on the unfolding histories of the relationships between people and technology.

Among the authors, there was a disinclination to unravel, what might have appeared to be, the 'positivistic' modes of interpretation of change in media in media structures. This disinclination was perhaps the most stark in Marshall McLuhan, who even created neologisms in order to get copyright on the dynamics of change. The hermeneutical approach enriched the rhetoric of Habermas, Bourdieu and McLuhan but limited explanatory outcomers.

Postmodernism and Complexity

This thesis has focussed on the contribution that a new approach to an analytical framework involving complexity theory could have made to research in the fields of media, communications and cultural theory over the past half century. As remarked upon throughout this thesis, complexity theory was one of several 'science innovations' that, up to the late twentieth century, may have had too many overtones of positivism for hermeneutically-inclined researchers and commentators (like our three authors) to accommodate.

However, notwithstanding this failure to accommodate this approach to analysis, in the past three decades there has been exploration of other approaches to 'bridging the gap'. These include the possibility of productive alignments between 'positivist' complexity theorists and 'hermeneutic' postmodernists.

"Is complexity science postmodernism revisited?" This is a question that complexity specialists Jacco Van Uden, Kurt A Richardson, Paul Cilliers asked in the *Journal of Critical Postmodern*

Organization Science in 2001.[553] Cilliers also stated in *Complexity and Postmodernism* that "the postmodern approach is inherently sensitive to complexity", and that "it acknowledges the importance of the self-organization whilst denying a conventional theory of representation."[554]

Jacco Van Uden, Kurt A. Richardson, Paul Cilliers asserted that the world is best described as being a complex system. Their paper supports "a complexity-based view that essentially justifies the need for paradigmatic pluralism and boundary exploration." They argue that "complexity theory in this respect is reminiscent of postmodern organization theory."[555]

Van Uden *et al* note that both complexity science and postmodernism discuss the potential 'dangers' of an extensive acceptance of the 'inclusion/exclusion' concept in postmodernism. Both schools hold that while borders "signify where one thing ends and another starts, they are somehow imposed rather than real in nature." [556]Further to supporting a link between the two, Van Uden et al point out that both complexity science and postmodernism acknowledge the importance of history to boundary allocation.

David Porush, a science and literature academic, takes the idea of complementarity of postmodernism and complexity science the next step down the hermeneutic path when focussing on the subject of 'the real' in Ilya Prigogine's complexity model:

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[553] Van Uden, Jacco, Kurt A. Richardson and Paul Cilliers. *Postmodernism Revisited? Complexity Science and the Study of Organizations* Tamara : Journal of Critical Postmodern Organization Science. Las Cruces: 2001. Vol. 1, Iss. 3 (p.1).
[554] Cilliers, Paul (1998) *Complexity and Postmodernism*, London, Routledge (p.113).
[555] Van Uden, Jacco, Kurt A. Richardson and Paul Cilliers. *Postmodernism Revisited? Complexity Science and the Study of Organizations* Tamara : Journal of Critical Postmodern Organization Science. Las Cruces: 2001. Vol. 1, Iss. 3 (p.1).
[556] Van Uden, Jacco, Kurt A. Richardson and Paul Cilliers. *Postmodernism Revisited? Complexity Science and the Study of Organizations* Tamara : Journal of Critical Postmodern Organization Science. Las Cruces: 2001. Vol. 1, Iss. 3 (p.7).

Prigonine's model challenges classical science's presumptions about the locale of reality, it also indicts the insufficiency of classical science's discourse about reality. As such, it is part of postmodernism's three-pronged attack on classical scientific discourse.[557]

As though haunted by the ghost of positivism with the mention of classical science by Porush, Van Uden et al. warn us that:

Although complexity science has its roots in hard sciences, and therefore runs the risk of being [appropriated] by 'rigorous' organizational scientists… we contend that complexity theory… provides us with a framework that enables us to make sense of organisations by directing our attention to processes already under investigation by postmodernism[558]

Even though there is always some value in considering possible compatibilities in what appear to be unrelated models, and that it might seem that there could be enough shared theoretical objectives between the concepts of complexity theory and postmodernism to establish a historical link between the two concepts in theory, I argue this is, in itself, a proposition that promotes hermeneutics. The apparent serendipity of theoretical positions comes at the cost of limiting the potential of a complexity theory approach, given that complexity theory seeks

[557] Porush, David (1991) "Fictions as Dissipative Structures: Prigogine's Theory abd Postmodernism,s Roadshow" in Hayles, N.Katherine ed. *Chaos and Order*, Chicago, The University of Chicago Press (p.60).
[558] Van Uden, Jacco, Kurt A. Richardson and Paul Cilliers. *Postmodernism Revisited? Complexity Science and the Study of Organizations* Tamara : Journal of Critical Postmodern Organization Science. Las Cruces: 2001. Vol. 1, Iss. 3 (p.2).

practical outcomes whereas the variations on postmodernism are comfortable in relying on all-purpose theory alone.

This point is substantiated by sociologist Sylvia Walby who not only sees Prigogine as part of the attack on classical science, she reads his observations on complexity as potentially hermeneutic:

> Prigogine (1997) said…the unknowability of the universe using conventional scientific techniques is one of his conclusions. This is an epistemological claim, not an ontological one…One of its implications is the search for more humanist methodologies, and the exploration of the power of metaphors.[559]

In my arguments for a complexity theory analytical framework having the capacity to bring a 'new approach' to the positivist/hermeneutical debate, I underline the term 'approach'. I side with sociologist John B.Thompson in his views on the acolytes of the 'new age' of postmodernism. While Thompson is an avowed hermeneuticist and anti- positivist, he does not see an overwhelming enlightenment from the pursuit of postmodernism and does not believe that post-positivism sociology, nor the post-Kuhnian history of science, are theories of a new age.

> For all the talk of postmodernism and post modernity, there are precious few signs that the inhabitants of the late twentieth-century world have recently entered a new

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[559] Walby, Sylvia (2003) "Complexity theory, Globalization and Diversity", Paper presented to conference of the British Sociological Association, University of York (p.16).

age…What we need today is not a theory of a new age, but rather a new theory of an age whose consequences we have yet fully to ascertain.[560]

Meanwhile, Van Uden *et al* remain upbeat about finding solutions to 'bridging the gap', a task that Habermas, Bourdieu and others (including C.P. Snow) have struggled with:

the potential benefits from some sort of marriage between programs of complexity science and postmodernism are worth exploring.[561]

Phase change

The paradox of phase change became a stumbling block for Habermas, Bourdieu and McLuhan. Phase changes were 'paradigm shifts',[562]a synonym that Thomas Kuhn introduced in 1962.[563] 'Paradigm shifts' were anomalies that could not be explained by a universally accepted paradigm within which epistemological progress had been made. Our writers may have appreciated Kuhn's other views on science, as Donna Haraway has noted that Kuhn would support "the fundamental objection raised against a positivist view of science has been inadequate attention is given to the role of metaphor".[564]

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[560] Thomson, John B. (1995) *The Media and Modernity*, Cambridge, Polity (p.9).
[561] Van Uden, Jacco, Kurt A. Richardson and Paul Cilliers. *Postmodernism Revisited?*
Complexity Science and the Study of Organizations Tamara : Journal of Critical Postmodern
Organization Science. Las Cruces: 2001. Vol. 1, Iss. 3 (p.4).
[562] See Glossary for *phase change* and *paragogm shifts*.
[563] Philosopher Thomas Kuhn introduced the term 'paradigm shift' in his controversial book *The Structure of Scientific Revolutions* (1962).
[564] Haraway, Donna Jean (1976) Crystals, Fabrics and Fields, New Haven, Yale University Press (p.7). Haraway is a prominent scholar in the field of science and technology studies.

As well, Habermas, Bourdieu and McLuhan had to disentangle the co-presence of linear and non-linear processes in the transformation of their media modes, 'probes' and structures in order to get closure on their meanings. At the time of writing their seminal works, the adoption of John Durham Peters' 'techniques'[565] in order to overcome the challenge of paradoxes was a 'science innovation' they did not, or could not, absorb. This was disappointing because complexity theory - a 'science innovation' with a focus on 'outcomes' - could have provided a probability hierarchy of outcomes that helped resolve the puzzle of the paradox. Such a hierarchy may have its own level of 'incompleteness' and not always satisfy theorists and researchers, but it avoids the reductionism of positivism and the sometimes unproductive circularity of hermeneutics.

Limitations

The analysis of the works of Habermas, Bourdieu and McLuhan has disclosed two major limitations. This thesis has argued that these limitations are significant and that they continue to disadvantage research in contemporary commentary on *the public sphere, the field* and *the medium.*

The first major limitation is the lack of acknowledgment by Habermas, Bourdieu and McLuhan, and many of their commentators and analysts, of the relevance of demographic factors in societal change. Growth of population and the coincidental expansion of technology eventuated in epochal changes in their spatio-temporal models. When discussing media, there is clearly a need

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[565] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

to refer to the potentially identifiable but apparently spontaneous signs of dynamic growth of population and technology – a major conjunction in societal phenomena. I would argue that growth factors automatically bring into play complexity theory concepts such as *emergence, network theory* and *self-organization*, and these concepts need to be considered a potentially prime contribution to any analysis.

Growth has its own non-linear agenda of phase changes, paradoxes and Kuhn's paradigms shifts. It is the major contributor to non-linear change in structures of *spheres*, *fields* and *mediums*. In a media world intermittently pulled or pushed by non-linear factors, acknowledgment of the non-linear growth of media technology seems appropriate, if not necessary, in any media analysis.

The second limitation is that although Habermas, Bourdieu and McLuhan were aware of spatio-temporal change did not adjust their theoretical modelling (or 'probes') to cope with any paradoxes that arose. This placed limitations on comprehensive explanations of their signature terms, even more so for Bourdieu who had a 'timeless'[566] static model of *the field*.

Hermeneutics versus positivism

Close readings of the works of Habermas, Bourdieu and McLuhan have shown that they made no investigations into the paradoxes that occurred in their spatio-temporal models. It was possible that moving away from a hermeneutical approach to a more empirical explanation meant moving towards the problems of 'scientism' at best, or mathematical 'positivism' at worst. This attitude

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[566] See the *Time* section in the Bourdieu chapter.

was made explicit by Habermas and Bourdieu even though they showed a fluctuating interest in 'bridging the gap'. McLuhan avoided the 'two cultures' theoretical debate and delivered 'arts meets science' stories[567].

It cannot be overstated that Habermas, Bourdieu and McLuhan were commenting on the interaction of human agency and media technology, and technology presupposes some acquaintance with the challenge of science. Fighting positivism, as in the case of Bourdieu, was not reason enough to avoid 'science innovation'.

The absence of science analogies in Habermas's *Structural Transformation of the Public Sphere* was noticeable even though he was a social scientist and attached the word 'science' to many disciplines, as in 'judicial science', 'political science', the 'science' of economics etc. In Bourdieu's media works, his methodology is almost the reverse of that of Habermas: for the most part he rigorously imported into his socio-historical commentary analogies related to classic physics, however tautologous or undeveloped they might be, whilst refuting any accusation that they were statements about physics. McLuhan was over-confident in the use of his scientific mode of reference and analogies, which were, at the same time, both melodramatic in a literary sense - even for his time - and, in several cases, unconvincing.[568]

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[567] McLuhan, Marshall (1964) *Understanding Media,* London, Routledge, pp. 205, 308.
[568] Post-*Understanding Media* there was one exception to McLuhan's mode of casually and informally treating science-referencing - his 'acoustic space' concept. It is treated seriously and formally argued. It is also worthy of comment to note that in *The Gutenberg Galaxy* (1962) McLuhan was more serious about his science, and he had no trouble in handling science references throughout *The Gutenberg Galaxy* as compared to *Understanding Media*

Phase change paradoxes and the new sciences may have been quarantined by the hermeneutical methodologies of Habermas, Bourdieu and McLuhan over the past half-century, but John Durham Peters thinks the memory of C.P. Snow is still reverberating in the academies, and looks forward hopefully to the hermeneutics/positivism schism being resolved: "A reunion of the two cultures is essential in my view for the future of humanities today".[569]

Given he was an analytic philosopher, Max Black[570]had somewhat romantic instructions about modes of 'bridging the gap':

> the imaginative aspects of scientific thought have in the past been too much neglected… a sociologist's pattern of thought may also be the key to understanding a novel…Perhaps every science must start with a metaphor and end with algebra; and perhaps without the metaphor there would never have been any algebra.[571]

It is of major interest that in the commentary and critiques of the media-related works of Habermas, Bourdieu and McLuhan, ranging over a period of some fifty years, references to the paradoxes were included with light regard to investigating the non-linear outcomes that flowed from them. One could assume those critics and commentators had 'hermeneutical tendencies'.

It can be argued that relational-only historical narratives emerging from a long-standing hermeneutical approach have limitations, and those limitations will tend to turn the social science

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[569] Peters, John Durham (2009) "Strange Sympathies: Horizons of Media theory in Germany and America", Gottingen, Germany (p.10). http://www.electronicbookreview.com/thread/criticalecologies/myopic

[570] A British-American philosopher who was one of the leading figures in analytic philosophy in the twentieth century.

[571] Black, Max (1962) *Models and Metaphors*, Ithaca, Cornell University Press (pps.242-243).

and cultural studies works of writers like Habermas, Bourdieu and McLuhan into merely anthropological studies of groups. Even Craig Calhoun, who is a constant defender of the role of interpretation in any hermeneutic versus positivist argument, still wants to see a methodological balance brought to the discussion: "The field of sociological theory necessarily…will remain a field of dialogue among multiple theories".[572]

Although complexity theory is unlikely to assuage the theoretical conflicts in sociology or media studies in the short term, some of its elements may contribute to a gradual change in using analytical frameworks that emphasizes bottom-up, self-organizing processes. As well, complexity theory offers a conceptual framework that reflects reality better: "In the real world, small inputs can have large effects…interactive effects can span across many temporal and spatial scales, and transformations from one state to another can happen gradually or precipitously."[573]

It is worthy of note that contemporary media studies has its own *schism.* Whilst not hermeneutics versus positivism or 'arts versus science', the conflicts in the media academic field between subjectivism and empiricism, and between cultural studies and political economy reflect the binaries in social theory. Reminiscent of this thesis endorsing new analytic frameworks, media studies academics, David Hesmondhalgh and Jason Toynbee do not endorse "calls for reconciliation based on the smoothing over of substantive issues of difference" in media studies,

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[572] Calhoun, Craig (1995) *Critical Social Theory*, Cambridge MA, Blackwell Publishers Inc. (p.7).
[573] http://www.ksparrowmd.com/complexity-theory-and-alternative-medicine/

instead, they state that the problem is that "media studies lacks theoretical frames which might enable synthesis and in turn transcendence of existing entrenched positions."[574]

Habermas, Bourdieu and McLuhan some time ago created the playing field of modern media theory, one with multi-disciplinary rules emanating from their original disciplines. However, as Habermas, Bourdieu and McLuhan moved into the era of dynamic relationships between technology and society there was every reason to move beyond their learned framework of disciplines and analyses. This thesis has put forward the argument that the exceptional value of their media-related works would have been well served by the addition of analytical frameworks from the new sciences such as complexity and emergence theory.

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[574] Hesmondhalgh, David and Jason Toynbee (2008) "Why Media studies needs better social theory" in Hesmondhalgh, David and Jason Toynbee eds. *The Media and Social Theory*, Oxon, Routledge (p.9).

GLOSSARY

There are a number of terms and phrases used in this thesis that come from science disciplines, particularly the sub disciplines. Because of the specialist nature of some of these terms I thought it would be appropriate to provide a glossary to assist in their comprehension. This list also includes other terms and terms that have might have meanings in other contexts. The references and definitions are from standard dictionaries and consensus-based sources.

Acoustic space

The acoustic environment in which sound is heard is often called acoustic space. This is characterized by the interaction between sound and a room, either by absorption, reflection, or diffraction by the walls. It is not limited to a world of music or sound; the environment of electronic media itself engenders this way of organizing and perceiving the other spaces we intersect.

Analogy

At the most basic level, an analogy shows similarity between things that might seem different -- much like an extended metaphor or simile. But analogy isn't just a form of speech. It can be a logical argument. If two things are alike in some ways, they are alike in some other ways as well.

The importance of analogies is well made in Melanie Mitchell's *Analogy-making as Perception* (1993). Having spent some time in the 1980s and 90s, in the Santa Fe Institute, the home of complex adaptive systems research, Melanie Mitchell reminded readers that:

> The human analogy-making capacity is far more than a mere tool used in the context of problem solving, or a servant to a "reasoning engine". It is a central mechanism of cognition; it pervades thought at all levels, both conscious and unconscious and cannot be turned on and off at will.[575]

Autonomy/Heteronomy

Autonomy: freedom from external control or influence; independence.

Heteronomy: the condition of being under the domination of an outside authority; the opposite of autonomy.

Bourdieu says the relationship between the three fields, *Political Field*, *Social Science Field*, and *Journalist Field*, is "a very important one, both scientifically and politically…These three social universes are relatively autonomous and independent, but each exerts effects on the others". And that:

> One can truly understand these things only through an analysis of the invisible structures that are fields.[576]…the amount that can be explained by the logic of the field varies

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[575] Mitchell, Melanie (1993) *Analogy-Making as Perception*, Cambridge, MA, The MIT Press (p.8)
[576] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.30).

according to the autonomy of the field[577], and to understand the currents, tendencies, fractions or factions in a very autonomous political space, one only has to know the relative positions within the microcosm of the agents concerned.[578]

Bourdieu's logic seems to tell us that if a field is very autonomous then one can analyse the contents/structure of the field if an agent's position can be fixed. When there is less autonomy the field and its agent or agents will be more affected by the other fields. However, while this looks like satisfactory explanation, it is an unfulfilling relational explanation from Bourdieu. Whatever end of the autonomous/heteronomous spectrum an analyst wants to pursue in order to evaluate an agent's position, status and relationship, the presence of multiple agents and/or fields compromises the evaluation.

Break boundaries

McLuhan observed that in any medium or structure there is a "break boundary at which the system suddenly changes into another or passes some point of no return in its dynamic processes". Synonymous with 'phase change'.

Causality

Causality is the relationship between causes and effects. It is considered to be fundamental to all natural science, especially physics

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[577] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.34).
[578] Bourdieu, Pierre (1995) "The Political Field, the Social Science Field, and the Journalistic Field" in Benson, Rodney and Neveu, Erik eds. (2005) *Bourdieu and the Journalistic Field*, Cambridge, Polity Press (p.35).

John Durham Peters, in dialogue with Jeremy Packer, argued that:

> [W]hen we discuss technology…it all reproduces the late nineteenth century debate of free will versus infinitely retraceable causation…For someone like Kant, failure of causal explanation was a huge crisis. If causation collapses, there's no intelligible order in the universe, and science, philosophy and moral choice are impossible.[579]

Causality and emergence go hand-in-hand. There is strong emergence and weak emergence. The former indicates possible downward causality but no upward causality and the latter indicates possible upward causality.

Chaos

Chaos theory is the study of nonlinear dynamics, in which seemingly random events are actually predictable from simple deterministic equations. In chaos theory, the butterfly effect is the *sensitive dependence on initial conditions*, where a small change at one place - in an apparently determinist but actively nonlinear system - can result in large differences to a later state.

Complexity

Complexity theory is a set of concepts that attempts to explain complex phenomenon not explainable by traditional (mechanistic) theories. It integrates ideas derived from chaos theory, cognitive psychology, computer science, evolutionary biology, general systems theory, fuzzy

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[579] Peters, John Durham with Jeremy Packer (2012) "Becoming mollusk: a conversation with John Durham Peters about media, materiality, and matters of history" in Packer, Jeremy and Stephen B. Crofts Wiley eds. (2012) *Communication Matters: Materialist Approaches to Media, Mobility and Networks*, Oxon, Routledge (p.40).

logic, information theory, and other related fields to deal with the natural and artificial systems as they are, and not by simplifying them (breaking them down into their constituent parts). It recognizes that complex behavior emerges from a few simple rules, and that all complex systems are networks of many interdependent parts which interact according to those rules.

Definitions are hard to come by in the world of complexity and the phase change paradox. However, there are a variety of methodological approaches in this task of defining the complexity family of concepts and their individual members.

Melanie Mitchell, computer scientist and acolyte of the Santa Fe Institute in New Mexico, the academic home of complexity studies, faced this task in her 2002 work called *Complexity: A Guide Tour*. Mitchell's methodology is to give explanations of every relative in the emergence and complexity family from the well-trodden path of complex adaptive systems and reflexivity to the new science of networks. Networks are fast developing their own discipline because the accelerating power of computers now allows theories to be appropriately tested in topics such as small-world networks, scale-free networks, degree distribution of the web and clustering.

Melanie Mitchell admits that her research has indicated that "the notions of complexity… have many different interacting dimensions and probably can't be captured on a single measurement scale".[580] However, she also states:

> The importance of thinking in terms of non-linearity, decentralized control, networks, hierarchies, distributed feedback, statistical representations of information, and essential

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[580] Mitchell, Melanie (2009) *Complexity: A Guide Tour*, New York, Oxford University Press (p.111)

randomness is gradually being realized in both the scientific community and the general population. Complex systems research has emphasized above all interdisciplinary collaboration.[581]

Neil F. Johnson, Paul Jeffries and Pak Ming Hui shared her position with the comment that:

Although there is no universally accepted definition of 'complexity' or 'complex system', most people would agree that any candidate complex system should have most or all of the following ingredients: feedback, many interacting agents, adaptation, evolution, and open system.[582]

Critical Theory

Critical theory is a school of thought that stresses the reflective assessment and critique of society and culture by applying knowledge from the social sciences and the humanities."Critical Theory" in the narrow sense designates several generations of German philosophers and social theorists in the Western European Marxist tradition known as the Frankfurt School. Critical theory provides the descriptive and normative bases for social inquiry aimed at decreasing domination and increasing freedom in all their forms.

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[581] Mitchell, Melanie (2009) *Complexity: A Guide Tour*, New York, Oxford University Press (p.300)
[582] Johnson, Neil F., Paul Jeffries and Pak Ming Hui (2003) *Financial Market Complexity*, Oxford, Oxford University Press (p.3).

Emergence

In philosophy, systems theory and the sciences, emergence refers to the way complex systems and patterns arise out of a multiplicity of relatively simple interactions. Emergence is central to the theories of integrative levels and of complex systems.

Emergence theory pioneer John Holland's *Emergence: From Chaos to Order* was open in his description of emergence:

> Despite its ubiquity and importance, emergence is an enigmatic, recondite topic, more wondered at than analysed. What understanding we do have is a catalog of instances…It is unlikely that a topic as complicated as emergence will submit weakly to a concise definition.[583]

The most forthright appraisal of the concept of emergence is from Robert Laughlin. Laughlin is a physicist who shared a Nobel Prize in 1998 for work in quantum theory:

> [R]eliable cause-and-effect relationships in the natural world have something to tell us about ourselves. In that they owe this reliability to principles of organization rather than microscopic rules. The laws of nature that we care about…emerge through collective self-organization and really do not require knowledge of their component parts to be comprehended and exploited.[584]

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[583] Holland, John (1998) *Emergence: From Chaos to Order*, Oxford, Oxford University Press in Morowitz, Harold J. (2002) *The Emergence of Everything*, Oxford, Oxford University Press (p.25)
[584] Laughlin, Robert B. (2005) *A Different Universe {Reinventing Physics from the Bottom Down}*, New York, Basic Books (p.xi).

Empirical falsification

Karl Popper proposed a epistemological methodology for evaluating hypotheses including those that could not be experimentally tested and insisted that the term "scientific" can only be applied to statements that are falsifiable. He asserted that no empirical hypothesis, proposition, or theory can be considered scientific if it does not admit the possibility of a contrary case.

Entropy

(i) the degree of disorder or uncertainty in a system

(ii) the degradation of the matter and energy in the universe to an ultimate state of inert uniformity

(iii) a process of degradation or running down or a trend to disorder

Because the Second Law of Thermodynamics states that the entropy of an isolated system never decreases, the definition of entropy is always associated with the 2nd Law. Like infinity, entropy is a difficult concept to fix in one's mind, because, unlike saying that the tide is going out and comes in, the entropy tide almost never stops going out. The entropy of an isolated system not in equilibrium will tend to increase over time. "Order to disorder" is a standard entropic activity in a closed system. Although the concept of entropy was not common knowledge in 1274, Thomas Aquinas was close to the mark when he stated that "It is impossible for an effect to be stronger than its cause."[585]

The most widely used example of entropy is the growth / expansion of a macro system. The universe is a closed macro system that expands and suffers entropy. Many physicists say that

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[585] http://www.jstor.org/discover/10.2307/4181986?uid=3737536&uid=2&uid=4&sid=21100914241571

there will be a 'heat death' of the universe eventually as the universe expands, meaning that energy will be spread so thin the universe will come close to –273 degrees Kelvin.

One might ask why this did not happen some time ago and why do all these pockets of energy, such as galaxies, planets, people and ants, still exist or come into existence. The explanation begins with the relationship between the Second and First Laws of Thermodynics. The Second Law of Thermodynamics, entropy, has to accommodate the First Law of Thermodynamics, which states that the total amount of energy in a closed system remains the same, whatever else changes.

Feedback

Feedback is synonymous with reflexivity.

Feedback in complexity and emergence theory is a non-linear process incorporating the minutiae of structural change in spatio-temporal relationships, where the change emanates from a continual interaction.

McLuhan's last major science topic in *Understanding Media* is *feedback*.[586]

John Rahn puts the concept of feedback/reflexivity within a definition of counterpoint in music:

> It is hard to write a beautiful song. It is harder to write several individually beautiful songs that, when sung simultaneously, sound as a more beautiful polyphonic whole. The internal structures that create each of the voices separately must contribute to the emergent structure of the polyphony, which in turn must reinforce and comment on the

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[586] McLuhan, Marshall (1964) *Understanding Media*, London, Routledge and Kegan Paul (p.387).

structures of the individual voices. The way that is accomplished in detail is...'counterpoint'.[587]

As can be seen in this thesis, the concept of *reflexivity/feedback* has been accepted wholly, or in principle, by all three of our thesis subjects, McLuhan, Habermas and Bourdieu.

Field

The field' is a site of struggle in which individuals and groups seek to maintain or alter the distribution of the various forms of capital that are intrinsic to the site.

Structural difference is an important aspect of the field that Bourdieu has failed to highlight in *The Fields*. This is worthy of comment given Bourdieu's previous association with structuralism.

Fields may have individually different structures. The potential differences in field configuration suggest that network theory might have the appropriate analytical tools to evaluate a differentiated set of overlapping fields.

Bourdieu and Wacquant's expanded the definition of the field in 1992 in *An invitation to Reflexive Sociology*. The presence of the term 'power' is problematic.

> In analytical terms, a field may be defined as a network, or a configuration, of objective relations between positions. These positions are objectively defined, in their existence, and in the determinations they impose on their occupants, agents, or institutions, by their

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587   Rahn, John (2000). *Music Inside Out: Going Too Far in Musical Essays*. intro. and comment. by <u>Benjamin Boretz</u>, Amsterdam: G+B Arts International. (p.177).

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present and potential situation in the structure and distribution of species of power (or capital) whose possession commands access to specific profits that are at stake in the field, as well as by their relation to other positions.[588]

Growth

Development from a lower or simpler to a higher or more complex form; evolution. An increase, as in size, number, value, or strength; extension or expansion.

In a chapter titled "Growth and Failure: The New Political Economy and its Culture" in *Spaces of Culture* (1995) sociologist Richard Sennett defines the key word "growth". He says "growth" can be divided into four categories.

> The first is sheer increase in number…{two] Increased number and size can …lead to alteration of structure…Larger markets trigger the division of labour in work…third [category] …metamorphosis…Finally, a system can grow by becoming more open; its boundaries become febrile, its forms become mixed, it contracts or expands its parts without overall coordination.

> The first sort…is how we reckon profit and loss. The second, in which size begets complexity…Metamorphosis belongs most readily…And communication networks…are…obvious examples of how open systems grow,…less obviously, subjectivity grows through open systems".[589]

[588] Bourdieu, Pierre and Wacquant, Loic J.D. (1992) *An Invitation to Reflexive Sociology*, Chicago, University of Chicago Press (p.96).

[589] Sennett, Richard (1995) "Growth and Failure: The New Political Economy and its Culture" in Featherstone, Mike and Scott Lash eds. *Spaces of Culture*, London, SAGE Publications (pps.15-16)

Hermeneutics

Hermeneutics is a method or principle of interpretation. *Traditional hermeneutics* is the study of the interpretation of written texts, especially texts in the areas of literature, religion and law. Discourse that takes interpretation seriously is called *hermeneutics.*

Anthony Giddens created the term 'double hermeneutic'. It applies to the process of understanding affecting action at the same time as action affects understanding. Some would call it *reflexivity*.

Hermeneutic Circle

The Hermeneutic Circle is a theory of interpretation and understanding that no observation or description is free from the effects of the observer's experiences, pre-suppositions, and projections of his or her personal values and expectations.

Human science

Human science is the study and interpretation of the experiences, activities, constructs, and artefacts associated with human beings, as against the *natural sciences* which seek to elucidate the rules that govern the natural world through scientific methods.

Inflection point

An event that results in a significant change in the progress of a company, industry, sector, economy or geopolitical situation. An inflection point can be considered a turning point after

which a dramatic change, with either positive or negative results, is expected to result. Companies, industries, sectors and economies are dynamic and constantly evolving. Inflection points are more significant than the small day-to-day progress that is made and the effects of the change are often well-known and widespread. Inflection points are often associated with outcomes from emergence theory.

Initial conditions

Conditions at an initial time (t = 0) from which a given set of mathematical equations or physical system evolves.

Recurrence, the approximate return of a system towards its initial conditions, together with sensitive dependence on initial conditions, are the two main ingredients for chaotic motion. They have the practical consequence of making complex systems, such as the weather, difficult to predict past a certain time range (approximately a week in the case of weather) since it is impossible to measure the starting atmospheric conditions completely accurately.

A dynamical system displays sensitive dependence on initial conditions if points arbitrarily close together separate over time at an exponential rate.

Linearity

In physics, a linear system is one in which the whole is equal to the sum of the parts, and in which the sum of a collection of causes produces a corresponding sum of effects.

Matrix analysis

Sociograms, or graphs of networks can be represented in matrix form, and mathematical operations can then be performed to summarize the information in the graph. These

mathematical operations are sometimes helpful to let us see certain things about the patterns of ties in social networks. These operations do not need high level mathematics.

Once a pattern of social relations or ties among a set of agents has been represented in a formal way (graphs or matrices), one can define some important ideas about social structure in quite precise ways using mathematics for the definitions. Social network analysts have formally translated some of the core concepts that social scientists use to describe social structures.

Neologism

A new word, phrase or meaning recently coined.

Network Theory / Social network analysis

Networks display substantial topological features, with patterns of connection between their elements that are neither purely regular nor purely random. Such features include a heavy tail in the degree distribution, a high clustering coefficient, community structure, and hierarchical structure. Two well-known and much studied classes of complex networks are scale-free networks and small-world networks.

> In the past decade, an avalanche of research has shown that many real networks, independent of their age, function, and scope, converge to similar architectures, a universality that allowed researchers from different disciplines to embrace network theory as a common paradigm.[590]

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[590] Barabasi, Albert-Laszlo (2009) Scale-Free Networks: A Decade and Beyond. http://www.sciencemag.org/content/325/5939/412.abstract

This is a comment from one of the people best known for research into network theory, Albert-Laszlo Barabasi. *Linked* (2003)[591], Barabasi's major work on network theory describes network structures and their applications in the non-linear world around us, be they economies, ant colonies, markets, nervous systems, ecosystems, biodiversity and communications. As well, Barabasi explores the multi-disciplinary potential of power laws, Poisson curves, random and scale-free networks, preferential attachments and hubs, and communications and web architecture.

There is no doubt that many productive explanations and analogies could be drawn using social network analysis – the practice of network theory. This practice could provide greater access to the meaning and explication of Bourdieu's fields. It remains intriguing that critics and commentators of both Bourdieu's and Habermas's media-related works have not explicitly referenced network theory.

Non-linear

A non-linear change is a change thast is not based on a simple proportional relationship between cause and effect.

In 1996, MIT mathematician Stephen H. Strogatz reported that the presence of a non-linear entity, chaos, in biology had stimulated biological scientist Robert May to urge the study of non-linearity in the educational process:

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[591] Barabasi, Albert-Laszlo (2003) *Linked*, New York, A Plume Book

May found examples of chaos in iterated mappings arising in population biology, and wrote an influential review article that stressed the pedagogical importance of studying simple non-linear systems to counterbalance the often misleading linear intuition fostered by traditional education.[592]

Non-linear phase change is a member of the family of complexity and emergence theory.

Open system

An open system is a process that exchanges material, energy, people, capital and information with its environment. An open system should be contrasted with the concept of a closed system which exchanges neither energy, matter, nor information with its environment.

Phase Change

Phase Change is a phenomenon of transition of a system, material or mixture from one phase to another.

Phase change, phase transition and phase transformation are equivalent terms.

Phase Change Paradox

Habermas, Bourdieu and McLuhan all noted paradoxes of substantial relevance in their analysis of major modes of society's interaction with media technology, but failed to pursue appropriate

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[592] Strogatz, Stephen H. (1996) *Nonlinear Dynamics and Chaos,* MA, Addison-Wesley Publishing Company (p.3).

spatio-temporal models and analogies of these paradoxes. The paradoxes were for the most part non-linear phase changes whose explanation would have benefited from analogies and spatio-temporal models drawn from complexity theory.

Positivism

Positivism is a philosophical system that holds that every rationally justifiable assertion can be scientifically verified or is capable of logical or mathematical proof, and that therefore rejects metaphysics and theism.

Positivism in general seeks to imitate the methods and form of the already established established natural sciences as a guarantee of scientificity.

Reflexivity

Reflexivity means an act of self-reference where examination or action "bends back on", refers to, and affects the entity instigating the action or examination.

A feedback loop is reflexive.

Scientism

Scientism refers to a belief in the universal applicability of the scientific method and approach.

Self-organization

Self-organization is a process where order or coordination arises out of the local interactions between the components of an initially disordered system. This process is spontaneous. It is often triggered by random fluctuations that are amplified by positive feedback. In chaos theory it is discussed in terms of islands of predictability in a sea of chaotic unpredictability.

Self-organization occurs in a variety of physical, chemical, biological, social and cognitive systems.

Signature term

A signature term is the term that identifies a major concept-bearing entity in an author's work.

Space and Time

Liza Zyga from Phys.Org, a popular science, research and technology news website, wrote:

> Scientists propose that clocks measure the numerical order of material change in space, where space is a fundamental entity; time itself is not a fundamental physical entity…In*Physics Essays*, Amrit Sorli, Davide Fiscaletti, and Dusan Klinar from the Scientific Research Centre Bistra in Ptuj, Slovenia… theorize that this Newtonian idea of time as an absolute quantity that flows on its own, along with the idea that time is the fourth dimension of spacetime, are incorrect. They propose to replace these concepts of

time with a view that corresponds more accurately to the physical world: time as a measure of the numerical order of change.

As the scientists added, the roots of this idea come from Einstein himself: "Einstein said, 'Time has no independent existence apart from the order of events by which we measure it…Time is exactly the order of events".[593]

The late French philosopher, Henri Lefebvre was a commentator with a particular interest in the relationship of space and society. Stuart Elden wrote that Lefebvre prioritised space, and Lefebvre claimed that the intangibility of time allowed it to escape appropriate evaluation in the part it plays in space-time deliberations. Elden said he was a contributor to "the noticeable shift from questions of temporality to those of spatiality within social theory in recent years". [594]

Spatio-temporality

Spatio-temporality can be perceived as a condition, a state, or a dimension. Spatio-temporal characteristics in a media context are those characteristics that relate to human interaction with information-based technology in a space-time continuum. This interaction is variously described as "the public sphere", "the field" and "the medium".

Systems Theory

A system is any entity that is composed of interdependent parts, so that the whole cannot be explained only by examining the different parts. The something extra that the parts produce

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[593] Zyga, Liza in *Phys.Org*, 25.04.11. http://phys.org/news/2011-04-scientists-spacetime-dimension.html%20Liza%20Zyga%20in%20Phys.Org
[594] Elden, Stuart (2004) *Understanding Henri Lefebvre*, London, Continuum (p.181).

when they form a system is said to *emerge* out of the system, and this quality of *emergence* is held in contrast to linear cause-and-effect.

Techno-humanism

Techno-humanism: interdisciplinary humanities in the information age.

Three-body system/problem

While the two-body system is integrable and its solutions completely understood, solutions of a three-body system may be of an arbitrary complexity and are very far from being completely understood. Three body systems provide workable, but not completely defined outcomes.

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