

The Strange Power of Maps

How maps work politically and influence our understanding of the world

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School of Sociology, Politics, and International Studies University of Bristol Working Paper No. 06-09

Piers Fotiadis graduated with a distinction in the MSc in International Relations from the Department of Politics, University of Bristol in 2009. This paper, originally an MSc dissertation, received the equal highest mark awarded to MSc dissertations in Politics at the University of Bristol in 2008-2009.

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Piers Fotiadis University of Bristol 2008/2009

Abstract

While maps are often looked at as objective and natural depictions of the world, this paper argues that they are in fact social constructions that work politically. Maps and cartographic images are powerful objects that are viewed through the interaction of a range of mapping practices and the intersubjective understanding a viewer brings to the map. The paper argues that their power resides in their widespread use by the media, in government and for education. Maps are shown to influence the way we view and understand the world, and to create and maintain particular discourses about the world and international relations, with very real implications for those in the territory they depict. Decision makers are encouraged to develop a critical awareness of the mapping techniques used to construct meaning and perpetuate intersubjective understandings of the world. This paper examines these practices: such as the use of colour, naming, drawing lines and framing. I argue that cartographic images contribute to conceptions of national and supranational identity, and as such they should be studied more carefully in order to be used more effectively. The paper draws on empirical evidence from a wide range of cartographic sources, including NATO, the European Union and *The Economist* in order to demonstrate the strange power of maps.¹

¹ I would like to thank Dr. Jutta Weldes for helpful comments throughout the research and writing process, and my cousin for turning my wall-map of the world upside-down.

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Introduction - 'The strange power of maps'²

'Maps are neither mirrors of nature nor neutral transmitters of universal truths. They are narratives with a purpose, stories with an agenda. They contain silences as well as articulations, secrets as well as knowledge, lies as well as truth. They are biased, partial, and selective.'3

Today maps have lost their innocence, fallen prey to the original sin of early cartographers who claimed to depict the world as it was, not as they saw it to be. 4 The cartographer's cloak of objectivity has been cast off to reveal that all maps are social constructions. Although a lack of objectivity is more overt in older Mappa Mundi, which did not include the New World, for example, 5 cartography's socially constructed eye can still be revealed in modern world maps. Through the use of colour, distortion of size, delimitation of space, fixed orientations and other necessary and pervasive mapping practices, maps provide their viewer with an image of the world, of states and of other territories within it that is infused with political choices, revealing at every gaze the cartographer's conscious or unconscious manipulation of the world.⁶

Yet the blame, if we can call it that, cannot solely be apportioned to the cartographic image and its creator; for an image is nothing without a viewer.⁷ Christian Jacob defines a map as the point where three variables come together, 'a medium (or space of representation), a referent (or represented space), and the gaze of a user (or, more generally, of a viewer).'8 The viewer is not a blank slate upon which

² Christian Jacob, Tom Conley (trans.), and Edward H. Dahl (ed.), The Sovereign Map: Theoretical Approaches in Cartography throughout History (Chicago: The University of Chicago Press, 2006), p.xiii.

John Rennie Short, The World Through Maps: A History of Cartography (Toronto: Firefly Books,

^{2003),} p. 24. ⁴ Rekacewicz, Philippe, 'La cartographie, entre science, art et manipulation', *Le Monde Diplomatique* (February 2006)

http://www.monde-diplomatique.fr/2006/02/REKACEWICZ/13169 [accessed 30th June 2009].

Short, The World Through Maps, p. 14.

⁶ For an overview on colour see Jean-Paul Bord, 'Cartographie, Géographie et Propagande : De quelques cas dans l'Europe de l'après-guerre', Vingtième Siècle: Revue d'histoire, no. 80, 2003, pp. 15-24; on distortions of size and orientation see Jeremy Black, Maps and Politics (London: Reaktion Books Ltd, 1997), pp. 29-57; on delimitation see Jacob, *The Sovereign Map*, pp. 107-117.

⁷ Ansel Adams on landscape photography: 'To the complaint, "There are no people in these photographs,' I respond, "There are always two people: the photographer and the viewer.", in John Shaeffer (ed.), The Ansel Adams Guide Bk 1: Basic Techniques of Photography (Boston: Little Brown, 1992), p.3.

⁸ Jacob, *The Sovereign Map*, p. 76.

the map projects its own image, but a complex collage of experiences and knowledge which they bring to the map, working with the map to create an intersubjective experience of the represented world. We will examine, therefore, the mapping practices which elicit shared socially constructed understandings from the viewer, as well as the pre-learnt reading techniques that a viewer brings to the map-reading process; where is the eye drawn to on the map and what voyage does it take?

Who, however is the viewer? I am interested in decision makers, in how maps influence their views of the world in which they make decisions. Maps pervade our world, from the maps on schoolroom walls to the strategic maps of decision makers in government, from the maps used in the media to illustrate the news to those in advertising, and the 'persuasive maps' 10 of institutions such as the EU and NATO. 11 Their ubiquity must affect our mental image of the world, and yet decision makers can be unaware of this surreptitious process, accepting the maps they see at face value without viewing them with a critical eye to determining their implied worldview.¹² Jeremy Black writes, 'maps as a form, expression, and organization of information are valuable to those who take decisions, and these are the wielders of power.' 13 This is why a study of cartographic representations of the world is important to the study of international relations. If those in power, those who act in the name of the state, are in any way influenced by maps, then it is imperative to examine the 'strange power of maps.'14 The Norwegian Foreign Minister, Gahr Støre, considered the role of maps in decision-making of such importance that he invested considerable time, effort and money in changing the Norwegian Foreign Ministry's maps from the standard Mercator projection with Norway relegated to the top, to a polar-centric projection which gave a better image of Norway's strategic sphere of interest, the High North, and placed Norway at its centre. 15 He believed in the importance of maps, and, as I

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⁹ Jacob talks of 'a visual itinerary on the surface of the map' in Jacob, *The Sovereign Map*, p. 251.

¹⁰ Karen Culcasi, 'Cartographically Constructing Kurdistan within Geopolitical and Orientalist discourses', *Political Geography*, vol. 25, 2006, p. 686.

¹¹ NATO, 'New map game and wallcharts launched' (01 Sep. 2004), http://www.nato.int/cps/en/natolive/news_20742.htm?selectedLocale=en [accessed 2 July 2009].

¹² John Rennie Short, *The World Through Maps: A History of Cartography* (Toronto: Firefly Books, 2003), p. 207; Peter Vujakovic, 'Whatever Happened to the 'New Cartography'?: the world map and development mis-education', *Journal of Geography in Higher Education*, vol. 26, no. 3, 2002, p379.

¹³ Black, Jeremy, *Maps and Politics* (London: Reaktion Books Ltd, 1997), p. 163.

¹⁴ Jacob, *The Sovereign Map*, p.xiii.

See Jonas Gahr Støre, 'The High North - top of the world - top of the EU agenda?', Speech at Institute of European Affairs, Dublin 18 September, 2006. Online at: <a href="http://www.regjeringen.no/en/dep/ud/about_mfa/minister-of-foreign-affairs-jonas-gahr-s/Speeches-and-articles/2006/the-high-north-top-of-the-world-top-of-t.html?id=420872 [accessed 19 June 2009];;

will argue, so should we. We must examine how maps create meaning and how they maintain specific discourses, in order to provide decision makers with a cartographic toolbox for understanding the way maps can influence action and 'shape and manipulate mental geographical images.' 16

This study of the power of maps will show how cartographic practices play a key role in a wide range of issues addressed in the study of international relations, from Samuel Huntington's world map [appendix 1] ¹⁷ to the break-up of Yugoslavia [appendix 2], ¹⁸ Cold War representations of the world [appendices 3-5] ¹⁹ to depictions of 21st Century Europe and its nation states [appendix 5]. ²⁰ Decision-makers should learn to be aware of the stories a map is telling, and to recognize how intersubjective knowledge is perpetuated through the widespread use of particular cartographic representations. Political maps which depict borders, for example, contribute to dominant discourses of the state, in that their emphasis on state borders exhibits an understanding of the world based on Westphalian concepts of territorial sovereignty and a state system. ²¹ However, maps can only work if combined with historical or normative narratives outside the map. ²² The widespread use of particular cartographic images combined with dominant accompanying narratives leads to common socially constructed understandings of the world or the states within it, which has important implications for questions of identity formation. ²³

There are numerous elements which contribute to the formation of the self and the other in terms of national or regional identity, but the cartographic image of a state and that state's placement in the context of regional or world maps is a powerful element in the construction of this identity. As Black notes, 'a polity defines itself, and is defined by others, in part through its cartographic image.' The prominent

also Jonas Gahr Støre, 'Perspectives on Current and Future Challenges in the High North', in Rose Gottemoeller and Rolf Tamnes (eds.), *High North: High Stakes. Security, Energy, Transport, Environment* (Bergen: Fagbokforlaget Vigmostad & Bjørke AS, 2008).

¹⁶ Matthew H. Edney, *Mapping an Empire: The Geographical Construction of British India, 1765-1843* (Chicago: The University of Chicago Press, 1997), p. 2.

¹⁷ Samuel P. Huntington, *The Clash of Civilizations* (Simon & Schuster: New York, 1996).

¹⁸ Jeremy W. Crampton, 'Bordering on Bosnia', *GeoJournal*, vol. 39, no. 4, 1996, pp. 355-356.

¹⁹ Bord, 'Cartographie, Géographie et Propagande', p. 20.

²⁰ Peter Vujakovic, "A New Map is Unrolling before us": Cartography in News Media Representations of Post-Cold War Europe', *Cartographic Journal*, vol. 36, no. 1, 1999, p. 48.

²¹ Short, *The World Through Maps*, p10.

²² Jacob, *The Sovereign Map*, p.234.

²³ Peter Vujakovic, 'Whatever Happened to the 'New Cartography'?: the world map and development mis-education', *Journal of Geography in Higher Education*, vol. 26, no. 3, 2002, p. 379.

²⁴ Black, *Maps and Politics*, p. 88.

outlines of the UK, Italy, and France's 'Hexagon' are instantly recognizable shapes; yet their cartographic forms are not just about depicting the land itself, but rather about turning the land into a graphic symbol, conjuring up all the associated information that symbolization promotes. A similar process is at work for the 'envisioned European space'25 of the European Union, and yet Europe's cartographic image does not seem to promote a distinctly European identity, as we shall discuss.

Jacob writes about maps that, 'the inscribed and visible image has more impact than the discourse that would describe it.'26 As an image of the world, an image that cannot naturally be captured by the human eye, an image that makes a viewer become what Certeau calls a 'voyeur-god',27 maps are a mystifying and fundamental tool that gives us access to the world. They are widely used, for navigation, consultation, illustration, and strategic planning, and yet research into their make-up and implications seems sidelined in the study of international relations for issues of 'grander' importance such as the nuances of realism, the value of (neo)liberalism and the practice of foreign policy. Yet maps are implicated in all of these, and more. It is important, therefore, to decode the symbols and practices involved in the creation of maps, examine the dominance of certain cartographic forms, and see how these connect to the narratives a viewer brings to a map, in order to determine the practical implications of maps and to highlight their inequalities, with a view to using them more effectively in the future.

An illustrative example of the inadequacies of maps took place in 1973. The Peters projection of the world, with its emphasis on the greater size of the developing world, found widespread support in post-colonial states and was adopted by many international aid organizations such as UNICEF and OXFAM.²⁸ The international community recognized its importance, and yet Peters' quest was fundamentally flawed: why was the North at the top and the South at the bottom? As John Short notes, 'We live in a spherical world where there is no obvious top or bottom and in a universe where the terms "top" and "bottom" have no meaning.'²⁹ This is but one

²⁵ Stuart Elden, 'Contingent Sovereignty, Territorial Integrity and the Sanctity of Borders', *SAIS Review*, vol. 26, no. 1, 2006, p. 12.

²⁶ Jacob, *The Sovereign Map*, p. 30.

²⁷ Michel de Certeau, Steven Rendall (trans.), *The Practice of Everyday Life* (Berkeley: University of California Press, 1984), p.93.

²⁸ Black, *Maps and Politics*, p. 35.

²⁹ Short, *The World Through Maps*, p. 14.

example among many of how maps have lost their innocence and been exposed for their human construction.

This paper will examine the cartographic construction of the world, its practices, influences, and symbolization in order to determine its implications for our identity and for our understanding of the world. More specifically, chapter 1 will address the relative absence of cartographic analysis in international relations literature and its much greater role in critical geopolitics and the growing concept of critical cartography. Following this, I will outline how maps are to be studied and will explain the methodological approach to this paper's cartographic research. Chapter 2 will explain the theoretical foundations which inform my understanding of cartography's role, looking at how we know the world through maps, the apparent objectivity of maps, how meaning is formed through representation, the role of the viewer, and social constructivist understandings of meaning and the intersubjectivity of maps. Chapter 3 looks at our cartographic education, examining the role of cartographic discourse itself, followed by an appraisal of map use in state cartography, cartography in education, and media cartography, all of which contribute to what I term the 'cartographic feedback loop'; the implications of cartographic images on identity. Chapter 4 takes the understandings of the previous chapters and addresses how decision makers use maps, the practical implications of the maps they use or create, and the necessity for what I call a 'Cartographer's Cookbook' for decision makers. Chapters 5a and 5b form this 'cookbook', where chapter 5a looks at technical aspects of mapping with political consequences, such as colour, size, the drawing of lines, and titles. Chapter 5b forms the second part of this discussion, focussing more on world maps, and outlines arguments about the dominance of particular cartographic forms and orientations, a reassessment of the Peters versus Mercator dispute. Chapter 6 flows on from the technical aspects of chapter 5, and addresses the role of maps in promoting national or regional identities, examining the role of what I term the 'cartographic homogenization impulse' in this process, looking at the implications of this for decision makers' understanding of the UK and Europe. The paper concludes with a call to encourage multiple cartographic depictions of the world and the states within it in order to promote other understandings of international relations and better understandings of 'the other'. Dorling and Faibairn note, 'Maps provide powerful images. For people who want to change the way we think about the

world, changing our map of the world is often a necessary first step.'³⁰ Maps provide a way of looking at the world: this paper will provide a way of looking at maps – in order to better understand the world.

CHAPTER 1 – Understanding Cartography

Literature Review

Considering the widespread availability of maps, their use by decision makers and in media depictions of international affairs, it is surprising that International Relations scholars seem to pay little attention to the role of maps and how they work. The International Relations student's bible, John Baylis and Steve Smith's The Globalization of World Politics³¹ contains a large world map [appendix 6] before the first chapter which presumably is there to set the scene for the subsequent discussions. On this world map, however, there is no discussion of the fact that it is a particular projection, which is Euro-centric, has the North on top, does not depict the Arctic circle, and does not note, as UN maps do, 32 that the collection of states represented and the borders depicted are not necessarily as fixed as they seem on the map: Cyprus is shown as one state, Kosovo is not depicted, and there is no mention of Palestinian territory. This use of maps as apparently unproblematic objects shows a lack of concern for the socially constructed stories they tell; this belief in the objectivity of maps prevails in society at large, only being granted a hearing in other more particular literatures such as those of critical cartography.³³ There is a widespread use of maps to illustrate ideas, such as Huntington's 'Clash of Civilizations' [appendix 1] or Thomas Barnett's influential 'The Pentagon's New Map' [appendix 8], 34 yet the maps' ontology is not questioned or examined.

Social constructivist and Post-structuralist International Relations literatures are more open to arguments that maps can influence world-views, where David Campbell, for example, presents a brief discussion of the differences between the

³⁰ Daniel Dorling and David Fairbairn, *Mapping: Ways of Representing the World* (Harlow: Longman, 1997), p. 154.

³¹ John Baylis and Steve Smith, *The Globalization of World Politics: An Introduction to International Relations* (3rd edition) (Oxford: Oxford University Press, 2006).

³² Philippe Rekacewicz, 'A political look at territory', *Le Monde Diplomatique* (May 2000) http://mondediplo.com/maps/introduction [accessed 29 June 2009].

³³ Jeremy W. Crampton, and John Krygier, 'An Introduction to Critical Cartography', *ACME: An International E-Journal for Critical Geographies*, vol. 4, no. 1, 2006, pp. 11-33.

³⁴ Mark Monmonier, 'Cartography: Distortions, World-views and Creative Solutions', *Progress in Human Geography*, vol. 29, no. 2, 2005, pp. 221-222.

Peters and Mercator projections [appendix 7]. 35 The bulk of research into cartography as a socio-political enterprise, however, is to be found in geographical, geopolitical, and cartographic literature, exemplified by the journals where such discussion takes place: Progress in Human Geography, ³⁶ Geopolitics, ³⁷ The Cartographic Journal, 38 amongst others. Literature which deals with the social construction of meaning, such as by Stuart Hall³⁹ and Jutta Weldes⁴⁰ provides a helpful framework for a social constructivist understanding of maps through the construction of dominant narratives, though they do not refer to maps as such. This paper's approach to the role of cartography, therefore, draws on this social constructivist literature and combines it with the burgeoning work of critical cartographers which blossomed in the late Eighties: from Brian Harley⁴¹ and David Woods'⁴² extremely polemical approaches to the political nature of maps, to the more balanced and technical appraisal of the political powers of maps that is found in the work of critical cartographers such as Jeremy Black, 43 Christian Jacob, 44 Jeremy Crampton⁴⁵ and John Pickles⁴⁶ who link 'mapping with the production of space, geography, place and territory as well as the political identities people have who inhabit and make up these spaces, '47 and who examine the role of colour, size, titles and other techno-political aspects of cartography. Peter Vujakovic's work on the 'new cartography' provides us with useful tools for examining how the media uses maps to

³⁵ David Campbell, 'Poststructuralism' in Tim Dunne, Milja Kurki and Steve Smith (eds.) International Relations Theories: Discipline and Diversity (Oxford: Oxford University Press, 2007), pp.

³⁶ Jeremy W. Crampton, 'Maps as Social Constructions: Power, Communication and Visualization', Progress in Human Geography, vol. 25, no. 2, 2001, pp. 235–252.

³⁷ Edoardo Boria, 'Geopolitical Maps: A Sketch History of a Neglected Trend in Cartography', *Geopolitics*, vol. 13, no. 2, 2008, pp. 278-308.

Sébastien Caquard and D. R. Fraser Taylor, 'What is Cinematic Cartography?' *The Cartographic*

Journal, vol. 46, no. 1, 2009, pp. 5-9.

Stuart Hall (ed.), *Representation : Cultural Representations and Signifying Practices* (London: Sage

Publications Ltd, 2003).

⁴⁰ Jutta Weldes, 'Constructing National Interests', European Journal of International Relations, vol. 2, no. 3, 1996, pp. 275-318.

⁴¹ J. Brian Harley, 'Deconstructing the Map' *Cartographica*, vol. 26, no. 2, 1989, pp. 1-20; Denis Wood, The Power of Maps (London: Routledge, 1993).

⁴² Wood, The Power of Maps.

⁴³ Black, Maps and Politics.

⁴⁴ Jacob, *The Sovereign Map*.

⁴⁵ Crampton, 'Maps as Social Constructions', pp. 235–252.

⁴⁶ John Pickles, A History of Spaces: Cartographic Reason, Mapping and the Geo-coded World (London: Routledge, 2004).

⁴⁷ Crampton and Krygier, 'An Introduction to Critical Cartography', p. 15; Pickles, *A History of Spaces*, p. 10.

reinforce narrative.⁴⁸ Where critical geopolitics seeks to 'reveal the representations, hidden messages, and power relations that underlie the construction of geographic knowledge' as a wider body of knowledge,⁴⁹ critical cartography focuses in on maps themselves and the way they construct geographic knowledge. Recent literature on cartography has sought to examine the political effect of maps with a greater emphasis on current empirical evidence, a trend to be welcomed in the often overly theoretical world of critical cartography.⁵⁰ Edoardo Boria notes in 2008, however, that research into the role of maps is still relatively fresh and as such much more work must be done to examine the implications of mapping practices;⁵¹ this paper hopes to contribute to that goal.

How to Study Political Maps and Cartographic Images

How, then, should we study maps? We must move from the general to the specific, beginning by examining the way maps allow us to access the world and how meaning is created through the interplay of the viewer and the socially constructed object itself, using theories of social constructivism to establish the intersubjectivity of the cartographic process. This framework invites us then to delve deeper into the cartographic process and examine the cartographic discourses that dominate the mediums in which the maps are found, such as state, education, and media cartography; as Doty writes, 'We can think of texts that illustrate the same kind of logic as constituting a controlling or dominant discourse.' We must be sensitive to the temporal and social contexts in which maps are or were used, as context is fundamental to the understanding of socially constructed objects, ⁵³ as well as emphasising, as Mark Monmonier does, that 'a single map is but one of an

⁴⁸ Peter Vujakovic, 'Mapping the War Zone: cartography, geopolitics and security discourse in the UK press', *Journalism Studies*, vol. 3, no. 2, 2002, pp. 187-202.

⁴⁹ Culcasi, 'Cartographically Constructing Kurdistan', pp. 687-688.

⁵⁰ Ibid, pp. 680-706; Pauliina Raento, Anna Hämäläinen, Hanna Ikonen and Nella Mikkonen, 'Striking Stories: a Political Geography of Euro Coinage', *Political Geography*, vol. 23, 2004, pp. 929-956; Mark Neocleous, 'Off the Map: On Violence and Cartography', *European Journal of Social Theory*, vol. 6, no. 4, 2003, pp. 409-425; Robert Shannon Peckham, 'Map mania: nationalism and the politics of place in Greece, 1870-1922', *Political Geography*, vol. 19, 2000, pp. 77-95.

⁵¹ Boria 'Geopolitical Maps', p. 279.

⁵² Roxanne Lynn Doty, 'Foreign Policy as Social Construction: A Post-Positivist Analysis of US Counterinsurgency Policy in the Philippines,' in *International Studies Quarterly*, vol. 37, 1993, p. 308. ⁵³ Pickles, *A History of Spaces*, p. 48.

indefinitely large number of maps that might be produced for the same situation' if it were not for the workings of power and dominant social narratives.⁵⁴

Having established the general theoretical foundations for cartographic practice, the specific elements of maps should then be studied: that is, we must look at the technical elements of cartography, the use of colour, the drawing of lines, the use of different projections and the other elements examined in chapters 5a and 5b. When we look at a map to study it, we must constantly ask questions about what the map is doing, and not allow the overt objectivity of maps to mask their covert power. 55 Studying maps involves questioning the implications of mapping practices: where are the boundaries of the map? What does this tell us about the narrative the map supports? Who made this map, who did they make it for, and how does this affect its meaning? Does the map tell the same narrative as the medium's dominant narrative?⁵⁶ Once we have established the cartographic discourse in play as well as how the technical elements in the map are working, we can then ask how cartographic representation has important implications for the construction of identity.⁵⁷ As Harley advocated in his seminal article, 'Deconstructing the Map': to study maps we must 'read between the lines of the map [...] to discover the silences and contradictions that challenge the apparent honesty of the image.'58

Methodology

Research for this paper requires a two-fold approach to the power of maps: as noted above, it is imperative to examine the theoretical issues which the question raises, both in terms of theories of meaning construction and in terms of theories of cartography itself. This approach is combined with an empirical examination of maps, which are used to critically examine the theories. Owing to constraints of time and space, we must inevitably be selective in our empirical search – yet the results of this search are used to discover and emphasise the general rules of cartographic practice.

In order to examine the theories of cartography, we look at a number of different maps, those found in cartographic literature and those found in different sources during this project's research into the power of maps. This includes looking at

⁵⁴ Mark Monmonier, *How to Lie with Maps* (Chicago: University of Chicago Press, 1996), p. 2.

⁵⁵ Yves Lacoste, 'Rivalries for Territory', *Geopolitics*, vol. 5, no. 2, 2000, pp. 120-158.

⁵⁶ Pickles, A History of Spaces, p. 50.

⁵⁷ Hall, Representation, p. 5.

⁵⁸ Harley, 'Deconstructing the Map', p. 3.

the maps in thirteen issues of *The Economist* from 1989, thirteen from 1990, twelve from 2008 and twelve from 2009 [appendices 9 & 10].⁵⁹ This paper's research also looks at the maps used by NATO from the Cold War and today [appendices 3-5],⁶⁰maps of Europe found in European Union websites [appendices 11-14],⁶¹ and of Europe in the media [appendix 15], ⁶² maps of the UK from various sources[appendices 16-19], ⁶³ world maps found in major newspapers [appendix 20],⁶⁴ and those found in social scientific studies about the subject.⁶⁵ These maps are examined critically in order to demonstrate the way meaning is constructed through the interplay of technical mapping techniques – choice, colour, omphalo-centrism, size, titles of maps and names on them, lines on the map including frontiers, the borders of the map as a framed space, different projections and orientations – and the political narratives that accompany them which raise questions of identity through processes such as the cartographic homogenization impulse.

Furthermore, the research examines how the aforementioned mapping practices affect the 'cartographic gaze', how viewers look at maps through shared discourses which encourage certain visual itineraries on the map and subsequently construct shared socially constructed understandings of the map and the world. As well as establishing the voyage of the cartographic gaze, it would be illuminating to study the actual movement of the eye on different world maps using eye scanners, like those used by Hannah Chua, Julie Boland and Richard Nisbett in their research into

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⁵⁹ The Economist, vol. 311, nos. 7596-7608, 1989; The Economist, vol. 316, nos. 7662-7673, 1990; The Economist, vol. 386, nos. 8561-8573, 2008; The Economist, vol. 392, nos. 8625-8638, 2009.

⁶⁰ NATO, 'Maps', http://www.nato.int/education/maps.htm

⁶¹ EUROPA, 'Europe', http://europa.eu/abc/maps/index_en.htm [accessed 7 August 2009]; European Parliament, 'EP Information Offices', http://www.europarl.europa.eu/parliament/public/nearYou.do [accessed 30 July 2009]; EUROPA, 'Schengen Map',

http://ec.europa.eu/justice_home/fsj/freetravel/map/wai/fsj_freetravel_map_en.htm [accessed 19 August 2009]; EUROPA, 'School wallmap of Europe', http://ec.europa.eu/unitedkingdom/pdf/map.pdf [accessed 19 July 2009].

62 Daily Mail, 'EU wipes England off the map', http://www.dailymail.co.uk/news/article-561342/EU-

⁶² Daily Mail, 'EU wipes England off the map', http://www.dailymail.co.uk/news/article-561342/EU-wipes-England-map--Gordon-Brown-flies-flag-St-George-Downing-Street.html [accessed 20 July 2009].

⁶³ EUROPA, 'Europe – The United Kingdom',

http://europa.eu/abc/maps/members/uk_en.htm[accessed 7 August 2009]; Bristol University, 'Maps and Travel Information – Bristol in the UK', http://www.bristol.ac.uk/university/maps/bristol-uk-small.html [accessed 7 August 2009]; HM Revenue and Customs, 'Land, Buildings and their Contents', http://www.hmrc.gov.uk/heritage/lbsearch.htm [accessed 7 August 2009]; BBC, 'Eurocrats leave Wales off EU map' http://news.bbc.co.uk/1/hi/wales/3715512.stm [accessed 19 August 2009].

The Guardian, 'The Guardian map of the world', 18 April 2009. E.g. **appendices 2 & 3**.

⁶⁶ Pickles, *A History of Spaces*, p. 80; See also Catherine A. Lutz and Jane L. Collins, *Reading National Geographic* (Chicago: The University of Chicago Press, 1993).

'Cultural variation in eye movements during scene perception', ⁶⁷ which detect the tangible line of a viewer's gaze, in order to reveal how the eye moves across different maps; the results of this would aim to establish the intersection of the physical eye and the constructivist gaze, hoping to discover which cartographic techniques are more effective for enticing the gaze. Such a study is beyond the scope of this article, so this element of the research project must be left to subsequent researchers, where here we will provide theoretical positions on how the viewer looks at a map, which can later be confirmed or disconfirmed by empirical research.

CHAPTER 2 – Cartographic Construction of the World

How We Know the World

The first most important question we must ask is how do we know the world, and more specifically, how do we know the world through maps? Although it might be assumed that the only appropriate way to represent the world is through the use of a globe, this is not in fact the case: by its very nature a globe only allows us to view one half of the world at a time, and so does not allow the viewer to look at the world in its entirety beneath what Jacob calls our 'totalizing and fully synoptic gaze.' Owing to this lack, flat maps are considered more useful for grasping the world as a whole and portraying its geography – especially political geography - than their spherical counterparts, as testified by the American Cartographic Association. Yet our knowing the world through flat maps is not unproblematic, since it is impossible to represent a spherical object like the world on a flat surface without causing some form of distortion, owing to the necessary use of particular projections and the political consequences of this choice, as will be discussed in chapter 5b. That the use of flat maps in society is far more widespread than the use of globes is also a result of the technical conditions of their distribution: in newspapers and textbooks, on school

⁶⁷ Hannah Faye Chua, Julie E. Boland, and Richard E. Nisbett, 'Cultural Variation in Eye Movements during Scene Perception', *PNAS*, vol. 102, no. 35, 2005, pp. 12629–12633.

⁶⁸ Jacob, *The Sovereign Map*, p. 52.

⁶⁹ American Cartographic Association, American Geographical Society, Association of American Geographers, Canadian Cartographic Association, National Council for Geographic Education, National Geographic Society, 'The Case against Rectangular World Maps', *The Cartographic Journal*, vol. 26, 1989, pp. 156-157.

⁷⁰ See Frank Canters and Hugo Decleir, *The World in Perspective: A Directory of World Map Projections* (Chichester: John Wiley & Sons, 1989).

walls and advertising placards, where we live 'map-immersed in the world.'⁷¹ This use of maps in the media is increasing as Mark Monmonier argues, and as our research into map use in *The Economist* confirms.⁷²

The more maps are used in society, the more we must use them to know the world, and consequently, the more they will influence our mental geographical understanding of the world, which in turn has consequences for international relations. 73 We must, therefore, ask why we need maps to know the world? According to Richard Phillips we use maps because it is easier to understand places and relations in graphic cartographic form, owing to the 'brain's limited capacity to store unprocessed information.'⁷⁴ This use of maps as a simplifying device contributes to what Susan Fiske and Shelley Taylor term, the 'cognitive miser model': 75 the brain attempts to economize on its cognitive operations by creating belief sets, and information received is in turn ordered according to the make-up of these beliefs.⁷⁶ Cartographic images contribute significantly to the construction of belief sets by providing the viewer with standardized cartographic images of the world, where maps, as Harley writes, cause the world to be 'disciplined', 'normalized', and turn us into 'prisoners in [their] spatial matrix.'77 Furthermore, Shannon Blanton argues that since images of the world and belief sets affect a decision maker's view of the world, then a decision maker's decisions will be influenced by their belief set, and will thereby influence international relations and their understanding of international relations.⁷⁸ In many ways, belief sets operate a similar function to the dominant discourses we address in chapter 2: that is, since discursive practices

define what is and is not appropriate in our formulation of, and our practices in relation to, a particular subject or site of social activity; what knowledge is considered useful, relevant and 'true' in that context.⁷⁹

then it follows that dominant discourses shape belief sets, and the operation of the two shape actions. Maps, therefore, contribute to a decision maker's belief set by

⁷¹ Denis Wood, cited in Vujakovic, 'Mapping the War Zone', p. 187.

⁷² Monmonier, *How to Lie with Maps*, p. 185; [appendix 10]

⁷³ Vujakovic, 'Mapping the War Zone', p. 188.

⁷⁴ Richard J. Phillips, 'Are Maps Different from other kinds of Graphic Information?', *The Cartographic Journal*, vol. 26, 1989, p. 24.

⁷⁵ Susan Fiske and Shelley Taylor, *Social Cognition* (New York: McGraw-Hill, 1984), p. 15.

⁷⁶ Jack Snyder, *Myths of Empire* (New York: Cornell University Press, 1991), p. 27.

⁷⁷ Harley, 'Deconstructing the Map', p. 17.

⁷⁸ See Shannon L. Blanton, 'Images in Conflict: The Case of Ronald Reagan and El Salvador', *International Studies Quarterly*, vol. 40, no. 1, 1996, pp. 23-44.

⁷⁹ Hall, *Representation*, p. 6.

acting as simplifying devices for cognitive economy and by reinforcing a socially constructed dominant discourse of the world. 80 Their contribution to this process, however, is often overlooked owing to the widespread understanding of maps as objective depictions of the world. As this paper is interested in encouraging an awareness of the socially constructed and simplifying nature of maps, then we must now establish the reasons for an apparent belief in the objectivity of maps in order to make the case for their intersubjectivity.

Objective?

When we read a news article in a newspaper, we know that the article has been written by someone according to the political stance of the paper, and yet when we see maps in a newspaper, most readers seem unaware that the map has also been drawn up by someone for the paper; the author of the map has disappeared and the map is treated as an objective graphic image external to the newspaper, which is added to the article in order to give a story context.⁸¹ Despite what Wood and Harley claim to the contrary, 82 it is not necessarily the case that the actual author of the map is conscious of the potential political message of the map they create; rather, they may draw a map which is guided by the socially constructed dominant discourses of the time or of their institution. The map may be working, and it may be working in conjunction with the aims of the newspaper, as we will discuss with regard to The Economist in chapter 3, yet belief in a map's objectivity tempts us to believe that it is not working at all, making us 'forget that this is a picture someone has arranged for us, chopped and manipulated, selected and coded.'83 Maps become common sense and to question them is madness; but 'though this be madness, yet there is method in it.'84 Weldes explains:

Social constructions become common sense when they have successfully defined the relationship of particular representations to reality as one of correspondence. [...] they are treated as if they

⁸⁰ Harley, 'Deconstructing the Map', p. 18.

Neocleous, 'On Violence and Cartography', p. 421.

⁸² See Wood, *The Power of Maps*; J. Brian Harley, 'Maps, Knowledge and Power' in Denis Cosgrove and Stephen Daniels (eds.), *The Iconography of Landscape: Essays on the Symbolic Representation, Design and Use of Past Environments* (Cambridge: Cambridge University Press, 1988), pp. 277-312.

⁸³ Neocleous, 'On Violence and Cartography', p. 421.

⁸⁴ William Shakespeare, Ebenezer C. Black (ed.), *The Tragedy of Hamlet* (London: Ginn & Company Ltd, 1909), p. 78.

naturally or transparently reflected reality. In this way, social constructions are reified or naturalized and their particular social origins are obscured.⁸⁵

Maps follow this logic: the author disappears, the map becomes the territory, the world becomes Mercator's world, North is top, South is bottom, and Europe is as big as South America. The strange power of maps, therefore, resides in the way they are viewed 'as if they naturally or transparently reflected reality', in their apparent objectivity and our unawareness of - or lack of concern for - their socially constructed nature. This has implications for international relations. Vujakovic writes that the concept of Europe is intimately linked to cartographic depictions of Europe, and 'the general acceptance of the mimetic nature of maps' helps 'naturalise particular ideological positions.' Furthermore, maps provide powerful images by appropriating the supposedly objective nature of maps, such as Huntington's map of the world according to homogenous blocs of religious ideology [appendix 1]; as Edward Said argues, 'Merely to designate an area as 'Islamic' is to designate an implicit foreign policy.' In order to show how maps work, we must cast off their cloak of objectivity, reveal how they create meaning, and show how this meaning creates identities which influence how we act in the world.

Meaning Formation

Maps create meaning by representing the world in graphic form and marking the resultant cartographic image through a collection of codes and cartographic conventions, such as 'symbolization, schematization, miniaturization, colours, nomenclature, vertical overview.' Each symbolic intervention on the map holds a particular meaning; each word or graphic element is a sign that means something. Yet how are we to understand the meaning of cartographic conventions such as the drawing of a line between states? To understand the meaning of such a line as a sign that represents a border between states – with all the implications that this has for international relations – viewers, as Hall explains, 'must share sets of concepts,

⁸⁵ Weldes, 'Constructing National Interests', pp. 275-318.

⁸⁶ Vujakovic, 'Cartography in News Media Representations', pp. 43-57.

⁸⁷ Edward Said, *Orientalism* (New York: Vintage Books, 1978) cited in Gearóid Ó Tuathail and John Agnew, 'Geopolitics and Discourse: Practical Reasoning in American Foreign Policy,' in *Political Geography Quarterly*, vol. 11, no. 2, 1992, p. 194.

⁸⁸ Jacob, *The Sovereign Map*, p. 12.

⁸⁹ Hall, Representation, p. 18.

images and ideas which enable them to think and feel about the world' and must observe the world, or in this case the map, through similar 'cultural codes.' On a political world map a line round an area with a toponym on the area and a smaller named dot within this area gains meaning through our shared cultural code which understands this cartographic convention to represent a state; this has important implications for the Republic of Kosovo [appendix 25], for example, where it gains a stronger existence on the ground and greater international legitimacy – both in practice and subliminally by having a cartographic image of its own.

Maps also create meaning through a process of connotation; that is, 'the connotative meaning of maps, which can be regarded as secondary meanings, often implicit rather than explicit, and sometimes unconsciously generated.' The use of colour in maps is exemplary in this sense, where using the colour red for Russia on world maps *connotes* ideas about communist Russia, so and red in UN zoning maps for Haiti connotes danger and threat, which have important implications for the action to be taken. Meaning, then, arises from the interaction of the map, its maker, cartographic conventions and the viewer's intersubjective cultural codes which allow the viewer to construct meaning with and through the map. Since the viewer plays a part in forming the meaning of a map it is important to clarify their role.

The Viewer, Background Knowledge and the Eye

Robinson and Petchenik called for 'a deeper understanding of the characteristics and processes by which the map acquires meaning from its maker and evokes meaning in its user.'98 This misses a fundamental point, however, in the construction of meaning in images such as maps, and that is the role of the viewer in *creating* meaning, most

⁹⁰ Hall, Representation, p.4.

⁹¹*The Economist*, vol. 386, no. 8568, 2008, p. 16.

⁹² Karin M. Fierke, 'Constructivism' in Tim Dunne, Milja Kurki and Steve Smith (eds.) *International Relations Theories: Discipline and Diversity* (Oxford: Oxford University Press, 2007), p. 177; Vujakovic, 'Mapping the War Zone', p. 188.

⁹³ *The Economist*, vol. 392, no. 8637, 2009, p. 111.

⁹⁴ Vujakovic, 'Whatever Happened to the 'New Cartography'?' p. 372.

⁹⁵ Ó Tuathail and Agnew, 'Geopolitics and Discourse', p. 201; Weldes, 'Constructing National Interests', p. 296; Hall, *Representation*, p.26.

⁹⁶ Paul Higate and Marsha Henry, *Insecure Spaces: Peacekeeping, Power and Performance in Haiti, Kosovo and Liberia* (London: Zed Books Ltd, 2009), p. 64;

⁹⁷ Pickles, A History of Spaces, p. 53.

⁹⁸ Arthur H. Robinson, and Barbara Bartz Petchenik, *The Nature of Maps* (Chicago: University of Chicago Press, 1976), p.xi.

importantly through the viewer's 'culturally informed interpretive work.' 99 The viewer is a key stakeholder in the creation of cartographic meaning, and the meanings they construct depend on their intersubjective codes through which they view the world and maps; research has shown that men and women seem to read maps differently, and that there are differences in eye movement on an image between Chinese and American viewers. These differences could be caused by biological differences, but following the course of our argument, it seems more the case that these differences are caused by the different ways in which viewers are educated into an intersubjective cartographic discourse, and in the different narratives viewers bring to the map.

Viewers bring narratives to the map and the map requires this background knowledge to function. The meaning of maps is intricately linked to the historical, textual, and social narratives that accompany the spaces represented graphically: 'Meaning is produced through the interaction of a viewing and an external knowledge of the world.' 100 John Short states that 'during the Cold War, Mercator projections were popular in the West because they exaggerated the size of the Soviet Union, making it appear more threatening.'101 Yet surely it only appears more threatening if accompanied by the Cold War discourse in which it was created? The Mercator projection is still used today, but the greater size of Russia no longer seems to appear so threatening. 102 The meaning of the map, therefore, forms in the interplay between cartographic image and the knowledge a reader brings to the map, connoting a meaning, which in turn depends on the socially shared dominant discourse of the time. Once the meanings have been successfully repeated, then 'the meanings they produce come to seem natural, to be an accurate description of reality; '103 they seem objective, yet they are not. Our approach to understanding maps, therefore, requires their 'shell of objectivity' to be broken and their intersubjective socially constructed nature to be accepted. 104

⁹⁹ Lutz and Collins, Reading National Geographic, p. 188.

¹⁰⁰ Jacob, *The Sovereign Map*, p. 271.

¹⁰¹ Short, *The World Through Maps*, p. 207.
102 The Guardian, 'The Guardian map of the world', 18 April 2009.

¹⁰³ Weldes, 'Constructing National Interests', p. 284.

¹⁰⁴ Crampton, 'Maps as Social Constructions', p. 242.

From Meaning to Identity

Since maps and the viewer's interaction with them creates meaning, and Hall states that 'meaning is what gives us a sense of our own identity, of who we are,' 105 then it follows that maps contribute to the construction of identities. National maps are particularly apposite in this regard: the national map helps create and sustain a national identity by showing graphically the territorial shape of the state, where all that is inside the lines is 'us' and all that is outside is 'them'. The outline of a state's cartographic image is understood through our culturally shared codes to represent borders; these borders are boundaries which, as David Campbell argues, are 'central to the production and reproduction of the identity in whose name it [the state] operates.' 106

It is important to remember, and easy to forget, that the viewer of a map is also in the map or outside its frame. If it is a national map of the state we inhabit then we are in this map and our identification with the land mutually constitutes our national identity. If it is a national map of another state, this also contributes to our identity as we are not in the map — we are outside it, in the strange space outside its frame. Our identity forms by 'highlighting who or what "we" are not'. 107 Even world maps contribute to our identity, by showing where we are, which has implications for who we are. The viewer takes on a spatialized identity, and this space has been shown to 'provide individuals with a sense of belonging or identity. A viewer's identity seeks its cartographic counterpart; Turkey, for example, actively discourages maps of 'Kurdistan' for fear of this contributing to a stronger Kurdish identity. As Mark Neocleous states:

The centrality of the form of the state [...] facilitates the identification of individual citizens with a particular territorial imagination of the space with which they are expected to identify and be most concerned.¹¹⁰

The meaning found in maps also contributes to the construction of identity by shaping our knowledge of the world and the discursive frameworks which enable us to act,

¹⁰⁵ Hall, *Representation*, p. 3.

¹⁰⁶ David Campbell, Writing Security: United States Foreign Policy and the Politics of Identity (Minneapolis: University of Minnesota Press, 1992), p. 68.

¹⁰⁷ Campbell, Writing Security, p. 48.

¹⁰⁸ Higate and Henry, *Insecure Spaces*, p. 16.

¹⁰⁹ Black, Maps and Politics, p. 143.

¹¹⁰ Neocleous, 'On Violence and Cartography', p. 421.

where the connoted meaning of a Eurocentric map with a larger developed world, or a map of Europe with no internal borders, contributes to a particular discourse that creates a particular identity which invites a particular course of action by decision makers who relate internationally;¹¹¹ it is to such cartographic education that we now turn.

CHAPTER 3 - Cartographic Education and Shared Discourses

Cartography plays a major role in the representation of the world and the states within it, thereby creating a foundation for the representation of international relations, providing what Jacob calls 'the prerequisite grid of intelligibility and interpretation of current events.'112 Yet how do maps hold such a foundational position in our mental geopolitical conception of the world? Maps become powerful representations of the world through their omnipresence in the world. 113 Not only are maps found in a range of locations as we will discuss subsequently, but cartographic discourse itself contributes to their power. Iranian President Mahmoud Ahmadinejad's statement that 'Israel must be wiped off the map' 114 is indicative of such cartographic discourse and provides a powerful and controversial metaphorical cartographic image, with real implications for international relations in the Middle East. A more benign version of cartographic discourse is exemplified by the title of Michael Emerson's book, Redrawing the Map of Europe. 115 In it, Emerson discusses more the idea of how Europe is expanding or should expand than the cartographic image of that expansion. The use of 'redraw the map', however, implies a cartographic discourse operating in his text, in the same way as does the often used phrase 'to draw a border', with its very real ramifications for African states. 116

'To put on the map' and to be 'off the map' are similarly powerful cartographic idioms where the first is defined as, 'out of existence; obsolete or of no account' and the latter as, 'in or into existence; in an important or prominent

¹¹¹ Alexander Wendt – 'Identities are the basis of interests', cited in Weldes, 'Constructing National Interests', p. 282; see also Hall, *Representation*, pp. 5-6.

¹¹² Jacob, *The Sovereign Map*, p. 353.

¹¹³ Jacob, *The Sovereign Map*, p. 305.

Cited in Alan Collins (ed.), *Contemporary Security Studies* (Oxford: Oxford University Pres, 2007),
 p. 138.
 Michael Emerson, *Redrawing the Map of Europe* (Basingstoke: Macmillan Press Ltd, 1998).

Michael Emerson, *Redrawing the Map of Europe* (Basingstoke: Macmillan Press Ltd, 1998).

116 See Emmanuel N. Amadife and James W. Warhola, 'Africa's Political Boundaries: Colonial Cartography, the OAU, and the Advisability of Ethno-National Adjustment', *International Journal of Politics, Culture and Society*, vol. 6, no. 4, 1993, pp. 533-554.

position.'¹¹⁷ This idiomatic use is reflected in cartographic practice where the states and borders that are 'on the map' gain a certain discursive legitimacy as opposed to those that are 'off the map'; the map becomes a crucial locale - both physical and linguistic - in the affirmation or disaffirmation of a state's existence. For example, maps that do not show 'Kurdistan' deny its existence and those that do, confirm it, putting Kurdistan literally and metaphorically 'on the map' [appendices 21, 31-34];¹¹⁸ the map, therefore, is shown to be a political statement about reality.

It is not just cartographic metaphors that cause maps and cartographic images to hold such a strong position in our mental geopolitical conception of the world; the ubiquity of maps and cartographic images in society is a fundamental reason for their power. Maps are found on classroom walls, in school and university textbooks, on the walls of international institution offices, foreign ministries, in newspapers and television; cartographic images are also used as powerful symbols in advertising, promoting a specific agenda, such as a UK, European, or global one as found in research into the use of maps and cartographic images in *The Economist*. Papendices 23, 30, 37 Given the ubiquity of maps in society, — in particular of the world, of regions, and of individual states — given that they are a key tool for representing the world and forming a mental geopolitical image of the world, and given that they are not objective but socially constructed objects which create, support and perpetuate particular narratives about the world, then it is imperative to study how this process operates and the way maps create and perpetuate discourses in and about the world.

Discourses enable one to write, speak, listen, and act meaningfully. They are a set of capabilities, an ensemble of rules by which readers/listeners and speakers/audiences are able to take what they hear and read and construct it into an organized meaningful whole. 121

¹¹⁷ Oxford English Dictionary,

http://dictionary.oed.com/cgi/entry/00301686?query_type=word&queryword=map&first=1&max_to_s how=10&sort_type=alpha&result_place=3&search_id=PKfa-fuICmW-6362&hilite=00301686 [accessed 1 August 2009].

¹¹⁸ See Culcasi, 'Cartographically Constructing Kurdistan', pp. 680-706.

¹¹⁹ Black, Maps and Politics, p. 17.

With regard to advertising: for image of UK see, *The Economist*, vol. 311, no. 7605, 1989, pp. 32-33; for image of Europe see *The Economist*, vol. 392, no. 8625, 2009, p. 93; for image of globe see, *The Economist*, vol. 386, no. 8570, 2008, p. 80; see also Black, *Maps and Politics*, p. 17.

¹²¹ Alker, H. and Sylvan, D., 'Political discourse analysis.' Paper presented at the Annual Meeting of the American Political Science Association, Washington DC, September 1986 cited in Ó Tuathail and Agnew, 'Geopolitics and Discourse', p. 193.

The widespread use of maps creates a shared cartographic discourse of the world, where what is mapped becomes truth owing to the belief in the objectivity of maps described above. Cartographic discourse enables decision makers to act by providing them with a tool with which to access the world they operate in, and they are educated into this discourse through their education, the media, and state cartography. Weldes argues that decision makers approach international relations with an 'already quite comprehensive and elaborate appreciation of the world, of the international system and of the place of their state within it.' Their understanding of the world is constructed by their education – not just scholastic – in 'domestic political and cultural contexts.' 123

Maps play a key role in this education, 124 and are fundamental to decision makers' appreciation of the world and the place of their state in the world. World maps place states in the context of the world and define the limits of domestic state action by framing the nation according to the Westphalian concept of territorial sovereignty, where 'Sovereignty, like "state", implies space, and control of a territory becomes the foundation of sovereignty. 125 Political maps perpetuate this discourse of sovereign domestic space through their depiction of state borders, contributing to a 'misleading sense of natural territorial control.' Decision makers consequently 'know' territorial borders through maps, for it is unlikely that any decision maker has confirmed the frontiers depicted on a map by actual research on the ground. 127 As the two escaped prisoners of war comment at the end of Jean Renoir's La grande illusion when unsure of whether they have crossed the border into Switzerland: 'Une frontière ça ne se voit pas, c'est une invention des hommes, la nature s'en fout.' - 'A border cannot be seen, it's a human invention, nature couldn't care less.'128 It is political maps that help create and perpetuate this social construction and this dominant discourse is maintained through state, educational and media cartography.

This has implications for identities through what I term the 'cartographic feedback loop.' Maps of the world and the world itself are held to be

¹²² Weldes, 'Constructing National Interests', p. 280.

¹²³ Ibid, p. 280.

¹²⁴ Jacob, *The Sovereign Map*,, p. 317.

Henri Lefebvre, Donald Nicholson-Smith (trans.), *The Production of Space* (Oxford: Blackwell, 1974), p. 280.

¹²⁶ Black, Maps and Politics, p. 20.

¹²⁷ Ibid, p. 146.

¹²⁸ My translation – from Jean Renoir, *La grande illusion* (France : Réalisation d'Art Cinématographique, 1937).

mutually constituted, where the one can and does influence the other with implications for identity construction. ¹²⁹ The cartographic feedback loop refers to how maps represent the world, then this representation is repeated through state, education and media cartography, which turns the map to common sense through a dominant cartographic discourse and thereby contributes to the formation of identity: once there is an established cartographic form, it is *re*represented, is thereby reaffirmed, and consequently identity itself is confirmed in the reproduction of the now apparently objective cartographic image. ¹³⁰ This is an important lesson for states seeking independence or attempting to justify their independence where maps can surreptitiously entrench a cartographic identity in our mental geopolitical view of the world [appendices 24, 25].

Official Cartography

An important question to ask when studying maps is who made the map? This is not a question of individual authorship, but more of the institution for whom the map was made. As has been argued above, even if a map is made by an individual, they do so through a shared discourse of cartography that involves certain cartographic practices such as the use of toponyms and full lines to denote fixed borders (as opposed to dotted lines), combined with the dominant discourse of the institution for which the map is produced. We would expect to see maps that are created by and for the European Union, or institutions within it, to portray an image of Europe as a Union, and this is generally the case [appendices 12, 22 & 23]. 131 Pauliina Raento argues that even cartographic images on Euro coins can be studied in terms of 'banal nationalism'; the way in which images on coins and notes 'support the production and maintenance of national narratives' 132 – or in this case European supranational narratives. As such, Euro coins show a borderless Europe on the one hand, which emphasises the diminishing significance of internal borders, and the strong external frontiers of European space on the other, constructing European identity in terms of self/other or inside/outside conceptions of identity [appendix 22]. ¹³³ By contributing

¹²⁹ Pickles, A History of Spaces, p. 94.

¹³⁰ See also Weldes, 'Constructing National Interests', p. 303 for a similar concept.

Raento, Hämäläinen, Ikonen and Mikkonen, 'Euro Coinage', especially pp. 935-936.

¹³² Ibid. p. 929.

¹³³ Iver B. Neumann, *Uses of the Other: "The East" in European Identity Formation* (Minneapolis: University of Minnesota Press, 1999), p. 4.

to this discourse of European demarcation from the other, European maps, if they are serving their patron institution, thereby help create and perpetuate European identity which is an active political project with major implications for international relations.¹³⁴

The initial backlash against cartography as an objective image sought to emphasise how 'the state is a major producer of maps', whether by creating the maps themselves for distribution, or funding institutions which create the maps, such as educational establishments and government media. 135 As creations of the state it is logical to assume that such maps contribute to the dominant discourse of the state. One does not have to look far to find a map of the state, whether as a map or a cartographic image, and it is this constant reproduction of cartographic images of the state in society that perpetuates a specific understanding of the state as a unified territorial body that prompts the 'identification of peoples and territory' [appendix 18]. 136 The creation of maps by governments may not necessarily be an intentional attempt to propagate a sense of national identity and territorial control, but there are cases where this is overtly the case, in particular in areas of disputed territory,, and as exemplified by the way official Iraqi maps prior to and during Iraq's invasion of Kuwait showed Kuwait as part of Iraqi territory. 137 Harley provides us with a useful analytical distinction, dividing state influence on maps in two: 'external power' which refers to the state mapmaker's decision about what is or is not portrayed on the map, and 'internal power' which refers to the mapping processes themselves 'through which the world is disciplined. 138 It is important to note that Western state maps also exert this 'external power' and so are not innocent in their cartographic depictions as they often omit nuclear plants, submarine bases, government buildings and other such 'sensitive' locations from their maps; these omissions, for example, were extended in the USA to cover even more locations after the attacks on the World Trade Centre and the Pentagon in 2001.¹³⁹

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¹³⁴ See also **appendix 23**: the erasure of borders and the use of angle to increase unity in the image.

¹³⁵ Pickles, A History of Spaces, p. 62.

¹³⁶ Black, Maps and Politics, p. 17.

¹³⁷ Monmonier, How to Lie with Maps, p. xiii.

¹³⁸ Harley, 'Deconstructing the Map', pp. 1-20.

Monmonier, 'Cartography', pp. 219-220.

Education Cartography

Yet it is not solely national or supranational institutions that create maps and thus perpetuate dominant – both political and cartographic – discourses about the world. Educational institutions play a key role in the construction of cartographic knowledge; the cartographic education of decision makers begins in the schoolroom and in school textbooks. 140 Hall emphasises how children learn and 'unconsciously internalize the codes which allow them to express certain concepts and ideas through their systems of representation', enabling them to become 'culturally competent subjects.' 141 Children do learn and internalize cartographic codes of how to draw a map, but they do so by imitating distorted socially constructed images of the world such as the widely discredited but still widely used rectangular Mercator projection. ¹⁴² As T. F. Saarien's research into maps drawn by students from all over the world has shown, students predominantly draw maps that are euro-centric and that exaggerate the size of the developed world in the same way as the Mercator projection. ¹⁴³ Even the maps used in textbooks that teach development continue to be euro-centric and strangely to deemphasise the size of the developing world. 144 Educational maps, therefore, perpetuate dominant political discourses of the world and thereby affect the mental geopolitical framework through which decision makers carry out international relations.

Media Cartography

The use of maps in the media is widespread, and as my research into *The Economist* shows, it has increased from 1989 to 2008 [appendices 9/10]. Since their use is increasing, their influence on our understanding of the world must also increase, as maps in the print media are understood to provide the main avenue through which issues of international importance, particularly conflicts, are represented to the public

¹⁴⁰ Peckham, 'Map mania', p. 82.

¹⁴¹ Hall, *Representation*, p. 22.

¹⁴² See The Guardian, 'The Guardian map of the world', April 18 2009; also American Cartographic Association, 'The Case against Rectangular World Maps', pp. 156-157.

¹⁴³ See Thomas F. Saarinen, 'Centring of Mental Maps of the World', *American Cartographer*, vol. 12, no. 2, 1988, pp. 103-111.

¹⁴⁴ See Vujakovic, 'Whatever Happened to the 'New Cartography'?', pp. 369–380.

From the increased ease of map production and the increased importance of maps; see Harold S. Shapiro, 'Giving a Graphic Example: the Increasing Use of Charts and Maps', *Nieman Reports*, no. 36, 1982, pp. 4-7.

and decision makers. 146 Mark Monmonier describes the media as 'society's most significant cartographic gatekeeper and its most influential geographic educator.'147 If maps are, as argued above, social constructions that portray an intersubjective and particular view of the world, and if one of the functions of the media is, as Peter Vujakovic argues, 'one of social reproduction', then it follows that the prevalence of maps in the media helps perpetuate and maintain particular understandings of the world; maps are not innocent objective adjuncts to a textual article, but powerful objects which affect decision makers' mental map of the world, and thereby influence the way they act in and on the world. 148 It is interesting to note that with the increased use of colour in *The Economist*, the majority of maps in it show all states in a pale green colour with only slight distinction of shade between states and weak brown borderlines (if at all): given *The Economist*'s liberal and globalizing stance, ¹⁴⁹ this cartographic depiction of states seems to reflect the magazine's liberal economic agenda, contributing to its avowed discourse of globalization.

Media world maps are also guilty of continuing to use inappropriate projections with real implications for our understanding of international relations such as was the case with maps that portrayed the range of North Korean Taepodong 3 missiles [appendix 20]. 150 By using an unsuitable world projection, the map in The Times showed the North Korean missiles as not being able to reach the UK, and the newspaper therefore questioned the importance of a missile defence shield in Europe. 151 By using a more suitable world projection we see that the Taepodong 3 missile could in fact reach the UK; by changing the map, therefore, the foreign policy implications are also changed. It is clear, then, that cartographic depictions of the world do affect our understanding of the world, and decision makers should be aware of this fact and be sure to approach maps with a critical eye; to which we now turn.

¹⁴⁶ Vujakovic, 'Mapping the War Zone', p. 187.

¹⁴⁷ Cited in Culcasi, 'Cartographically Constructing Kurdistan', p. 689.

Vujakovic, 'Whatever Happened to the 'New Cartography'?' p. 377. Vujakovic, 'Whatevel Happened to the New Cartography : p. 3
 Vujakovic, 'Cartography in News Media Representations', p. 54.
 Vujakovic, 'Mapping the War Zone', pp. 199-200.

¹⁵¹ The Times, 28 July 99.

CHAPTER 4 – Decision-Makers & Maps

Practical Implications of Maps

Maps play a vital role in the construction of our mental geographies of the world which has real implications in the world. Decision makers, however, may not yet be convinced of the subtle effects of mapping practices, so we now turn to the very direct practical implications of map use in order to reinforce the power of maps, before turning to the issue of how decision makers should learn to read maps critically, not just as maps that show location, but as socially constructed objects whose construction tells a particular narrative.

The real political implications of maps are more apparent when depicting territories that are contested "on the ground". Such disputes, ranging from Kosovo to Kurdistan, Macedonia to the 'Islas Malvinas', Palestine and Israel, and in some senses the idea of Europe, ¹⁵² demonstrate how 'cartographic representations are innately divisive [...] because there is no agreed upon reality to represent.' Russia does not recognize the legitimacy of the Republic of Kosovo, so will they place it on Russian maps? Similarly, NATO does not recognize the independence of Abkhazia and South Ossetia and so does not even name them or outline their territories on official NATO maps [appendices 28/29]; as Neocleous writes, 'to leave a state off a map is to deny its existence.' Conversely, to put a state on the map is to affirm its existence [appendices 25, 32].

Yet it is not just about naming states on a map, but rather maps are also actively used to *create* territory with very real implications for those inside the depicted territory; the division of Bosnia following the break-up of Yugoslavia is a case in point. As the former Yugoslavia broke up, maps were created and distributed to reinforce claims for areas with a supposed spatial-ethnic connection. ¹⁵⁵ The division of Bosnia into two homogenous blocs after the Dayton Agreement can be seen as the external imposition of cartographic simplicity with serious implications for the Bosnians [appendix 2]. Whereas Bosnia had previously been a collection of ethnicities, it now became a state with two separate ethnic spaces, sanctioned by the

¹⁵² Monmonier, *How to Lie with Maps*, p. 93; Rekacewicz, 'La cartographie'.

¹⁵³ Culcasi, 'Cartographically Constructing Kurdistan', p. 681.

Neocleous, 'On Violence and Cartography', p. 422; see also **appendix 19** for Wales' disappearance - BBC, 'Eurocrats leave Wales off EU map', http://news.bbc.co.uk/1/hi/wales/3715512.stm [accessed 19 August 2009].

¹⁵⁵ Jelena Lovric, Washington Post, 22 August, 1995, cited in Crampton, 'Bordering on Bosnia', p. 360.

Dayton map. Yet this was not just about drawing lines on a map; these lines required the people on the ground to move to their new territories, forcing the creation of new spatial identities and legitimizing the violent claims of ethnic incompatibility. ¹⁵⁶ Cartographic line drawing and its effects on the ground is shown to be no longer simply the domain of colonial cartographers who drew straight lines on Africa, ¹⁵⁷ but to be a contemporary practice of decision makers dealing with territorial problems; 'maps precede territory [...] inscribe boundaries and construct objects that in turn become our realities.'

How Decision-Makers use Maps

Another way in which maps have direct implications on the ground is the way in which the maps decision makers use depict the world and the territories within it. World maps, for example, allow the viewer to behold the whole world in a single gaze, creating a sense of control in the viewer and a diminishing sense of space, where the map is understood to be 'a technical and artificial widening of the visible'. 159 This inevitably encourages the decision maker to view the world as a more simplified and smaller platform on which to act, and can lead, as Paul Higate has argued, to the deployment of troops for peacekeeping operations to distant lands in which their small presence is overwhelmed by the actual geographical size of the region they must keep the peace in. 160 Cartographic images of the world play a part in encouraging action on a global scale, just as national maps encourage a sense of national unity as shall be discussed in chapter 6. Short argues that the first image of earth from space contributed to a sense of a shared world which required shared action; ¹⁶¹ world maps, however, have been encouraging a global view since Columbus, and yet they do not necessarily promote 'shared global action' as he claims, but also individual action on a global scale.

Added to the way maps become tools for simplifying the territory they depict and encouraging action in or on that territory, we must remember that maps *cannot* depict everything that happens on the ground, and this has real implications for how

¹⁵⁶ Milton J. Esman, An Introduction to Ethnic Conflict, p. 206

¹⁵⁷ Amadife and Warhola, 'Africa's Political Boundaries⁷, p. 534.

¹⁵⁸ Pickles, A History of Spaces, p. 145.

¹⁵⁹ Jacob, The Sovereign Map, p. 99.

¹⁶⁰ Higate and Henry, *Insecure Spaces*, p. 99.

¹⁶¹ Short, *The World Through Maps*, p. 214.

decision makers view territory, especially in terms of military operations. As Sébastien Caquard and others argue, maps 'dehumanize' the landscape by not depicting the brutality of conflict, and thus 'make it easier for decision makers [...] to avoid conscience related issues to the impact any of their decisions might have on the population of the mapped area.' 162 Thus, we have the image of decision makers making decisions on a map which cannot depict the violent consequences of their decisions: decision makers move markers and mark targets, decisions that will cause widespread destruction on the ground, but destruction that will not be shown on the map [appendix 27]. This reminds us of an important consequence of map use: maps are not the ground they depict, and for both technical and political reasons, cannot show everything that is on the ground. 163 All viewers of maps should be aware, therefore, that maps are sanitized simplifications of reality and recognize that action on the map does have consequences for people on the ground. In the fifty issues of The Economist that were looked at as part of this paper's research, 84 percent of the maps were political maps which dealt with conflict [appendix 9], and yet the cartographic images displayed none of the violent results of the conflicts depicted [appendices 33/34].

How Maps use Decision-Makers:

Decision makers use maps which have practical implications on the ground, yet as we have argued in previous chapters, the cartographic images and maps that pervade society in the media, in our education and elsewhere have a great effect on our geopolitical understanding of the world. It is the argument of this paper that decision makers and the public should know, not just how maps work as technical representations of location, but how maps are working politically; how political maps are telling a particular political narrative. If you know how to read maps as socially constructed objects with an understanding of the meanings they entail, you can use them more effectively. There is a real need for decision makers and others not to be taken in by cartographic depictions which claim to show the world objectively. Thomas Barnett's 'The Pentagon's New Map' [appendix 8] and Samuel Huntington's 'Clash of Civilizations' [appendix 1] have both been used to justify policy decisions,

¹⁶² Caquard and Taylor, 'What is Cinematic Cartography?', p. 7; see also Harley, 'Deconstructing the Map', p. 18; Black, *Maps and Politics*, p. 152.

¹⁶³ Rekacewicz, 'A political look at territory'.

where the former, as Monmonier argues, rationalized the occupation of Iraq and put the case for 'future interventions throughout the Gap, presumably with wider support from Core nations, on the opposite side of its ominous, convincing boundary.' ¹⁶⁴ Furthermore, decision makers should develop a more critical understanding of maps so that they can react to them rationally rather than instinctively. The initial reaction to the map in **appendix 26** sees Israel as a tiny state surrounded by the black oppressive homogenous bloc of surrounding Arab states, promoting a sense of powerful encirclement. Yet decision makers should be able to react rationally, and recognize that the map does not show differences between the states in its dark bloc, says nothing of Israeli military power and is silent on the impact of nuclear weapons.

Lessons for Leaders: a Cartographer's Cookbook?

Black argues that 'issues of symbolization do not worry, and are not relevant to, the vast majority of map-users and are not explained to them.' He is perhaps correct in thinking that symbolization in maps does not 'worry' map-users, but it is the argument of this article that, not only is it relevant to map-users, but that cartographic symbolization *should* be explained to them. Since the use of maps and cartographic images is so widespread, for representing the world and explaining conflicts, with official, educational and media cartography playing a dominant role in cartographic dissemination, and since these maps, as argued above, consequently play a vital role in our geographical and geopolitical understanding of the world, then it is vital that decision makers in particular understand how maps create meaning and how they work politically.

Hall writes that meanings 'regulate and organize our conduct and practices' and that 'they are also [...] what those who wish to govern and regulate the conduct and ideas of others seek to structure and shape.' This is why it is important for decision makers to be critically aware of mapping practices and their effect on our understanding of the world and international relations, and why we need a "Cartographer's Cookbook" to explain these practices to them. They should recognize, for example, how cartographic practices work to promote different political views of the world and perpetuate particular discourses, such as the NATO Cold War world

¹⁶⁴ Monmonier, 'Cartography', p. 222.

¹⁶⁵ Black, Maps and Politics, p. 24.

¹⁶⁶ Hall. Representation, p. 4.

with aggressively red Russia facing calm blue NATO across the Arctic and the Russian equivalent showing its encirclement by NATO countries [compare appendices 3 & 4]¹⁶⁷ As Weldes states, there must be a language shared [...] by those state officials involved in determining state action and by the audience for whom state action must be legitimate. The Cartographer's Cookbook will explain this shared language for decision makers and their audience in order to promote a better understanding of cartographic practices. It is to this 'Cartographer's Cookbook' that we now turn.

CHAPTER 5a - The Cartographer's Cookbook – Political Maps

Since this paper asserts that maps are social constructions that are viewed through intersubjective codes of meaning, we must establish the mapping practices and symbolization involved in their social construction, in order to reveal their political narrative and show how knowledge of international relations is created, perpetuated, and reinforced through the cartographic construction of the world. To do this, we outline a set of questions that should be asked about any map or cartographic image in order to develop a critical awareness of the social construction of maps and to read their implicit political messages. These questions, in this chapter and the next, will address the mapping practices involved and apply them to a number of maps and cartographic images in order to emphasise their relevance and power.

Choice and Cartographic Silence

The first question to ask is, what is or is not being shown in the map? In other words, is there anything that *should* be presented in the map in order to represent the area depicted in a more comprehensive manner? This question strikes at the heart of cartographic representation: 'map-makers have to choose what to show and how to show it, and by extension, what not to show.' As argued above, to know what is not being shown requires prior knowledge of the world external to the map. Although the enlightened West riled at the deliberate omissions in Soviet maps, Western maps are guilty of similar offences, where Ordnance Survey maps in the UK do not show

¹⁶⁷ Bord, 'Cartographie, Géographie et Propagande', pp. 18-22.

¹⁶⁸ Weldes, 'Constructing National Interests', p. 277.

¹⁶⁹ Black, Maps and Politics, p. 11.

nuclear sites or GCHQ, and US maps after 9/11 were extensively purged of 'sensitive' locations. ¹⁷⁰ Furthermore, in media articles, the choice of what to show or what not to show in a map can reflect the dominant discourse of the period; a discourse that can change over time as we see when we compare maps of the area Iraq, Iran, Turkey and 'Kurdistan' in *The Economist* from 1989 to 2009 [appendices 31-34].

In the first instance from April 1989, the mapmaker chose to depict an area called 'Iraqi "Kurdistan" [appendix 31], in a depiction from June 1989 of the same area but slightly wider, the map shows an area called 'Kurdistan' [appendix 32]. In the two maps of the same area from 2008 and 2009, however, the first shows a space entitled 'Mainly under Kurdish Control' [appendix 33] and the second a space marked as 'Areas with high proportions of Kurds' [appendix 34]. Whereas in 1989, there was more Western support for a land called 'Kurdistan', in 2009, this idea has diminished where the PKK are now referred to as Kurdish terrorists or Kurdish guerrillas. ¹⁷¹ The maps, therefore, through their choice of what to show and how to show it, reinforce the dominant discourse of the time; that is, not only are they a product of the discourse, but they represent the discourse in a clearer graphic form which powerfully and yet subtly alters our geopolitical perception of the area. Yet the Economist maps do show areas of a Kurdish nature; the map of Iraq from the UN Cartographic Section, however, passes over any mention of a Kurdish area, condemning their assertions of autonomy to cartographic silence, 172 which Black would consider to be an 'inaccurate' map of Iraq. 173 In the cartographic world, what exists is what is on the map.

Colour

The second question to ask about a map is, what are the colours used and what meanings do they connote? The use of colour is one of cartography's most powerful tools for attracting the viewer's gaze and promoting particular connoted narratives about the world and international relations. This may or not be a conscious attempt on the part of the mapmaker to manipulate the viewer, but owing to the intersubjective

¹⁷⁰ For UK maps see Neocleous, 'On Violence and Cartography', p. 420; for US maps see Monmonier, 'Cartography', pp. 219-220.

¹⁷¹ The Economist, vol. 386, nos. 8569, 1 March 2008, p. 14; see also Culcasi, 'Cartographically constructing Kurdistan', p. 699.

¹⁷² United Nations Cartographic Section, 'Iraq',

http://www.un.org/Depts/Cartographic/map/profile/iraq.pdf [accessed 2 September 2009]. Black, *Maps and Politics*, p. 117.

meanings that viewers associate with certain colours, the use of colour inevitably creates subtle intersubjective interpretations of maps that depend on the viewer's cultural background. ¹⁷⁴ In a Western cultural code it is widely agreed that Red conjures ideas of danger, conflict, blood, anger, drama, fire and Communism. ¹⁷⁵ Blue on the other hand has come to symbolize calm, neutrality, peace, Europe and UN peacekeeping. ¹⁷⁶ The use of blue and red in maps consequently connotes meanings about the depicted area. For example, [appendix 4] shows the connotatively offensive red Communist bloc facing the connotatively defensive blue NATO countries. In order to emphasise this point, we can compare the aforementioned NATO map with a more current one [appendix 29], where Russia is no longer red but a neutral beige colour – Russia is now a partner not an aggressor and its cartographic depiction supports this understanding of world politics.

The use of colour in maps also promotes the idea of unity, whether of a state, of states, or of regions. By using a single colour for a state, the colour supports the territorial homogeneity of that state: furthermore the use of shades of green – with what Vujakovic describes as its connotations of calm and productivity ¹⁷⁷ - for all states depicted in *The Economist* promotes the similarity of states and discourses of globalization, as argued above. ¹⁷⁸ It should be noted, however, that colours are understood through intersubjective shared discourses, so green can also connote ideas of Arabia or environmentalism; the interpretation of colour depends on social context and the user.

Titles & Names

The third question is, how does the title influence our interpretation of the map? The title of a map alerts us to the political narrative of the map, where it is the title that 'most directly determines the perception and comprehension of the document.' Barnett's controversial map [appendix 8], for example, is entitled 'Mapping

¹⁷⁴ Monmonier, *How to Lie with Maps*, p. 170.

See Hall, *Representation*, p. 26; Monmonier, *How to Lie with Maps*, p. 170; Jean Chevalier and Alain Gheerbrant, *Dictionnaire des symboles* (Paris: Robert Laffont/Jupiter, 1986), p. 2; Black, *Maps and Politics*, p. 54; Ó Tuathail and Agnew, 'Geopolitics and Discourse', p. 201; Higate and Henry, *Insecure Spaces*, p. 64.

¹⁷⁶ Michel Pastoureau, *Dictionnaire des couleurs de notre temps* (Paris: Bonneton, 1999), p. 72; Rekacewicz, 'La cartographie'.

¹⁷⁷ Vujakovic, 'Cartography in News Media Representations', p. 49.

¹⁷⁸ Ibid, p. 54.

¹⁷⁹ Jacob, *The Sovereign Map*, p. 192.

America's War on Terrorism: An Aggressive New Strategy': it becomes clear that the title frames the map's narrative, as the same map could be used but have a completely different meaning if entitled 'Mapping America's Imperialist Quest in the Developing World: An Aggressive Approach'. Another example is found in an *Economist* map with the title 'Causes for concern' [appendix 35]. 180 This combines with the unifying power of colour, where all the states from Morocco to Iran are painted with the same brush of 'concern'. The title encourages the viewer to see all these states as problematic, despite differences in their political make-up and possession of mediumrange missiles: the title, like the colour, simplifies and homogenizes their complexity in the same way as Huntington's 'World of Civilizations' [appendix 1]. If looked at uncritically, both maps force the viewer to adopt the same view of the world as the map's author, ¹⁸¹ which if repeated enough, as has been argued above, contributes to a dominant discourse about the world with very real implications for international relations, especially between the West and the developing world.

Along with the title of a map, we should question the naming of places in the map. Toponymy is a key feature of cartographic practice and it is by no means fixed or objective. Greek maps of Greece, for example, always name the state on their northern border as F.Y.R.O.M, 182 and yet the majority of maps of the area found in the media simply call it Macedonia - an issue of great political annoyance to the Greeks [appendix 25]. We must ask, moreover, what language are the toponyms on the map written in? The evidence of 'English linguistic imperialism' is widespread in the cartographic world. NATO maps, ¹⁸⁴ educational maps, ¹⁸⁵ media maps, ¹⁸⁶ and maps in the UN Cartographic section¹⁸⁷ show a strong tendency to use the English names for places where the 'language that names all the places of the world is symbolically appropriating them.' 188 The only exception found during research for

¹⁸⁰ 'Defence Survey (Special Report)', *The Economist*, vol. 316, no. 7670, 1990, p. 6.

¹⁸¹ Jean Paul Guérin, Représenter l'espace: L'imaginaire spatial à l'école (Paris: Anthropos, 1989), p. 4; Pickles, A History of Spaces, p. 353.

¹⁸² Former Yugoslav Republic of Macedonia; see Mainland Greece Map, http://www.greece- map.net/mainland-greece.htm [accessed 15 July 2009].

Tim Newfields, 'Book Review', *The Cultural Politics of English as an International Language* by

Alastair Pennycook (1994), Teacher Talking to Teacher, vol. 3, no. 3 1995, p. 21.

NATO, 'NATO Member and Partnership Countries', http://www.nato.int/icons/map/0706memb- part-e.pdf [accessed 14 August 2009].
 Baylis and Smith, *The Globalization of World Politics*, pp. 16-17.

¹⁸⁶ See appendices 19-21, 24/25, 30-36.

¹⁸⁷ UN, 'United Nations Cartographic Section',

http://www.un.org/Depts/Cartographic/english/htmain.htm [accessed 5 July 2009].

⁸ Jacob, *The Sovereign Map*, p. 212.

this paper was on the map of Europe from the European Union website [appendix 11], in which the countries were named in their own language; e.g. Polska instead of Poland, Österreich instead of Austria. If we seek national equality in cartographic representation, then such a use of the appropriate languages is to be welcomed.

Symbols on the Map: Lines & Borders

Another way in which maps acquire their socially constructed meaning is through the use of symbols and lines depicting borders. 189 When addressing a map critically, we must question the supposed objectivity of symbols. In the Economist 'Causes for concern' map described above [appendix 35], the symbol used to represent 'Fundamentalism in power or strong in recent elections' is a scimitar, for 'Chemical weapons' there is a head in a gas mask, and for 'Medium-range missiles' there is simply a missile. The scimitar, for example, is a particularly powerful symbol that conveys images of pre-modern violence and primitiveness to the viewer. Furthermore, it is surprising that the use of medium-range missiles is shown for Syria, Iran, Iraq and Egypt for example, but nothing is said of US missiles in Turkey which are passed over in cartographic silence. The symbols encourage an emotional response from the viewer in a similar way to how *The Times* cartographically represented massacres perpetrated by the Serbians at the end of the nineties with 'emotive skull and crossbones' and yet the symbols for NATO collateral damage were 'ambiguous yellow crosses'. 190 Symbols are socially constructed objects which, when read through intersubjective understandings of their signification, can prompt emotive responses to maps.

Lines on maps are generally used to represent borders. As Monmonier explains, 'A bold, solid line might make the map viewer infer a well-defined, generally accepted border separating different nations with homogenous populations.'191 A key question we must ask about political maps, therefore, is, are there or are there not lines depicting borders, and if not, why not? If as Monmonier argues, a solid line shows the separation between nations, then it is appropriate to assume that a political map without border lines between states creates a sense of the potential unity of these states. A clear example of this is found in the depiction of the

 ¹⁸⁹ Pickles, A History of Spaces, pp. 31-32.
 190 The Times, April 29 1999, p. 18, referenced in Vujakovic, 'Mapping the War Zone', p. 195.

¹⁹¹ Monmonier, *How to Lie with Maps*, p. 107.

European Union. A map of the Union created by someone in favour of increased political connections between European states and the diminishment of nationalism, would be expected to show a Europe without border lines: ¹⁹² the European Central Bank, for example, uses a cartographic image of Europe in its advert that is not only without borders but is also of one homogenous unifying shade [appendix 23]. Yet, this is not always the case, as the map of the European Union on the Europa website does depict the borders between states [appendix 11]. Perhaps this map does not follow the European Union's unifying discourse, or perhaps it is a counterweight to such claims in order to emphasise the inter-national and intergovernmental nature of the Union and appease those who reject the idea of a supranational European project. ¹⁹³ *The Economist* map of World Trade also does not depict borders, where this lack of frontiers supports the message of globalized world trade as an 'Engine of Growth'. ¹⁹⁴

As will be discussed further in chapter 6, the depiction of frontiers in political maps has important implications for reinforcing identities, by graphically separating states from other states and constructed regions from the areas outside the region, where we must recognize the 'political function of maps in constructing rather than merely reproducing the world and in creating rather than merely tracing borders.' 195

CHAPTER 5b - The Cartographer's Cookbook - World Maps

The issues raised by political world maps are manifold and contentious. As a way of looking at the world, as the foundational platform for global strategy and geopolitical discourse, world maps provide the viewer with an apparently all-encompassing view of the world and the states within it. World maps convey a 'powerful and lasting effect on people's impressions of the shapes and sizes of lands and seas;' 196 yet as Roosevelt proclaimed, 'great power involves great responsibility.' It is imperative, therefore, to understand the power of world maps in order to use them more effectively, and indeed more responsibly.

¹⁹² Raento, Hämäläinen, Ikonen and Mikkonen, 'Euro Coinage', p. 935.

¹⁹³ See Daily Mail, 'EU wipes England off the map'.

World Trade Survey (Special Report)', The Economist, vol. 316, no. 7673, 1990, p. 6.

Neocleous, 'On Violence and Cartography', p. 418.

¹⁹⁶ American Cartographic Association, 'The Case against Rectangular World Maps', p. 157.

¹⁹⁷ Franklin D. Roosevelt, *My Friends: Twenty Eight History Making Speeches* (Whitefish: Kessinger Publishing, 2005), p. 153.

Dominance of Cartographic Forms and the Status Quo

A key element in the strange power of world maps is the way in which they have become standardized and subsequently mass produced, to be found, as argued above, in schoolrooms, government buildings, media articles, advertising and more: 'The authority of the map derives from the fact that it circulates a single representation of space among its users.' 198 The world becomes the political world map, where the ubiquity of its representation establishes the power of its message – that we live in a world made up of territorial sovereign states with strictly defined borders, ¹⁹⁹ that the states on the map are the only legitimate actors in international relations, ²⁰⁰ and that there is nothing problematic about the straight lines that carve up the African continent.²⁰¹ The dominance of the world political map as a representation of the world serves to reify and legitimize the international state system, lending credence to the status quo and perpetuating a particular hierarchical understanding of the world, where 'the more powerful, the more prominent.' States are shown on the map, but people, the fluid space of borderlands and states seeking independence are not [appendices 6, 8, 28, 29]. 203 Even if the name of a state does not appear on the map, its shape with its strong borderlines forces the viewer to see only states, creating a shared discourse about the world through which we understand and operate in the world. As a socially constructed representation, the political world map encourages the viewer to see the world through the eyes of society's dominant representation of the world. This does not mean, however, that it is or should be the representation of the world, and the increasing use of maps to depict flows, regions, and populations lends legitimacy to alternative views of the world.²⁰⁴

Mercator versus Peters

Political world maps, however, do not just show states; they show the relative size of these states and their relative position in the world. Yet the representation of their size

¹⁹⁸ Jacob, *The Sovereign Map*.

¹⁹⁹ Elden, 'Contingent Sovereignty', p. 11.

²⁰⁰ Neocleous, 'On Violence and Cartography', p. 416.

²⁰¹ Amadife and Warhola, 'Africa's Political Boundaries', pp. 543-544.

²⁰² Harley, 'Deconstructing the Map', p. 9.

Neocleous, 'On Violence and Cartography', p. 416.

²⁰⁴ See Worldmapper 'Worldmapper: The world as you've never seen it before', http://www.sasi.group.shef.ac.uk/worldmapper/index.html

or position or the orientation of the world is by no means fixed or objective; they are once more shown to be socially constructed representations of the world which significantly affect our mental geopolitical understanding of the world with inevitable implications for decision makers who view world maps. Before addressing issues of size, where the map is centred and its orientation, we must first establish the framework for such a discussion, and the Mercator versus Peters debate provides such a framework [appendix 7].

The 1569 Mercator projection of the world has been much maligned for the way it depicts Greenland as almost the same size as Africa and exaggerates the size of Europe and the developed 'North'. 205 It is true that Mercator's map overemphasises 'the North', but it is, I believe, unjust to criticise his projection as a map, owing to the reason why he created the projection. It was not created to show the relative size of different lands, but rather to facilitate navigation for sailors, so they could correctly use the map with a compass; its title should alert us to this fact – 'Nova et Aucta Orbis Terrae Descriptio ad usum Navigantum emendate accommodate²⁰⁶ - A New and Enlarged Description of the Earth with Corrections for Use in Navigation.'207 When used for navigation the Mercator projection is to be commended. However, what should be criticised is not the map itself, but its continued and widespread use to depict the world in media unconnected to its original navigational purpose. In a 2009 world map featured in The Guardian, it is stated that 'The Mercator is well-known and familiar: it is the standard map used in most schoolbooks and newspapers; it arguably has the clearest depiction of all countries'. 208 Furthermore, the Mercator projection is used in 'Google Maps' 209 and in advertising [appendix 37]. As discussed earlier, 'Social constructions become common sense when they have successfully defined the relationship of particular representations to reality as one of correspondence; 210 the widespread use of the Mercator projection has made it become 'the standard map used' as The Guardian affirms, and as such its social construction should be recognized and its dominance questioned.

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²⁰⁵ Campbell, 'Poststructuralism', pp. 204-205.

Jacob, *The Sovereign Map*, p. 198; see also **appendix 26**.

²⁰⁷ Denis Wood, Ward L. Kaiser, and Bob Abrahams, *Seeing Through Maps: Many ways to see the world* (Amherst: ODT Inc., 2006), p. 5.

²⁰⁸ The Guardian, 'The Guardian map of the world', April 18 2009.

²⁰⁹ See Google Maps, http://maps.google.co.uk; zoom out for the world map.

²¹⁰ Weldes, 'Constructing National Interests', p. 303.

What, however, are the alternatives? The map most often offered as a counterweight to the Mercator is the Peters Projection [appendix 7], ²¹¹ which purports to offer an equal-area map of the world that is 'fairer' to developing countries. His projection was applauded by aid organizations such as UNICEF and Christian Aid, was adopted by Oxfam, and used for the cover of the Brandt Report on International Development. ²¹² Despite its popularity, however, Peters' map is flawed in a number of ways: regarding his arguments about size, the Eurocentric nature of the map, its English linguistic bias, and its conventional North-South orientation. Questions about these issues should form a key part of the critical viewer's cartographic cookbook, and it is to these issues that we now turn, using Peters' projection as a springboard.

Size

Peters argued that size on the map implies importance, and that anyone looking at a Mercator world map would think that since the Soviet Union was bigger than Africa on the map, then the Soviet Union was more important. Yet importance is not just about cartographic or even geographic size. It is telling, for example, that Peters does not suggest that Greenland, with its greatly increased cartographic size, will be considered as important as the Soviet Union. Meaning, as this paper established above, is created through the interaction of the socially constructed map and the intersubjective knowledge the map viewer brings to the map reading process. Some viewers may see size as equating importance, but this depends on the shared discourse through which they view world maps. Furthermore, even if we accept that a viewer may think that 'relative size on the map corresponds to relative size in the world,'214 does relative size in the world actually testify to increased importance and power? Australia is almost the same size as China, but that tells us nothing about their vastly different populations or economic power. For this reason, there is an increasing call to use population cartograms - 'hybrid map-diagrams which show the size of states

²¹¹ Crampton and Krygier, 'An Introduction to Critical Cartography', pp. 22-23.

²¹² Black, *Maps and Politics*, pp. 35-37; Vujakovic, 'Whatever Happened to the 'New Cartography'?', p. 370.

²13 Cited in Wood, Kaiser and Abrahams, Seeing Through Maps, p. 11.

²¹⁴ Alan M. MacEachren, *How Maps Work: Representation, Visualization and Design* (New York: Guilford Press, 1995), p. 315.

relative to their population.'²¹⁵ Even then, however, we must be careful about arguing for correlations between population size and power just as we should be between cartographic size and power, since a correlation is not necessarily an explanation. The size of cartographic states do affect a viewer's geographical understanding of the world, but only affect their political worldview when understood through the non-cartographic knowledge and narratives that a viewer brings to a map.

Omphalo-centrism

If Peters' projection sought cartographic justice for the developing world, then it was flawed in the way that it was still centred on Europe. The centre of world maps 'plays an important role in guiding our perceptions of the world.' Not only is there a certain semantic power in describing somewhere as "the centre of the world", but it is also argued that the viewer's gaze is automatically attracted to the centre of a map in what Jacob calls the 'Omphalos syndrome'. A critical viewer of a world map, therefore, should question why the map is centred on a particular area and what this might imply. Eurocentric maps, for example [appendix 6, 8, 29], reinforce a sense of Europe as the centre of the world, the cradle of civilization. To centre the map elsewhere is to make a political statement about the world; a political statement 'McArthur's Universal Corrective of the World' [appendix 38] makes very clearly, and to which we now turn.

Upside-down Maps

Stuart McArthur's map is not only centred on Australia, but is also upside-down. The phrase 'upside-down', however, betrays the overwhelming dominance of world maps which place North at the top and South at the bottom. As Short notes, 'We live in a spherical world where there is no obvious top or bottom and in a universe where the terms "top" and "bottom" have no meaning.' Just as there is a semantic power in the phrase 'the centre of the world', the same is the case for 'top' and 'bottom', where the top is generally better than the bottom: the top of the class, the bottom of the

²¹⁵ Vujakovic, 'Whatever Happened to the 'New Cartography'?', p. 372; see also Worldmapper 'Worldmapper', http://www.sasi.group.shef.ac.uk/worldmapper/index.html

²¹⁶ Short, *The World Through Maps*, p. 15.

²¹⁷ Omphalos is the Greek word for 'navel': Jacob, *The Sovereign Map*, p. 133.

²¹⁸ Short, *The World Through Maps*, p. 14.

league table. To turn a world map 'upside-down', as this paper encourages the reader to do, both literally and metaphorically turns the viewer's world upside-down. A Eurocentric map turned on its head increases Africa's prominence and Europe shrinks in dominance beneath the cartographic weight of the African continent. It is the belief of the author, that turning a map upside down encourages fresh thinking about the world, and should therefore be promoted: it is not, however, about fixing this particular orientation, but about changing orientations in general.

Different Orientations

Different orientations, as argued above, provide different views of the world, and are often chosen specifically to make the viewer adopt the same viewpoint as the mapmaker or their sponsor. There is nothing natural about a particular orientation; it is the dominance of socially constructed beliefs that makes it seem so.²¹⁹ Medieval mappa mundi, for example, centred the world on Jerusalem and placed the east on top. 220 To take a more contemporary example, the map 'NATO in the World' [appendix 4], adopts a polar-centric projection, but orientates it so that the viewer adopts the position of NATO countries facing the Communist bloc opposite. This inevitably encourages identification with the NATO space instead of the Communist bloc. A critical map-reader should ask why a particular orientation has been chosen and what political purpose it serves. The advert for the European Central Bank discussed previously [appendix 23], views the European space from a low Mediterranean angle, thereby lessening the cartographic space between the UK and France, Poland and Scandinavia. Its political message supports the idea of a more unified territorial European space, an idea with inevitable consequences for questions of European identity, and it is to questions of cartographic identity that this paper now turns.

²¹⁹ Jacob, *The Sovereign Map*, p. 215. ²²⁰ Short, *The World Through Map*, p. 14.

CHAPTER 6 – Questions of Identity

Since political maps and cartographic images have been shown to be social constructions that create and perpetuate particular political meanings about the world, and since, as was argued in chapter one, meaning contributes to the construction of identity, then maps can contribute to the construction and affirmation of identities - the aforementioned cartographic feedback loop combines with Andersonian conceptions of 'imagined communities' in order to reinforce national or regional identity through mapping practices which this paper will now address.

The Political Act of Framing

It is an easily overlooked fact that to frame a map is to make a statement about the world. It is not only the borders *within* a map that are important, but it is the border *of* the map which is vital to the cartographer's construction of the world. Framing a map is a cartographic practice that 'delimits a portion of territory to be represented,'222 and this delimitation entails a political choice. A map of Europe which includes Turkey tells a different narrative to a map of Europe that does not. The cartographic image used on Euro coins, for example, includes Cyprus, but Cyprus has been moved significantly to the West so that it is possible not to show Turkey, 'whose candidature for EU membership alarms many an existing EU state.'223 Just as 'regions lie where politicians want them to lie', 224 maps place a frame on the world where mapmakers want them to be placed. To frame a map of Europe, the Middle East, or Africa is to make political statements about the existence of areas called Europe, the Middle East and Africa, which lends credence to ideas of regional importance. The border of a map, therefore, reinforces the fact that cartography is a political practice involving 'delimitation, selection, and abstraction of a part from the whole.'225

²²¹ See Benedict Anderson, *Imagined Communities: Reflections on the Origins and Spread of Nationalism* (London: Verso, 1991).

²²² Jacob, *The Sovereign Map*, p. 107.

²²³ The Economist, 'To coin a phase', *The World in 2008*, 2008, p. 58.

²²⁴ Joseph Nye, cited in Neumann, 'Uses of the Other', p. 116.

²²⁵ Jacob, *The Sovereign Map*, p. 108.

Cartographic Homogenization

What I term the "cartographic homogenization impulse" refers to the way cartographic depictions of states or regions promote the idea of spatially territorialized entities as homogenous unified spaces. This is achieved through the widespread use of a single colour or shade to mark a state or area where this single chromatic bloc is juxtaposed with that of a neighbouring space. ²²⁶ A look at the majority of the maps in this paper's appendix confirms this ubiquitous use of single colours or shades to represent a territorial entity such as a state or region.²²⁷ Although this does achieve cartographic clarity, it also promotes the simplifying rhetorical and politically influential process whereby 'a complex, diverse and heterogeneous social mosaic of places is hypostasized into a singular, overdetermined and predictable actor.'228 A state or region is far more complex and dynamic than its cartographic counterpart. Huntington's world map [appendix 1], for example, is guilty of this mapping practice as he vastly simplifies the world into neatly defined homogenous chromatic areas in order to support his 'Clash of Civilizations' argument. 229 Yet if the shades he used truly represented the adherents to particular religious denominations, then the map would no longer contain homogeneous blocs, but rather would be an extremely complex mosaic of colour and shades that would undermine Huntington's civilizational argument and emphasise the messy complexity of the world over the aesthetic clarity of maps. The cartographic homogenization impulse encourages both the public and decision makers to see a world made up of homogenous spaces, which in the current international system are predominantly states. ²³⁰ Political maps encourage state-centric analyses of international relations and their power lies in their ability to portray the state system as a natural objective fact.

This cartographic homogenization impulse has important practical implications on the ground, as well as implications for identity. UN Peacekeeping Operations apply a 'generic cartographic template' to all their operations, which

²²⁶ Black makes a similar point, referring to the sanitization of cartographic space - Black, *Maps and Politics*, p. 116.

²²⁷ See appendices 6, 11, 12, 23.

²²⁸ Ó Tuathail and Agnew, 'Geopolitics and Discourse', p. 202; see also Joe Painter, 'Cartographic Anxiety and the Search for Regionality', *Environment and Planning A*, vol. 40, 2008, p. 346.
²²⁹ See Samuel P. Huntington, 'The Clash of Civilizations?' in Gearóid Ó Tuathail, Simon Dalby and Paul Routledge (eds.), *The Geopolitics Reader* (2nd edition) (Abingdon: Routledge, 2006), pp. 136-144.
²³⁰ Painter, 'Cartographic Anxiety', p. 352.

partitions the deployment area into different sections requiring different actions.²³¹ The cartographic homogenization impulse operates here with the socially constructed implications of colour mentioned above, where the territory is split into zones and where the 'red zone' is considered most dangerous.²³² To label a zone 'red' means that UN peacekeepers will react differently to the indigenous population in such a zone than they would in a green zone. The population becomes defined by their zone where the potentially heterogeneous complexity of the population is simplified into a cartographic identity that 'captures little of the positive face of human existence in these places.'²³³

The cartographic homogenization impulse is quite effective in the construction of imagined communities: if a decision maker seeks to promote national or regional identity, they should understand how this cartographic practice works in order to use it more effectively, as will now be argued.

From Cartographic Nationalism to Supranationalism

'A polity defines itself, and is defined by others, in part through its cartographic image.' ²³⁴ Ever since territory has been linked with sovereignty in the post-Westphalian world, the two have come together to create an identity based on distinct sovereign territory. ²³⁵ It is predominantly through national maps that the territory is known, and national maps therefore contribute to the formation of a national identity. The national territory in cartographic form provides a powerful image of the state as a unified, homogenous entity with which its citizens can identify, yet showing little of the inherent social complexity within the state. ²³⁶ This image naturalizes the existence of particular states with particular borders through its repeated use, as argued above, in schoolrooms, the media and advertising [appendix 30/39]. This is an example of the 'banal nationalism' that promotes national images in our everyday surroundings, subtly reinforcing our sense of national identity so that it seems completely natural; ²³⁷ the socially constructed cartographic image finds its power in its apparent objectivity.

²³¹ Higate and Henry, *Insecure Spaces*, p. 54.

²³² Ibid, p. 64.

²³³ Ibid, p. 64.

²³⁴ Black, Maps and Politics, p. 88.

²³⁵ Neocleous, 'On Violence and Cartography', p. 411.

²³⁶ Ibid, p. 421.

Raento, Hämäläinen, Ikonen and Mikkonen, 'Euro Coinage', p. 930.

The map of the UK, for example, repeated in all types of media, reinforces a sense of UK identity – as distinct from a European one - through its emphasis on the insular. If we compare **appendices 16** and **17** which both show the UK, we see that appendix 17 does not show the edge of Belgium or France in the place where it should be, as appendix 16 from the European Union map of the UK shows. Since the cartographic image of a state is a key component in the identity of its citizens, the continued use of images of the UK surrounded by water and without continental Europe contributes to the UK's isle-monkeyism (from the German 'Inselaffe') – a term describing the UK's both literal and metaphorically insular stance towards Europe – and contributes to the popular discourse that treats the UK as a homogenous entity that is separate and distinct from its European neighbours.²³⁸

Since a cartographic image of an area can encourage a sense of national identity, then it follows that cartographic images can also be used to create a sense of supranational identity; a concept European Union decision makers must recognize if they wish to promote a distinct form of European identity.²³⁹ As discussed above, a map framed round Europe takes the first step in the cartographic creation or affirmation of such an identity. It is a generally agreed - though socially constructed idea, that there exists an area of space on the earth called Europe. 240 Within this space, however, there are a number of nation states with distinct borders. The European Union seeks to diminish the importance of these national borders and promote economic – and potentially political – unity among the component states. ²⁴¹ The Schengen Agreement is one element of this process, allowing the free movement of peoples across the borders of signatory states.²⁴² Yet maps of the Schengen territories seem inappropriate in that they continue to show the borders the agreement seeks to eliminate [appendices 13, 40]. If European decision makers are to promote a European identity, they will require the cartographic tools discussed in earlier chapters. A more effective map to promote European identity would show Europe in a single homogenous colour bloc with no internal but strong external boundaries

²³⁸ See Daily Mail, 'EU wipes England off the map'.

²³⁹ Raento, Hämäläinen, Ikonen and Mikkonen, 'Euro Coinage', p. 935.

See Elden on the 'Treaty Establishing a Constitution for Europe' - Elden, 'Contingent Sovereignty', p. 12.

p. 12. See Emerson, *Redrawing the Map of Europe*.

²⁴² Europa, 'The Schengen Area and Cooperation',

http://europa.eu/legislation summaries/justice freedom security/free movement of persons asylum immigration/133020 en.htm [accessed 12 August 2009].

[appendix 41]. It could show Europe from a lower angle so as to deemphasise the space between the UK and France [appendix 23], or could depict the Channel Tunnel, providing a symbolic and influential connection between continental Europe and the 'insular' UK. It would contain the title 'EUROPEAN UNION' emblazoned across the space. The whole area could be placed in a Eurocentric projection of the world to emphasise its symbolically central influence on the world. If such a map were promoted and disseminated in schools, the media and official EU cartography, then, following this paper's argument, it would lead to a greater sense of the cartographic naturalness of European identity. It is outside the scope of this article to discuss the merits or demerits of the European project, but from a cartographic point of view it is an excellent example of how maps can be made to work politically.

CONCLUSION

Maps can no longer be considered as objective depictions of the world as it is; they are socially constructed images of the world as it is seen to be. Through shared discourses and intersubjective knowledge, maps become political statements about reality that reinforce particular narratives, support particular identities, and perpetuate particular representations. Their widespread use in the media, by government and for education, as powerful images for representing the world and tools for acting in the world, necessitates a deeper and more critical understanding of the way in which they operate politically. Beneath the ubiquitous belief in the objectivity of maps, we find a plethora of mapping practices that betray their socially constructed nature and alert us to how they help create and perpetuate dominant discourses about the world. Whenever we see a map we should question the way in which cartographic choice, colour, the title, names on the map and lines dividing the world affect our understanding of the world and the states within it. We should recognize the political implications of using one orientation over another, of framing a map round a

demarcated space, and of using a single colour to depict a homogeneous spatial form with its role in perpetuating simplified discourses about international relations. Since maps and cartographic images significantly influence our mental geopolitical image of the world, it is vital that decision makers understand the mapping practices involved in the cartographic construction of the world, not only to be critically aware of their own cartographic education, but also in order to use maps more effectively.

Yet how can we use maps more effectively? A map's effectiveness depends on its purpose.²⁴³ As we saw with the Mercator projection, a map succeeds if it is used for the reason it was created. Maps and cartographic images, however, are used for a variety of purposes, and as this article has argued, their political message may be implicit and as such it will be difficult to measure whether the message it purports to send is the same as the one a viewer receives through the intersubjective codes through which they read a map. Individual political maps help create and perpetuate dominant understandings of the world, with the aforementioned implications for statebased identity and a tendency to homogenise and reify spaces and geospatial identities. In order to break away from the reifying and homogenising power of cartographic representation, we must seek to represent the complexity of the world in cartographic plurality. That is, we should consciously use numerous maps and different orientations of the same space in order to better understand it. A national map viewed in conjunction with a supranational map next to an inverted map of the world and a population-cartogram would much better help us understand the space we were attempting to comprehend. Thinkers have often toyed with the idea of an ideal map, yet as Jorge Luis Borges comically demonstrates, the ideal map ends up being the

²⁴³ Wood, Kaiser and Abrahams, Seeing Through Maps, p. 12.

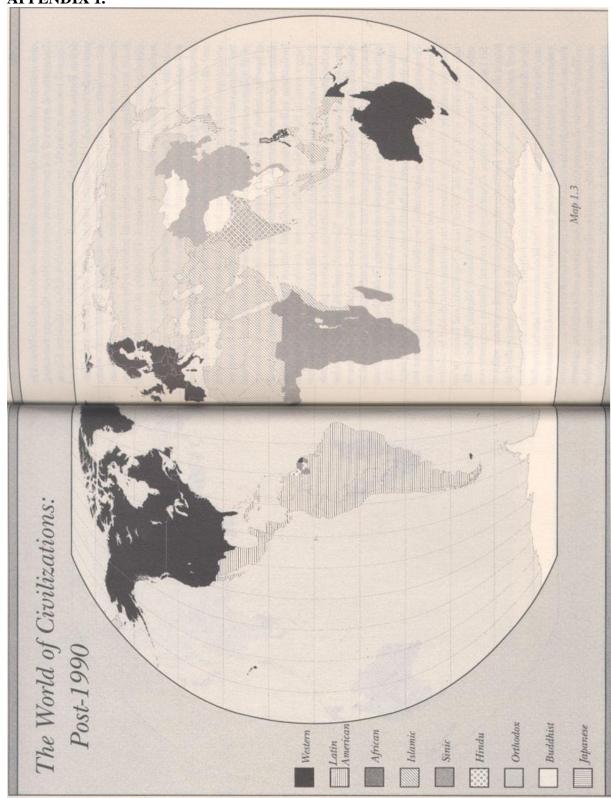
same size as the territory it wishes to depict – and is therefore of no use to anyone.²⁴⁴ We should not seek a utopian ideal map, but we should address all maps critically and constantly change the maps we use in order to change the way we view the world. By adopting the cartographic orientations of others and recognizing the political nature of maps, alternative cartographies will help encourage mutual understanding among peoples, not despite the maps' power, but precisely *because* of the strange power of maps.

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²⁴⁴ Jorge Luis Borges, 'On Rigor in Science' in M. Boyer & H. Morland (trans.), *Dreamtigers* (Austin: University of Texas Press, 1964), p. 90.

APPENDIX

APPENDIX 1.



Huntington, Samuel P., The Clash of Civilizations (Simon & Schuster: New York, 1996), p. 26.

APPENDIX 2.

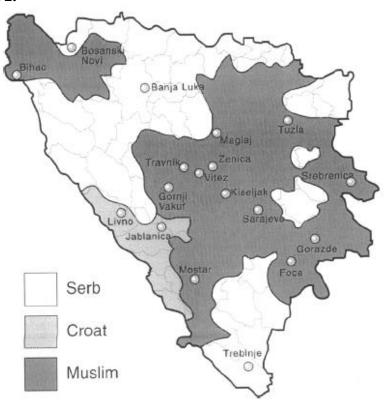


Figure 1. Ethnic majority areas in Bosnia as derived from the 1991 census. (Source: Department of State, 1993).



Figure 2. The partition of Bosnia according to the Dayton Peace Accords.

Crampton, Jeremy W., 'Bordering on Bosnia', *GeoJournal*, vol. 39, no. 4 (1996 – August), pp. 353-361, pp. 355-356.

APPENDIX 3.

Le monde vu de Moscou

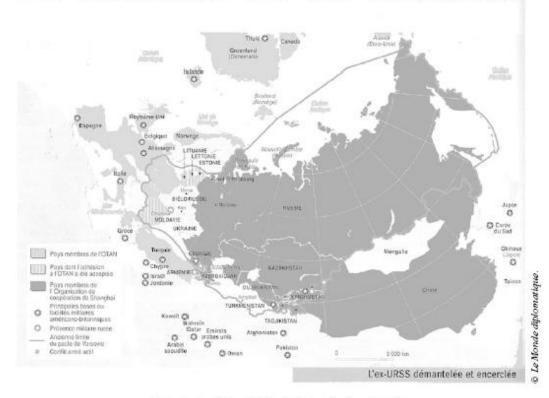
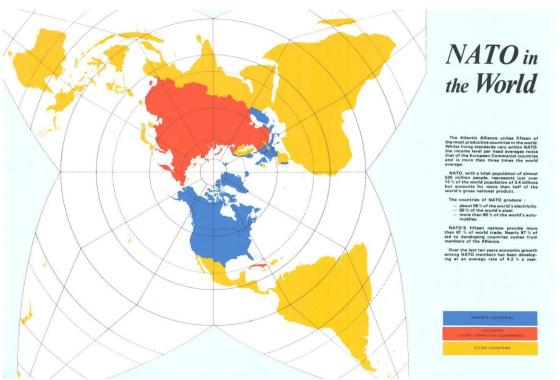


Illustration 1 - L'Atlas du Monde diplomatique janvier 2003

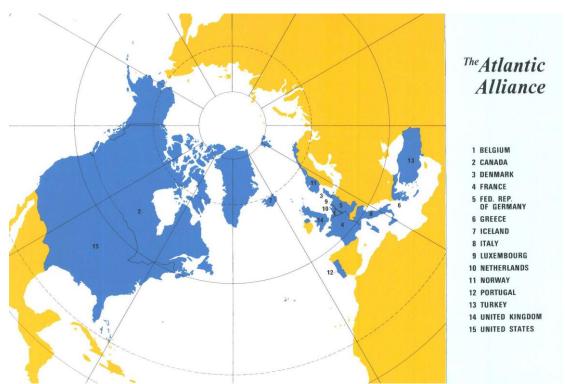
Bord, Jean-Paul, 'Cartographie, Géographie et Propagande : De quelques cas dans l'Europe de l'aprèsguerre', *Vingtième Siècle: Revue d'histoire*, 80 (October-December), 2003, p. 23.

APPENDIX 4.



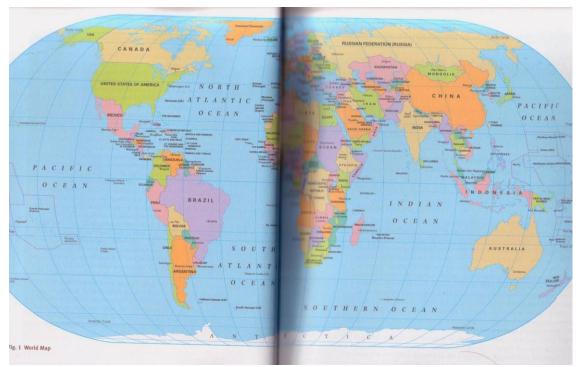
NATO, 'NATO in the World', http://www.nato.int/education/images/posters/otan-07.pdf [accessed 14 August 2009].

APPENDIX 5.



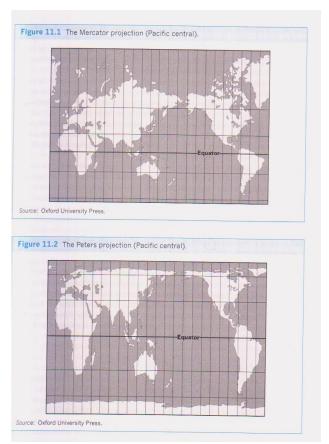
NATO, 'The Atlantic Alliance', http://www.nato.int/education/images/posters/otan-08.pdf [accessed 14 August 2009].

APPENDIX 6.



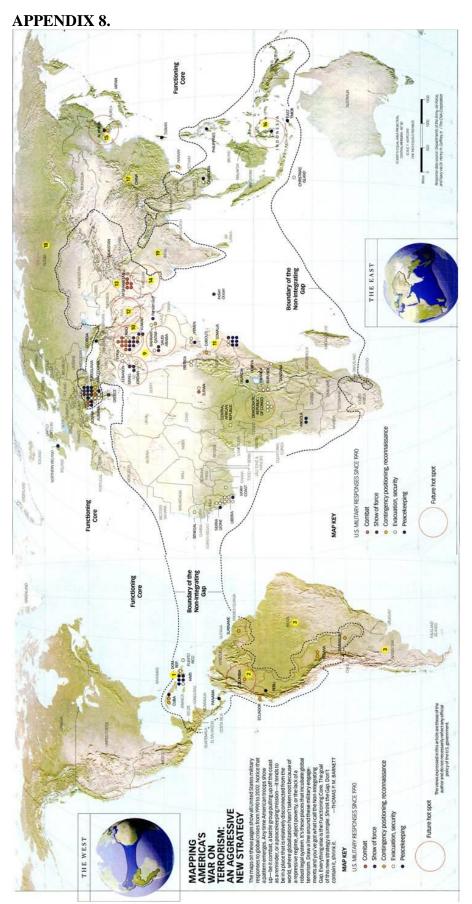
Baylis, John and Steve Smith, *The Globalization of World Politics: An Introduction to International Relations* (3rd edition) (Oxford: Oxford University Press, 2006), pp. 16-17.

APPENDIX 7.



[Pacific-central – The original Peters Projection is Eurocentric]

Campbell, David, 'Poststructuralism' in Tim Dunne, Milja Kurki and Steve Smith (eds.) *International Relations Theories: Discipline and Diversity* (Oxford: Oxford University Press, 2007), p. 205.



Barnett, Thomas P.M, 'The Pentagon's New Map', http://www.thomaspmbarnett.com/images/pentagons new map.jpg [accessed 9 July 2009].

APPENDIX 9. The Economist Maps:

Vol. 311 - 1989	Maps Total	Political Maps	Advert Maps	Globe Image
No. 7596	3	3		
No. 7597	2	2		
No. 7598	4	4		
No. 7599	3	3		
No. 7600	0	0		
No. 7601	2	2		
No. 7602	3	3		
No. 7603	3	1	2	
No. 7604	2	2		
No. 7605	4	3		1
No. 7606	2	2		
No. 7607	4	4		
No. 7608	4	3		1
Total	36	32	2	2
Average	2.8	2.5		

Vol. 316 - 1990	Maps Total	Political Maps	Advert Maps	Globe Image
No. 7662	5	4	1	
No. 7663	5	2	3	
No. 7664	2	2		
No. 7665	3	2	1	
No. 7666	1	1		
No. 7667	2	1	1	
No. 7668	6	5	1	
No. 7669	2	2		
No. 7670	5	5		
No. 7671	1	1		
No. 7672	2	2		
No. 7673	3	3		
No. 7674	4	3	1	
Total	41	33	8	
Average	3.2	2.5		

Vol. 386 - 2008	Maps Total	Political Maps	Advert Maps	Globe Image
No. 8561	7	6	1	
No. 8562	6	4		2
No. 8563	9	6	3	1
No. 8564	6	3	2	1
No. 8565	NA	NA	NA	NA
No. 8566	16	15	1	
No. 8567	11	9	1	1
No. 8568	9	9		
No. 8569	14	12	2	
No. 8570	15	14	1	
No. 8571	14	13		1
No. 8572	10	7	1	2
No. 8573	10	9		1
Total	127	107	12	9
Average	10.6	8.9		

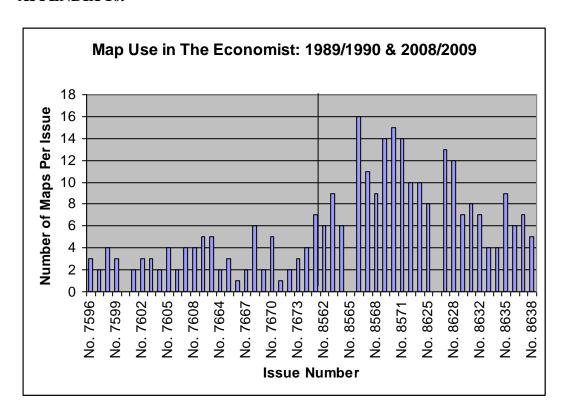
	Maps		Advert	
Vol 2009	Total	Political Maps	Maps	Globe Image
No. 8625	8	7	1	
No. 8626	NA	NA	NA	NA
No. 8627	13	12	1	
No. 8628	12	11	1	
No. 8630	7	5	1	1
No. 8631	8	6	1	1
No. 8632	7	6	1	
No. 8633	4	3		1
No. 8634	4	4		
No. 8635	9	8	1	
No. 8636	6	5		1
No. 8637	7	6	1	
No. 8638	5	4	1	
Total	90	77	9	4
Average	7.5	6.4		

The Economist, vol. 311, nos. 7596-7608, 1989. *The Economist*, vol. 316, nos. 7662-7673, 1990.

The Economist, vol. 386, nos. 8561-8573, 2008.

The Economist, vol. 392, nos. 8625-8638, 2009.

APPENDIX 10.

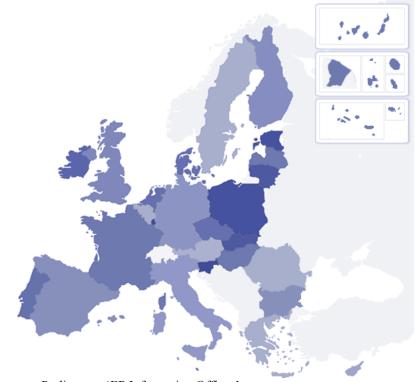


APPENDIX 11.



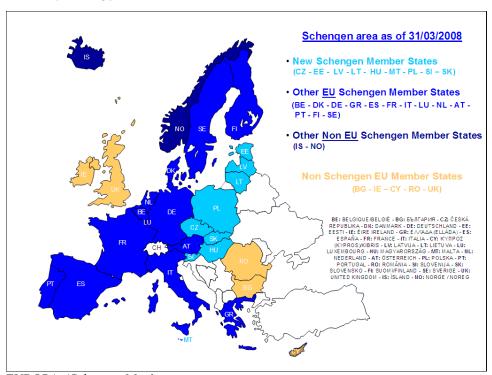
EUROPA, 'Europe', http://europa.eu/abc/maps/index en.htm [accessed 7 August 2009].

APPENDIX 12.



European Parliament, 'EP Information Offices', http://www.europarl.europa.eu/parliament/public/nearYou.do [accessed 30 July 2009].

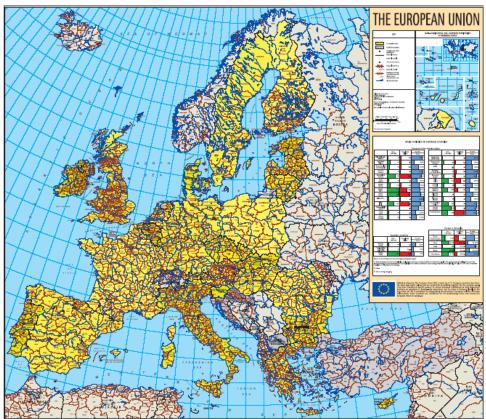
APPENDIX 13.



EUROPA, 'Schengen Map',

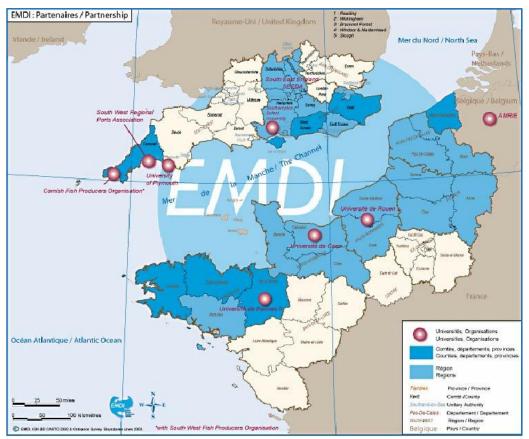
http://ec.europa.eu/justice home/fsj/freetravel/map/wai/fsj freetravel map en.htm [accessed 19 August 2009].

APPENDIX 14.



EUROPA, 'School wallmap of Europe', http://ec.europa.eu/unitedkingdom/pdf/map.pdf [accessed 19 July 2009].

APPENDIX 15.



Daily Mail, 'EU wipes England off the map', http://www.dailymail.co.uk/news/article-561342/EU-wipes-England-map--Gordon-Brown-flies-flag-St-George-Downing-Street.html [accessed 20 July 2009].

APPENDIX 16.



EUROPA, 'Europe – The United Kingdom', http://europa.eu/abc/maps/members/uk_en.htm[accessed 7 August 2009].

APPENDIX 17.



 $Bristol\ University,\ `Maps\ and\ Travel\ Information-Bristol\ in\ the\ UK', \\ \underline{http://www.bristol.ac.uk/university/maps/bristol-uk-small.html}\ [accessed\ 7\ August\ 2009].$

APPENDIX 18.



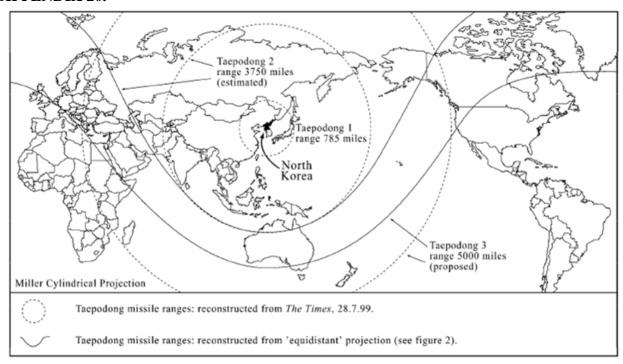
HM Revenue and Customs, 'Land, Buildings and their Contents', http://www.hmrc.gov.uk/heritage/lbsearch.htm [accessed 7 August 2009].

APPENDIX 19.



BBC, 'Eurocrats leave Wales off EU map' http://news.bbc.co.uk/1/hi/wales/3715512.stm [accessed 19 August 2009].

APPENDIX 20.



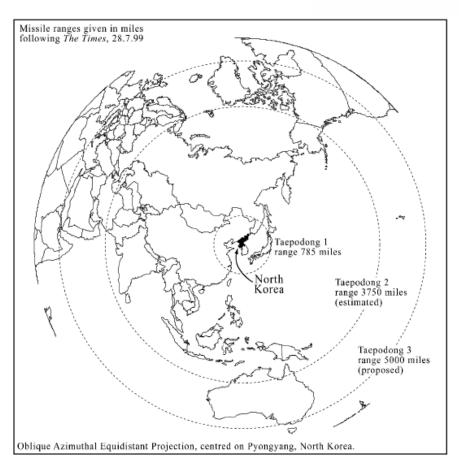


Figure 2. Oblique azimuthal equidistant projection (centred on Pyongyang) to show Taepodong missile ranges correctly as a series of concentric circles

Vujakovic, Peter, 'Mapping the War Zone: cartography, geopolitics and security discourse in the UK press', *Journalism Studies*, vol. 3, no. 2, 2002, pp. 187-202, pp. 199-200.

APPENDIX 21.



Fig. 1. Various borders of Kurdistan.

Culcasi, Karen, 'Cartographically constructing Kurdistan within geopolitical and orientalist discourses', *Political Geography*, vol. 25, 2006, pp. 680-706, p. 682.

APPENDIX 22.



Three cartographic perspectives on the European Union as depicted on the common sides of euro coins.

Raento, Pauliina, Anna Hämäläinen, Hanna Ikonen and Nella Mikkonen, 'Striking stories: a political geography of euro coinage', *Political Geography*, vol. 23 (2004) pp. 929-956, p. 934.

APPENDIX 23.



The Economist, vol. 386, no. 8561, 2008, p. 75.

APPENDIX 24.

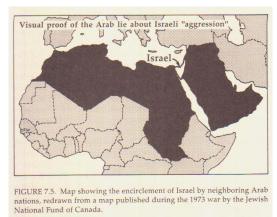


APPENDIX 25.



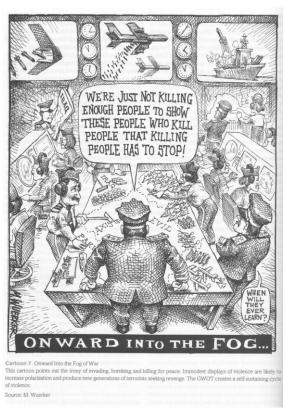
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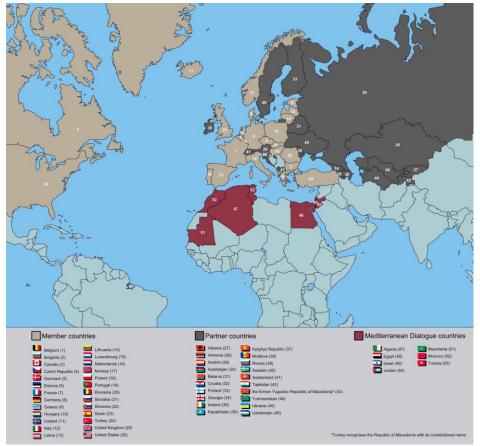
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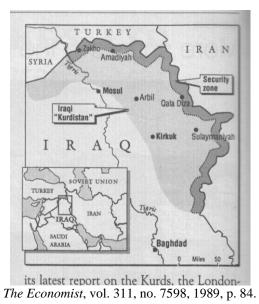
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APPENDIX 32.



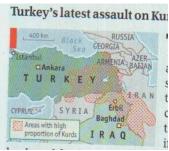
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APPENDIX 33.



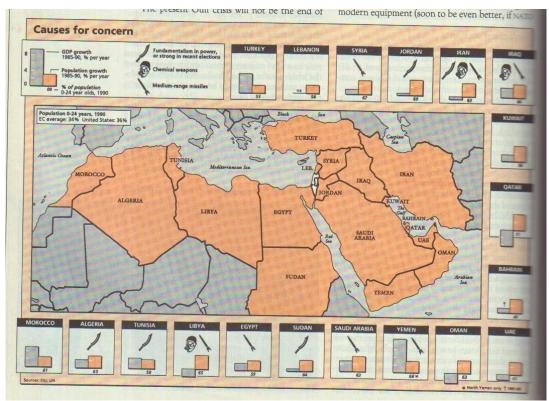
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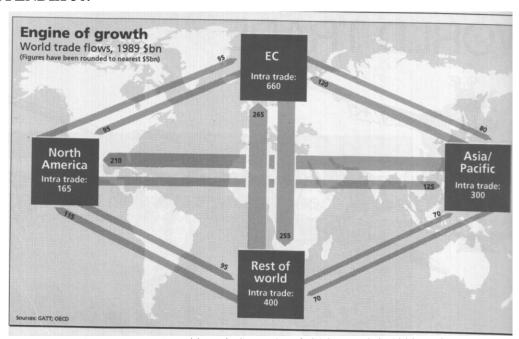
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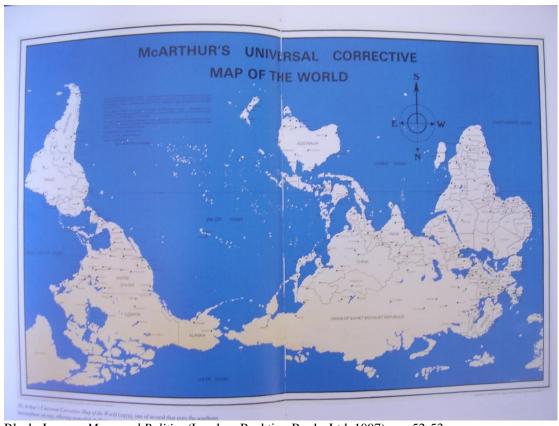
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