CYBERSPACE AND POLITICAL POWER

QUESTIONS FOR THE EMERGING DISCOURSE OF ARCHITECTURE

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Introduction

This paper is based on the proposition that architecture is fundamentally political and technological. It examines how the technology of cyberspace transforms the traditional, hierarchical, notion of political power instituted in spatial and social fixity, and consequently, the discourse of architecture. Contrary to the popular discourse that cyberspace is our new medium of existence, this paper is based on an assertion that cyberspace merely displaces, not replaces, the material and metaphysical basis of the physical, Cartesian space. It acknowledges layered and hybrid coexistence of these diverse spaces, and therefore draws instances from them to explain and exemplify its arguments by comparison and contrast.

Is Space Political?

Let us begin by examining the question: Is space political? The classical example of the architectural representation of a political ideology is the Greek polis. The Greek polis was a spatially and socially established political body instituted in Aristotle's proposition: bomo est naturaliter politicus, id est, socialis — "man is by nature political, that is, social."2 The political life in the Greek polis was predominantly concerned with the universal good for the Greek society by regulating justice, war, religion and economy. Given its predominantly political nature, the main spaces in the polis were those that supported such activity. Most important of them all was the agora, the vital hub for all political activity. Around the agora were located structures in which political, economic and cultural life of the polis was planned and enacted. The agora not only represented the political structure of the polis, but also provided a place for the enactment, validation, and stabilization of this structure. The Greek agora therefore is one of the earlier examples of politically determined architectural

After the Greek city-state, the Roman empire imposed its linear, hierarchical political structure in the planning of its cities. Similar attributes are evinced in the post World War I; World War II cities shaped by modernist ideologies and in colonial cities shaped by the Imperial power. Further, in the 20th century, Winston Churchill proclaimed: "We shape our buildings, and afterwards our buildings shape us." He argued:

The party system is much favored by the oblong

form of Chamber. It is easy for an individual to move through these insensible gradations from left to right, but the act of crossing the floor is one which requires serious consideration The essence of good House of Commons speaking is the conversational style, the facility for quick, informal interruptions and interchanges. Harangues from a rostrum would be a bad substitute for the conversational style in which so much of our business is done. But the conversational style requires a fairly small space, and there should be on great occasions a sense of crowd and urgency.3

Churchill's statement illustrates the importance of an appropriately designed built-environment in the political functioning of a state. It articulates architectural determinism — that architecture can play a role not only in who may gain or sustain power, but also in how the political stage-set can aid legislative deliberations.

At the urban scale, Berlin as well as Brasilia are examples of how political powers shape cities to serve their own ends. Alfons Hugs notes in his paper "Brasilia Revisited:"

Brasilia was not conceived merely as a model of modernist aesthetic discourse. Rather, it was molded as the materialization of a decidedly political blueprint ... By founding its new capital, Brazil hoped to expunge the blotches and botches of its past, to sweep away all traces of its colonial inheritance, to put underdevelopment staunchly behind it and stride forward to a fair, new dispensation for its people ... Brasilia was planned to tone down clashing regional interests ... Part of its purpose was to open up the interior of the country by planting a national bub for spreading development in a region that had hitherto languished in utter oblivion.4

However, it is important to note that all of the above examples are based on the presence of a geo-political territory, a spatial fixity within which the political order of a state operates. The political order legitimizes itself by asserting the functionality of its functions within its territory against that outside. It is therefore important for

the state to maintain spatial fixity to define itself as an order. It is as Harris Breslow argues:

It (the state) has to ward off, as it were, conceptions of an undifferentiated field or a field of possibilities such possibilities being presented as the result of living outside of the restrictions of the state's codeagainst the state's field of coded necessities or imperatives, which it posits as possibilities or potentials in order to simulate the dynamics of the unencumbered order while maintaining its control.⁵

Also, a *social fixity* predetermined by the form of the state itself (democratic, socialist, communist, etc.). The social fixity is ensured by creating a belief in the form of state by social conditioning. Social fixity implies that the citizens can indulge themselves with only the politically legitimate activities within the spatial regime of the state. It also implies that political regime controls what its citizens see and hear.

It is also essential to realize that such spatial and social fixity is an attribute of hierarchical, striated societies. Deleuze and Guattari in their book A Thousand Plateaus explain such societies to be structured like a tree. They note that "the tree is already the image of the world, or the root the image of the world-tree ... Binary logic is the spiritual reality of the root-tree." Such societies have a pyramidal political structure - of primary, secondary and tertiary nodes of power unified by the logic of dichotomous relationships. Christopher Alexander illustrates the concept of the tree in his article "A City is Not a Tree." He differentiates between the natural and artificial cities as the cities paradigmly based on the mathematical models of the semi-lattice and the tree respectively. He notes "both the tree and the semi-lattice are ways of thinking about how a large collection of many small systems goes to make up a large and complex system."8 Fundamentally, the semi-lattice and the tree are mathematical metaphors for striated, hierarchical societies. For Alexander, the cities of Columbia, Chandigarh, and Brasilia (all of which were planned to establish specific political ideologies) represent cities based on the structure of the tree.

All of the above establish a relationship between the political ideology and spatial and formal character of the designed environment in spatially and socially instituted, hierarchical societies. Next is the question of technology and its relationship to politics, and architecture. The proposition that technology manifests itself in the tectonics, and in the political ideology of architecture has been a topic of constant debate in the architectural domain. Let us briefly examine how technology effects the power structure of a state? Consequently, how is technology important in the conception and articulation of space?

Technology and Political Power

The capacity of technology in shifting the military or economic balance of political powers is undisputed. The total annihilation of the Japanese cities of Hiroshima and Nagasaki by the atomic explosion in 1945 is a testimony of the radical shift in the balance of military power in the post-World War II era. It was brought about by one of the most radical technological endeavors of the 20th century — the atomic bomb. Similarly, today the cumulative developments in science and technology, especially cyberspace, are altering the political relationships at all levels: the relationships among sovereign states, the relationships between government and citizens, and between citizens and private institutions in society. We are witnessing a revolution in the shape and direction of national and international events. Walter B. Wriston noted:

The information revolution is profoundly threatening to the power structures of the world, and with a good reason. The nature and powers of the sovereign state are being altered and even comprised in fundamental ways. The geopolitical map of the world is being redrawn. The elements of the balance of power that has prevailed for the last forty years have already been permanently disturbed and may soon be irretrievably altered or lost.⁹

As cyberspace alters the structure of political power, its effect on architectural space cannot be negated. Today, the political relevance of physical, material architecture stands challenged by cyberspace. An understanding of the impact of cyberspace on political power, and consequently on architecture, can be situated in an understanding of the structure of cyberspace. However, before we get into the discussion of cyberspace, let us for a moment transcend the theoretical web of this paper to take a look at what is happening around us.

Emerging Discourse Of Power

Cyberspace is already being explored and exploited for its potential to challenge the political order of nation-states around the world. Today, all nations seem to be engaged in "Infowar" — a war for the control and subsequent use of information to disturb each other's political stability. In contradiction to the traditional notion of war, where military powers were engaged in war within the geo-political territories, Infowar is fought beyond geo-political territories, in the space of cyberspace. The gains of the Infowar are not in the control of territory. The success of Infowar lies in its capacity to challenge the social fixity of nations. The following examples illustrate how nations engage in Infowar.

Scenario 1. The Pentagon launches a sophisticated psy-ops campaign against Haiti's military regime to restore deposed President Jean-Bertrand Aristide. Using market-research surveys, the Army's 4th Psychological Operations Group divides Haiti's population into 20 target groups and bombards them with hundreds of thousands of pro-Aristide leaflets appealing to their particular affinities. Before U.S. intervention, the CIA makes anonymous phone calls to Haitian soldiers, urging them to surrender, and sends ominous E-mail messages to some members of Haiti's oligarchy who have personal computers. Infowar has begun.¹⁰

Scenario 2. February 4, 2000. Iran is trying to bully a

weakened Saudi Arabia into cutting its oil production to drive up prices. Washington considers sending troops to the kingdom to steel its resolve. The Iranians, remembering the fate of Saddam Hussein, elect not to challenge America on the desert sands. Instead they opt to humble the "Great Satan" in a more insidious way. In fact, no one yet knows the US is under attack. No one can quite hear the clicks of the enemy keyboard or the fuse-less bombs traveling over the Internet. However, a pattern of computer mayhem begins to emerge. As White House officials show the President evidence that Tehran is dabbling in information warfare, Cairo blacks out for several hours. Suddenly an aide bolts into the White House situation room: Telephone service in northern California and Oregon has crashed, apparently because of a computer "trap door" surreptitiously implanted into the system's computer code. Further north, phones at the Army's huge base at Fort Lewis, Washington, go down for several hours, victims of a "mass-dialing" attack launched over the Internet.

Shortly after the President's National Security Council meeting ends, a high-speed passenger train traveling 200 m.p.h. slams into a misrouted freight train near Laurel, Maryland. The CIA suspects the culprits are Iranian agents who inserted a "logic bomb" into the railroad's computer system to trigger the disaster. In Saudi Arabia, an oil refinery near Dhahran suffers computer sabotage, triggering a large explosion and fire just as Iranian warships and ground troops move menacingly toward the kingdom. In London, Scotland Yard warns the Prime Minister that the Bank of England has detected three different "software sniffers" designed to sabotage fund transfers. Amid this electronic maelstrom, CNN reports that Iran has hired Russian computer experts and Indian software writers "to threaten the entire economic fabric of the U.S. and Western Europe." Buffeted by this string of shocks, stocks plunge on the New York and London exchanges. 11

The above examples are indicative of a challenge to the spatial and social fixity of the nation-states as the world gets tied together by cyberspace, an electronic network that carries news and data, good and bad, true or false, with the speed of light anywhere on this planet. I assert that the challenge to the spatial and the social fixity can be attributed to the very nature and structure of the medium of cyberspace. It is as Neil Postman has observed:

Media of communication available to a culture are a dominant influence on the formation of the culture's intellectual and social pre-occupations ... we must take into account the symbolic forms of their (media metaphors) information, the source of their information, the quantity and speed of their information, the context in which their information is experienced.¹²

Understanding Cyberspace

The word cyberspace comes out of William Gibson's work of fiction-*Neuromancer*. His cyberspace was "a unified conceptualization of space spanning the entire 'Net and existed only as a consensual hallucination on the part of the hosts and users which participated in it." Today, cyberspace can simply be understood as the space

that exists in the universal, networked environment of the computers. It is denoted by the Internet, and the world wide web of text, images, sound and video. Michael Benedikt, in his "Collected Abstracts from the First Conference on Cyberspace," describes cyberspace as follows:

Cyberspace is a globally networked, computersustained, computer accessed, and computergenerated, multi-dimensional artificial, or "virtual" reality. In this world, onto which every computer screen is a window, actual, geographical distance is irrelevant. Objects seen or heard are neither physical nor necessarily, presentations of physical objects, but are rather-in form, character, and action-made up of data, of pure information. This information is derived in part from the operation of the natural, physical world, but is derived primarily from the immense traffic of symbolic information, images, sounds, and people, that constitute human enterprise in science, art, business, and culture.¹⁴

The above description of cyberspace is indicative of its radical potential for facilitating exchange of information between people beyond geographic boundaries. Cyberspace promises to be the new, immensely potent paradigm of space for contemporary society. It is also immensely important in its capacity as our new epistemological, ontological, and existential reality. However, to understand its limits and potential as a medium of political discourse, we must develop an understanding of its nature and structure. I propose that cyberspace can be understood in terms of rhizome as explicated by Deleuze and Guattari: "A rhizome has no beginning or end; it is always in the middle, between things, inter-being, *intermezzo*. The tree is filiation, but the rhizome is alliance, uniquely alliance. The tree imposes the verb "to be," but the fabric of the rhizome is the conjunction, "and ... and ... and ... "15 Unlike a tree or its roots, and the analogous conception of the physical political space as discussed earlier, cyberspace is like a rhizome. Unlike hierarchical political regimes based on the pyramidal distribution of power, where the nodes of power exist in dichotomous relationships, cyberspace "brings into play very different regimes of signs, and even non-sign states."16 Another analogy that explains the structure of cyberspace is a fisherman's net made of nodes and mesh, where the nodes are always in the middle, not in beginning or end. Each node can be understood to be analogous to a plateau: "a continuous, self-vibrating region of intensities whose development avoids any orientation towards a culmination point or external end."17 These nodes are interconnected by a non-linear, smooth mesh that offers no dimensions, only directions, a multitude of possible directions that link one node to another.

Cyberspace fosters an ontology that is nonhierarchical, acentered, non-territorial, and modifiable. Therefore, as cyberspace facilitates an information exchange uncontrolled by the spatial and social fixity of the traditional political regimes, it challenges the

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traditional notion of political power: "The supreme undivided authority possessed by a state to enact and enforce its law with respect to all persons, property, and events within its borders." Information acquires the status of the new source of wealth, and power.

Cyberspace and Political Power

The implications of cyberspace on political power, therefore can be understood as:

Geopolitical borders are no longer boundaries. Since communication of information is facilitated by satellites; it is essentially non-Euclidean. Political boundaries no longer separate one nation from another as far as we are concerned with the exchange of information. As cyberspace defies the spatial fixity by carrying information beyond geopolitical borders, it reduces the value of the political purpose that can be extracted through the control of territory. Such a diffusion of spatial fixity threatens the traditional structure of political power. (The intention here is not to overlook the new boundaries that are created by those who create, control, disseminate and manipulate information. These players are the new power elite. However, such discussion is beyond the scope of this paper.)

Citizens see and hear beyond geopolitical boundaries. Closed societies, such as the former Soviet Union, have always based their power in part on their ability to control, channel, or obliterate what their citizens see and hear within their spatial regimes. However, as information proliferates the closed societies, it challenges the political control of what citizens see and hear. Such proliferation of information challenges the social fixity, and therefore threatens the traditional power structure.

Therefore, cyberspace decentralizes power as it decentralizes information. This new condition makes it essential to re-examine the relationship between political power and space.

Cyberspace—Politics—Architecture

Henri Lefebvre, in his book *The Production of Space*, states:

Change society! Change life! These precepts are nothing without the production of an appropriate space ... So long as everyday life remains in thrall to abstract space, with its very concrete constraints; so long as the only improvements to occur are technical improvements of detail ... so long, in short, as the only connection between work spaces, leisure spaces and living spaces is supplied by the agencies of political power and by their mechanisms of control - so long must the project of "changing life" remains no more than political rallying-cry to be taken up or abandoned according to the mood of the moment. 19

Here, apart from reiterating the fact that political control directly controls the nature of designed space, Lefebvre proposes that for any change in this relationship, there has to be an ideology that challenges the status quo of such relationship. Right now, cyberspace seems to provide a new ideology that challenges the traditional

notion of hierarchical, linear, striated, political space. With cyberspace, newer, invisible forms of space and control are emerging. Cyberspace is also a technology that is making possible both the illusions of freedom and the realities of cyber-fascism. The implications of such a condition are immense. Fundamentally, it raises the following questions for the nature of designed space.

1.0 The Physical Space

- How does physical architecture react to the new structures of political (non)power brought about by the technology of cyberspace?
- Is it at all relevant anymore to incorporate in architecture the political ideology of a nation?
- If so, how?
- If it is not relevant any more to treat architecture as a political instrument, is architecture free of all preconceived sets of rules and notions of design in architecture?
- If so, what are the design implications of such a condition?

2.0 Cyberspace

- How does the space of cyberspace react to the new structures of political power brought about by its own technology?
- If cyberspace does not ensure the survival of the traditional political power, what becomes of its spatial and formal character?
- If cyberspace supports newer structures of political power, what becomes of its spatial and formal character?

3.0 The Space In-Between

- If the physical, human body coexists in the physical space and cyberspace, and if the political structures coexist in the physical space and the cyberspace, is there a space in-between?
- If there is a space in-between, conversely, does this space facilitate the coexistence of human body and political structures in the physical space and cyberspace?
- If so, what is the formal and spatial character of this space in-between?

The first set of questions deals with the nature of space in the physical space, the second deals with the nature of space in the coexistent cyberspace. These two sets of questions are fundamental to an understanding of the future discourse of architecture. We shall now examine the emergent trends by considering two proposals put forth as answers to a few of the above questions.

Emergent Discourse of Architecture: Two Proposals

Proposal One. Lebbeus Woods: The Zagreb-Free-Zone — This project is instituted in the proposition that cyberspace disturbs the status quo of different political regimes and social groups across the globe by an indiscriminate proliferation and dissemination of information. This results in new types of social and political alliances. Lebbeus Woods notes that such alliances tend to be loosely-knit, continually shifting networks heterarchies governed by the present and changing needs of its constituents, 20 rather than by rigid attitudes

determined by traditions and enforced by fixed structures of authority (hierarchies)."²¹ Further, he notes that the growing political liberalization in the technologically mediated societies, results in "the relative autonomy of individuals within their social groups, requiring of these individuals ethical self-sufficiency and highly developed living and working skills in an even more competitive and present-oriented economic, political and social milieu."²² What kind of spaces support such technologically mediated human condition?

Woods proposes the Zagreb-Free-Zone: A model for the discourse of physical architecture of a mediated society, as an architectural discourse that addresses the contemporary condition. The Zagreb-Free Zone "encourages the networking of autonomous individuals, free of monumentalized institutions of culture."²³ The design is proposed as a Free-Zone within which an electronic network of Freespaces is established. Freespaces are spaces free of predetermined purposes and meaning. Freezone itself constitutes what Woods calls "a new urban pattern, a new way of living founded on the free-exchange of self-knowledge and the inhabitation of an entirely human nature."²⁴

In my view, Woods project celebrates the classical human desire for freedom²⁵ from any institutional control. He sees the possibility of such freedom in the technologically mediated societies. Therefore, his architecture embodies a sense of freedom from any preconceived sets of rules and notions about design. However, technologically mediated societies do not necessarily represent freedom as new, cybernetic alliances and institutions are formed in such societies. We may therefore argue that Woods project is essentially utopian. However, it is certainly not without value as it is indicative of an emergent discourse of architecture.

Proposal Two. Marcos Novak: Liquid Architectures in Cyberspace: This project is instituted in the proposition that the new, technologically mediated society exists entirely in cyberspace. To make space for such existence in the ever-shifting space of cyberspace, Marcos Novak puts forth the concept of liquid architecture. It is based on the notion that the nature of space in cyberspace is in contradistinction to our traditional notion of territorial, spatial fixed, physical space. He explains the traditional public-political space as an "area of delimited political rights; contested ground of human altruism and animal aggression, also, device for limiting aggression; playground, mating ground, holy ground, dumping ground; area of jurisdiction, vital interest, prized resource; battlefield, Elysian field, neglected ecology."26 Cyberspace, on the other hand, is "Trans Terra Firma ... a navigable electronic non-place that nonetheless can be experienced as a fully dimensional space."²⁷ Spatial and social fixity are rendered meaningless in the rhizomatic ontology of cyberspace. In such a condition, Marcos Novak proposes a liquid architecture — "a habit, a way of life, a liberating and confident openness to discontinuity."28 Liquid architecture is defined as:

A liquid architecture is an architecture whose form is contingent on the interests of the beholder; it is an architecture that opens to welcome you and closes to defend you; it is an architecture without doors and hallways, where the next room is always where it needs to be and where it wants to be. It is an architecture that dances or pulsates, becomes tranquil or agitated. Liquid architecture makes liquid cities, cities that change at the shift of a value, where visitors with different backgrounds see different landmarks, where neighborhoods vary with ideas held in common, and evolve as the ideas mature or dissolve.²⁹

It can be argued that Novak's liquid architecture, like Woods proposal of Freezone, also celebrates the classical human desire for freedom. It also represents another utopian extreme where the physical is no longer relevant. Such a discourse has given rise to a bandwagon of cyber-architects keenly engaged in designing the "space" in cyberspace. However, this is certainly another emergent discourse in architecture.

Epilogue

We have argued in this paper that the traditional structures of political power instituted in spatial and spatial fixity stand challenged with the onslaught of cyberspace. Such a condition challenges the traditional notion of architecture as an ideological blueprint of a state's political regime. The relationship between architecture, political power, and technology is no longer dichotomous, it becomes rhizomatic. There are no direct cause-and-effect, linear relationships, but a continuous mesh of relationships, which is open to as many interpretations as the interpreters. Not all interpretations however are equally perceptive or true. A new agenda for architecture is called for, which will be shaped as much by individualistic ideas and impulses, as it will be shaped by concerted efforts of emerging schools of thought. Two trends have been discussed. But, if both of the discussed proposals represent two utopian extremes, what is real? Is the space in-between real? If yes, it takes us back to our third set of questions that struggle with the formal and spatial character of this space. However, at this point, definitive assertions about the future discourse of architecture will not only be difficult to make, but also naïve.

NOTES

- When referring to the term "political power," we will base our understanding of the term in the definition of sovereignty provided by the *Dictionary of International Law* as: "the supreme undivided authority possessed by a state to enact and enforce its law with respect to all persons, property, and events within its borders."
- ² The quotation is from the Index Rerum to the Taurinian edition of *Aquinas* (1922).
- ³ Winston, Churchill, "On Rebuilding the House of Commons" in Eade, C. Editor. *Onward to Victory* (London: Cassell. 1944).
- ⁴ Alfons Hugs, "Brasilia Revisited" in D. Dollens, Editor. *Sites* (NY: Lumen, Inc., 1993).
- ⁵ Harris Breslow, "Spatial Narratives and Political Space" in D. Crow, Editor. *Philosophical Streets* (Washington, DC: Maisonneuve Press, 1990).

- ⁶ John K. Galbraith, *The Anatomy of Power* (Boston: Houghton Mifflin Company, 1983). John Galbraith suggests three instruments used by the state for enforcing power: condign, compensatory, and conditioning. Conditioned power "is exercised by changing belief. Persuasion, education, or the social committment to what seems natural, proper or right causes the individual to submit to the will of another or of others. The submission reflects the preferred course; the fact of submission is not recognized."
- ⁷ G. Deleuze and Felix Guattari. . A Thousand Pleatues: Capitalism and Schizophrenia (Minneapolis: University of Minnesota Press, 1987).
- 8 Christopher Alexander, "A City is not a Tree." Architectural Forum. 1965 (Whitney Publications).
- ⁹ Walter B. Wriston, *The Twilight of Sovereignity* (NY: Charles Scribner's Sons, 1992).
- D. Waller, "Onward Cyber Soldiers" in *Time*. August 21, 1995. This is reported as a true incident.
- 11 M. Thompson, "If War Comes Home" in *Time*. August 21, 1995. This is how an imagined, no-holds barred global infowar may start, according to The Day After ... in Cyberspace, a Rand Corp. War game recently played by senior US officials and reviewed exclusively by *Time*.
- ¹² Neil Postman, Amusing Ourselves to Death. Public Discourse in the Age of Show Business (NY: Penguin Books, 1985).
- ¹³ William Gibson, Neuromancer (NY: Ace Books, 1984).
- ¹⁴ Willard Uncapher, 1991. "Trouble in Cyberspace" in *Humanist* (September/October 1991), p. 5.
- ¹⁵ G. Deleuze and Felix Guattari. A Thousand Pleatues: Capitalism and Schizophrenia (Minneapolis: University of Minnesota Press, 1987).
- ¹⁶ Ibid, p. 21.

- ¹⁷ Ibid, p. 22.
- ¹⁸ Dictionary of International Law.
- ¹⁹ Henri Lefebvre, *The Production of Space* (Cambridge: Basil Blackwell, 1991), pp. 59-60.
- A system of organizing space, time and society comprised of autonomous, self-inventing and self-sustaining individuals and groups, the structure of which changes continually according to changing needs and conditions.
- ²¹ Lebbeus Woods, "Heterarchy of Urban Form and Architecture" in A. Papadakis, Editor. Architectural Design: Free Space Architecture (London: Academy Editions, 1992).
- ²² Ibid., p. 39.
- 23 Ibid.
- 24 Ibid.
- 25 J.C. Davis, Utopia and the Ideal Society: A study of English utopian writing 1516-1700 (Cambridge: Cambridge University Press, 1981). J.C Davis discusses four types of ideal, utopian societies: The Land of Cockaygne, Arcadia, The Perfect Moral Commonwealth, and the Millennium. Further, he argues that "if politics is about the distribution of opportunities, rewards and satisfactions, the settings of norms of human behavior and policing the abnormal, then ideal societies are, in a sense, all about the end of politics." (p. 9). The two examples discussed here Lebbeus Woods'd and Marcos Novak's proposals also seem to assume an end of politics, and therefore become idealistic, or utopian.
- Marcos Novak, "Trans Terra Firma: After Territory" in Dollens, D. Editor. Sites. (NY: Lumen, Inc., 1993), p. 34.
- ²⁷ Ibid, p. 35.
- ²⁸ Ibid, p. 39.
- 29 Ibid.