POSTCOLONIAL STATES AND INTERNET GOVERNANCE:
POSSIBILITIES OF A COUNTER-HEGEMONIC BLOC?

by

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Abstract

The role of the postcolonial states is under-theorized in contemporary global communication studies. This dissertation broadens our understanding about the role of such states by assessing the positions of China, India, Brazil, South Africa, Iran, Tunisia and Cuba on global Internet policy issues in comparison to those of the other stakeholders (e.g., the U.S., the EU, civil society and businesses) at the World Summit on the Information Society. It argues that global Internet policy making in issues such as U.S. control, digital divide, intellectual property right, multilingualism and security is a power struggle between the U.S. and the postcolonial states. The postcolonial states oppose U.S. power in global Internet policy-making. Businesses, representing the transnational capitalist class, buttress the U.S., while civil society plays a variable role. Non-state actors' influence on global communication policy-making has increased, but states still hold decision-making power.

This study argues that the postcolonial states show ambivalence in their opposition to the U.S. They oppose U.S. power in global Internet policy-making, but not its ideological foundation—neoliberalism. This behavior eventuates as a result of their adoption of neoliberal means (e.g., privatization, liberalization, etc.) in managing the economic and communication sectors, including the Internet, at the national level. They oppose the U.S. to become a partner in the U.S. constructed mode of global Internet policy-making, but not to create a true alternative to the existing ICANN mode of global Internet policy-making. Their ambivalence led them stage a limited resistance to U.S. control over global Internet policy-making.

This study demonstrates that the postcolonial states have common grounds in challenging U.S. control over global Internet policy-making, but they are yet to develop as a counter-hegemonic bloc. To emerge as a counter-hegemonic bloc, they need to present an alternative framework which will guide ways to radically democratize global
Internet policy-making. Only radically democratized postcolonial states may be able to
develop that alternative.

Keywords: Hegemony; Internet Governance; Civil Society; Global Media Policy;
Postcolonial States; World Summit on the Information Society
To my son Oniruddho and wife Farhana
who shared the pain of writing this dissertation.
Acknowledgements

For this dissertation, I owe a large debt to my senior supervisor Professor Yuezhi Zhao who has been involved with this project from conception to completion. I and Zhao jointly conceived the idea of this dissertation immediately after the WSIS. Academic publications and seminars on this summit were preoccupied by civil society heroics—how civil society emerged as a key actor in global communication by challenging the dominance of states. But there was hardly any discussion about the postcolonial states which once tried to restructure international communication through the NWICO. We both were shocked to see this lack in contemporary global communication studies. Zhao said that I could contribute to fill up this gap through my doctoral dissertation. I took her observation seriously, and thought that, as a postcolonial subject, it was my moral obligation to pursue such a dissertation project.

It was an intellectually ambitious and theoretically challenging project. Zhao’s intellect and other human qualities, such as the ability to feel the pain of postcolonial students, helped me complete this project. By doing this project, I learned how to harbor intellectual ambitions. I learned how to face intellectual challenges. I doubt that any other faculty member would take the risk of allowing a graduate student to venture into such an ambitious dissertation project.

Many other scholars have helped prepare me to handle this challenge. I learned from many scholars including Vincent Mosco, Dan Schiller, Dwayne Winseck, Karim H. Karim, Catherine Murray, Peter Anderson, Gerald Sussman, Robert Anderson, Martin Laba, Pat Howard and Ellen Balka.

Vincent has taught me the political economy of communication and has remained as a mentor. Dan as a supervisor spent a lot of his valuable time in reading and suggesting changes to the draft of this dissertation. Catherine has worked as a strong critic of my work in the Doctoral program and worked as a supervisor on the dissertation supervisory committee. Catherine’s sharp criticism of my writings compelled me to
rethink about my approach to communications and helped broaden my understanding of theoretical and methodological issues. Peter as a supervisor spent his valuable time in reading and commenting on the drafts of this dissertation. Gerald as an external reader of this dissertation made some valuable comments which helped sharpen the focus of the dissertation. Robert and Martin have been good friends and well-wishers during my doctoral studies at the School of Communication. Without being on my supervisory committee, Robert has always been interested to know about my work and the progress of the dissertation.

Administrative staffs at the School of Communication—Neena Shahani, Lucie Menkveld, Brenda Baldwin, Monique Cloutier and Denise Vanderwolf—were awesome. They always extended their helping hands whatever way they could whenever I asked them.

The University of Dhaka in Bangladesh has set an excellent precedent of encouraging scholarship by giving me both paid and unpaid leave from my teaching job there to complete my journey to this Ph.D.

My son Oniruddho and wife Farhana had to sacrifice their comfort to allow me to pursue this ambitious project, and stood beside me when I was depressed going through the rigorous processes of the doctoral program. I am also grateful to my parents and Farhana's parents for their support during my doctoral program.

Finally, I would like to say thank you to Joanie Wolfe, who formatted this dissertation on short notice.

This dissertation is a result of contribution from many people. I give credit to all of them for its success, but take full responsibility for its failure.
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<th>Description</th>
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<tr>
<td>APC</td>
<td>Association for Progressive Communication</td>
</tr>
<tr>
<td>ASCII</td>
<td>American Standard Code for Information Exchange</td>
</tr>
<tr>
<td>CCBI</td>
<td>Coordinating Committee on Business Interlocutors</td>
</tr>
<tr>
<td>ccTLD</td>
<td>Country Code Top Level Domain</td>
</tr>
<tr>
<td>CERTs</td>
<td>Computer Emergency Response Teams</td>
</tr>
<tr>
<td>CNNIC</td>
<td>China Internet Network Information Center</td>
</tr>
<tr>
<td>CRIS</td>
<td>Communication Rights in the Information Society</td>
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<td>CSB</td>
<td>Civil Society Bureau</td>
</tr>
<tr>
<td>CSIRTs</td>
<td>Computer Security Incident Response Teams</td>
</tr>
<tr>
<td>CSNET</td>
<td>Computer Sciences Network</td>
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<tr>
<td>DARPA</td>
<td>Defense Advanced Research Projects Agency</td>
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<td>DCMA</td>
<td>Digital Millennium Copyright Act</td>
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<tr>
<td>DNS</td>
<td>Domain Name System</td>
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<td>DSF</td>
<td>Digital Solidarity Fund</td>
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<tr>
<td>EC</td>
<td>European Commission</td>
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<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FBI</td>
<td>Federal Bureau of Investigation</td>
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<tr>
<td>FCC</td>
<td>Federal Communication Commission</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<tr>
<td>FISA</td>
<td>Foreign Intelligence Surveillance Act</td>
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<tr>
<td>FTA</td>
<td>Free Trade Agreement</td>
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<tr>
<td>GAC</td>
<td>Government Advisory Committee, ICANN</td>
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<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<tr>
<td>GI</td>
<td>Geographical Indication</td>
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<td>GSP</td>
<td>Generalized System Preferences</td>
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<tr>
<td>gTLD</td>
<td>Generic Top Level Domain</td>
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<tr>
<td>gTLD-MoU</td>
<td>Generic Top Level Domain-Memorandum of Understanding</td>
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<td>HKNIC</td>
<td>Hong Kong Network Information Center</td>
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<tr>
<td>IAB</td>
<td>Internet Architecture Board</td>
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<td>IAHC</td>
<td>International Ad Hoc Committee</td>
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<td>IANA</td>
<td>Internet Assigned Numbers Authority</td>
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<td>ICANN</td>
<td>Internet Corporation for Assigned Names and Numbers</td>
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<td>ICP</td>
<td>Internet Content Provider</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>IDN</td>
<td>Internationalized Domain Name</td>
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<td>IDNA</td>
<td>Internationalized Domain Names in Application</td>
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<td>IETF</td>
<td>Internet Engineering Task Force</td>
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<tr>
<td>IGF</td>
<td>Internet Governance Forum</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>IP</td>
<td>Internet Protocol</td>
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<td>IPR</td>
<td>Intellectual Property Right</td>
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<td>ISOC</td>
<td>Internet Society</td>
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<td>ISP</td>
<td>Internet Service Provider</td>
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<td>ITU</td>
<td>International Telecommunication Union</td>
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<td>JPNIC</td>
<td>Japanese Network Information Center</td>
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<td>KRNIC</td>
<td>Republic of Korea Network Information Center</td>
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<td>MII</td>
<td>Ministry of Information Industry, China</td>
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<tr>
<td>MIIT</td>
<td>Ministry of Information Industry and Technology, China</td>
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<tr>
<td>MIME</td>
<td>Multipurpose Internet Mail Extensions</td>
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<td>MINC</td>
<td>Multilingual Internet Name Consortium</td>
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<tr>
<td>MONIC</td>
<td>Macau Network Information Center</td>
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<tr>
<td>MPAA</td>
<td>Motion Picture Association of America</td>
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<tr>
<td>NAM</td>
<td>Non-Aligned Movement</td>
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<tr>
<td>NGOs</td>
<td>Non-Government Organizations</td>
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<tr>
<td>NIIO</td>
<td>New International Information Order</td>
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<tr>
<td>NSA</td>
<td>National Security Agency</td>
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<tr>
<td>NSF</td>
<td>National Science Foundation, U.S.</td>
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<td>NSFNET</td>
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<td>NSI</td>
<td>Network Solution Inc.</td>
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<tr>
<td>NTIA</td>
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<tr>
<td>NWICO</td>
<td>New World Information and Communication Order</td>
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<tr>
<td>OECD</td>
<td>Organization of Economic Cooperation and Development</td>
</tr>
<tr>
<td>RFC</td>
<td>Request for Comment</td>
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<tr>
<td>RIRs</td>
<td>Regional Internet Registries</td>
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<tr>
<td>SRI-NIC</td>
<td>Stanford Research Institute Network Information Center</td>
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<tr>
<td>TNCs</td>
<td>Transnational Corporations</td>
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<tr>
<td>TRIPS</td>
<td>Trade Related Aspects of Intellectual Property Right</td>
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<td>TWNIC</td>
<td>Taiwan Network Information Center</td>
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<tr>
<td>UDHR</td>
<td>Universal Declaration of Human Rights</td>
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<tr>
<td>UDRP</td>
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<tr>
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<td>United Nations</td>
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<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>UNESCO</td>
<td>United Nations Economic Scientific and Cultural Organization</td>
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<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>U.S.</td>
<td>United States of America</td>
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<td>USDoC</td>
<td>United States Department of Commerce</td>
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<td>USDoD</td>
<td>United States Department of Defense</td>
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<td>USTR</td>
<td>Office of the U.S. Trade Representatives</td>
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<td>WCT</td>
<td>WIPO Copyright Treaty</td>
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<td>WPPT</td>
<td>WIPO Performances and Phonograms Treaty</td>
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<tr>
<td>WGIG</td>
<td>Working Group on Internet Governance</td>
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<tr>
<td>WIPO</td>
<td>World Intellectual Property Organization</td>
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<td>WSIS</td>
<td>World Summit on Information Society</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<tr>
<td>WWW</td>
<td>World Wide Web</td>
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1.

Postcolonial States and Global Internet Policy-Making

This dissertation explains how postcolonial states such as Brazil, China, Cuba, India, Iran, South Africa and Tunisia tried to influence global Internet policy-making. For that, it assesses their encounters with the U.S. on various Internet policy issues during the processes of the World Summit on Information Society (WSIS).

Tunisia persuaded the International Telecommunication Union (ITU) to hold a world summit to deal with concerns that the “developing countries” were falling behind the “developed countries” in terms of producing ICTs and using them for national development. It proposed to create a forum to achieve an international consensus about the use of ICTs to fulfill the United Nations (UN) Millenium Development Goals (MDGs) which include alleviating extreme poverty, reducing gender inequality and child mortality, improving maternal health, and fighting diseases like HIV/AIDS and Malaria for the benefit of the “developing countries”.

The Minneapolis conference of the ITU in 1998 decided to hold a world summit on Information Society and requested the UN General Assembly to make the final decision about holding this event. The General Assembly approved the decision and asked the ITU to take the lead in organizing the summit. The summit processes took place between June 2002 and December 2005 in Geneva and Tunisia. ITU headquarters in Geneva hosted the executive secretariat of the summit. As host countries, both Switzerland and Tunisia had separate secretariats to help with the preparation of the summit.

As the UN has no fixed rules for holding its summits, every summit formulates its own rules usually at the first meeting of the summit preparatory committee. Similar to other UN summits, the WSIS also involved preparatory committee meetings (PrepComs), round table discussions, and plenary sessions. While a UN summit usually
involves 3-4 PrepComs and one summit meeting, the WSIS had six PrepComs, evenly
taking place in two phases, and two summit meetings—one in Geneva and another in
Tunisia. The intergovernmental preparatory committees of the WSIS created the rules of
procedures for the PrepComs and summit meetings, and invited civil society and
businesses to participate.

My review of the scholarly literature on the WSIS reveals that three themes
dominate the discussions: an analysis of the WSIS as an event and its significance for
global communication, Internet governance, and the role of civil society in the WSIS
processes. To highlight the importance of the WSIS in global communication, Marc
Raboy identifies it as the third attempt of the UN system to deal with communication.¹
The other two events were: the codification of the Universal Declaration of Human
Rights (UDHR) in 1948 and the movement for a New World Information and
Communication Order (NWICO) which took place throughout the 1970s.

Claudia Padovani,² Kaarle Nordentstreng³ and Victor Pickard⁴ have pointed out
the changes and continuities in terms of issues by drawing parallels between the
NWICO and the WSIS. Many issues such as national sovereignty and the quest of the
"developing countries" for development are common to these events. The events differ
mainly in terms of organizational procedures and stakeholder participation. Marc Raboy
argues that the WSIS "opens a new phase in global communication governance and
global governance in general."⁵ For Marc Raboy and Normand Landry, the WSIS
processes have been a multistakeholder exercise involving states, civil society and

¹ Marc Raboy, "The World Summit on Information Society and Its Legacy for Global Governance,"
² See Claudia Padovani, "Debating Communication Imbalances from the MacBrute Report to the World
Summit on the Information Society: An Analysis of a Changing discourse," Global Media and
Communication 1, no. 3 (2005): 316-338.
³ See Kaarle Nordentstreng and Claudia Padovani, "From NWICO to WSIS: Another World Information
⁴ See Victor Pickard, "Neoiberal Visions and Revisions in Global Communications Policy From NWICO to
⁵ Raboy, The World Summit, 225.
businesses. Bart Cammaerts and Nico Carpentier agree with them, saying that the WSIS demonstrates a form of multistakeholderism.

But for McLaughlin and Pickard, the WSIS is a manifestation of the neo-corporate mode of governance at the global level. They argue that:

neo-corporatism is the contemporary version of a long-standing approach to policy-making known as corporatism. As a strategy for policy concertation, corporatism was originally adopted to maintain social equilibrium in the welfare state by welcoming labor unions into cooperative relations with business interests and the state on matters of economic policy-making.

They go on to say that neo-corporatism was made a norm for global communication policy-making at the WSIS by incorporating civil society actors into the summit processes. Similar to them, Cees Hamelink also sees the WSIS as a triumph of neoliberalism in global communication policy-making as it did not make any efforts to critique the existing neoliberal political and economic environment within which decisions about information and communication technologies (ICTs) are made.

However, an unconditional acceptance of the WSIS as the outright success of neoliberalism would undermine a significant conflict which occurred between the U.S. and the postcolonial states over global Internet policy-making during this event. We need to problematize the WSIS as a space of struggle. Andrew Calabrese argues that although the stated goal of the summit was to devise strategies to enable ICTs to contribute to poverty alleviation, the conflict over the control of the Internet stole the show. The postcolonial states made "Internet governance" a pivotal issue of the

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summit by opposing U.S. control of the Internet. Other stakeholders such as the EU, civil society and businesses also engaged in the conflict. The issues of conflict include the unilateral U.S. control of the Internet root, the limitation of the existing ICANN-led Internet policy-making framework, digital divide, intellectual property rights (IPRs), freedom of information, multilingualism and cyber-security.

Scholarly literature on the WSIS and Internet governance highlighted the role of civil society as an oppositional group, but did not thoroughly evaluate the role of the postcolonial states in the conflict.\(^\text{11}\) In some cases, the role of the postcolonial states received a cursory glance to say that they clashed with the U.S. for the UN to take over global Internet policy-making.\(^\text{12}\) This dissertation provides a systematic analysis of the role of key postcolonial states in the Internet governance conflict by answering the following questions:

1. How can we characterize postcolonial states’ opposition to U.S. control over global Internet policy-making?

2. Did those states work as a unified group?

3. Does their opposition show the possibility of the rise of a counter-hegemonic movement in global communication?

This dissertation shows that the postcolonial states are oppositional and acquiescing to the U.S.-led global Internet policies at the same time. It argues that this is a persistent ambiguity in the role of the postcolonial states in global Internet policy-making.

It is important for communication study to thoroughly analyze the Internet governance conflict between the U.S. and the postcolonial states because it is a structural conflict—a conflict of setting the rules of global communication. The Internet, a network of networks built on telecommunication infrastructure, allows information to be

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stored, retrieved and dispatched more efficiently in massive quantity compared to the other media. After being developed as a project of the U.S. military-industrial-university complex in the 1970s, the Internet became a pivotal infrastructure of global communication. Trillions of bytes of corporate data travel across the Internet everyday. The Internet has facilitated the growth of e-commerce, rise of cyber-crime, generation of new techniques for the violation of privacy, a rethinking of intellectual property right, re-creation of the social divide between the haves and have-nots as digital divide, and regeneration of the old debates on freedom of expression and cultural diversity. Dan Schiller claims that “Internet comprises nothing less than the central production and control apparatus of an increasingly supranational market system.” In other words, the Internet constitutes the central nervous system of the emerging global informational capitalism. To be a part of the contemporary global political economy, one has to be on this network. Internet’s pivotal status in the emerging informational capitalism makes Internet related conflicts as one of the key themes of global communication.

I chose Brazil, India, China, Cuba, Iran, South Africa and Tunisia to explain the role of postcolonial states in global Internet policy-making because of their active engagement in the Internet governance conflict. These states are known as “third world states” and “developing countries”. But I call them postcolonial states drawing on postcolonial studies and critical political economy approach to communication.

Two streams of research—subaltern studies and literary postcolonialism—are prominent in postcolonial studies. Subaltern studies, developed by Ranajit Guh and his Indian colleagues, critique colonial historiography for misrepresenting the colonized and emphasize writing the history of subaltern resistance. On the other hand, literary postcolonialism grew drawing inspiration from Edward Said’s orientalism and matured in the hands of Homi Bhabha and Gayatri Chakravorty Spivak to create a space for itself in cultural studies. Both streams concentrate on the analysis of the discourses of domination but do not engage in analyzing the political economic structures of domination. However, one exception in subaltern studies is Partha Chatterjee who has studied the Indian state. Although Partha Chatterjee did not define the term postcolonial

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state, we can get some idea of such a state from his book Nationalist Thought and the Colonial World: a Derivative Discourse.\textsuperscript{14} He would suggest that the postcolonial state is a nation-state like India which originated with promises of emancipation for its people.

On the other hand, the critical political economy approach to communication deals with the institutional structures of domination, but Amin Alhassan identifies the lack of the study of states in the south as a blindspot of this approach and tried to illuminate the blindspot by exploring the role of the postcolonial state in the context of development communication by taking Ghana as a case.\textsuperscript{15} He defines the postcolonial state as a developmentalist state which promised to engage in redistributive tasks to develop as a nation-state after its establishment in the aftermath of the overthrow of colonial rule.\textsuperscript{16} Drawing on Chatterjee and Alhassan, we can define the postcolonial state as one which grew out of anti-colonial struggles in the South and harbors a promise of alternative modernity to western modernity. From this standpoint, western states like the U.S., which also got independence through popular struggles, do not qualify as postcolonial states. The U.S. was created as a nation-state by European settlers, and the U.S. war of independence was a war primarily between European factions. The Americans have never been defined as the other they way the Indians, Arabs, Africans, Latin Americans, and Chinese have been defined in social science literature. The U.S. has always belonged to the “superior” west.

The end of the cold war eliminated the conceptual basis of the term third world which was based on the idea of three worlds—the first world, also known as the west or the north, comprised the industrially developed states, the second world, also known as the east, comprised the Soviet Union and East European socialist states, and the third world, also known as the south, comprised the rest of the countries. There is hardly any justification to use the term third world state to identify southern states from a spatial sense. But Vijay Prashad argues that the third world was not just a spatial category.

\textsuperscript{14} Partha Chatterjee, Nationalist Thought and the Colonial World: A Derivative Discourse (Minneapolis, Minnesota: University of Minnesota Press, 1993).


\textsuperscript{16} Ibid.
Rather it embodied a collective spirit of the third world states for their socio-economic emancipation by challenging western modernity. In this sense, the third world and postcolonial are synonymous.

The term “developing countries” originated within the western development discourses in the 1950s that defined western states as developed and southern states as developing or underdeveloped. I consciously avoided using the label of “developing countries” to identify my chosen states in this dissertation because this label would incorporate them into the dominant western development discourses as inferior actors. I will use the term postcolonial state and third world state interchangeably throughout this dissertation to refer to my chosen states.

These states are diverse in many ways—in terms of size, continents, history, and style of political and economic management. Brazil, China, India and South Africa are big states, while Cuba, Iran, and Tunisia are small. The big states represent three continents—South America, Asia, and Africa and house the majority of the world population. Each of these states is an ensemble of different social groups, and they have different political systems.

Cuba and Brazil became free from colonial rule during the first wave of decolonization in the 19th century, while India and Tunisia became independent in the mid-20th century, after the World War II. Brazil and Cuba were settler colonies, while India and Tunisia were not. South Africa is made up of settler colonies. But China and Iran were not colonies the way the others were. Although it fought western imperial domination and a brief Japanese occupation, China was not a colony the way Brazil, India, Cuba, and Tunisia were. But Maoist China always upheld the postcolonial spirit of establishing a mode of indigenous development that would be different from western modernity and Stalinist Soviet statism, and was a key influence on the Non-Aligned Movement (NAM), argues Lin Chun. Supported by the Soviet Union and China, India, Cuba and Tunisia were key actors in the NWICO movement. Tunisia led the third world states in the NWICO debates.

China and Cuba had socialist revolutions, while Iran had an Islamic revolution. The other postcolonial states earned independence through popular uprisings against colonial rule. All these states are post-revolutionary in the sense that they all promised their citizens an alternative modernity to western modernity. They all strive for self-reliance and self-control in economics, culture and communications. Their quest for national development by maintaining a strong national identity brings all of these states to the same category. They are all postcolonial in spirit. And all of them have been active in the Internet governance conflict.

However, one may ask why I did not include South Korea or Venezuela in this study. South Korea has made exceptional progress in expanding the Internet and increasing access to this medium, but distanced itself from the Internet governance conflict. Moreover, South Korea has long been a U.S. client state. Similarly, Venezuela organized a regional television network—Telesur—to offset the influence of U.S. television networks in Latin America, but hardly intervened in the global Internet policy-making processes.

1.1 Other Stakeholders of the Internet Governance Conflict

Of the stakeholders of the Internet governance conflict, the U.S. has been the controller of the Internet and its governing structure. Another stakeholder, the European Union (EU), founded by Belgium, France, Germany, Italy, Luxembourg and the Netherlands in the early 1950s, is a supra-state with 27 state members. It created a single market in the late 1980s by allowing the free movement of goods, services, people and money among the member states through the Single Europe Act. It developed a common currency called euro in the early 2000s. The EU economy is slightly bigger than the U.S. economy. In addition to economic initiatives, the EU has a small defense force of around 60,000 personnel called the European Rapid Reaction Force (ERRF) involving units of land, air, and sea forces. The ERRF, which is

independent of the North Atlantic Treaty Organization (NATO), has worked so far as a peacekeeping force in Europe.

Stephen Gill argues that the EU unity is based on a narrow economistic vision, and the lack of congruence between political and economic aspects of the European integration and popular support for such a project undermines EU's capability to become a dominant power.\textsuperscript{20} The EU is yet to develop a common stand on defense and foreign policy since its stance on these issues is torn by German reluctance to get more involved, British pro-Americanism and traditional French individualism.\textsuperscript{21}

Politically, there is little difference between the values of the U.S. and the EU. Perry Anderson claims that the recent expansion of the EU into East Europe has happened according to the desire of the U.S.\textsuperscript{22} The threats of Soviet socialism united the EU with the U.S. once, and now threats from Islamic radicalism will keep it there, argues Bradley Thayer.\textsuperscript{23} However, we can see occasional disagreements between the U.S. and the EU on political and economic issues. One example of EU's difference with the U.S. in global politics is Iraq war. EU's united economic stance gives it a countervailing bargaining power against the U.S. in international trade negotiations such as the WTO [World Trade Organization] negotiations.\textsuperscript{24} At the WSIS, the EU worked as a cohesive unit and tried to mediate between the interests of the U.S. and postcolonial states in Internet policy issues.

The WSIS opened an opportunity for both civil society and businesses to play important roles in global communication policy-making. It was the second UN summit to accept the accreditation of business entities, after the 2002 Monterrey UN summit named Financing for Development. In the first phase of the WSIS, 98 business entities attended the meetings. In the second phase, their number increased to 226, with the


\textsuperscript{21} Ibid.


\textsuperscript{23} Thayer, The Case, 34.

\textsuperscript{24} Gill, The Emerging World, 190.
encouragement of western states. In the business category, mainly transnational corporations (TNCs) involved in ICT business participated in the meetings. Leslie Sklar would define the representatives of these transnational media companies as the members of the transnational capitalist class.25 They participated in the name of the Coordinating Committee on Business Interlocutors (CCBI) with the International Chamber of Commerce (ICC) as the chair. Apart from the ICC, the key members of the CCBI include the Business Council for the United Nations (BCUN), Global Business Dialogue on Electronic Commerce (GBDe), the Global Information Infrastructure Commission (GIIC), Money Matters Institute (MMI), the United States Council for International Business (USCIB), the World Economic Forum (WEF), and the World Information Technology and Services Alliance (WITSA).

Similar to businesses, civil society also had an elevated status at the WSIS, compared to the previous UN communication events. Marc Raboy points out that civil society has been involved in UN summitry for quite some time in various capacities, but not as an “equal partner”; the WSIS treated civil society as an equal partner to other stakeholders.26 In the first phase 481 NGOs participated in the WSIS processes, and in the second phase their number went up to 606.

But the definition of civil society is murky within the UN system since it includes everyone, who is not part of the governments, private enterprises and intergovernmental organizations, in the civil society category. The WSIS document on stakeholder participation shows that the Civil Society Bureau (CSB), the WSIS official bureau of civil society created during the second PrepCom of the Geneva phase to coordinate civil society activities, clustered civil society representatives into 21 families such as “The Media”, “Creators and Active Promoters of Culture”, “Networks and Campaigns”, and “Cities and Local Authorities” etc.27 The CSB also included representatives from various

26 Raboy, The World Summit, 228.
caucuses (i.e., the human Rights caucus, the Internet governance caucus, the gender caucus etc.) and the regional contact points of the summit.

Cammaerts and Carpenter note that civil society was diverse at the WSIS in terms of structure and ideological orientation. It had representatives from grassroots civil society organizations, regional civil society organizations and global civil society organizations, and with all types of ideological orientations such as conservative, liberal and radical. Marc Raboy claims that Voices 21, a London based loose coalition of media activists formed in 1999 to act as a voice for communication issues, was the pioneer in organizing civil society actors at the WSIS. It negotiated with other west-based NGOs such as the World Association of Community Radio Broadcasters (AMARC), the Association for Progressive Communication (APC) and the World Association for Christian Communication (WACC) to increase civil society influence at the WSIS. All these organizations together launched a platform called the Campaign for Communication Rights in the Information Society (CRIS) to establish communication rights as a central issue of the WSIS. CRIS later joined forces with other NGOs and civil society groups dealing with communication issues such as Friedrich Ebert Stiftung, a German foundation, which organizes public service broadcasters. It acted as the key player at the CSB which tried to offer unified civil society viewpoints at the WSIS. Most civil society groups which participated in the WSIS processes came from the west which critics see as an evidence of the uneven participation within the non-state actor category in a global event.

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28 Cammaerts and Carpenter, The Unbearable, 18.
29 Raboy, The World Summit, 228.
30 Ibid, 229.
31 Ibid.
1.2 Theories of Global Policy-Making

Global governance paradigm provides a framework for analyzing policy-making at the supranational level. It hinges on the idea of globalization, as its leading theorist James Rosenau suggests that the partially globalized world has required a new form of policy-making—global governance—to deal with the problems created by increased interdependence between global actors. Governance is different from government in the sense that it involves both formal and informal rules, norms, agreements, practices and institutions, while government involves only the formal ones, observes Sandra Braman. The objective of policy-making in this framework is to foster interdependence at global and national levels through norms, rules, regulations and institutions.

David Held and Anthony McGrew have summarized the key features of global governance. They suggest that global governance is a multilateral process with the involvement of multiple actors and levels such as supra-state actors (e.g., the UN system), regional actors (e.g., the EU), and transnational actors (e.g., civil society and TNCs). In this approach, the state which traditionally dominated governing, including policy-making, at both national and supranational levels, plays the roles of a liaison by coordinating the various levels of governance. Global governance theorists see an end to the idea of dominant power in international politics, claiming the decline of U.S. power. For them, the supranational political process has become global from international. In the global process, states, businesses and civil society share policy-making power, while in the international process only states had policy-making power. James Rosenau observes that, in global governance, states dominate some issues, civil society dominates some and businesses control some.

36 Rosenau, Governance in a new global order, 76.
37 Ibid.
Under this perspective, global communication policy-making should be called
global communication governance, and should be defined as a multistakeholder process
where many parties including states, businesses and civil society participate in setting
norms. This paradigm would suggest that there was no relation of power at the WSIS
and Internet governance conflict, and the stakeholders participated in these events as
equal partners. But the questions which arise are: how would this paradigm characterize
unilateral U.S. control of the Internet root and Internet Corporation for Assigned Names
and Numbers (ICANN)? And how would it explain the role of the postcolonial states?
How would it ignore the power relation between states and non-state actors at the WSIS
where intergovernmental bodies decided the terms and conditions of participation for
businesses and civil society?

Another theoretical approach—regime theory—has also tried to explain
contemporary global policy-making processes. Sandra Braman points out that regime
theory has only recently been used to explain information policy-making. She argues
that regime theory works as a useful tool in addressing what she says, “one of the key
problems facing information policy-makers—the dispersal of decision-making across
numerous venues and players” by placing them under a unified framework.

In the different versions of regime theory, regime refers to many things ranging
from an issue area to an international organization. Sandra Braman notes that
originally regime theory would take the nation-state as the principal unit of analysis, but
now it considers other informal processes, including the role of other actors such as
“epistemic communities” (i.e., people or institutions which share an epistemic outlook—a
way of looking at the world) in policy-making as well. She argues that regime theory
helps us understanding three features of information policy-making: first, it suggests that

38 Braman, The Emergent, 12.
40 See S.D. Krasner, International Regimes (Ithaca: Cornell University Press, 1982); William J. Drake,
“Asymmetric Deregulation and the Transformation of the International Telecommunication Regime”, in
The Dynamics of Telecommunication Policy in Europe and the United States, eds. Eli Noam and Gerald
Pogorel, 137-205 (Norwood, NJ: Ablex, 1994), M. Zacher and B. Sutton, Governing Global Networks:
International Regimes for Transportation and Communications (Cambridge: Cambridge University Press,
41 Braman, The Emergent, 28.
information policies are not only made by nation-states, but also by other systems; second, it highlights information generation, information processing and information flows as important processes and the use of information as a tool of power in international and global politics; and finally, it explores how a particular regime adapts to changing realities.\footnote{Ibid, 30.}

We can see some similarities between global governance paradigm and regime theory since regime theory also subscribes to the idea of governance and recognizes the role of civil society. Similar questions, which I have raised about global governance paradigm, can also be raised about regime theory. Jill Hills has developed a strong critique of regime theory in her book \textit{Telecommunication and Empire}.\footnote{Jill Hills, Telecommunication and Empire (Urbana: University of Illinois Press, 2007).} She argues that regime theory, which became a leading theory of international regulation in the wake of a relative decline in U.S. economic power in the 1980s, has lost its relevance.\footnote{Ibid, 19.} She notes that the idea of a regime implies a consensus, and regime theory hides power relations by assuming the existence of a consensus.\footnote{Ibid, 20.} Foregrounding the idea of dominant U.S. power in international policy-making, Jill Hills notes that regime theory cannot explain how the U.S. could unilaterally create international policy-making institutions (e.g., ICANN), adopt forum shifting and employ both unilateralism and multilateralism to manipulate international policy-making processes.\footnote{Ibid, 21.} For Jill Hills, another big hole in regime theory is that it lacks an analysis of the role of businesses in shaping international policy-making.

Gramsci's idea of hegemony, outlined in his prison notebooks, can help us explaining power relations in global policy-making.\footnote{Antonio Gramsci, Selection from the Prison Notebooks (New York: International Publishers, 1971).} Gramsci suggests that a social group becomes superior or the ruling class in a society through their control over the means of production and by subjugating other social groups. The ruling class can subjugate the other classes by giving economic concessions to them or by annihilating
their intellectuals. Using the idea of transformismo, he explains it as a historical transformation of social groups.

The ruling group needs to achieve consent from the other social groups to enjoy hegemony. To ensure hegemony, it needs help from the state and bourgeois intellectuals. Bourgeois intellectuals create an ideology—a system of ideas—to justify the rule of the dominant class and achieve consent from other classes. The state coerces the other classes into accepting the dominance of the ruling class, when the other classes fail to give active or passive consent. A ruling class loses hegemony when it loses the consent of the other classes, but can continue to rule through domination or use of force. A national hegemonic system is a social order with economic, political and social/cultural components.

I use this idea of hegemony to understand the struggle over global Internet policy-making. For using this to understand a global conflict, we need to move from the national context to the global one. Gramsci provides a hint for this. He suggests looking into the relations of three forces—the level of the development of productive forces, relations between the political forces within the states, and potential political and military power of the states to support the hegemonic class at the transnational level. 48 Robert Cox reinforces this point saying that a transnational hegemony is “an outward expansion of the internal (national) hegemony established by a dominant social class.” 49 He defines the transnational hegemonic system “as a social structure, an economic structure, and political structure,” and argues that “it cannot be simply one of these things but must be all three.” 50

According to Robert Cox, transnational class hegemony “is expressed in universal norms, institutions and mechanisms which lay down general rules of behaviour for states and for those forces of civil society that act across national boundaries—rules.

48 Ibid, 176.
50 Ibid, 172.
which support the dominant mode of production." He identifies transnational organizations as a mechanism through which the "universal norms of" transnational hegemony are expressed. He goes on to say that the dominant state either initiates or supports the efforts of creating transnational institutions and rules, and secures the consent of other states for that. Among the states, it first secures the consent of the core countries and then of some key peripheral countries.

The U.S. began to rise as a powerful state in the global political economy since the end of the Second World War. Leo Panitch and Sam Gindin claim that U.S. rise began with the reconstruction of war-torn Europe through the Marshall Plan, creation of international organizations such as the World Bank and the International Monetary Fund (IMF), and the Bretton Woods Agreement. The Marshall Plan integrated the European economy with the U.S., and the World Bank, IMF and Bretton Woods agreement established U.S. financial power by creating an international financial framework. According to Peter Gowan, one of the most important decisions made by the U.S. administration was to make its currency, the dollar, as the standard of the international monetary system in the 1970s and other currencies convertible into dollar. It gave the U.S. government absolute control over its own currency, leverage over other capitalist countries, and helped bring the international financial market under the control of the U.S. Treasury-Wall Street clique. The U.S. Treasury-Wall Street control of the international financial flows gave the U.S. power to create pressure on other countries to adopt policies that would help open up their economies to transnational capital which is predominantly American.

Susan Strange sees U.S. financial power as a component of its structural power—the power to set agendas and create rules for participation in the global political

51 Ibid.
52 Ibid.
economy. She points out that, along with having control of global finance, the U.S. has security power that it can provide security to other countries through its air, land and sea forces. And it also has economic and cultural power that its TNCs control the production and distribution of goods, services, knowledge and ideas through their control over technologies, production and the media. Harvey agrees with Susan Strange that the U.S. maintains its influence by using its political, economic, military and cultural power.

But world system theorist Immanuel Wallerstein argues that the U.S. lost its economic power by losing its productive edge, and it is now the most indebted country in the world. And its military as well as political power is no longer overwhelming. Its ability to dictate to its allies (e.g., Western Europe and Japan), intimidate its foes, and overwhelm the weak is vastly impaired. The effectiveness of its military is under severe challenge in Iraq and Afghanistan.

Given the ongoing economic crisis in the U.S., predicting the decline of American power has been a matter of common sense. But Robert Brenner observes that we need to see how U.S. power is defined to judge whether it declined or not. He argues that if U.S. power is defined from the perspective of geopolitics—the ability to use force, certainly that power shows some weakness. And the U.S. economy is also going through a crisis. But the U.S. is not alone in going through an economic crisis. The world economy is in shambles because all the major economies, including the European, Chinese and Indian, are dependent on the U.S. economy. The U.S. has been the largest importer of the products of other major economies. The European economy, Chinese economy and Indian economy all have had decreased growth rates. One estimate

59 Economist. “Suddenly Vulnerable: Asia’s Two Big Beasts are Shivering. India’s Economy is Weaker, but China’s Leaders have More to Fear”, December 11, 2008, http://www.economist.com/opinion/displayStory.cfm?story_id=12773135&fsrc=nwlehfree
suggests that, China, the country that is thought to be capable of matching U.S. dominance across the world will need till 2042 to have a GDP of 10.9 trillion dollars, that is equal to the GDP of U.S. in 2003, if the Chinese economy can continue to grow the way it was growing before the recent economic slump.\textsuperscript{60} However, if we assess the processes of creating and protecting the rules of the world capitalist order, we can clearly see that the U.S. still has the ability to maintain a hegemonic world order, argues Robert Brenner.

This dissertation contributes to the above debate by assessing U.S. power in creating a hegemonic global communication system. Herbert Schiller, as a pioneer in explaining U.S. power in this area, argues that the U.S. laid the foundation of a transnational hegemonic communication system through ideas and the capabilities of its TNCs in producing communication technologies and content in an overwhelming quantity.\textsuperscript{61} According to Herbert Schiller the "free flow of information" was the key ideology in initiating a hegemonic transnational communication system in the post-World War II period. In recent years, the key ideology for reorganizing world communications has been neoliberalism.

Harvey defines neoliberalism as a system of ideas for organizing political economic practices that:

proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free market and free trade. The role of the state is to create and preserve institutional framework appropriate to such practices.\textsuperscript{62}

Neoliberalism denotes the re-emergence of the liberal ideas of organizing political economic practices. The key features of neoliberalization in the communication sector include: privatization, liberalization and state interventions in favor of private interests. Neoliberalism is synonymous with the phrase "Washington Consensus" since neoliberal

\textsuperscript{60} Thayer, The Case, 32.

\textsuperscript{61} Herbert Schiller, "Is there a United States Information Policy?" In Hope and Folly: The United States and UNESCO, eds. William Preston Jr., Edward S. Herman, and Herbert I. Schiller, 285-286 (Minneapolis: University of Minnesota Press, 1989).
ideas were promoted by Washington, DC based institutions such as the IMF, the World Bank and the US Treasury Department.

Edward S. Herman and Robert W. McChesney argue that a handful of U.S. based transnational media corporations have created a hegemonic global media system with the help of the U.S. government by using neoliberalism as the guiding philosophy. In order to create this global media system, powerful states and global communication policy bodies adopted neoliberal policies. Jill Hills argues that the U.S. restructured the transnational communication policy arena by transforming the old international communication bodies (e.g., ITU and Intelsat) and creating new models of communication policy-making (i.e., the ICANN model of Internet policy-making) in light of neoliberal policies. This transformation created frictions between states.

In this dissertation, I explain the nature of conflict between the U.S. and the postcolonial states over global Internet policy-making by using Gramsci’s idea of hegemony. For that, I first discuss how and why the U.S. created the ICANN model by taking a historical approach. After that, I explore why and how the postcolonial states opposed the ICANN model, and assess whether their opposition embodies the signs of the growth of a counter-hegemonic bloc or in the Gramscian sense a new historic bloc.

1.3 Scope and Organization of this Dissertation

This dissertation first explains why and how the U.S. created the ICANN model of global Internet policy-making by drawing on available secondary literature on U.S. influence in global communication and primary literature on the creation of Internet policies and policy-making bodies (e.g., ICANN, IETF etc). U.S. government policy papers on Internet management and ICANN generated “Request for Comments” (RFCs) provide primary data for this purpose.

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After explaining the creation of the ICANN model, this dissertation moves on to discuss why and how the postcolonial states opposed the ICANN model in the selected issues of global Internet policy-making. For this purpose, I looked into various primary documents presented by the stakeholders—the U.S., the EU, the postcolonial states, civil society and businesses—at the WSIS. The representatives of the stakeholders submitted position papers and gave speeches on Internet policy issues at the WSIS during the six PrepComs and two summit meetings which held between June 2002 and December 2005. The WSIS website maintained by the summit organizer, the ITU, made all the documents available.

For the purposes of this dissertation, I have analyzed the documents by using the methods of discourse analysis and keeping the political and economic context of Internet policy-making in mind. Secondary materials such as journal articles and books provided the background to understand the documents by situating Internet policy issues in historical, political and economic contexts. I also compared the stated positions of important state actors (e.g., the postcolonial states, the EU, and the U.S.) at the WSIS with each other and their actual practices at the national level. This comparison helps us understand why a state took a particular position on an Internet policy issue at the WSIS. Usually domestic priorities of a state shape its responses at the supranational level.

1.3.1 Chapter Outlines

This dissertation has eight chapters. Chapter 1 introduces the goals, objectives and methods of the dissertation. Taking a historical approach, chapter 2 explains how and why the U.S. created the ICANN model of Internet policy-making. It explores the ideas and institutions the U.S. utilized to achieve its goal by subjugating the opposing forces. It begins with the creation of UNESCO and ends at the creation of ICANN.

Chapters 3, 4, 5, 6 and 7 explore how the postcolonial states challenged the ICANN model of Internet policy-making. They document the ambiguity in postcolonial opposition to the U.S. in the context of those Internet policy issues which were discussed during the WSIS processes such as unilateral U.S. control over the Internet root and ICANN, digital divide, multilingualism, intellectual property right (IPR), and Internet security. These issues can be divided into three groups—the issues of conflict (i.e., U.S.
unilateral control over the Internet root and ICANN, digital divide), the issues of compromise (i.e., multilingualism), and the issues of complicity (i.e., IPR and Internet security).

Chapter 3 discusses that the postcolonial states oppose the ICANN model because it has mechanisms for the U.S. to unilaterally control Internet policy-making through its control over the Internet root and ICANN, and shows how the U.S. succeeded in maintaining its control over the Internet and safeguarding ICANN.

Chapter 4 explores how and why the postcolonial states differed with the U.S. on the issue of digital divide. It reviews the visions of the various stakeholders on digital divide to see how they define the issue and suggest solutions. It also assesses the policy recommendations and initiatives taken to eliminate digital divide.

Chapter 5 explains why there was a consensus between the conflicting parties in expediting the multilingualization of the Internet. It explores what is involved in the multilingualization of the Internet and evaluates the steps taken to ensure that.

Chapter 6 shows how the U.S. and businesses made IPR an important issue of Internet policy-making and moved this issue out of the WSIS. The postcolonial states agreed with the U.S. and the CCBI to leave this issue to the WTO and the World Intellectual Property Organization (WIPO). This chapter explains the nature of conflict between the U.S. and the postcolonial states in these forums. It demonstrates that the postcolonial states have more influence on the WIPO processes than the WTO. It argues that the postcolonial states accept the IPR framework in principle but fight for leverage within the framework.

Chapter 7 discusses how the postcolonial states acquiesce to the U.S. perspective on Internet security in spite of having different understanding of the sources of threat to their security. For this purpose, this chapter explains how cyber-crime/ cyber-terrorism is defined and what measures are recommended to deal with them, and review the role of various stakeholders. It also shows that the participation of non-state actors, more specifically civil society, is limited with regard to cyber-security measures.

Finally, the concluding chapter assesses whether the postcolonial states' resistance to U.S. over various Internet policy issues will develop as a counter-
hegemonic movement or in the Gramscian sense a new historic bloc. It ponders the possibility of developing a new democratic multilateral Internet policy-making forum, which it defines as a postcolonial utopia.
2.

From UNESCO to ICANN: The Rise of a New Model of Global Communication Policy-making

Why and how did the U.S. create the new mode of global communication policy-making (i.e., the ICANN model)? U.S. efforts in this regard have unfolded over the years. We can identify two phases in U.S. efforts. The first phase began immediately after the World War II and ended in the early 1980s, and the second phase began in the mid-1980s and continued to today. There were ups and downs during these phases: the U.S. faced challenges to its efforts and successfully overcame them. At the beginning of the first phase, the U.S. established a hegemonic transnational communication system, but faced a challenge from the NWICO movement, created by the “third world states” exposing the inequality in world communication.

In the second phase, the U.S. overcomes the challenge and tries to recreate the hegemonic system. As part of the effort, it created a new mode of global communication policy-making, the ICANN model of Internet policy-making. I will show below that the superior production capabilities of U.S. media corporations and U.S. soft power—the capability of generating new ideas and creating new institutions—worked hand in hand in creating and recreating the hegemonic transnational communication system.

In the first phase, the U.S. worked through the UN system by using a liberal idea called the “free flow of information”, and in the second phase, it restructures global communication policy-making institutions and creates a new model for Internet policy-making by applying the logics of neoliberalism.

In the first half of this chapter, I discuss how the U.S. created the transnational hegemonic communication system and how and why it faced the crisis, and in the
second half, I explain how it transforms the communication arena by applying the neoloberal doctrine to recreate the hegemonic system.

2.1 First Phase: The Rise of a Hegemonic Transnational Communication System

The U.S. used the idea of free flow of information and UNESCO, a new institution created as a part of the UN system, to create a new transnational hegemonic communication system. Herbert Schiller defines the “free flow of information” as a system of ideas with multiple components.¹ The core arguments of this doctrine are the following. First, the flows of media materials across the world should be free from state intervention. Second, the media should provide “objective” and “unbiased” news. Only privately-owned media can do this since they are “free” media. Third, there should not be any international agreements which will demand accountability or impose obligations on the international communication system. Finally, the idea of free flow of information subscribes to a technological determinism that technologies are remedies to all social problems including social inequality. Herbert Schiller also nicely points out how this system of ideas contributed to U.S. objectives, saying that “[i]ts value is that it skillfully and seamlessly blends corporate advantage, media domination, and the yearnings of people everywhere for contact and full expression, at the same time that it confers an enormous propaganda advantage on its advocates.”²

Through historical research, Dwayne Winseck and Robert Pike trace the root of this doctrine which would make the core of the U.S. approach to global communication in the 1920s. They argue that the principal focus of U.S. international policy at that time was to expand its trade and investment across the world and create a stable world system for that. The State Department was the lead agency in fulfilling this goal by drafting policies and monitoring international agreements on telecommunications.³ Winseck and Pike go on to say that a group at the State Department, which included

¹ Schiller, Is there, 288.
² Ibid, 293.
former newspaper editors and career foreign service officers, prepared the outline of a coherent U.S. approach to global communication and the “free flow of information” doctrine. This doctrine was based on an idea of liberalism which championed some types of freedom such as freedom to do business without government intervention (i.e., free market), freedom of individual choice, freedom of individual expression, and freedom for individual consumption.

The U.S. made the “free flow of information” a key component of global communication policy through UNESCO. Joseph A. Mehan, a former Chief of Public Information for UNESCO in the U.S. and Canada, writes that the U.S. promoted communication as an area of international jurisdiction at the UN, arguing that communication media would provide a means to ensure peace by spreading knowledge and information across the member states. The U.S. delegation, involving Archibald MacLeish and Senator William Benton, proposed to define the media as the utmost means of “spreading knowledge and common understanding for [human] security” at the preparatory conference of the UN for the establishment of an international organization for education and culture, which would later be known as UNESCO, in 1945. Under U.S. influence, the conference incorporated Article I: Section 2a into UNESCO constitution which says that the organization: “will collaborate in the work of advancing mutual knowledge and understanding of peoples, through all means of mass communication and to the end recommend such international agreements as may be necessary to promote the free flow of ideas by word and image.” The U.S. also influenced the first session of the UN General Assembly to instruct its Social and Economic Council to convene a world conference on the rights and obligations related to the freedom of information. The Social and Economic Council involved UNESCO in holding the conference because it was the latter’s constitutional responsibility to help securing the free flows of information and freedom of expression. The conference, known as the UN Freedom of Information Conference, sat in Geneva from 23rd March to

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4 Ibid.
6 Ibid.
7 Ibid, 159-160.
21st April 1948. Delegates from 54 nation-states, including 30 member states of UNESCO, attended the conference which adopted three key resolutions related to the freedom of information. Of these resolutions, two were for ensuring the free flow of information and one was on states’ right to publicize their responses to any false information and information that would encourage a war.

To pass the resolutions supporting free flow of information, the U.S. had to subjugate the Soviet Union which promoted an alternative idea. General Carlos P. Romulo of the Philippines, who presided over the conference, points out that this conference turned into a battle over two opposing ideas—the free flow of information championed by the U.S. and its European allies and the freedom of information with responsibility promoted by the Soviet Union and its allies.⁸

At the conference, the U.S. pressed for the acceptance of an unrestricted flow of information across the world. The Soviet Union argued that the freedom of information should be exercised with some responsibility. It said that “freedom without attendant responsibility was … anarchy” and “uncontrolled freedom” would destroy freedom itself since it would enable a few to become powerful and abuse power.⁹ It also suggested that the conference should list which activities of the press should be encouraged and what should be restrained. As an example of press role, the Soviet Union suggested that the press should help fight fascism, racial discrimination, warmongering, and promote democracy as well as economic and social well-being. And states’ job would be to encourage the flow of that information which fulfills these goals. On the other hand, the U.S. opposed outlining any responsibilities for the press.

Under the influence of the U.S. and its allies, who formed the majority at the time, the conference defined freedom of the press as a fundamental human right and urged to exercise it with responsibility. It encouraged the press to decide its own responsibility, reasoning that any mechanisms developed to impose responsibilities on the press would pave the path for restricting freedom. The only concession the Soviet position received

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⁹ Ibid.
was that states would have the right to correct false and distorted reports and restrict the spread of that information which would encourage warmongering.\textsuperscript{10} The UDHR, which was created by the UN at the same time of the conference, incorporated freedom of information as a fundamental human right.

U.S. efforts at the UN and UNESCO received active support from west European states. The U.S. won their support by helping their post-war reconstruction under a four year (1948-1952) economic recovery project, known as the Marshall Plan initiated by the U.S. Secretary of the State George C. Marshall. The pressure of Soviet socialism was an important factor for both U.S. and European statesmen to pursue this project. For the same reason, the U.S. also helped the U.K. and Japan reconstruct their economies.

Initially, UNESCO served as a vehicle to promote the idea of free flow of information. U.S. goal to ensure the free flow of information across the world was to make sure that there was no restriction against the flows of its media products. During the creation of UNESCO, the American media industry was the dominant producer and distributor of media products across the world as two subsequent world wars debilitated European media industries. William Preston Jr. argues that the Marshall Plan helped U.S. media companies to become transnational by consolidating their market in Europe. The plan had “specific provisions ‘to help promote the circulation of American publications and American ideas in Europe.’”\textsuperscript{11} American news agencies got more clients to deliver their news and feature services, Hollywood got an additional 110 million weekly audience for its movies, and newsweeklies saw their international circulation increased.\textsuperscript{12}

By the 1960s, U.S. media corporations had further strengthened their lead in the field of communication by developing new technologies (e.g., satellite and wireless). Their superiority in computer technology, satellite communication, and remote sensing

\textsuperscript{10} Ibid.


\textsuperscript{12} Ibid.
created concerns among the rest of the world because DBS and remote-sensing have the ability to operate across the space ignoring national borders.

With support from Western Europe and the innovative and production power of its media companies, the U.S. created a transnational hegemonic system in global communication immediately after the World War II. It achieved the consent of other states by establishing the free flow of information as a constitutive principle of UNESCO and freedom of information as a human right. However, U.S. domination would face a new challenge in the late 1960s, which I discuss next.

2.1.1 Crisis of U.S. Power in Global Communication

U.S. influence at the UN and UNESCO began to decline dramatically when the third world states collaborated with the Soviet Union. The third world states, which gained independence through popular nationalist movements against European colonial powers and with promises for new prosperous self-determined societies, emerged as a powerful bloc in international politics in the 1960s. They began to organize themselves in the early 1950s to have their voice heard at international forums. African and Asian states got united first and then Latin American countries joined.

The first official expression of the unity of African and Asian states happened through the 1955 Bandung Conference in Indonesia. In April 1954, Indonesia first proposed to have a summit of the third world countries to discuss colonialism, self-determination, and explore the areas of mutual cooperation. Later Indonesia and four other countries—India, Sri Lanka (former Ceylon), Myanmar (former Burma), and Pakistan—decided to jointly organize the conference. Twenty-nine countries, including China and Iran, representing the half of the world population participated in the conference. The conference took place at a time when people in many societies across the world were fighting against colonial/imperial domination. Influenced by this reality, the conference produced its final communiqué denouncing all forms of colonialism and issuing a call for unity among Asian and African people.

Latin American countries joined the Bandung countries in the 1960s with a concern for economic development in postcolonial societies. The unity of these countries, in spite of its internal tension, gradually emerged as the third force called the Non-Aligned Movement (NAM) in international politics in parallel to the U.S.-led capitalist bloc and the Soviet-led socialist bloc. Vijay Prashad argues that since its inception, the NAM was pulled toward two opposite directions—some states wanted it to be in the capitalist camp, while some wanted it to be in the socialist camp, as the principal conflict of the world at that time was between the capitalist and communist blocs.\textsuperscript{14} But at the end of the day, the third world alliance stood against U.S. imperialism, argues Prashad.\textsuperscript{15} They would side more with the Soviet Union on communication issues in UN forums to have self-control in culture and communications. We can see their combined efforts at the UN in the late 1960s.

Both the Soviet Union and third world states demanded the protection of national sovereignty and national interest from the free flow of information. They tried to kill this doctrine in the field of satellite communication. The Soviet Union argued at the Committee on the Peaceful Uses of Outer Space (COPUOS), which began to convene in 1969, that this committee should make it mandatory for DBS providers to take a prior consent of the states before covering their territories. The U.S. opposed it saying that such a provision would be contradictory to Article 19 of the UDHR which enshrines the right to freedom of opinion and the free flow of information.

The Soviet Union, supported by the third world states, proposed a resolution to the UN General Assembly for a binding convention of principles for international satellite broadcasting.\textsuperscript{16} The resolution, passed by 102 to 1 vote (i.e., U.S. vote), instructed COPUOS to develop principles for the use of DBS. The Soviet Union and the third world states also pressed for strict provisions related to remote sensing. They influenced the 1972 UNESCO General Conference in adopting a declaration on the principles of the use of satellite broadcasting which would reinforce the provision of prior consent.

\textsuperscript{14} Prashad, The Darker, 209.
\textsuperscript{15} Ibid, 210.
In addition to this, the third world states demanded a New International Information Order (NIIO) and a new scheme for the allocation of orbital slots and radio frequencies. The fourth conference of the non-aligned states in Algiers in 1973, where 75 countries participated, formally launched the NIIO. Article 13 of the Action Program for Economic Cooperation, passed by the conference, expressed the goals of the NIIO. The NAM countries wanted the NIIO to create a balance in the flows of cultural products between them and the first world states, mainly the U.S. The third world states claimed that the international communication system was one-sided to such an extent that cultural products (e.g., news, television programs, and advertising) from the first world states debilitated their cultures, and disadvantaged them in the allocation of radio-frequency for broadcasting and telecommunication and orbital slots for satellite communication.

They pointed out that four big western news agencies—Reuters, the AFP, AP and UPI—dominated news flows across the world creating a one-way flow in terms of news. U.S. media corporations dominated the world in terms of magazines, TV programs and films. The third world states demanded balanced flows of information across the world and made it a key focus of the NIIO movement. They argued that the existing international economic and communication systems were facilitating a neocolonialism in postcolonial societies by keeping their economies and cultures dependent on the metropolitan centers of the first world. Mustapha Masmoudi, the Tunisian permanent delegate at UNESCO, was the key person who articulated third world viewpoints on NIIO. Kaarle Nordenstreng summarizes third world states’ demands as four “Ds”: democratization (i.e., demand for pluralizing the sources of news and information), decolonization (i.e., the struggle for independence from western domination and self-reliance), de-monopolization (i.e., demand for an end to the concentration of

17 It died in the 1980s.

ownership in the media industries) and development (i.e., need for social, economic and cultural development).\textsuperscript{19}

The third world states put up strong resistance against western states at the UN because they thought that their economic and cultural future was at stake, and they needed to change the free flow based international system for their common good. With the help of the Soviet Union and China, they exercised their majority at various UN forums to achieve favorable declarations since such forums made decisions on majority votes.

Colleen Roach notes that from the mid-1970s through the mid-1980s UNESCO, with a secretariat under the leadership of Amadou Mahtar M'Bow of Senegal, was a forum of the third world states and their demand for a new international order in world communication.\textsuperscript{20} Under pressure from the third world states, the 1976 UNESCO General Conference in Nairobi decided to create a commission to investigate the problems of international communication. In 1977, the Director General formed an international commission with the Sean MacBride of Ireland as the chair, and requested the commission to report to the General Conference by 1979.\textsuperscript{21} The other members of the commission, which would be known as the MacBride commission, came from the three blocs—the first world, the second world and the third world.\textsuperscript{22}

Apart from forming this commission, UNESCO also proceeded towards developing other media related norms. In 1978, the 20\textsuperscript{th} UNESCO General Conference adopted a declaration called the “Declaration on Fundamental Principles Concerning the Contribution of the Mass Media to Strengthening Peace and International Understanding, to the promotion of Human Rights and to Countering Racialism, Apartheid and Incitement of War,” which is also known as the Mass Media Declaration,

\textsuperscript{22} Ibid, 296.
supporting the idea of a new and more effective as well as just world information and communication order.\textsuperscript{23}

The report produced by the MacBride commission titled "Many Voices, One World", which stands as one of the most important documents of international communication, is a negotiated political document created by a small group of experts for a large international audience.\textsuperscript{24} The MacBride report validated the third world claim that information flows between the "developed" and "developing" countries were unequal, favoring the former countries, but adopted the term New World Information and Communication Order (NWICO) instead of the NIIO, to define the goal of the report. It said that the "developing countries" were dependent on the "developed countries" in the field of communication, and their dependence did not allow them to be self-reliant. It defined communication both as an individual human right and the collective right of a nation. It also defined freedom of information and the right to seek, receive and impart information as a fundamental human right. It called for the democratization of communication at the national level and the international level. It emphasized that the "developing countries" should have comprehensive national communication policies, and the policies should be linked with social, political and economic development initiatives to ensure diversity, independence and self-reliance in terms of communication.

The U.S. viewed the report as a "mixed bag" which on the one hand expressed strong support for libertarian values like freedom and diversity, and on the other, denounced the involvement of the private sector in communication.\textsuperscript{25} Masmoudi saw it as a partial fulfillment of the goal of the third world states for a new international order in information and communication.\textsuperscript{26} But critical scholars criticized it for not explaining the


structural factors which led to inequalities in international communication\textsuperscript{27} and for its bias toward technology as a means of development.\textsuperscript{28}

The report agreed on the need for protecting state sovereignty over communication, highlighted the existence of inequality between states in terms of media flows, and the need to limit the activities of TNCs. This was a report of a fact finding commission which tried to assess the claims of the third world states, not a legal document of the UN. But it would have introduced significant changes to international communication, if its recommendations were accepted by the General Conference for implementation.

The first world states led by the U.S. got worried about the report, especially about the recommendations dealing with commercialization, media concentration and transnationalization, and about the development of communication media in the third world states. They gave maximum effort to make sure that the subsequent UNESCO General Conference did not make any decisions to implement the recommendations of the report. They defined the NWICO movement as a project of the Soviet Union and some radicals from the third world whose goal was to impose censorship and control over media flows. They began pondering strategies to break the alliance between the Soviet Union and third world states.

They chose two ways—first, they decided to show sympathy to the communication and development needs of the third world states, and second, they began to look for allies in the third world to isolate the third world states from the Soviet Union.\textsuperscript{29} The U.S. also made a counter proposal to reduce the imbalance by increasing media production capabilities in the third world states not by controlling media flows, and showed willingness to help such states to build their media industries.\textsuperscript{30} In addition to that, it engaged its media companies to help stifle the move of the third world states. The


\textsuperscript{29} U.S. Department of State, The US view of Belgrade, 142.

\textsuperscript{30} Roach, The Movement for, 287.
U.S. State Department, along with the U.S. International Commission on UNESCO and the World Press Freedom Committee, a U.S. based private think tank, held briefing meetings for U.S. media practitioners. The Secretary of State Edmund Muskie himself met the key figures of U.S. media to discuss UNESCO issues.\textsuperscript{31} Being influenced by their government, U.S. media groups, along with other western news organizations, got together in Talloires, France, in mid-May in 1981 and issued a declaration renouncing the MacBride report.\textsuperscript{32}

The Belgrade conference did not make any decisions for the implementation of the recommendations except the recommendation on creating an organization for training third world media professionals—the International Programme for the Development of Communication (IPDC), but underscored the need for the distribution of the report. After the Belgrade conference, the U.S. State Department, under the newly elected Reagan Administration, pressured the Tunisian government into withdrawing Mustafa Masmoudi, who became the spokesperson of the third world states, to weaken the NWICO movement.\textsuperscript{33} In 1984, the U.S. withdrew itself from UNESCO saying that the organization moved away from the "original principles of its constitution."\textsuperscript{34}

Following the U.S. decision to withdraw from UNESCO, other first world states including Canada, the U.K., Germany and the Netherlands created a working group to deal with the concerns raised by the U.S. and began to attack the NWICO.\textsuperscript{35} Under their attack, the UNESCO secretariat changed in 1987 with the election of Federico Mayor from Spain as the Director General. After his election, Mayor issued many statements outlining the role of UNESCO. A statement of Mayor, which he made during a press conference in October 1988, defines the return of UNESCO to its pre-NWICO role—the promotion of the free flow of information. In the statement, he said, "This is a house of

\textsuperscript{31} U.S. Department of State, The US view of Belgrade, 148.
\textsuperscript{32} UNESCO, A Documentary History, 129-130.
\textsuperscript{33} Roach, The movement for, 284.
\textsuperscript{35} U.S. Department of State, "A memorandum prepared by William G. Harley, Communications Consultant, U.S. Department of State, reflecting the views of that Department on what the U.S. government is thinking and doing about UNESCO." Journal of Communication 34, No. 4 (1984): 90.
freedom, and we can never go against our constitution which says we guarantee a free flow of information," and rejected the concept of the new world information order.36

In spite of their internal differences, the first world states led by the U.S. stood as a cohesive group against the third world states in NWICO debates. The first world states got united because if the report was implemented, it would restrict the movement of TNCs and help the third world states have self-control over their national markets. Otherwise, TNCs would be left undisturbed to explore new markets in the third world states. The first world states looked after the interests of their TNCs by opposing the NWICO, argues Colleen Roach.37

The NWICO movement died because of attack by the U.S. and its European allies, the collapse of the Soviet Union, and the internal contradiction of the third world alliance. But they lacked a firm commitment for success because of their bourgeois nature, argues Vijay Prashad.38 He goes on to say that third world leaders depended on the same power base—the landed and merchant classes—for their survival, as did colonial rulers. Since anti-colonial movements were not true social revolutions, they did not dismantle the colonial power structure. The dilemma of the statesmen of the newly independent third world states was how to protect and use the power structure for their own benefit such as legitimizing their rules. Some third world leaders legitimized their rules by taking steps towards ensuring a representative democracy39 (e.g., India), some championed decolonization internationally but pursued repressive domestic policies40 (e.g., China), and some legitimized their rules through the rhetoric of development but not democracy (e.g., Ghana).41 Third world leaders refrained from pursuing radical democratic transformation at the national level to protect their power bases, and

38 Prashad, The Darker, 14.
39 Ibid.
41 Amin Alhasan, Communication and the Postcolonial Nation-State, 65.
because of that they did not have moral strength to pursue democratization at the international level.

Although the NWICO is identified as a failed movement in supranational communication, its significance cannot be denied. It created a crisis of U.S. power in world communication. In the post-NWICO period, the U.S. took many initiatives to re-establish its superiority. The NWICO taught the U.S. one important lesson that any international system which decides on majority votes will decide in favor of the third world states because of their numerical strength. Therefore, to re-establish its superiority in international communication, the U.S. must re-organize the international communication policy-making bodies by downsizing the role of the state and increasing the role of businesses. Vincent Mosco and Dan Schiller argue that two impediments needed to be overcome—state control of the communication industry and the public service goals of communication policies—to ensure business control of supranational communication.42

A U.S. State Department memo prepared by its communications consultant William G. Harley in 1984 reveals future U.S. strategies to restructure international communication. It says that after withdrawing from UNESCO, the U.S. would use “other organizations and mechanisms—multilateral, bilateral, regional—particularly in the private sector, exist to promote the national and sectoral interests to deal with international communication issues.”43 In the next section, we will see how the U.S. influences international institutions to regain its control over world communication.

2.2 Second Phase: Efforts to Re-Create the Hegemonic Transnational Communication System

After the death of the NWICO, the U.S., along with its media corporations, restructured world communication through neoliberalism. Before neoliberalization, we


43 U.S. Department of State. A Memorandum, 91.
can identify three models of managing telecommunications across the world—the American, the European and the third world models. In the American model, state sanctioned private monopolies would own and operate broadcasting and telecommunication outlets. A regulatory agency would regulate their activities. In the European model a government ministry, say for example the ministry of communication or information or telecommunications would operate and regulate telecommunications. States would own telecommunication infrastructures.

The third world model of communication regulation was close to the European model in terms of the extent of state control over communication services. Relevant government ministries would strictly control broadcasting and telecommunication services. In the case of broadcasting, both state owned and private entities would provide broadcasting services, but in the case of telecommunication, state-owned telecommunication companies would have a monopoly.

In the past, telecom regulators, irrespective of their nature, would regulate broadcasting and telecommunication with a stated goal of protecting public interest. However, the definition of public interest would vary from country to country. In the case of broadcasting, public interest goals would include: providing universal access, ensuring plurality and diversity in terms of services, safeguarding freedom of expression for individuals and social groups, and protecting people’s privacy from business interests.\footnote{Colin R. Blackman, “Convergence between telecommunications and other media: How should regulation adapt?,” Telecommunications Policy, 22, no. 3 (1998): 169; Jan van Cuijlenburg and Denis McQuail, “Media policy paradigm shifts: Towards a new communications policy paradigm”, European Journal of Communication, 18 no. 2 (2003): 182.}

Telecommunications would be regulated as a public utility because of an understanding that it is an important resource for everyone since it has an ability to affect the production, distribution and consumption of other social resources.\footnote{William H. Melody, “Policy objectives and models of regulation.” In Telecom reform: Principles, policies and regulatory practices, ed. W.H. Melody, 11-24 (Lyngby: Technical University of Denmark, 1997).} The objective of public utility regulation was to make such goods and services available to everyone at a reasonable cost. Dwayne Winseck points out that states would treat telecommunication


as a natural monopoly. A single company, either state owned or private, would control the supply of telecommunication services.⁴⁶

The international mode of telecommunication regulation was based on the recognition of state sovereignty that states were the sole authority in making decisions about communication resources at national and supranational levels. The international telecommunication system would provide a kind of public service to the third world states through a fixed accounting rate system. Under this system, both call generating and call receiving operators would equally share the costs and revenues.⁴⁷ The ITU developed this rate system to make sure that telecommunication service providers in the third world states, which terminated more international calls than they generated, could receive some revenues. It was a form of assistance to the third world states for the development of their telecommunication systems.

But the regulatory environment changed enormously across the countries during the last few decades under the influence of neoliberal policies. The objective of regulation, the nature of the regulator, and the pattern of ownership changed in many states. Creating competition in the communication sector became the stated goal of policy-making. Communication outlets began to receive almost the same treatment as other commodity producing industries. Creating competition, privatization and liberalization began to be identified as the public interest goals.

Many countries across the world have liberalized broadcasting and telecommunication, allowing additional service providers in the market, and some have privatized state-owned media companies, and many states have created new regulatory bodies to regulate telecommunication. All these changes led to the restructuring of the communication sector and to the creation of a new mode of regulation—regulation primarily for serving private interests. This restructuring is known as deregulation or re-regulation. It shifted the goal of regulation from protecting public interest to encouraging

profit-making. Jill Hills defines this new mode of regulation as the "WTO mode" since it has been fostered by the WTO for big businesses.  

To increase the role of businesses in global communication policy-making, the U.S. first restructured the communication sector at home through neoliberalization and then moved to the international context. Dan Schiller argues that under business pressure, the U.S. regulatory agency the Federal Communication Commission (FCC) began to deregulate the communication sector through liberalization since the late 1960s. After the completion of domestic deregulation, the U.S. and its TNCs worked for the same in Western Europe and Japan in various ways. First, the U.S. created a "competitive dynamic" for TNCs. The liberalization of the communication sector in the U.S. made it a lucrative place for big businesses because it increased their profit by decreasing communication costs. Other western states were afraid that their corporations would not be able to compete with U.S. corporations which would benefit from a liberalized market, and as a result, their domestic capital might think of moving to the U.S. to avail the same benefit. To keep pace with the U.S., many other first world states liberalized their communication markets. Second, the U.S. pressured some first world states for deregulation (e.g., France and Germany), whose companies were doing business in the U.S. market, communicating that if their companies wanted to continue enjoying the benefits of a liberalized U.S. market, they would have to reciprocate.

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48 Hills, Telecommunication, 12.

49 Dan Schiller, Digital, 6-7; While Dan Schiller points out the role of big businesses, Robert Britt Horwitz in his book The Irony of Regulatory Reform: The Deregulation of American Telecommunications (New York: Oxford University Press, 1989) documents the role of two opposing political forces—the proponents of free market and left-liberal forces—in the processes of re-regulation in the U.S. According to Horwitz, left-liberal forces attacked the regulatory mechanism because they saw regulatory agencies, including the FCC, as captured by the industries which the agencies were supposed to regulate. They suggested that in order to get rid of the corporate control of regulatory agencies the existing regulatory structure needed to be dismantled. On the other hand, the conservatives and free market forces argued that the vast bureaucracy of regulatory agencies and their protectionist interventions were harmful to the overall development of the industries.


51 Ibid, 233, 245.
Finally, the U.S. TNCs doing business in other countries facilitated liberalization by giving wish lists to the U.S. government.\textsuperscript{52}

Deregulation in the first world states was followed by the same in the third world states where it first took place in hard-core economic sectors. The structural adjustment programs (SAPs), which started in the early 1980s when some third world states (e.g., Brazil) faltered in repaying their foreign debts, were the first deregulation programs. The programs involved the privatization of state-owned industries, liberalization of the market, and reduction of government expenditure by eliminating subsidies in agriculture, health and education.\textsuperscript{53} Neoliberal policy-makers, who dominated the IMF and World Bank at the time, designed the programs and made them a prerequisite for the third world states to receive financial assistance from these organizations.

Of the postcolonial states, Brazil adopted SAPs in the late 1980s to reduce state role in the economy through privatization and liberalization.\textsuperscript{54} South Africa deregulated its economic sectors in the 1990s.\textsuperscript{55} India began contemplating to introduce neoliberal policies of privatization and liberalization in the 1980s, because that was a condition for receiving money from the IMF.\textsuperscript{56} India's economic restructuring, which took place in the 1990s, is characterized more by liberalization than privatization.

China began implementing neoliberal policies in the 1980s to attract foreign investment. Since 1978 China took many initiatives such as creating special economic zones and allowing state-owned companies to take joint ventures with TNCs.\textsuperscript{57} China allowed full private enterprises to operate in 1988. China got more integrated into global

\textsuperscript{52} Dan Schiller, Digital, 38; Vogel, Freer Markets, 38; Jill Hills, Deregulating Telecoms (London: Frances Pinter, 1988): 113, 187.


\textsuperscript{54} Geisa Maria Rocha, "Redefining the Role of the Bourgeoisie in Dependent Capitalist Development: Privatization and Liberalization in Brazil," Latin American Perspectives 21, no. 1(1994): 82.

\textsuperscript{55} Ibid, 38.

\textsuperscript{56} Manjunath Pendakur and Jyotsna Kapur, "Think Globally, Program Locally: Privatization of Indian National Television." In Democratizing Communication?: Comparative Perspective on Information and Power, eds. Mashaed Baillie and Dwayne Winseck, 204 (Cresskill, NJ: Hampton Press, 1997).
capitalism through its accession to the WTO in 2001. In spite of China’s integration, Yuezhi Zhao argues that: "... China is not an openly committed neoliberal capitalist social formation." The transformation of China is still open-ended that on the one hand, the Chinese social formation is becoming increasingly authoritarian capitalist, and on the other, popular struggles have compelled the state not to give up its socialist legacies.

Iran began to adopt privatization and liberalization as principles of organizing the economy under IMF’s prescription in the late 1980s, during the period of reconstruction after the end of its war with Iraq, notes Khiabany. And, Tunisia also began to adopt SAPs at the same time as Iran by privatizing as many state-owned enterprises as possible under the influence of the IMF and World Bank, points out Belev. Sadiki observes that economic liberalization got a momentum in Tunisia, but political liberalization is yet to take place.

Cuba faced a financial crisis in the second half of the 1980s when the Soviet Union began eliminating the preferential trade arrangements, which it provided to Cuba since the Cuban revolution, and the East European socialist market collapsed. To cope with the crisis, Cuba adopted a dual strategy—exercising economic austerity and creating a new market oriented sector, tourism, as well as opening up state enterprises to joint ventures to attract foreign capital.

Dan Schiller observes that most third world statesmen gladly accepted SAPs as a way out of the debt burden, despite opposition from labor unions and other social movements. The third world states deregulated their communication sectors, more

59 Ibid.
63 Schiller, Digital, 44-45.
specifically telecommunications, after deregulating hard-core economic sectors. The World Bank, ITU and WTO have been the key international bodies to spearhead telecommunications deregulation in the third world states. The World Bank established telecommunications deregulation as a development priority, the WTO Telecom Agreement enlisted specific commitments from many states for deregulation, and the ITU promoted deregulation by placing an increased weight on business' opinion in telecommunication policy-making. Of these organizations, the U.S. can easily dominate the WTO and World Bank.

The World Bank, a key lender to the third world states, is a cooperative of its member states where each member is a shareholder. A 24 member executive board makes its day-to-day decisions. Large shareholders like the U.S., the U.K., France, Germany and Japan appoint one director each, and the rest of the member states—181 countries—elect the other directors. The U.S. as the largest shareholder holds the chair of the board. Both the World Bank and IMF have a weighted voting system. The large shareholders have more voting power than the small ones.

The WTO, created in 1995 as the successor to GATT [General Agreements on Tariffs and Trade] to facilitate free markets across the world, has 148 states as its members. The WTO makes decisions on the basis of consensus instead of the majority votes. WTO negotiations proceed when one country gives a concession in one area and receives a reciprocal concession from another country in another area. In such a bartering process, diversified economies benefit the most. Although it is an intergovernmental organization, TNCs have a huge influence at the WTO. They exercise their influence by sending a large number of lobbyists to WTO negotiations. And there is also a revolving door between the WTO and TNCs—many WTO officials work for TNCs after their retirements. But civil society actors have to work hard to participate in the WTO negotiations because the WTO does not include non-state actors in its decision making processes. They lack funds to follow WTO meetings which take place across the world. The WTO has made a significant progress in introducing free trade in many areas

of social life including telecommunications since its agreements are binding on its members, and it can impose sanctions for the violation of an agreement.

However, the U.S. had to restructure the organization to use the ITU as a tool for neoliberalism. The U.S. pressured the ITU to go through a transformation according to neoliberal logic. William Drake notes that the pressure for transforming the ITU began to be felt directly during the preparatory phase of the 1988 Worldwide Administration of Telegraph and Telephone Conference (WATTC) where delegates faced difficulties to draw a balance between the extent of telecommunication liberalization and the right of sovereign states to regulate.\(^{65}\)

Two parties were at loggerheads—the U.S.-led pro-liberalization group and the third world states opposing the U.S. move. The U.S. suggested that the ITU should reduce its involvement and adopt promoting competition and liberalization as its goal. On the contrary, the third world states proposed to expand the jurisdiction of the ITU over new services (e.g., the Internet) and figure out mechanisms how universal services and the rights of users could be secured in terms of new technologies. Although they could not agree on any substantive issue, states felt a need to take steps to modify ITU rules and practices to deal with new telecommunication technologies and services.

To compel the ITU to promote liberalization, the U.S. began undermining its authority in fixing the exchange rates between international telecommunication operators. The FCC licensed call back service operators and Internet telephony to dismantle the accounting rate system.\(^{66}\) It set benchmarks for U.S. carriers to control the amount of payment they could make to their counterparts in other countries for international calls.


\(^{66}\) Dan Schiller, Digital, 50; Francesco Stolfi and Gerald Sussman, "Telecommunications and transnationalism: The polarization of social space," The Information Society, 17 no. 1 (2001): 54; Call back service: It allows a customer to dial a number to the U.S. and receive a dial tone from a U.S. company and then can use its outbound switch to place a call. Call back service providers can use the facilities of other countries' telecommunication carriers without paying any compensation since call back service is not within the jurisdiction of the ITU.
The U.S. rejected the accounting rate system by saying that the arrangement did not reflect the costs and benefits of providing international call services. It also argued that it was facing tariff imbalances with some countries because of the accounting rate system, while evidences suggested that the imbalances occurred because of the liberalization of international telecommunication services in the U.S.\textsuperscript{67} As a remedy to the imbalances, the FCC directed U.S. telecommunication operators to bilaterally negotiate tariffs with their foreign counterparts bypassing the ITU. The U.S. also tried to counterbalance the third world states at the ITU by advocating for mechanisms to increase participation by businesses in ITU forums.\textsuperscript{68} The U.S. goal for streamlining the ITU was to have it work for the liberalization of telecommunication across the third world states.\textsuperscript{69}

The 1989 ITU plenipotentiary conference in Nice adopted a reform plan, which concluded in 1998, to restructure the ITU to work in the neoliberal environment. The official objectives of the reform were to improve the efficiency of the ITU as an organization, to enhance the role of non-government organizations in this institution by increasing their rights and obligations, and to transform the organization into a discussion forum for telecommunication policies and regulations.\textsuperscript{70}

As a part of the reform plan, the 1994 plenipotentiary conference in Kyoto highlighted the role of non-government members at the ITU, created a new forum called World Telecommunication Policy Forum (WTPF) where all members—including the member states and corporations—would participate in discussions on global telecommunication policies, and directed the ITU Standardization Sector to develop a framework for a cost-based accounting rate system for international telecommunication services. These new measures increased business participation in ITU activities under the guise of non-government members.


\textsuperscript{68} Donald J. MacLean, "A new departure for the ITU: An inside view of the Kyoto Plenipotentiary Conference", Telecommunications Policy 19, no. 3 (1995): 188.


\textsuperscript{70} Donald J. MacLean, "Open doors and open questions: interpreting the results of the 1998 ITU Minneapolis Plenipotentiary Conference", Telecommunications Policy 23 no. 2 (1999): 152.
In parallel to ITU’s transformation, the U.S., along with its European allies, pursued the WTO to take up telecommunication as an issue of international trade. The WTO was successful in reaching an agreement on basic telecommunication. Sixty-nine countries signed a WTO telecommunication agreement in 1997 to liberalize their telecommunication markets to facilitate international trade in telecommunication, with more countries joining later. This agreement, popularly known as the WTO Telecommunication Agreement, established a framework for multilateral trade in telecommunication services. Sean Siochru, Bruce Girard and Amy Mahan argue that this agreement brought “all countries under a single set of clearly defined and enforceable rules” in terms of telecommunication.

The postcolonial states have neoliberalized their telecommunication sectors as a part of their commitments to the WTO. Although the degree of neoliberalization varies among the states, the common features of this process are: privatization of the state-owned telecommunication operator, liberalization of the market to allow additional companies to provide telecommunication services, and creation of a separate regulator for telecommunication.

Brazil privatized its state-owned telecom operator Telebras, opened its market to new local and foreign companies and created a new regulatory body—Anatel—in the 1990s. The Brazilian government broke Telebras into pieces for privatization. It sold Telebras’ long-distance arm Embratel to MCI, and merged its local units in 16 states into a single company called Telemar and sold the company to local conglomerates. The Brazilian regulatory model is a form of corporatism where state representatives, businesses and civil society work together. Similar to Brazil, South Africa also has a corporatist regulatory system. South Africa privatized its telecom operator, Telkom, by selling its shares to local and foreign companies, and created a new regulatory body called the Independent Communications Authority of South Africa (SATRA).

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72 Siochru, Girard and Mahan, Global Media, 58.

Because of workers' resistance, India could not privatize its state-owned telecom operator, but liberalized the market and created a separate regulatory body. China liberalized its telecommunication system to fulfill an entry condition to the WTO. It treaded a different path to liberalization through the creation of four state-owned companies—China Telecom, China Mobile, China Satellite and Guo Xin Paging Company for radio paging—splitting China Telecom in 1999, and encouraged these companies to provide services in competition with each other. The Ministry of Information Industry (MII), now the Ministry of Industry and Information Technology (MIIT), which was created in 1998 by merging the Ministry of Post and Telecommunications (MPT) and the Ministry of Electronic Industry, regulates telecommunications in China.

Similar to China, Iran has neoliberalized its telecommunications as a part of its preparation to be a member of the WTO. Tunisia privatized its telecom operator and liberalized the market as a part of its commitment to the WTO. Cuba limited the neoliberalization of its telecommunications to allow a foreign company to own a part of its state-owned telecom operator to improve its telecommunication system.

The neoliberalization of the economy and telecommunication sectors in the third world states has opened opportunities for transnational capital to invest in the communication sectors there. Each of the big postcolonial states—China, India, Brazil and South Africa—received huge amounts of foreign direct investment (FDI). The World Bank estimates Brazil as the top recipient of telecommunication FDI with $51 billion, and India stood 11th with $4.8 billion during the period between 1990 and 2003. During the same time, China received 30% of the total FDI flows.

TNCs bought partial ownership in local companies and initiated many joint ventures in the big postcolonial states. World's largest TNCs opened numerous R&D

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centers in China in recent years. Dan Schiller argues that the Chinese state tried to secure advantages for domestic capital through allowing TNCs access to its cheap labor and huge domestic market. Gurucharan Das notes that China made a name as the "world’s workshop" by expanding its export oriented manufacturing sectors of toys, clothes and consumer electronics in cooperation with western TNCs. And India made a name as the "world’s back office" since it thrived on outsourced service works, such as call center jobs and computer software engineering. More than a hundred Fortune 500 companies have opened R&D centers in India.

Brazil and South Africa also attracted a lot of TNC investment but not at the rate of China and India. While Brazil has always been a popular destination for TNC investment, South Africa began to reopen its market for transnational capital in the post-apartheid era.

The neoliberalization of telecommunications in the postcolonial world has further integrated the communications sectors there with the transnational capital whose core is in the U.S. The top telecommunications companies which expanded their businesses throughout the world as a result of neoliberalization are from the U.S. and Europe. Of the top ten telecommunications TNCs between 1990 and 2003, four are from the U.S.—Verizon, MCI, BellSouth Corporation, and SBC Communications. The others include Spain’s Telefonica Internacional Holdings, France Telecom, Deutsche Telecom, Protugal Telecom, and TeliaSonera of Sweden. In addition to neoliberalizing the telecommunication sectors at home and abroad, the U.S. modeled regulation for the new areas of communication applying neoliberal logics as a part of its efforts to recreate the

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78 Horwitz, Negotiated Liberalization, 38.
79 Guislain and Qiang, Foreign Direct, 25.
transnational hegemonic communication system. It created the ICANN model of global Internet policy-making. In the following section, I will discuss how the U.S. created the ICANN model as an embodiment of neoliberalism.

2.2.1 Evolution of the ICANN-Model of Internet Policy-Making

Before the creation of ICANN, the engineers who created the Internet as a part of their contract with the U.S. Department of Defense (USDoD) initially managed the medium. At the beginning, when the Internet name space was small, a single computer file was enough to store the identifiers (e.g., domain names and IP addresses). Stanford Research Institute Network Information Center (SRI-NIC) would verify the uniqueness of the identifiers and record them under a contract with the USDoD. The names and numbers would be listed in a file called *hosts.txt*. John Postel, who began to work with the Defense Department Internet project as a graduate student at the University of California Los Angeles at that time, would look after this file, and his job would later be known as the IANA [Internet Assigned Numbers Authority] function.

A small group, known as the Internet Configuration Control Board (ICCB), created in 1979 by Vinton Cerf and Robert Kahn, the managers of the Internet program, would look after Internet protocol development. The USDoD reorganized this board in 1984 into a bigger body called the Internet Activities/ Advisory/ Architecture Board (IAB), involving the chairs of the 10 working groups which were created to deal with the various technical aspects of the Internet such as privacy, security, engineering, gateway algorithms, interoperability, testing and evaluation, and end-to-end service, and John Postel as the RFC editor and controller of the protocols.80 This board became the key forum for Internet policy discussion, and grew big with the participation of hundreds of people by prompting its organizers to split its activities. The IAB broke its activities into two bodies—the Internet Engineering Task Force (IETF) and Internet Research Task Force (IRTF)—in 1989.

When the number of networks and individuals connected to ARPANET—the early form of the Internet—increased, the IAB restructured the name space into a domain name based system to accommodate the increasing number of computers. The Defense Advanced Research Projects Agency (DARPA) would administer all the generic top level domains (gTLDs) except .mil which would be done by the Defense Data Network (DDN). SRI-NIC would conduct the day-to-day management of the DNS [Domain Name System]. The United States Defense Communication Agency assigned the Information Sciences Institute (ISI) at the University of Southern California to manage the root server system, including the assignment of Internet protocol (IP) addresses, and SRI-NIC to register domain names. John Postel was the person at the ISI who would look after the root zone file, the allocation of IP address space, and the assignment of IP addresses.

In 1987, SRI-NIC took over the responsibility of assigning IP addresses, but John Postel managed to maintain his influence in deciding the assignments. The U.S. Defense Information System Agency (DISA) awarded a contract to a private entity called Government Systems Inc in 1991, which later outsourced the job to Network Solution Inc (NSI), to manage SRI-NIC. Later, NSI received a five year contract from the National Science Foundation (NSF) to take care of domain name registration, IP address assignments, and autonomous system numbers (ASNs). It became the custodian of the root server through this contract. The text files that made up the root were transferred to NSI office in Herndon, Virginia. In 1995, the NSF permitted NSI to charge fees for domain name registrations. NSI made a lot of money out of domain name registration since business interest in the Internet exploded after the creation of the World Wide Web (WWW) in 1994. NSI became vigilant to maintain its control over the root zone and domain name registration.

81 Daniel Pare, Internet Governance in Transition: Who is the Master of this Domain? (Lanham: Rowman and Littlefield, 2003), 16.
83 Pare, Internet governance, 19.
NSI dominance irked the technical people who created the Internet. John Postel issued a note in 1994 asserting that the IANA is the ultimate decision making authority for IP addresses, the DNS and many other parameters of the Internet.\textsuperscript{85} NSI and other regional registries would carry out the day-to-day responsibility for assigning IP addresses, ASNs and most top as well as second level domain names. John Postel and many others, who were involved with the creation of the Internet, moved toward organizing around a body known as the Internet Society (ISOC) to take control of the Internet.

In 1996, the ISOC realized that they needed an institutional structure to be successful in taking over the control of the Internet.\textsuperscript{85} It created a blue ribbon international panel to develop a plan to take over the DNS. ISOC CEO Don Heath presented an 11-member committee known as the International Ad Hoc Committee (IAHC) which incorporated people from the ISOC and its critics such as trademark owners and the ITU.\textsuperscript{87} Two members came from trademark holders—the International Trademark Association (INTA) appointed one and WIPO did the other. It also had one representative from the ITU and the NSF each and five technical members from the Internet Engineering Task Force (IETF)/ISOC selected by John Postel. The IAHC developed a management structure for the DNS,\textsuperscript{88} and the ISOC and ITU signed a deal called the Generic Top Level Domain Memorandum of Understanding (gTLD-MoU) in March 1997 to operationalize this structure.

Under this new management structure, registrars would be incorporated in Geneva and create a Geneva based non-profit Council of Registrars (CORE). To join CORE, registrars would pay a $20,000 entry fee and $2000 per month fee and an additional amount for each domain name registration. A committee called Policy


\textsuperscript{86} Milton Mueller, "ICANN and Internet governance: Sorting through the debris of self-regulation", Info 1 no. 6 (1999): 501.

\textsuperscript{87} Ibid.

\textsuperscript{88} gTLD-MoU. "Establishment of a Memorandum of Understanding on the Generic Top Level Domain Name Space of the Internet Domain Name System, 28 February 1997." gTLD-MoU, http://www.gtlدمou.org/gTLD-MoU.html
Oversight Committee (POC) would act as the top authority in this governance structure. POC’s membership would be similar to the IAHC with two members each from the ISOC, the IAB, the IANA and CORE, and one member each from the ITU, INTA and WIPO. There would also be a policy advisory board (PAB), a consultative body that any signatory to the gTLD-MoU could join. The ITU would work as the repository of the gTLD-MoU that would remain open for everyone in the Internet community. ITU secretary General Pekka Tarjanne called this management structure a new form of “voluntary multilateralism”.

But many parties involved with the Internet were not happy with this arrangement. NSI, which could see the loss of its monopoly in domain name registration through the installation of this new governing structure, did not like the idea and began to lobby the U.S. government to nullify this move. It received moral support from many unexpected allies in its attempts to foil the initiatives which would dismantle its monopoly. Businesses interested to expand to domain name registration also did not like the new structure because they saw this move as an effort by a new large “monopoly” to take over domain name management. They were also afraid that the high fees which were earmarked to be charged for domain name registration would discourage people to own domains. Policy analysts and users saw the whole process as an exercise of power by trademark interests. The European Commission (EC), the administrative body of the EU, did not like the outcome because it saw the arrangement too U.S.-centric. It wanted more representation from Europe.

The U.S. government also did not like to see a UN entity getting an important role in the management of the Internet. U.S. Secretary of State Madeline Albright wrote a memo in late April 1997, accusing the ITU for signing an agreement related to a new medium without any consultation of the member states. The U.S. began to think about developing a formal governing body for the Internet. On 1 July 1997 a U.S. presidential

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80 Mueller, ICANN and Internet, 502.

91 Medeline Albright, cited in Mueller, ICANN and Internet governance, 502, footnote 18.
directive authorized the Secretary of Commerce to support efforts to create a private, competitive and contractually based "self-regulatory" regime for the management of domain names. The Department of Commerce (USDoC) gave the job to its lead institution—National Telecommunication and Information Agency (NTIA)—replacing the NSF. The NTIA issued a RFC to hear suggestions about its proposed principles for managing the DNS. The principles were: the private sector with input from the U.S. government would develop a consensus based stable self-governing mechanism which would be sensitive to the global nature of the Internet, accommodate competition in open, stable and robust way, and develop an effective dispute resolution mechanism.

After assessing the public comments it received on these proposed principles, the NTIA published its guidelines for the management of the DNS in a green paper and invited further public comments on it. The green paper described the existing picture of Internet management and the role of the U.S. government in this regard and proposed a governance framework. Reasserting the fact that the Internet was a product of the U.S. government investment on packet switching technology and communication networks, the green paper said that the IANA headed by John Postel, under contract with DARPA, would allocate the blocks of IP addresses to regional Internet registries (RIRs), and assign values to technical parameters related to the Internet such as protocol numbers. And NSI, which maintained the authoritative root database and replicated changes to the root servers on a daily basis, would operate the 'A' root server.

The green paper highlighted that the Internet became a global medium from a US-based research vehicle. It observed that many groups were dissatisfied with the current form of Internet management and demanded a robust governance framework where many stakeholders, including the overseas ones could join. The key issues the green paper identified were—the absence of competition in domain name registration.

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94 Ibid.
and a sound mechanism to deal with trademark related disputes.\textsuperscript{95} It suggested that the proposed new governance system would be guided by four principles—stability, competition, private bottom-up coordination, and representation. Stability referred to maintaining the stability of the Internet at any costs so that the medium could function without any interruptions. Competition and consumer choice would act as the driving principles of Internet management wherever possible. The management functions which would require coordination should prefer private-sector actions to government control. And finally the governance mechanism would be representative of Internet users and their needs across the world.

It proposed the creation of a private, not-for-profit corporation to coordinate the management of the DNS.\textsuperscript{96} The new corporation would set a policy for the allocation of IP address blocks, oversee the operation of an authoritative root server system, decide the creation of new top level domains, and coordinate the development of technical parameters to maintain inter-connectivity. This new corporation would be operational by the end of September 1998. And it would work for creating competition in domain name registration, including the top level domains, and have a dispute resolution mechanism to deal with trademark related disputes.\textsuperscript{97} The U.S. government would work as the policy oversight body until this corporation matures and phase out its role by September 2000. The U.S. government would gradually release IANA functions, the root server system and the appropriate databases to this new corporation. The USDoC would coordinate U.S. government’s policy role.

The green paper suggested that the new corporation would get its funds from domain name registries. The current IANA staff would man it for their expertise and for the sake of continuity. And the corporation would be based in the U.S. and incorporated as a not-for-profit entity under U.S. law. It would have a board of directors with representatives from around the world. Of the board members, three would come from RIRs, two from the IAB, two from domain name registries and registrars, and seven from Internet users. The CEO of the board would also be a board member.

\textsuperscript{95} Ibid.
\textsuperscript{96} Ibid.
Finally, the green paper suggested that in order to officially launch the new governance system—the corporation and the member organizations (e.g., RIRs) would have to sign an agreement between themselves; the U.S. government and IANA would sign an agreement to transfer IANA functions to the new organization; and NSI and the U.S. government would sign an agreement to end the monopoly of NSI. Under the NSI-U.S. government agreement, NSI would continue to operate .com, .net and .org top level domains on a shared basis with other registries, and would leave the operation of .edu domain to a non-profit entity. NSI would give the U.S. government copies and documents of all data, software and other intellectual properties created under this agreement. NSI would turn over the control and management of the “A” root server whenever the U.S. government would want it to do so.

After assessing the public comments on the green paper, the NTIA issued a white paper by re-stating the principles. The white paper retained the key principles and policies of the green paper, but added explanation to some of them. It made significant changes to the governance principles, especially to two principles—stability and representation. For example, the white paper explained what stability meant by identifying security and reliability as the principal aspects of stability.

In terms of representation, the white paper suggested to ensure the participation of business users from all over the world. Similar to the green paper, it also asked for creating mechanisms to ensure functional and geographical diversity in terms of participation in the management structure. On dispute resolution, the white paper invited WIPO to develop recommendations for resolving trademark related domain name disputes.

Following the white paper, the USDoC and technical people who were involved in Internet management created a new body—ICANN—in October 1998 and incorporated it in the State of California. The USDoC signed a memorandum of understanding (MoU),

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97 Ibid.
98 Ibid.
99 Ibid.
which began to be known as the Joint Project Agreement (JAA) after its seventh amendment, with ICANN in November 1998 on an assurance that this private body had the capability and resources to handle the responsibilities of managing the DNS.\(^\text{101}\) Under this MOU/ JAA, the USDoC and ICANN would jointly design, develop and test mechanisms for the management of the DNS. The parties would also prepare yearly reports documenting the progress of the project. The USDoC amended the MoU/ project agreement many times, and ICANN submitted 13 status reports to the USDoC.

After its formation, the immediate tasks of ICANN were to establish itself on a firm footing by electing a board of directors and organizing its other constituting elements. ICANN created a government advisory committee (GAC) to maintain a link between the governments on issues related to the DNS, and a root server system advisory committee to coordinate the activities of 13 root servers. It developed accreditation policies for registrars and initiated tests for new registrars. It recognized the Domain Name Supporting Organization (DNSO) which was created by RIRs. It signed a transition agreement with the ISI to secure the services of the IANA team which would allocate IP addresses and protocol parameters in coordination with RIRs and Internet Standards-Development Organizations (SDOs).\(^\text{102}\)

ICANN also signed MoUs with the RIRs and SDOs to secure their cooperation.\(^\text{103}\) It formed a Protocol Supporting Organization (PSO) on July 14, 1999 involving the SDOs—the IETF, the World Wide Web Consortium (W3C), the ITU, and the European Telecommunications Standards Institute (ETSI). To further strengthen its relations with individual SDOs, ICANN signed a MoU with the IETF on March 10, 2000 which would allow ICANN to perform the protocol-parameter assignment functions arising from the

\(^{100}\) USDoC. "White paper (Management of Internet Name and Addresses)," (Washington DC: USDoC, June 1998), http://www.icann.org/general/white-paper-05jun98.htm

\(^{101}\) ICANN. "Memorandum of Understanding between the US Department of Commerce and Internet Corporation for Assigned Names and Numbers." ICANN, November 25, 1998, http://www.icann.org/general/icann-mou-25nov98.htm


technical standards developed by the IETF. Under pressure from trademark holders, ICANN adopted a WIPO generated policy, known as the Uniform Domain-Name Dispute Resolution Policy (UDRP), in October 1999 to settle domain name related disputes. ICANN’s initial policy to assign domain names on first come first served basis led to cyber-squatting. Many people registered established trademarks as their domain names, inviting a backlash against ICANN from trademark holders.

ICANN generated its operating funds with donations from private individuals as well as foundations and loans from some corporations. Major donations came from Microsoft, Corporate law firm Jones, Day, Reavis & Pogue, and Markle Foundation.\footnote{104} And it received loans, which it already repaid, from Cisco System, MCI WorldCom, 3Com and Deutsche Telecom.

The existing directors of the ICANN board represent private Internet and e-commerce companies from across the world. Table 2.1 shows the directors’ business affiliations. They come from Internet companies in Australia, France, Norway, U.S., Ireland, Brazil, Chile, Gambia and India.

\textbf{Table 2.1. ICANN’s Board of Directors}\textsuperscript{105}

\begin{center}
\begin{tabular}{|l|l|l|}
\hline
\textbf{Name} & \textbf{Designation} & \textbf{Nationality and Corporate Affiliation} \\
\hline
Peter Dengate Thrush & Chair, Voting member & New Zealander, barrister with specialization on Internet laws; former legal advisor of InternetNZ \\
 & Term: Jan 2005 - 6 months after the end of the 2010 annual meeting & \\
\hline
Roberto Gaetano & Vice Chair, Voting member & European, A representative of ETSI (European Telecommunications Standards Institute) \\
 & Term: Dec 2006 - Oct 2009 & \\
\hline
Rod Beckstrom & President and CEO, Voting Member & American, Former Director of the National Cyber Security Center (NCSC), the Department of Homeland Security, U.S.; Founder and former CEO of CATS Software Inc. \\
 & Term: July 2009 - present & \\
\hline
Harald Tveit Alvestrand & Voting Member & Norwegian, works for Google \\
 & Term: Nov 2007-Oct 2010 & \\
\hline
Raimundo Beca & Voting Member & Chilean, a partner of Imaginaccion, a Chilean consulting company \\
 & Term: May 2004-Apr 2010 & \\
\hline
\end{tabular}
\end{center}


\textsuperscript{105} ICANN. “ICANN Board of Directors.” ICANN, http://www.icann.org/en/general/board.html
<table>
<thead>
<tr>
<th>Name</th>
<th>Designation Term</th>
<th>Nationality and Corporate Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Crocker</td>
<td>Voting Member</td>
<td>American, CEO and co-founder of Shinkuro, Inc., a start-up company focused on sharing information across the Internet and on the deployment of Internet security protocols</td>
</tr>
<tr>
<td>Steve Goldstein</td>
<td>Voting Member</td>
<td>American, A former National Science Foundation (NSF) and NASA employee.</td>
</tr>
<tr>
<td>Dennis Jennings</td>
<td>Voting Member</td>
<td>Irish; co-founder of 4th Level Ventures, an Irish venture capital company</td>
</tr>
<tr>
<td>Rita Rodin Johnston</td>
<td>Voting Member</td>
<td>American, A partner of law firm Skadden's Intellectual Property and Technology and Internet and E-Commerce practices</td>
</tr>
<tr>
<td>Raymond A. Ptizak</td>
<td>Voting Member</td>
<td>American, Involved in Internet registry business, President and CEO of ARIN (2000-2009)</td>
</tr>
<tr>
<td>Rajasekhar Ramaraj</td>
<td>Voting Member</td>
<td>Indian, Founder and till recently the CEO of Sify Limited, a leading company in Internet, Networking and eCommerce Services in India</td>
</tr>
<tr>
<td>Mike Silber</td>
<td>Voting Member</td>
<td>South African, an independent legal and regulatory consultant on information and communication technologies.</td>
</tr>
<tr>
<td>Jean-Jacques Subrenat</td>
<td>Voting Member</td>
<td>French, Chairman of the Advisory Board of Institut Pierre Werner in Luxembourg (2007~) and tutor at ENA (Ecole nationale d'administration in Strasbourg, 2007~)</td>
</tr>
<tr>
<td>Bruce Tonkin</td>
<td>Voting Member</td>
<td>Australian, Chief Technology Officer for Melbourne IT Limited</td>
</tr>
<tr>
<td>Katim Touray</td>
<td>Voting Member</td>
<td>Gambian, An independent development consultant</td>
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<tr>
<td>Janis Karklins</td>
<td>GAC Liaison</td>
<td>Latvian Ambassador to France</td>
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<td>SSAC Liaison</td>
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</table>
The 2002 reform of ICANN eliminated At Large membership and dropped user representation from the board, which is a shift from ICANN's original policy of balancing industry representation with user representation.\(^{106}\) The election process of the board of directors paved the way for private sector executives, with knowledge about the technical aspects of the Internet, get elected. Businesses control the decision making processes of ICANN.

### 2.2.2 Role of States in the ICANN Framework

Given the history of ICANN formation, it is not surprising that no state, except the U.S., has any direct role in the ICANN-led framework. The U.S. has controlled the management framework through four tools—the ICANN MoU, the IANA contract, the agreement between the USDoC and VeriSign Inc (which bought NSI), and the control of the root server system.\(^{107}\) The MoU, which ICANN signed with the USDoC in 1998 and got renewed many times since then, controlled ICANN activities by giving a guideline of what ICANN could do and what it could not, and ensured that it followed the guidelines by requiring the submission of annual reports stating its performance to the USDoC. However, the USDoC gave up this controlling role on September 30, 2009.\(^{108}\) ICANN does not need to submit review/ progress reports to the USDoC anymore, and is now free from the direct control of the U.S. government. Under the IANA contract, the U.S. government authorizes ICANN to run IANA functions. The agreement between the USDoC and VeriSign, the operator of .com and .net domains and the largest commercial domain name registry, authorizes VeriSign to run the hidden master server that handles the official root zone file of the Internet’s root servers and the “A” root server. The U.S. exercises its control over the root server system, and asserts its policy authority in approving changes to the root through this agreement.


\(^{107}\) Ibid.

The other states can only sit on the GAC which was formed with representatives from national governments and intergovernmental organizations. Many postcolonial states are involved with the GAC. Among the postcolonial states, Brazil and China have been on this advisory committee since its birth. India and Tunisia got involved with it in 2003, and Iran did the same in 2005. As an advisory committee, made up of representatives from several states, it accepts the values, principles and missions of ICANN. It has no direct power over ICANN’s decision making. ICANN’s decisions are made by its board of directors elected by industry people and the business users of the Internet. The policy-making method of the ICANN-led framework is called “governance”.

2.2.3 Uniqueness of ICANN

Compared to UNESCO and the ITU, ICANN is unique that it is governed by industry people, and no state, except the U.S., has any control over it. ICANN is funded by contributions from the domain name registries which pay a regular fee for domain name services, while UNESCO and the ITU are primarily funded by the UN. Most UN fund is generated by subscriptions from the member states.

ICANN is more authoritative than UNESCO and the ITU. It exercises its authority over the DNS by making laws for its management. The domain name registration contracts are the laws framed by ICANN. If anyone violates this contract, ICANN can delete them from the DNS. The ITU can twist the arms of its members by withholding or canceling the allocation of radio frequencies and orbital slots, but UNESCO does not have any mechanism to impose sanctions on its members.

Compared to UNESCO and the ITU, ICANN scores poorly in terms of legitimacy and accountability. There is no question about the legitimacy of UNESCO and the ITU since they are UN agencies created by the member states, the highest public authority.

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But ICANN’s legitimacy as a global Internet policy-making body is under scrutiny as it was created by a single state—the U.S. There is no internationally codified legal mechanism to define the mandate of ICANN. It had been guided by the MoU/ JAA which the U.S. government frequently modified in a non-transparent way. ICANN bylaws allow the review of its actions, and the California state courts have authority to go after ICANN. The USDoC could easily terminate the MoU at any time. ICANN does not have direct control over the root system. It recommends to the USDoC if any changes are needed to be made to the root, such as the addition of new TLDs. VeriSign generates the root zone files.

While UNESCO and the ITU are accountable to their member states, ICANN is accountable to businesses that make the core of its membership. ICANN serves the interests of corporate capital by pursuing neoliberal policies. Its mandate is to create a free market in relation to the Internet. Both UNESCO and the ITU help their members in developing capacities related to communication, but ICANN does not venture into any such activities. ICANN leaves out the issue of capacity building in the “developing countries” related to the Internet to market forces. ICANN is a model of industry self-regulation where industry people regulate the industries. It incorporated the elements of the “WTO mode” of regulation. ICANN which symbolizes the neoliberal mode of communication policy-making—governance—serves business interests.

But the postcolonial states oppose U.S. superiority in global Internet policy-making. We will see in the following chapters how and for what purposes they oppose the U.S.

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3.

Postcolonial Resistance to
U.S. Control over the ICANN Model:
Too Little, Too Late

U.S. control of Internet governance, which it realized by controlling the root and ICANN, was a key issue of conflict between the U.S. and postcolonial states at the WSIS. Both phases of the summit—the Geneva phase and the Tunis phase—discussed this issue. This chapter shows that the postcolonial states opposed U.S. control of Internet governance but did not oppose the ideology which facilitated the control. Their goal was to have equal participation in Internet governance, but not to radically restructure Internet policy-making. This is a sign of ambivalence in the role of the postcolonial states. The U.S. successfully subjugated the postcolonial states to keep the Internet governance framework unchanged.

In the first section of the chapter, I show how and why the postcolonial states opposed the existing Internet governance framework and demanded a new framework, review the proposals for the new framework and finally explain how the U.S. maintained the existing framework.

3.1 Internet Governance as the Controversial Issue

Although the WSIS began with the objectives of developing a common vision of the Information Society to promote universal access to knowledge and information and figure out ways to use ICTs to achieve the MDGs, “Internet governance” became the most important issue of the summit as the postcolonial states used this forum to attack U.S. control of the Internet. In the Geneva phase, Brazil, Cuba and Iran demanded an intergovernmental framework to replace the existing ICANN-led Internet governance framework, but faced opposition from the U.S., businesses and civil society.
At the first PrepCom, Brazil and the EU raised the issue of Internet governance. Internet governance did not get to the list of the official themes of the summit, but grabbed the limelight from the beginning of the second PrepCom. Following the EU and Brazil, the other stakeholders talked about Internet governance.

The EU divided the jurisdiction of Internet governance into two areas national and international. It listed the allocation of Internet resources such as IP addresses, the assignment of country codes, and managing gTLDs and the root sever systems under international jurisdiction. It observed that the mechanism to carry out the international job of Internet policy-making: “should be democratic, multilateral and transparent. … It should respect geographical diversity and ensure representativeness through the participation of all interested States (including public authorities with competence in this field), of civil society and the private sector, with due respect to their legitimate interests.” The EU called upon states to “internationalise the management of Internet resources in order to achieve a universally representative solution” and create an “appropriate international body” for managing the international aspect in cooperation with the other stakeholders.

The key terms in the EU statements are multilateralism, democracy and transparency. The statements imply that the present Internet governance framework is unilateral, lacks democracy and transparency since a single state—the U.S.—controls the framework and makes decisions on key Internet issues (i.e., Internet root). The EU wanted a democratic and transparent multilateral Internet governance framework which would have equal participation of all the stakeholders, including states and non-state actors.

Brazil demanded full participation of the “developing” countries “in all decision-making bodies and processes concerning the structure and functioning of the

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2 Ibid.
3 Ibid.
cyberspace." It defined the Internet as a "global public good" because many sections of the public use it and it forms the core of the Information Society. It said that the medium was increasingly used as a vehicle for conducting social and economic activities by public authorities, private companies and NGOs across the world. Brazil identified states as the only legitimate public authority to govern this public good.

Brazil later reinforced its stand by saying that:

The Internet is the base of the information society. The Internet must be considered a public, International domain. … The administration of root servers, domain names and Internet protocol addresses must be under the responsibility of a multilateral, democratic and transparent international organization. Full access to the mechanisms of Internet governance must be granted to developing countries.°

Brazil suggested that "an [international] [intergovernmental] organization should ensure multilateral, democratic and transparent management of root servers, domain names and Internet protocol (IP) address management."°

The key themes of the Brazilian proposal are: Internet is a "global public good", states are the legitimate public authorities, and an intergovernmental framework should look after global Internet policy-making. For Brazil, a multilateral framework means an organization where sovereign states hold the decision-making power and involve non-state actors according to their discretion.

Cuba and Iran echoed the Brazilian demand for an international/intergovernmental framework for Internet governance. Cuba demanded an "intergovernmental" framework for "Internet governance".° Iran defined the management of the domain names and IP addresses as "public" issues, which to be handled by

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6 Ibid.
legitimate public authorities such as sovereign states. Therefore, President Mohammad Khatami defined Internet management in the following way: “Global management of the Internet should find a democratic and comprehensive mechanism to enable all players, including the developing countries, to play an effective role in this arena.”

On the contrary, Japan, the U.S., businesses and civil society opposed the EU and the postcolonial states for demanding an international/intergovernmental Internet management framework. Japan suggested that the present private sector-led industry self-regulation framework should continue managing the Internet. The U.S. suggested that a framework based on “public-private partnership” should deal with “Internet governance” in an open and transparent way.

The CCBI expressed its unequivocal support to the incumbent private sector led framework of “Internet governance.” It defended the structure saying that “the Summit must not challenge the continued private sector leadership of the technical coordination of the Internet. Indeed, ... the Summit should endorse it.” It also went on to say that it “cannot accept any reference to an inter-governmental organization engaging in such management.” The rationale for CCBI’s position is that businesses have the ability to carry out the jobs since “business has been and continues to be the major owner, developer, administrator and coordinator of the Internet” and Internet management does not need state intervention.

The Human Rights and Internet Governance Caucus spoke on Internet governance on behalf of civil society in the Geneva phase of the summit. It assessed the

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13 CCBI. CCBI comments on Draft Declaration of principles and draft action plan.
14 CCBI. CCBI Comments on the WSIS Draft.
existing Internet management framework as deficient because: “it is a private organization; a handful of countries dominate it; and, it is based on a contract with a single government. It highlighted the lack of inclusion of the “developing countries” in Internet policy-making (e.g., Internet protocols and standards setting).”

But civil society opposed the creation of any intergovernmental bodies for Internet management. In its Geneva declaration, civil society said that “the Internet cannot be governed effectively by any one organisation or set of interests” and “an exclusionary intergovernmental model would be especially ill suited” for that purpose. It went on to say that Internet governance needed a flexible, open and multistakeholder framework. Civil society rationalized this claim by saying that the Internet is a “highly distributed set of protocols, processes, and voluntarily self-associating networks” which requires a multistakeholder management framework. Civil society’s idea of multistakeholderism, which is similar to EU’s multilateralism, implies an equal participation of all state and non-state actors.

At this stage of the debate, we can see three positions on the Internet governance framework—the demand for an intergovernmental framework, the demand for a multilateral/multistakeholder or a corporatist framework, and the demand for the maintenance of the status quo. Those who demanded a new framework, including the postcolonial states, justified their position for a new intergovernmental framework on the ground of representative democracy, and did not oppose the neoliberal logics of Internet management. Tension and interactions between these three positions continued throughout the PrepComs and to the Geneva summit meeting. The main documents of the summit—the Declaration and the Action Plan—which were drafted during the PrepComs of the Geneva phase bear that traces of tension between the stakeholders.

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17 Ibid, 22.
The Declaration and the Action Plan which were approved at the Geneva Summit meeting emphasize "Internet governance" as a core issue of the Information Society. The Declaration asks for a corporatist framework of Internet governance saying that:

The international management of the Internet should be multilateral, transparent and democratic, with the full involvement of governments, the private sector, civil society and international organizations. It should ensure an equitable distribution of resources, facilitate access for all and ensure a stable and secure functioning of the Internet, taking into account multilingualism.\textsuperscript{18}

The Declaration divides Internet governance issues into two categories: technical issues and public policy issues, and demarcates the roles of various stakeholders. It noted that states would deal with public policy issues, businesses would deal with the technical and economic aspects of Internet development, and civil society would handle Internet issues at the community level. It requested the UN Secretary General to set up a working group on Internet governance (WGIG) involving all the stakeholders to make an assessment of the existing Internet governance framework by 2005.

The Action Plan outlined the mandate of this group. The tasks of this group would be to develop a definition of "Internet governance", identify Internet related public policy issues, and outline the roles of various stakeholders such as states, businesses and civil society in Internet governance. In the next section, we will see how the WGIG evaluated the existing governance framework and suggested alternatives.

3.2 Proposed Outlines for a New Internet Governance Framework

The postcolonial states and EU proposed outlines for a new Internet governance framework at the WGIG which was created during the Tunis phase. WGIG's job was to assess the proposals and advise the intergovernmental subcommittee on Internet governance to make a decision. Discussions to form the WGIG began at various forums immediately after the Geneva summit meeting such as the ITU Workshop on Internet

\textsuperscript{18} Ibid.

Nitin Desai, the special advisor to the UN Secretary General for the WSIS, held consultations at the UN Geneva office from September 20 to 21, 2004 to set up the WGIG. About 250 participants representing states, civil society, and businesses attended the consultation meeting. On November 11, 2004, the Secretary General announced a 40 member WGIG involving representatives from states, businesses and civil society, with Nitin Desai as the Chair (see Table 3.1).

As its membership suggests, the WGIG as a corporatist formation signals a change in terms of stakeholder participation compared to the MacBride Commission which included independent people from various states. As a kind of fact finding mission, the WGIG relied on comments and contributions from state representatives, businesses, civil society and academic experts.

Of the postcolonial states, first China and Brazil made proposals to the WGIG to create an alternative Internet governance framework. China outlined two limitations of the existing Internet governance framework: it lacked participation by the “developing”, and “least developed” countries and it was not a UN body. China demanded equal participation of all states in deciding public policy issues of the Internet.

China suggested that the WGIG should provide an outline for the creation of a new Internet governance framework which would be a UN organization because it believes that all countries’ participation at the UN makes it the most legitimate global body. China observed that “sovereign governments and governmental organizations should play leading roles under the United Nations’ framework, while guaranteeing a broad participation of all stakeholders.”

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21 Ibid.
Table 3.1.  The Formation of the WGIG

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td><strong>State Representatives</strong></td>
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<tr>
<td>Nitin Desai, Chair</td>
<td>Special Adviser to the Secretary-General for the World Summit on the Information Society, India</td>
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<tr>
<td>Abdullah Al-Darrab</td>
<td>Deputy Governor of Technical Affairs, Communications and Information technology Commission of Saudi Arabia</td>
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<tr>
<td>Faryel Beji</td>
<td>President and CEO, Tunisian Internet Agency, Tunis</td>
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<tr>
<td>Trevor Clarke</td>
<td>Permanent Representative of Barbados to the United Nations Office in Geneva</td>
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<tr>
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<td>Chairman, ICT Authority of Mauritius, Port Louis</td>
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<tr>
<td>David Hendon</td>
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<tr>
<td>Qiheng Hu</td>
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<td>Khalilullah Qazi</td>
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<td>Masaaki Sakamaki</td>
<td>Director, Computer Communications Division, Ministry of Internal Affairs and Communications, Tokyo</td>
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<td>Mikhail Vladimirovich Yakushev</td>
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<tr>
<td>Jean-Paul Zens</td>
<td>First Counselor, Director of the Media and Telecom Department, Ministry of State of Luxembourg, Luxembourg City</td>
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**Business Representatives**

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<th>Name</th>
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<tbody>
<tr>
<td>Kangsik Cheon</td>
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<td>Avri Doria</td>
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</tr>
</tbody>
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22  WGIG. “The members of the Working Group on Internet Governance (WGIG).”  
http://www.wgig.org/members.html
China ranked the “administration” of global Internet resources (i.e., IP addresses, domain names, root server etc.) as the number one public policy issue. China’s rationale for this was: the Internet belongs to the whole world and Internet resources are the common resources of the world, and the “administration” of such resources is a public policy issue—the domain of sovereign states. Here China forgets that the Internet was an American invention. China’s proposed framework is different from Brazil in the sense that China did not allow any room for non-state actors.
Brazil gave a detailed plan for the new framework.\textsuperscript{23} Brazil felt the need for a new framework because the existing framework had two key limitations: first, Internet governance includes many issues (i.e., Internet interconnection, spam and cyber-crime etc.) which go beyond the mandate of the current ICANN-led structure; and second, the current structure lacks representation from most states and many sections of civil society and businesses. As a remedy to these limitations, Brazil suggested the creation of a new transparent democratic multilateral and multistakeholder body called “Global Internet Governance Coordination Forum” based on an intergovernmental treaty that would guarantee the required legitimacy.\textsuperscript{24} This forum would replace ICANN.

Within this framework, states would be the key authority in dealing with issues which would affect state sovereignty. This body would coordinate the works of the existing organizations involved in Internet policy-making, and not be “under the jurisdiction of a single country.”\textsuperscript{25} Brazil cited its national Internet governance model, which is a corporatist model, as a guiding light. A steering committee, created by a presidential decree in September 2003, involving the representatives of the government, businesses, civil society and academic community, manages the Internet in Brazil. This committee controls the management of the domain name registry, allocation of IP numbers, and Brazil’s ccTLD, .br, with a view to expanding the Internet in the country. It also determines the norms and procedures related to the regulation of Internet-related activities. Brazil believes that this model of Internet management has best served the Brazilian Internet community, and wants the international community to replicate it for the global Internet.

Civil society told the WGIG that “legitimate and successful Internet Governance can only be achieved if all concerned or affected groups have an opportunity to influence the outcome of governance process.”\textsuperscript{26} The “developing countries” had insufficient representation in the existing framework. Civil society suggested that “Internet


\textsuperscript{24} Ibid.

\textsuperscript{25} Ibid.
governance decision making should be pursued on a multi-stakeholder basis reflecting the full participation of civil society." It suggested the WGIG to adopt human rights, freedom of expression, openness and innovation as key principles of Internet management. However, it sidestepped the idea of creating a new framework.

The CCBI opposed any intergovernmental framework for Internet governance. It stressed that "governance" does not refer exclusively to "government activities" and "Internet governance includes organized and cooperative activities between different stakeholders" and "encompasses a wider range of issues, conditions and mechanisms than IP numbering and domain name administration." It opposed the creation of any new framework saying that many organizations and entities are dealing with "Internet governance" issues "in various forms of 'governance' including international organizations, national governments, business, civil society, and multi-stakeholder processes." It suggested that the WGIG should not recommend any radical restructuring of the Internet governance framework.

After hearing from the stakeholders, the WGIG prepared a report titled the "Report from the Working Group on Internet Governance" and submitted to the intergovernmental committee on Internet governance called the Internet Subcommittee A on 3 August 2005 during the PrepCom 3 of the Tunis phase. This report included a working definition of Internet governance, outlined the roles and responsibilities of various stakeholders in this regard, and made recommendations on the formation of a new Internet governance framework. The report defined Internet governance as the "development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet." This definition suggests a corporatist framework for Internet policy-making and designates different

27 Ibid.
29 Ibid.
roles for the stakeholders. It reflects a change in the cast of characters in supranational communication policy-making which was completely an area of sovereign states in the past.

The report suggested that the existing ICANN-led governance framework was deficient because it did not deal with many Internet policy issues. It identified and grouped public policy issues into four categories—infrastructure issues, cyber-security issues, issues with relevance to the Internet, and development issues. Infrastructure issues include the management of IP addresses, the DNS, the root server system, determining technical standards, peering and interconnection etc. Cyber-security issues are: spam, network security and cyber-crime. The other issues include IPRs, capacity building in developing countries, access and multilingualization of the Internet.

The WGGG evaluated the existing Internet governance mechanism to see how it dealt with various policy issues and presented its observations. The report outlined the observations in 13 paragraphs from paragraph 15 to 27. The observations could be split into the following categories such as infrastructure issues, interconnections costs, cyber-crime, participation of developing countries, intellectual property right (IPR) and multilingualism.

On infrastructure, the report observed that the management of the root zone files and system was under "unilateral control by the United States government" since the Internet was invented in the U.S. The root zone operators stay at arm’s length from the existing Internet governance framework. It pointed out the absence of a multilateral mechanism that would ensure the stability and security of Internet infrastructure and application. It felt a need for new policies and procedures for gTLDs to influence the distribution of resources and ensure people's access to the Internet and multilingualism. It observed that the allocation of IP addresses in IPv4 was unequal and suggested that the allocation of these in IPv6 should be balanced in terms of geography.

On interconnection costs, it said that Internet service providers (ISPs), particularly ISPs in the developing countries, which are remote from the Internet backbones pay the full costs of international circuits. Internet backbone providers do not share any costs.
On cyber-security, it said, states did not have tools to deal with online crimes committed from overseas locations. It observed a lack of agreement between stakeholders in defining spam and a means to deal with it. It related freedom of expression to spam and said that the measures which are in place to deal with cyber-crime impede freedom of expression. It observed that there was a lack of mechanisms in national and global contexts to protect data and users' privacy rights and consumer rights in e-commerce.

The report pointed out that "there are significant barriers to multistakeholder participation in governance mechanisms." Some intergovernmental and international organizations dealing with Internet governance issues are off limit for the "developing countries", civil society and small businesses because of costs. It felt the absence of a "global mechanism for participation by Governments, especially from developing countries, in addressing multisectoral issues related to global Internet policy development." There is also a lack of resources in many "developing countries" to build capacity to participate in Internet governance.

On IPR, the report saw an agreement among the stakeholders in drawing a balance between right holders and users, but a disagreement on means to ensure that. It observed that right holders are worried about digital piracy, while the users are worried about the impediments of access to digital content because of IPR protection mechanisms.

On multilingualism, the report said that "insufficient progress has been made towards multilingualization." It observed that the things which were yet to be settled for multilingualization were: standards for multilingual TLDs, e-mail address, keyword look up and local content.

The report also defined the role of stakeholders—states, civil society, and businesses—in Internet governance. It suggested that states should make policies, create environment for ICT development, oversee implementation, promote research and development, promote access, combat cyber-crime, and make treaties on Internet related issues. It suggested that businesses should implement policies through industry self-regulation, provide inputs and tools for policy-making, foster innovation, promote capacity building, invent technologies, and create standards and processes etc. And it
suggested that civil society should check on the works of states and businesses by raising people’s awareness of Internet related issues and the need for capacity building by promoting public interest objectives and taking part in policy-making.

In its final section, the report made proposals for the creation of a “forum” and suggested four models for developing a new framework to deal with the global public policy issues, terming the existing Internet governance framework inadequate. The forum would deal with those issues of Internet governance, which were left out by the existing institutions, by involving all the stakeholders. It would be linked with the UN in some ways, defined later, and would coordinate the activities of the institutions involved in managing the Internet and contribute to capacity building in the “developing countries”.

Of the four models, the first model suggests that a Global Internet Council (GIC) should be created at the UN, involving all the stakeholders. The GIC would replace the GAC and look after the international part of Internet management, which was performed by the USDoC. It would make policies on international public policy issues and cybersecurity issues, facilitate coordination and negotiation of treaties and conventions on Internet related public policies, and oversee the management of Internet resources such as IP addresses and the DNS. It would provide guidance on development issues such as capacity building, access to the Internet and multilingualism. ICANN would be accountable to it.

The second model suggests that there should be no oversight organization. Rather the role of the GAC should be enhanced to respond to the concerns of the postcolonial states about Internet related issues. The forum would coordinate the functions of all the stakeholders and make recommendations about Internet related issues.

The third model suggests that an International Internet Council (IIC), created with the equal participation of all stakeholders, should take over the functions of ICANN. The IIC would abolish the GAC, and states would have a leading role in this framework in handling public policy issues. This initiative would accompany an adequate host-country agreement for ICANN.
And the fourth model suggests that a global policy council, a world ICANN, and Global Internet Governance Forum (GIGF) should be created. A Global Internet Policy Council (GIPC) should be formed with states as members and businesses and civil society as observers to address, oversee and coordinate Internet related issues. ICANN would be reformed and renamed as WICANN which would be a UN organization. An intergovernmental committee created by and accountable to the GIPC would oversee the activities of WICANN. And the GIGF would be created involving states, businesses and civil society on an equal footing to coordinate and discuss global public policy issues related to the Internet.

As a neololiberal and neocorporatist formation, WGIG's proposed frameworks do not suggest any radical democratic transformation of ICANN. On the basis of WGIG's proposals of the new framework, the intergovernmental subcommittee would develop final recommendations on "Internet governance" for adoption by the Tunis summit meeting. In the next section we will see how the subcommittee fails to come to a conclusion on creating a new framework because of U.S. pressure.

3.3 The Existing Internet Policy-Making Framework Survives

The Internet governance sub-committee held 14 meetings to finalize the text on "Internet Governance" section of the final documents of the Tunis summit meeting. Businesses and civil society attended the proceedings of this committee as observers. The committee could agree on creating the forum, but failed to agree on a new Internet governance framework.

The committee created a draft chapter on Internet governance on 22 September 2005 in light of the WGIG report and invited all the stakeholders to comment on it. The draft chapter on "Internet governance" categorized the issues into five sections: Introduction, stakeholders, public policy issues relevant to Internet governance, measures to promote development, and follow-up and possible future arrangements.

The introduction of the chapter reaffirms the global status of the Internet and identifies "Internet governance" as the key issue of the Information Society, and the stakeholder section reaffirms Internet governance as a multistakeholder job. The chapter categorized the public policy issues into two groups—issues related to the management
of critical resources of the Internet (e.g., the root, the DNS and IP addresses), and issues related to the use of the Internet (i.e., cyber-security, spam, freedom of information, privacy and data protection, and consumer rights). The section titled measures to development included the issues of digital divide, Internet interconnection, capacity building, enabling environment, and multilingualization. Finally, the section titled follow-up arrangement deals with the existing "Internet governance" framework.

The stakeholders expressed opposing views on these issues at the committee meetings. Given the length of this chapter, I will only deal with the views on the Internet governance structure here and leave the other issues for the subsequent chapters.

The draft text on Internet governance made the following proposal on the "Internet governance" framework. In paragraph 62, it says: "In reviewing the adequacy of existing institutional arrangements for Internet Governance and for policy debate, we agree that some adjustments need to be made to bring these into line with the 'Geneva Principles' (emphasis original). Accordingly, we propose: Approach: evolutionary, incremental; Framework for interface between existing and future arrangements; Governance/oversight function: (models); Recommended mandate and structure, subject to agreement on the interface; Possible forum" (emphasis original).

Of the stakeholders, Brazil, Iran, South Africa, Tunisia, India, the EU, the U.S., the CCBI, civil society, and ICANN/ISOC reacted to this proposal by supporting, rejecting and/or demanding modification. An analysis of the reactions reveals four positions—a postcolonial position, a U.S.-CCBI position, an EU position, and a civil society position. I will discuss these positions and show how the U.S.-CCBI position demanding the maintenance of the status quo related to Internet governance overpowered the other positions.

In response to the draft text, Brazil suggested to add the following lines to paragraph 62: "We agree to create new space for dialogue for all stakeholders on an

31 Geneva principles refer to the principles of participation stated in the WSIS Geneva Declaration such as transparency, multilateralism, multistakeholderism, and democracy in decision making.
equal footing in an effort to realise the development-oriented Information Society. And, this forum "shall be linked to the United Nations and shall" liaise with intergovernmental and other institutions on some Internet governance issues such as IPRs, e-commerce, trade in services and Internet/telecommunication governance, identify those issues of Internet governance which may arise in the future, coordinate the activities of the existing Internet governance organizations, and help capacity building in the "developing countries".

India did not make any specific suggestions to paragraph 62, but made comments on the jurisdiction of Internet governance and the four models. The Indian delegation divided Internet governance issues into technical and public policy baskets, and proposed to segment them into three tiers—local, national and global. It felt a need for international cooperation to prepare model laws on public policy issues such as security, privacy and data protection. It observed that the nature of cooperation could be bilateral, multilateral and multistakeholder cooperation since any such cooperation would enhance country competitiveness. It also underscored the need for an international agreement for the management of the international portion of Internet governance.

About the four models, the Indian delegation said, "We have studied the 4 models incorporated in the WIGIG report. Each of them has certain elements of democratic transparent, multilateral involvement and functioning with a view to increase competition, privatization and internationalization." It proposed to create a new model which would include the key elements of all the models. The new model would encourage a multistakeholder decentralized policy-making structure, where states would look after the public policy issues and foster competition. India’s proposal wholeheartedly embraced neoliberal logics (i.e., privatization, competition etc.).

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33 India. "Statement of the Indian delegation in the meeting of the Sub-Committee-A on Internet Governance during the PrepCom 3, Tunis phase."
34 Ibid.
Iran proposed to add two new paragraphs numbering 63 and 64 to paragraph 62 under the title of Global Public Policy and Oversight.\textsuperscript{35} Iranian paragraph 63 suggests that “any organization formed for the governance function/oversight function” should allow state role in managing the international portion of Internet governance, be multilateral, transparent and democratic “with the full involvement of Governments, the private sector, and civil society and international organizations.”\textsuperscript{36} And the following paragraph, paragraph 64, suggests that an “Intergovernmental Council for Global Public Policy and Oversight” should be set up at the UN where businesses, civil society and relevant intergovernmental and international organizations work as advisors.

Iran suggested that this intergovernmental council should set international public policies related to the Internet, and oversee Internet resource management, especially ICANN/IANA functions in the following areas such as additions or deletions of the root zone files and management of IP addresses and ccTLDs. It would also deal with other public policy issues, negotiate treaties/agreements/conventions on Internet related public policies, provide guidance on development issues, and approve measures on dispute settlement. ICANN/IANA would be internationalized and made accountable to the council. The reform of ICANN/IANA would accompany an adequate UN like host-country agreement.

South Africa supported the creation of the forum and proposed to create an “intergovernmental body for [the] purposes of facilitating and ensuring debate around issues that impact on government.”\textsuperscript{37} It also suggested the creation of a new multistakeholder body by reforming ICANN to ensure the participation of all the stakeholders in the management of the Internet. And states would oversee this body to make sure that everyone could participate. South Africa also demanded the participation of all states in the allocation of the domain names and IP addresses. It also supported a pan-African proposal made by Ghana, which called for ensuring the participation of states in decision making with regard to Internet related public policy issues, the internationalization of root server management, and an increased participation of

\textsuperscript{35} Iran. Iran at PrepCom 3.

\textsuperscript{36} Ibid.
specialized institutions from the “developing countries” in managing the technical resources of the Internet and making Internet standards. South Africa’s framework for a multistakeholder Internet governance body is corporatist in nature.

Tunisia did not submit an independent proposal but as an Arab country supported the Arab group proposal made by Saudi Arabia. The Arab proposal supported the creation of the forum, and identified the first one from the four models as the best to deal with global Internet public policies and oversight.

The EU proposal, in response to the draft chapter tabled by the U.K., suggested the addition of four new paragraphs numbering 63, 64, 65, and 66 under the titles of “principles”, “essential tasks”, “forum function”, and “transition to this new model of international cooperation” respectively. Under principles in paragraph 63, the EU suggested that the new international framework for Internet governance should be built upon the existing framework, and it should be a public-private cooperative where states would participate mainly to handle the public policy issues. Under essential tasks in paragraph 64, the EU suggested that the new framework should have global public policy principles for the allocation of IP number blocks, procedure for changing the root zone file especially for inserting new TLDs, and allow state involvement in creating the principles.

Under forum function in paragraph 65, the EU supported the creation of a forum to handle the public policy issues and strengthen multi-stakeholder cooperation in Internet governance. And under paragraph 66, it suggested that the creation of the forum should be the first step in moving towards creating a new governance structure.

The U.S. opposed the creation of a new mechanism for Internet governance, but expressed willingness to discuss how the existing framework could be made more

37 South Africa. “South Africa’s general statement on internet governance, PrepCom 3, Tunis phase.”
effective, efficient, transparent and democratic. About the existing governance structure, the U.S. said, "It is important that the global community recognize that the existing structures have worked effectively to make the Internet the highly robust and geographically diverse medium that it is today." It reiterated its support for: "the private sector led technical coordination and management of the Internet’s domain name and addressing system (DNS) in the form of the Internet Corporation for Assigned Names and Numbers (ICANN), with government advice on DNS issues provided by the Government Advisory Committee (GAC)." The U.S. denied that it unilaterally controls the Internet and pointed out that there were more than 100 root servers, including mirror roots, a vast majority of which are located outside of the United States, demonstrates that the Internet and its core resources are not centralized in one country." It conceded that states have legitimate rights to manage public policy issues related to ccTLDs, but not in other areas.

Before giving its reaction to the subcommittee report, the U.S. issued a statement in June 30, 2005 through the NTIA defending its control of the Internet. The U.S. said that it would maintain its role in authorizing changes to the root zone file, allow other states to have a role in managing ccTLDs, continue defending ICANN as the technical manager of the DNS, and like to continue dialogues on "Internet governance" in multiple forums.

The CCBI said that "the private sector has succeeded in ensuring" the stability and security of the Internet, and proposed to maintain the status quo in terms of Internet governance, citing the existing framework as a success. It believes that the creation of

41 Ibid.
42 Ibid.
43 Ibid.
45 CCBI. CCBI comments on the Working Group.
a "single over-arching organization" would not ensure the participation of all because of the diverse nature of Internet governance issues.

About the administration of the root zone files and system, the CCBI said that the formulation—"unilateral control by the U.S. Government over the root system"—was not accurate since ICANN controls the IANA and encourages the participation of a wide range of parties. It pointed out that "the U.S. Government has contractual oversight, but neither actualizes this oversight in the form of 'unilateral control' nor would the exercise of such contractual oversight amount to this power." 46 Moreover, the CCBI went on to say that, most mirror root servers are located outside of the U.S. It proposed to set the criteria for IP address allocation based on engineering, and observed that the existing private sector-led governance framework "provides the opportunity for governmental and civil society participation" in this process.

It opposed the creation of the forum, saying that many organizations dealt with the various aspects of the Internet and provided spaces for discussion. Resorting to the architectural principles of the Internet, the CCBI said that the Internet was "designed to be managed/ coordinated in a decentralized fashion without the need for 'centralized' control" and it worked that way for many years. 47 The CCBI suggested that, if necessary, issue-based forums could be created. It opposed all the models saying that none of them was "appropriate in providing the needed stability and security for the Internet." 48 It argued that most Internet governance issues would not require governments' oversight.

Of the civil society actors, Heinrich Boell Foundation, the African Civil Society Caucus and the Civil Society Gender Caucus commented on the draft text. The first two opposed the creation of a new "Internet governance" framework and any political oversight of the Internet, and proposed to make ICANN more accountable, transparent, participatory and democratic. Heinrich Boell Foundation suggested ICANN's reform, instead of creating a new oversight organization for the domain names and IP

46 Ibid.
47 Ibid.
48 Ibid.
addresses. It suggested that ICANN’s reform would eliminate U.S. control of the organization, ensure multistakeholder participation on the ICANN board, and establish a sound mechanism to ensure ICANN’s accountability. It said that the U.S. government should hand over the IANA authority to the reformed ICANN. The African Caucus made some similar suggestions.

But the Gender Caucus supported the creation of the forum and identified the absence of a global-multi-stakeholder forum to address Internet related public policy issues. Like the other civil society actors, it opposed the creation of an oversight body and recommended ICANN’s reform.

In this Internet governance conflict, the postcolonial states wanted to create a new Internet governance framework as a UN body where states would have the dominant role, while the goal of the U.S. and CCBI was to maintain the status quo. The EU offered to reconcile these opposing positions. It suggested the creation of a new body with the participation of states only in public policy issues. Civil society opposed the creation of any state-controlled framework, but called for reforming the existing framework.

Efforts to win out were not limited to the negotiating table only. Opposing groups worked behind the scene to achieve their goals. The postcolonial states wasted no time to rally behind the EU. But the U.S. was surprised by the EU move because EU’s position on the Internet has always been in conformity with the U.S. David Gross, the leader of the U.S. delegation, was frustrated to hear the EU proposal and dismissed it as a proposal to impose a “top-down” control on the Internet. The U.S. government made an all-out effort to know why the EU took such a position and convince it to refrain from pursuing its proposal.

49 WSIS Executive Secretariat, “Compilation of Comments Received on the Chair’s Paper (DT/10), Chapter Three: Internet Governance,” 29 September 2005, Document WSIS-II/PC-3/DT/14 (Rev. 2)-E.

President Bush talked to Jose Manuel Barroso, the president of the EC, when the latter visited the U.S. The U.S. Congressional Internet Caucus Co-chairman Representative Goodlatte (R-Va.) met with Barroso to express concerns about the EU position. U.S. Congress and Senate passed resolutions urging the Bush Administration to keep U.S. control of the Internet. The Bush Administration put the blame on the EU commissioner on Internet related issues—Vivian Redding—for the EU proposal. In return, Redding said that the EU proposal did a favor to the U.S. by bringing unfriendly governments, which wanted state involvement in everyday management of the Internet, on board. She noted that the EU did not support any government involvement in the management of the Internet, but the U.S. was not interested to give up its control.

Western news media also got involved in this conflict from outside by criticizing those who argued for a new Internet governance framework. World’s influential newspapers and magazines such as the New York Times, the Washington Post, the Wall Street Journal, the International Herald Tribune, and Economist published commentaries condemning the UN and the postcolonial states like China, Brazil, Iran and Cuba for, what they said, robbing the freedom of the Internet, and introduced these states as the enemies of the free world. Here we can see a similarity between the Internet governance conflict and NWICO that private conglomerate media shored up support for the U.S. on both occasions. In the case of Internet governance conflict, ICANN and the ISOC played a key role in riling up the media to foil the move for creating a new Internet governance framework. Media campaign compelled the UN secretary General Kofi Annan to clarify UN position on Internet governance. Annan in an op-ed piece in the Washington Post on 5 November 2005 clearly said that the UN had no

51 Ibid.
53 Ibid.
54 Frederick Kempe, “How the Web was Run: The U.S. and Europe are at Odds but there may yet be a Way Out,” The Wall Street Journal Online, October 25, 2005, http://online.wsj.com/article_print/SB113016040615477507.html
56 WSIS, “Compilation of Comments Received on the Chair’s Paper (DT/10), Chapter Three: Internet Governance.” 29 September 2005, Document WSIS-II/PC-3/DT/14 (Rev.2)-E.
intention to take over Internet governance. However, the UN would like to help the “developing countries” to build capacities for the Information Society.

But the postcolonial states and EU were unfazed by media criticism. At the subcommittee meetings they overpowered the U.S. The U.S. began to search ways to break the unity of the postcolonial states and EU. The U.S. raised the Internet governance issue to the new chairman of the EU—the U.K.—at the bilateral level. The U.S. Secretary of State Condoleeza Rice and Secretary of Commerce Carlos M. Gutierrez jointly sent a strongly worded letter to the U.K. Foreign Secretary Jack Straw on 7 November 2005 to communicate the determination of the U.S. administration in maintaining its control over the Internet and seek EU support in this regard. In the letter, they wrote:

The governance structure and continued stability and sustainability of the Internet are of paramount importance to the United States. As we approach the World Summit on the Information Society (WSIS), we should underscore the vast potential of the Internet for global economic expansion, poverty alleviation, and for improving health, education and other public services, particularly in the developing world where Internet access remain unacceptably low. We regret the recent positions on Internet governance (i.e., the “new cooperation model”) offered by the European Union, the Presidency of which is currently held by the United Kingdom, seems to propose just that - a new structure of intergovernmental control over the Internet.

The four principles the United States issued on June 30, 2005, reinforce the continuing U.S. commitment to the Internet’s security and stability, including through the historical U.S. role in authorizing changes or modifications to the authoritative root zone file. At that time, we also expressed our support for ICANN as the appropriate private sector technical coordinator of the Internet’s domain name and addressing system. We believe that ICANN is dedicated to achieving broad representation of global Internet communities and to developing policy through consensus-based processes.

The United States and the European Union have long worked together toward the goal of global access to the Internet. The WSIS offers us the opportunity to reaffirm our partnership to spread the benefits of the Internet globally.

The history of the Internet's extraordinary growth and adaptation, based on private-sector innovation and investment, offers compelling arguments against burdening the network with a new intergovernmental structure for oversight. It also suggests that a new intergovernmental structure would most likely become an obstacle to global Internet access for all our citizens. It is in this spirit that we ask the European Union to reconsider its new position on Internet governance and work together with us to bring the benefits of the Information Society to all.\textsuperscript{58}

It is widely believed that after this letter, the EU decided to back off from pursuing its proposal and consent to the U.S. proposal. With the reversal of the EU, the demand for a new Internet governance structure lost its strength. EU's about face shows its vulnerability in global communication policy-making and complicity with the U.S.

Eventually the subcommittee dropped the idea of creating a new governance framework because of the lack of a consensus, but finalized the creation of the forum. There was almost a universal agreement between the states, except the U.S., on creating an Internet governance forum to discuss Internet related issues. The forum would be a multilateral body to discuss the public policy issues, but it would neither have any oversight function nor replace the existing Internet governance structure.

Following the recommendation of the subcommittee, the UN Secretary General declared the creation of the forum at the Tunis summit meeting. Debates, lobbying and negotiations on Internet governance for two years resulted in the creation a new UN talking shop. About this outcome, U.S. representative David Gross told the BBC that "We did not change anything on the role of the U.S. government with regard to the technical aspects that we were very concerned about."\textsuperscript{59}

Similar to the U.S., civil society in its 16 page declaration on the summit expressed satisfaction for maintaining the status quo in terms of Internet governance.\textsuperscript{60}

The civil society statement reads:

\textsuperscript{58} This letter was published in Register, a British magazine, and is available at http://www.theregister.co.uk/2005/12/02/nice_eu_letter


\textsuperscript{60} Civil Society Plenary, "Much more could have been achieved", Civil Society statement at the World Summit on the Information Society, 18 December 2005.
Civil society is pleased with the decision to create an Internet Governance Forum (IGF), which it has advocated for since 2003. However, we reiterate our concerns that the Forum must not be anchored in any existing specialized international organization, meaning that its legal form, finances, and professional staff should be independent.61

The role of civil society in the conflict over the Internet governance framework implies that it is supportive to the hegemonic forces.

The postcolonial states expressed mixed reactions to the outcome. On the one hand, they appreciated it by identifying it as a beginning toward achieving their goal—a new multilateral, multistakeholder Internet governance framework—and on the other, they rued for not achieving the goal. Chinese Vice Premier Huang Ju reminded everyone that Internet governance remained as a problem of global communication policy-making, and it should be democratic, transparent and government guided, and should have multiplayer involvement.62 Iranian Information Minister Soleymani said, the Internet governance framework remained to be multilateral where the nation-states would participate on an equal footing.63 He also dubbed U.S. control of the Internet as the most important agenda of international communication.

Indian Communication and Information Minister Dayanidhi Maran also echoed a similar sentiment, but his articulation was a bit indirect. He said, "If the Internet is a shared resource, so must be its oversight and management."64 He saw the outcome as a beginning for a new governance framework, saying that “the outcome document embodies our collective resolve that we move slowly but surely towards a system of oversight” which is democratic, transparent, multilayered and multistakeholder.65

South African President Thabo Mbeki said: “One of the fundamental challenges facing all of us is to build multilateral and multistakeholder institutions and systems rooted within the UN system to ensure inclusive and equitable access to ICTs within the

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61 Ibid.
65 Ibid.
context of an Internet Governance system that is legitimate, transparent and accountable.”

Similar to Mbeki, Ignacio Gonzalez Planas, Minister of Informatics and Communications of the Republic of Cuba said, “Internet shall not continue being administered by the United States. It is necessary to organize a new multilateral and democratic institutionality” to manage, administer and regulate the Internet.

The president of the Republic of Tunisia Zine El Abidine Ben Ali, the host of the summit, also concluded saying that the: “Internet is one of the most important pending issues that need a consensus in order to serve the interests of all humanity, as part of the serious dialogue that, as we said earlier, we hope will be pursued after the Tunis Summit.” All these postcolonial reactions mean that wrestling over “Internet governance” is nothing but over.

3.4 Making Sense of the Postcolonial Resistance

What can we make out of the postcolonial resistance to U.S. control over Internet governance? The postcolonial states expressed a common position on this issue, but did not form any formal alliance. They opposed U.S. control of the Internet governance framework, but did not challenge the neoliberal principles embedded in Internet governance. They wanted a new framework so that they could have equal participation in global Internet policy-making. They demanded representative democracy in global Internet policy-making, instead of pushing for a radical restructuring of global Internet policy-making. They wanted to establish state control over Internet policy-making which is now a TNC dominated process.

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66 Thabo Mbeki, Speech at the WSIS, Tunis, November 16, 2005.
They even uncritically accepted the US sponsored idea of the Information Society, an information technology driven phase of social development. They did not propose any alternative to the neoliberal Internet regime. They pressed for creating a new governance framework on two grounds: all states did not have equal participation in the existing framework and the framework did not deal with many development and public policy issues related to the Internet such as digital divide, cyber-security and IPR etc. Since they wanted to be equal players in the global Internet governance game through their resistance, the postcolonial states did not challenge the ideological foundation of Internet governance—neoliberalism, making their opposition to the U.S. control of Internet policy-making deficient.

They had no support from civil society. Civil society opposed any form of state control of the Internet and emphasized the need for equal participation of every stakeholder groups in ICANN. Civil society's demand for human rights and opposition to the oversight of ICANN placed it against many “third world states”. The EU, which initially supported the creation of a new mechanism of Internet governance, fell in line with the U.S. under pressure.

The U.S. and businesses both wanted to maintain the status quo and suggested to figure out ways to enhance the existing Internet governance framework. Only thing the U.S. conceded was that it recognized the primacy of states in managing ccTLDs. During the NWICO, the private sector had no formal participation, other than through surrogates—the first world states, but it was a key stakeholder in the Internet governance controversy, reflecting the neoliberal transformation of the policy-making bodies of global communication.

The conflict over the Internet governance framework ended for now, creating a new space—Internet governance forum—where states, businesses, and civil society discuss Internet governance issues without any decision-making power—and keeping the status quo in terms of Internet governance. Although everyone claimed victory over the outcome, the U.S. was the ultimate winner and was able to maintain its control over

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69 See Zhao, Between a World Summit; Chakravartty, Who Speaks for; A.J.M.S.A. Bhuiyan, “Peripheral View: Conceptualizing the Information Society as a Postcolonial Subject.” International Communication
the Internet. But the postcolonial states seem to continue to fight on to ensure the primacy of states in global Internet policy-making at the Internet governance forum which was created as a follow-up to the WSIS.

U.S. success in maintaining the status quo in terms of Internet policy-making suggests that its economic crisis and military quagmire in Iraq did not affect its status in global communication. But I conclude the same as Dan Schiller does that: “Issues associated with the control structure and policy of the global Internet remain in flux and very much alive.”


70 Dan Schiller, How to Think about Information (Urbana: University of Illinois Press, 2007), 139.
4.

Bridging Digital Divide: Neoliberal Means with State Control?

Digital divide is another key issue of global Internet policy-making. Although digital divide, the gap in terms of access to ICTs, sounds like a mere technological divide, it is a result of the existing socio-economic inequality. Warschauer argues that political, economic, cultural and linguistic contexts shape people’s experience with any technology including the Internet.¹ Digital technologies have developed within a neoliberal political and economic context, which is inherently unequal and encourages individual well-being over collective well-being and profit over public service. The inequality which exists in terms of digital technologies is a socio-economic divide. Digital divide exists in every part of the world. It is narrow in western societies but huge in the postcolonial states which are economically underdeveloped.

The United Nations Conference on Trade and Development (UNCTAD) examines digital divide in terms of per capita income, Internet service costs, and the availability of bandwidth for Internet communication. It says, “A person in a high income country is over 22 times more likely to be an Internet user than someone in a low-income country.”² It points out that the cost of Internet service in low-income countries is almost twice as much of that in high income countries. Just 20 hours of Internet connection costs over 2.5 times the average monthly income in a low-income country. Internet affordability in a high income country is 150 times better than a low income country. In spite of the affordability of the Internet by most households and businesses in high

² UNCTAD, Digital Divide Report, 8.
income countries, digital divides exist in such countries between urban and rural areas, genders, age groups and racial groups.

The report shows a huge regional disparity in terms of bandwidth/Internet backbone capacity. Table 4.1 documents that:

<table>
<thead>
<tr>
<th>Regions</th>
<th>Year: 1999</th>
<th>Year: 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mbps</td>
<td>Percentage</td>
</tr>
<tr>
<td>Africa-Asia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Africa-Europe</td>
<td>62</td>
<td>0</td>
</tr>
<tr>
<td>Africa-US and Canada</td>
<td>145</td>
<td>1</td>
</tr>
<tr>
<td>Asia-Europe</td>
<td>172</td>
<td>1</td>
</tr>
<tr>
<td>Asia-US and Canada</td>
<td>6,287</td>
<td>32</td>
</tr>
<tr>
<td>Europe-Latin America</td>
<td>63</td>
<td>0</td>
</tr>
<tr>
<td>Europe-USA and Canada</td>
<td>12,164</td>
<td>61</td>
</tr>
<tr>
<td>Latin America-US and Canada</td>
<td>953</td>
<td>5</td>
</tr>
<tr>
<td>Total global bandwidth</td>
<td>19,825</td>
<td>100</td>
</tr>
</tbody>
</table>

This table suggests that U.S. have most global Internet bandwidth, followed by Canada and Europe. The divide within a region in terms of bandwidth use is severe, according to the UNCTAD report. In Europe, west European countries have the maximum bandwidth. In Asia, Japan, South Korea, Taiwan, Hong Kong, Singapore and Australia have the maximum bandwidth. In Africa, Egypt, South Africa and Nigeria have the maximum. In Latin America, Brazil, Chile, Peru and Argentina have the same. Most Internet traffic between African and Latin American countries is routed through Europe and the U.S.

If the Internet is to be used for building information societies across the world, it has to be universally accessible. Digital divide remains as a barrier to this. The postcolonial states have been the key actors in establishing digital divide as an Internet

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policy issue at the WSIS, while the U.S. and businesses avoided talking about this. But the actions of the postcolonial states were self-contradictory. They opposed U.S. control of the Internet, but adopted the U.S. sponsored neoliberal policies to increase Internet access. On the one hand, they want to attract TNC investment through market liberalization, and on the other, they want to maintain national control over Internet expansion. They want to establish a state-controlled Internet system, involving public and private entities. This is a sign of ambiguity in their behavior.

In this chapter, I explain this complexity in the behavior of the postcolonial states in terms of digital divide. For this, I discuss how the Internet became a global medium, how it expanded to the postcolonial states, and what the concerns of such states about digital divide are, and how they differ with the U.S. on this issue.

4.1 Internet Becomes a Global Medium

The Internet spread across the world from the U.S. in various ways. First, ARPANET included some sites outside the U.S. such as the University College of London (UCL) and a seismic monitoring center in Norway in the early 1970s. And the network of the USDOD connected many overseas American military bases. Second, the CSNET, the network of the computer science departments of U.S. universities created in the early 1980s with funding from the NSF, also expanded international links to the Internet for exchanging electronic mails. The NSF allowed the CSNET to set up e-mail gateways to research networks built in the first world countries at the time. Foreign research networks had to agree that their links to the Internet would be used only for approved research purposes as a condition of their connections to the CSNET. The U.S. government restricted the foreign entities connected to the CSNET from connecting the other networks of their countries to the Internet. However, the privatization of the Internet changed the scenario by making the medium available for the public on a pay-per basis.

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Most foreign networks established initial connections to the Internet through the NSFNET. The first world states including EU members got connected to the Internet by 1989 and the postcolonial states made it by the early 1990s. By the mid-1970s, many European states had their own state-run networks. In addition to national networks, the EU supported the creation of EU networks. Some of the networks were like ARPANET, designed for research and education purposes, but some were for-profit network services. France Telecom, with its Minitel system (introduced in 1982), was the first phone company to offer a network service that provided both communication options and content (e.g., online telephone directories and recreational services). It connected millions of people in France through low cost special purpose terminals.

Of the postcolonial states, India and Brazil got connected to the Internet through the NSFNET, but China, Cuba, Iran, South Africa, and Tunisia got connected to the Internet through European networks. The NSF denied China, Iran and Cuba direct connections to U.S. based networks. South Africa and Tunisia preferred European networks on the ground of availability and proximity. India got connected to the Internet in 1988. The Indian government created two networks in the early 1990s—the Educational and Research Network (ERNet) of the Department of Electronics (DOE) to provide Internet access to premier Indian educational and research institutions and the NICNet of the Department of Statistics to provide Internet access to government departments and offices.

Brazil became a part of the Internet in 1987 when researchers at two state-owned entities—a research foundation called FAPESP in the State of Sao Paulo and the National Laboratory of Scientific Computing (LNCC)—exchanged data with American

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5 Merit 1995, cited in Abbate, Inventing the Internet, 193.
universities using TCP/IP protocols. Later more Brazilian universities got connected to American universities through the Internet. The Ministry of Science and Technology also created a nation-wide Internet backbone called National Research Network (RNP) in 1990.

China developed a network called the Chinese Academic Network (CANET) at the Beijing Research Institute of Computer Application Technology in partnership with the University of Karlsruhe in Germany. This CANET built the first e-mail node in the country and first exchanged e-mails with this German University. China built a X.25 PAC network connecting all the major cities in 1988. In the same year, the college network of Tsinghua University connected itself with the University of British Columbia in Canada through X.25 network. In China, Tsinghua University adopted TCP/IP protocols—which would be the ultimate protocols of Internet communication—for the Internet in December 1992. Zixue Tai claims that the NSF turned down China’s request for connection to its network because the Internet as a U.S. government project had many government information online and the U.S. government did not feel comfortable to allow China access to U.S. networks.

For the same reason, the U.S. denied access to Iran and Cuba because of its hostile relationships with them. The Internet began its journey in Iran at the Institute for Studies in Theoretical Physics and Mathematics in Tehran in 1992 as an academic tool. Its director inaugurated the Internet by exchanging an e-mail message with the University of Vienna in Austria.

Cuba first exchanged e-mails with the former Soviet Union in the 1980s. After the disintegration of the Soviet Union, it developed e-mail contacts with PeaceNet—a NGO

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network in Canada. By 1992, Cuba established e-mail networks within the country connecting medical, scientific and cultural institutions. In 1994 the National Center for Teaching and Self-Advancement in Informatics (CENSAI), with government approval, took initiatives to get connected to the global Internet. It got connected to international networks through Telecom Italy and Sprint.

In the case of South Africa, white dominated affluent universities got connected to the outside world through the Internet in the late 1980s. Tunisia developed an EARN/BITNET node in 1989 by using an X.25 link. It connected itself with the Internet as the first Arab and African country when the Tunis-based Regional Institute for Computer Sciences and Telecommunications (IRSIT) set up an IP connection with the French Institute for Research in Computer Science and Control (INRIA) on a leased X.25 line.

All these networks in the west and the postcolonial states we have discussed above were only able to send e-mails and transfer files. These were academic and elitist. Only elite academic and research institutions had contact with them. The privatization of Internet services by the NSF and the invention of the WWW in the early 1990s changed the world of networking. This opened the Internet to people who could afford it. The NSF laid the foundation for a global Internet by building the primary backbones in the late 1980s. It built a two-tiered long distance network known as the NSFNET with some regional branches and a central branch, known as backbones or high-capacity lines. The regional networks would connect to these backbones through gateways. The first version of the backbones linked six Internet research centers across the U.S. and had 16 nodes to connect national computer research laboratories or regional networks.

13 Press, Foster, Wolcott, and McHenry, The Internet in India.
15 Tunisia Online, "Internet in Tunisia," http://www.tunisiaonline.com/internet/history.html, retrieved 20/05/07
16 Abbate, Inventing the Internet, 191.
In 1987, the NSF decided to upgrade and maintain the network by involving private companies, and it awarded a five-year contract to MERIT (Michigan Educational Research Information Triad which involved IBM and MCI) for that. Under this arrangement, computer hardware manufacturing giant IBM would supply the packet switches and telecom giant MCI\textsuperscript{18} would provide the telecommunication lines. But the NSF maintained a policy called acceptable use policy which would restrict the use of the NSFNET backbones only to use for research and education purposes. Under a contract with the NSF, MERIT, IBM and MCI would operate the backbones till 1992. Before the expiry of their contract, these companies together created a new company to provide commercial backbone services to corporate networks.\textsuperscript{19}

At the same time, some regional networks began providing e-mail and file transfer services to business users on a pay-per basis. Performance Systems International (later known as PSINet) first began offering such commercial services on a pay-per basis in 1989.\textsuperscript{20} Other regional networks quickly followed suit. Subsequently, MCI and other telecommunication TNCs such as AT&T and Sprint began to offer commercial Internet services.\textsuperscript{21} To increase the scope of service for commercial users, three of the commercial service providers—PSINet, CERFNet, and Altenet—formed a nonprofit organization called Commercial Internet Exchange (CIX) in 1991.\textsuperscript{22} CIX, financed by membership fees, was a gateway for these companies to exchange each other’s traffic free of cost. Other commercial networks soon joined CIX to avail this benefit, which Janet Abbate identifies as the first truly private version of the network to serve businesses.\textsuperscript{23}

In order to facilitate interconnections between competing backbones, the NSF established network access points (NAPs) similar to CIX in geographically dispersed

\textsuperscript{18} Now Verizon Business, after its merger with Verizon Communications.
\textsuperscript{19} Abbate, Inventing the Internet, 196.
\textsuperscript{20} PSINet was bought by Cogent in the early 2000s and has its history available at http://www.cogentco.com/us/about_history.php, accessed 3/6/2009
\textsuperscript{21} Vint G. Cerf, “How the Internet Came to be,” The Online User’s Encyclopedia, ed. B. Aboba. Addison-Wesley, 1993.
\textsuperscript{22} Abbate, Inventing the Internet, 198.
\textsuperscript{23} Ibid.
areas. The NSF solicited bids from private companies for the establishment of network access points (NAPs) across the U.S. By February 1994, four NAPs operated by telecommunication companies were in place. Networks would interconnect at any or all of these exchange points for free of cost.

To further encourage private sector participation in expanding the Internet, the NSF decided to give up its role in Internet services and hand over its responsibility to commercial ISPs. Backbone users would connect their LANs or computers to commercial backbones at gateways called Internet exchange points. The NSF awarded contracts to private companies in 1994 to take over the responsibility of backbone traffic transport, routing arbiter and traffic exchange points. It retired the NSFNET and commercial networks took over the responsibility of backbone services. MERIT dismantled the NSFNET backbones in April 1995, eliminating U.S. government ownership of Internet infrastructure. The NSF also outsourced the job of domain name registration to NSI in 1993 by giving the company a five year contract. And it continued subsidizing the costs of domain name registrations until 1995 when it authorized NSI to charge for domain name registration.

The privatization of backbones and domain name registration signaled a shift in the policy of controlling the Internet from geopolitical consideration to business purpose. The rapid growth of Internet traffic provided tremendous incentives for ISPs to further increase the number of Internet exchange points. Private backbone and network providers expanded the Internet and created new exchange points across the world. The U.S. has been far ahead in terms of the number of exchange points with competing Internet exchange points in key cities. By the end of 2000, the U.S. had 11 major public

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26 Abbate, Inventing the Internet, 199.


28 OECD, Internet Traffic Exchange, 23.
(open for all networks to interconnect at free of cost) interconnection points and a multitude of private exchange points, allowing network operators to interconnect.

Outside the U.S., Internet exchange points were first created in capital cities (e.g., Paris, London and Rome) and then in regional centers like Grenoble, Manchester and Milan in Europe. Western European countries had at least one major NAP by the 1990s created by private backbone providers where domestic and international ISPs and Internet backbone providers could interconnect. European backbone providers became global by swapping their European capacities with American ISPs for American capacities. Some Asian ISPs such as Japanese Verio, Singapore’s SingTel, Australia’s Telstra, and Hong Kong Telecom’s Pacific Century Cyber Works have developed regional dominance.

In the early days, Internet traffic between two neighboring countries would travel through the U.S. because of the absence of national or regional exchange points. It is claimed that the Internet has become less U.S.-centric these days and the traffic that traverse the U.S. may well be carried on backbones wholly owned by non-American carriers. The New York Times reported recently that now only 25% of international Internet traffic travel through the U.S. The countries that have relatively recently got their first Internet connections have not connected directly to the backbones which are in the U.S. For example, Georgia is connected to the Internet through networks in Russia and Turkey. It is said that increasingly a large amount of Internet traffic can avoid the primary backbones, now known as Tier 1 networks because the termination of traffic through regional networks increased.

But an oligopolistic structure created by a small number of U.S.-based TNCs control Internet backbones. They exercise their power in connecting with smaller backbone providers by dictating the terms of interconnections. Usually backbone providers interconnect in two ways—peering and transit. Initially when their number was


31 Ibid.
small, backbone providers would interconnect with each other through peering by transmitting each other’s traffic at free of costs because they needed each other for the expansion of their networks. When the commercial use of the Internet and the number of service providers increased, interconnections took the form of transit where ISPs charge each other for transmitting traffic.

Tier 1 backbone providers have their own terms and conditions for getting into interconnection arrangements. They usually do not get into a peering arrangement with small providers because they do not feel it financially worth to peer with a geographically less dispersed service provider.32 They are interested in getting into transit arrangements with small providers and exercise influence in deciding the terms, conditions and costs of the arrangements. Information related to interconnection arrangements is private, and ISPs keep it secret signing non-disclosure agreements.

Interconnections between Tier 1 backbone providers and small national and regional providers through transit affect the costs of users. The more ISPs are far away from backbone providers the higher the costs are. Within the U.S., small backbone providers accuse Tier 1 backbone providers for charging arbitrary prices. At the international level, the ISPs of the postcolonial world have the same complaint. There is neither any rule to determine the costs of interconnections nor any guideline to determine international internet exchange points. Exchange points are determined through private negotiations between service providers. In international Internet interconnections, non-American ISPs pay the full cost of the leased lines to connect their regional and national networks to a U.S. based international Internet gateways and Tier 1 backbones.

U.S. TNCs developed Internet services and expanded the Internet as a civilian medium within the U.S. and across the world as a pay-per service with the help of the state. It happened within the storm of deregulation, and the FCC created necessary environment for that. As a part of the deregulation movement in the U.S., the FCC decided not to regulate computer services such as data processing and data transmission because it was satisfied that the computer industry grew as a competitive
sector from the beginning. The FCC conducted an inquiry into the computer industry in the late 1960s and came up with the result in the early 1970s that service providers faced no natural or artificial barriers to access the computer service markets.\(^{33}\) Showing the "absence" of a dominant market power in the computer service markets and arguing that regulation might discourage innovation in this sector, the FCC decided not to regulate the Internet. It was also convinced that an essential input of the computer industry (i.e., telecommunication capabilities) was available to everyone on a non-discriminatory basis.\(^{34}\) It categorized computer services including backbone services as an enhanced service and left them to the market to regulate. Its position was fortified by the Telecommunication Act 1996. The act distinguished between basic and enhanced services, and supported the regulatory abstention in the case of the Internet, saying that "[t]he Internet ... flourished, to the benefit of all Americans, with a minimum of government regulation."\(^{35}\)

The Internet became accessible to only those people who can pay for it. U.S. based TNCs control the global Internet infrastructure—Tier 1 backbones—and hardware and software to connect to the Internet. Telcos like AT&T, MCI, and IBM control the backbones, computer hardware manufacturing giants such as IBM, Hewlett-Packard, Intel, Dell and Apple Corporation control the supply of computers, Microsoft controls computer software, and Oracle controls database software. Cisco System has a global monopoly in supplying networking hardware and software.

4.2 Internet Expansion in the Postcolonial States

The Internet reached the elites of the postcolonial states as an academic tool, and then became available to common people through mostly market-driven means by adding a new divide—divide in terms of Internet access—to existing social inequality.

\(^{32}\) Kende, The Digital Handshake, 12.


\(^{34}\) Kende, The Digital Handshake, 9.

Internet services in the postcolonial states are concentrated in those areas where users can pay for the services because both state-owned and private ISPs make them available on a pay-per basis.

The Internet became accessible to ordinary people in India in 1995, when the state-owned telecom operator for long distance and international telecommunication services Videsh Sanchar Nigam Ltd (VSNL) launched Internet services on a pay-per basis. Jhunjhunwala notes that VSNL had a monopoly in Internet services until 1998 when the government began to license private operators to provide Internet services.\(^{36}\) By 2002, India issued 79 licenses to provide nation-wide Internet services, 357 licenses to provide regional and local services, and 20 licenses to operate 45 international gateways in 16 cities to private and non-government entities.\(^{37}\) India sold VSNL to Tata Communications, a private company, in 2000 as part of its commitment to the WTO, and the company is now known as Tata Communications Limited since then. Four companies—two state-owned (e.g., Bharat Sanchar Nigam Limited [BSNL] and Mahanagar Telecom Nigam Limited [MTNL]) and two private companies (e.g., Sify Technologies Limited and Tata Communications Limited) dominate telecommunications and the Internet market in India.\(^{38}\)

Jhunjhunwala argues that Internet growth in India is a predominantly urban phenomenon with the key cities (e.g., national capital New Delhi, state capitals and cities like Bangalore and Mumbai) accounting for 79% of Internet users, while more than 70% Indians live in rural areas.\(^{39}\) The places of access include home, school, cybercafé, and public access kiosks. Public, private and non-profit ISPs provide services on pay-per basis.

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\(^{36}\) Ashok Jhunjhunwala, Case Study: India (Enabling Rural India with Information Technologies), ITU, August 2004, http://www.itu.int/osg/spu/nl/digitalbridges/docs/casestudies/India.pdf


\(^{39}\) Jhunjhunwala, Case Study.
Initially in Brazil, Embratel, the former long distance arm of the state-owned telecom operator Telebras, operated and regulated the Internet. Embratel, now owned by Telemar, is the largest national backbone providers in Brazil with networks in all the major cities and international links with the U.S. and Europe. Telemar owns the physical infrastructure necessary for Internet connections in the 16 states of Brazil, while online media portal and Internet company Universo Online SA, U.S. cable company Comcast Corporations, and Spanish telecommunications and entertainment company Telefonica SA dominate the Internet service industry in Brazil.\textsuperscript{40}

Although Brazil licensed a number of private ISPs to provide local Internet services since 1995, the services are concentrated in the affluent areas of big cities like Sao Paulo, claims Ami Albernaz.\textsuperscript{41} Brazilian Internet users reflect the social inequality in Brazil. Only wealthy people can access the Internet. Claudio Pinheiroz observes that private company executives and top managers, professionals (e.g., physicians, lawyers, and journalists etc), private schools and high income households in Brazil use the Internet the same way as the elites of the developed world.\textsuperscript{42} But people living in the rural and underdeveloped areas and people with low income have problem to connect to the Internet. They do not even have access to a telephone. However, the Brazilian government has begun to pursue a policy of digital inclusion to make the Internet universally accessible, alongside applying neoliberal methods.\textsuperscript{43}

In China, the MIIT oversees the Internet. By June 2007, China had 10 state-owned Internet access providers to provide nation-wide backbone services, and more than 600 privately owned ISPs to provide local Internet services.\textsuperscript{44} Datamonitor Report 2009 on China’s Internet access industry suggests that Hong Kong Stock Market listed telecommunication operator China Unicom, Internet and telecom service provider China

\textsuperscript{40} Datamonitor, June 2009, Internet Access Industry Profile: Brazil, http://web.ebscohost.com.proxy.lib.sfu.ca/bsi/pdf?vid=6&hid=12&sid=f8b64bc2-eb93-4f87-9fed-5e276681ee7%40sessionmgr10


\textsuperscript{43} Albernaz, The Internet in Brazil.
Telecom, and telecommunication operator China Tietong (formerly China Railcom which was acquired by China Mobile Communication Corporation in 2008) are the key players in China's Internet markets.45

Although most users, about 80%, access the Internet at home, work places and Internet cafes (i.e., Wangbas) are also popular locations for Internet access. In terms of Internet access, two types of divide exist in China—between the regions and between the urban and rural areas.46 Most Internet users are concentrated in the urban areas of eastern region closely followed by central China. By June 2009, the penetration rate rose to 71.7% in the urban areas and 28.3% in the rural areas.47

Similar to the other postcolonial states, the Internet began as an academic tool in South Africa. Academics at the white dominated universities used the medium, excluding their colleagues at the black dominated universities, observes Marcia Wilson.48 Local and foreign ISPs began to provide Internet services to common people on a commercial basis since 1992. Russell Southwood points out that 355 commercial ISPs were operating in the country by the end of 2005, and corporate users constituted 52% of the Internet users.49 Three private companies—voice and data service provider Vox Telecom Ltd. (formerly known as DataPro Group Ltd.), Dimension Data Holding PLC, and MTN Group Limited—control the South African Internet industry.50 Internet services are concentrated in the urban areas of three provinces—Gauteng, Western Cape and KwaZulu Natal. Common people access the Internet at telecenters, public information

47 Ibid.
terminals, and cybercafés. The post-apartheid ANC government has adopted proactive policies to achieve universal access to the Internet.\textsuperscript{51}

The first country-wide network in Iran has been the academic network called IRANET.IP.M. Later the Iranian Post, Telephone and Telegraph authority developed alternative nation-wide networks to provide services to commercial agencies and government organizations. Babak Rahimi observes that initially the government promoted the Internet as a venue of technological research during the economic recession which happened during the last Iran-Iraq war.\textsuperscript{52} Private ISPs began to pop up since 1994, with the approval of the Data Communication Company of Iran (DCI) and the Ministry of Culture and Islamic Guidance to provide services. The Telecommunication Company of Iran (TCI) prepares the guidelines for the operation of the Internet and provides national backbone and international gateway services. Around 700 privately owned ISPs now provide local and regional services.

Tunisia developed a network, known as the National Research and Technology Network (RNRT), in 1993 to offer Internet access to research centers at various universities. The Internet remained as an academic tool until 1995. The Tunisian Ministry of Communications formed the Tunisian Internet Agency (ATI) in 1996 to look after Internet development. Both public and private ISPs provide Internet services. State-owned cybercafés called Publinets provide access to common people on a pay-per basis.

In Cuba, CENSAL and other ISPs give priority to those people who work for the government (i.e., Communist Party officials, doctors, scientists and academics) in providing access to the Internet. Common people can access the medium at publicly owned Internet cafes, universities and the Communist Party youth clubs. Cuba does not allow private Internet connections to everyone. People who want private Internet access have to take accreditation from the government, showing valid reasons. Cuban Internet cafes provide two types of network access on a pay-per basis—access to the “national”

\textsuperscript{51} Wilson, The Development of, 103.
Internet, which is made of only local networks, and the standard Internet, which is the Internet we know. Ordinary Cubans can hardly access the national one because of high costs, let alone the standard one.\(^{53}\)

The Internet is very expensive and slow for the Cubans because the U.S. economic blockade limits the country's access to Internet equipments and international networks. When the U.S. eased its restrictions on Cuba's international communication in the early 1990s, Cuba sold a portion of its telecommunication operator, ETEC SA, for the development of its telecommunications. ETEC SA maintains a complete control of Cuba's Internet.\(^{54}\)

Although the number of Internet subscribers and users has been steadily increasing in the postcolonial states, digital divides in terms of Internet access in these countries are still huge (see Table 4.2). As I have already said, Internet services in these countries are mostly based in those urban areas which have strong telecommunication infrastructure and domicile the elites creating a new inequality because initially such services were based on dial-up connections.

Compared to the first world states, the postcolonial states will have to go a long way to bridge this gap. According to the latest UNCTAD statistics, among the postcolonial states Brazil ranked number 1 in terms of the ICT diffusion index, but it stood 76\(^{\text{th}}\) among all states (see Table 4.3). India ranked last among the postcolonial states, and 142\(^{\text{nd}}\) among all states.


\(^{54}\) Ibid, 5.
### Table 4.2. Internet Penetration: Internet Subscribers and Users per 100 Inhabitants

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>15.82</td>
<td>43.08</td>
<td>19.59</td>
<td>58.79</td>
<td>20.88</td>
<td>64.76</td>
<td>20.88</td>
<td>68.93</td>
<td>23.56</td>
<td>70.59</td>
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<td>Japan</td>
<td>14.31</td>
<td>29.99</td>
<td>23.51</td>
<td>46.59</td>
<td>26.63</td>
<td>62.39</td>
<td>26.63</td>
<td>68.69</td>
<td>n/a</td>
<td>69.16</td>
</tr>
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<td>United Kingdom</td>
<td>14.30</td>
<td>26.82</td>
<td>20.69</td>
<td>55.71</td>
<td>25.85</td>
<td>62.50</td>
<td>27.99</td>
<td>65.21</td>
<td>31.65</td>
<td>79.62</td>
</tr>
<tr>
<td>Germany</td>
<td>15.84</td>
<td>30.22</td>
<td>18.24</td>
<td>49.16</td>
<td>23.06</td>
<td>61.19</td>
<td>24.27</td>
<td>69.27</td>
<td>24.27</td>
<td>75.97</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.29</td>
<td>2.87</td>
<td>1.98</td>
<td>9.15</td>
<td>1.98</td>
<td>19.07</td>
<td>3.15</td>
<td>31.37</td>
<td>5.94</td>
<td>35.91</td>
</tr>
<tr>
<td>South Africa</td>
<td>1.59</td>
<td>5.35</td>
<td>2.16</td>
<td>6.71</td>
<td>7.51</td>
<td>8.43</td>
<td>7.51</td>
<td>7.61</td>
<td>7.51</td>
<td>8.43</td>
</tr>
<tr>
<td>Iran</td>
<td>.37</td>
<td>.93</td>
<td>1.19</td>
<td>4.63</td>
<td>1.19</td>
<td>15.15</td>
<td>1.19</td>
<td>15.37</td>
<td>n/a</td>
<td>31.37</td>
</tr>
<tr>
<td>Tunisia</td>
<td>0.39</td>
<td>2.75</td>
<td>0.80</td>
<td>5.25</td>
<td>1.24</td>
<td>8.53</td>
<td>1.80</td>
<td>12.99</td>
<td>2.77</td>
<td>27.53</td>
</tr>
<tr>
<td>China (mainland)</td>
<td>0.71</td>
<td>1.78</td>
<td>4.34</td>
<td>4.60</td>
<td>5.84</td>
<td>7.21</td>
<td>5.86</td>
<td>10.52</td>
<td>11.31</td>
<td>22.28</td>
</tr>
<tr>
<td>India</td>
<td>0.28</td>
<td>0.53</td>
<td>0.34</td>
<td>1.54</td>
<td>0.49</td>
<td>3.14</td>
<td>1.10</td>
<td>6.62</td>
<td>1.09</td>
<td>6.95</td>
</tr>
<tr>
<td>Cuba</td>
<td>...</td>
<td>0.54</td>
<td>...</td>
<td>3.77</td>
<td>0.11</td>
<td>8.41</td>
<td>0.14</td>
<td>11.16</td>
<td>0.30</td>
<td>12.94</td>
</tr>
</tbody>
</table>

Note.  S = Subscribers, U = Users.

### Table 4.3. Ranking of the Postcolonial States: ICT Diffusion Index 2004

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
<th>Access Index</th>
<th>Connectivity Index</th>
<th>ICT Diffusion Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>1</td>
<td>0.928</td>
<td>0.703</td>
<td>0.815</td>
</tr>
<tr>
<td>United States</td>
<td>2</td>
<td>0.833</td>
<td>0.754</td>
<td>0.794</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10</td>
<td>0.804</td>
<td>0.557</td>
<td>0.680</td>
</tr>
<tr>
<td>Germany</td>
<td>18</td>
<td>0.753</td>
<td>0.538</td>
<td>0.646</td>
</tr>
<tr>
<td>Japan</td>
<td>22</td>
<td>0.785</td>
<td>0.478</td>
<td>0.632</td>
</tr>
<tr>
<td>Brazil</td>
<td>76</td>
<td>0.532</td>
<td>0.180</td>
<td>0.356</td>
</tr>
<tr>
<td>South Africa</td>
<td>84</td>
<td>0.512</td>
<td>0.145</td>
<td>0.328</td>
</tr>
<tr>
<td>China</td>
<td>90</td>
<td>0.513</td>
<td>0.133</td>
<td>0.323</td>
</tr>
<tr>
<td>Tunisia</td>
<td>102</td>
<td>0.477</td>
<td>0.122</td>
<td>0.300</td>
</tr>
<tr>
<td>Cuba</td>
<td>106</td>
<td>0.660</td>
<td>0.027</td>
<td>0.298</td>
</tr>
<tr>
<td>Iran</td>
<td>114</td>
<td>0.462</td>
<td>0.106</td>
<td>0.284</td>
</tr>
<tr>
<td>India</td>
<td>142</td>
<td>0.407</td>
<td>0.023</td>
<td>0.215</td>
</tr>
</tbody>
</table>

55 Based on the ITU statistics database, [http://www.itu.int/ITU-D/icteye/Indicators/Indicators.aspx](http://www.itu.int/ITU-D/icteye/Indicators/Indicators.aspx)

56 UNCTAD, Digital divide report, 49-52.
4.3 Conflict over Digital Divide at the WSIS

The postcolonial states brought the issue of digital divide to the fore at the WSIS as they saw it as the principal obstacle to building inclusive information societies across the world and wanted to secure funds for Internet expansion under government control. They received civil society support for all digital divide issues, except the issue of state control over Internet expansion. On the contrary, the U.S. and businesses did not mention digital divide. Instead, they talked about “digital opportunity” and opposed some of the proposed remedies to digital divide.

We will see below that the stakeholders had different understandings on digital divide. In the case of eliminating the divide, they agreed to a minimal measure, a technological solution—making Internet access points available, but differed on how to do that. Among the postcolonial states, China, Brazil, South Africa and Tunisia defined digital divide as a socio-economic divide, while India, Cuba and Iran defined digital divide as the lack of access to information and communication technologies (ICTs). The EU and civil society also defined digital divide as the lack of access to technology. The U.S. and CCBI avoided using the term digital divide. None, except Cuba, raised concerns about the commercial expansion of the Internet.

In three out of its four official submissions to the WSIS, China highlighted digital divide as an Internet policy-making issue. It defined digital divide as a component of the overall development divide and located the existence of this divide between the North and the South and within every country. It identified the absence of information infrastructure and skilled as well as knowledgeable human resources as an important cause of digital divide. It said that governments should play key roles in dealing with digital divides and create market regulations and information/communication regulations, guide information/communication development and market growth, and devise financing mechanisms for bridging the divides.

Chinese Minister for Information Industry Wang Xudong stressed for "coordinated economic and social development" approaches to remove the divides. Chinese Vice Premier Huang Ju reiterated the importance of state sovereignty in relation to devising measures for bridging digital divides. He said that the "developing countries should rely upon their own efforts to seek and explore development models suited to their own national conditions." About the financing of digital divide, Huang said that the "developed countries" were "duty bound to support the developing countries, especially the least developed countries, in terms of finance, technology and human resources in their effort to address inadequate infrastructure as soon as possible...." He supported the creation of a financing option—Digital Solidarity Fund (DSF)—proposed by Senegal to finance digital development in the "developing countries".

Brazil also took a position similar to China in defining and locating digital divide. It also dealt with the issue in three out of its five submissions to the WSIS. Brazil identified universal access to the Internet at affordable cost as an important element in bridging digital divides and suggested that states should play the "central role" in bridging digital divides through plans which are suitable for their national contexts and priorities. But in the case of implementation, Brazil suggested to involve civil society and businesses. It also cautioned the "developing countries", saying that "mainstreaming ICTs into public policies ... could lead to a surge in ICT imports and consumption, pressuring their [developing countries'] balance of payments and promoting 'de-industrialization', without necessarily producing the desired social and economic benefits." Brazil also brought up the issue of Internet interconnection costs as an obstacle to bridging the divides in the "developing countries", and suggested the use of copyleft/open source software for achieving universal access.

50 Huang Ju, Speech at the Tunis Summit.
60 Ibid.
61 Ibid.
62 Brazil, Brazilian presentation on Draft Declaration.
63 Ibid.
64 Brazil, Brazilian Government Contribution.
Similar to Brazil, South Africa also perceived digital divide as a socio-economic problem. South Africa talked about digital divide issues in four out of its six submissions to the WSIS. South African Minister for Communication Dr. Ivy Matsepe Casaburri said: “Bridging the digital divide is a corrective measure aimed at addressing past and existing inequalities and disparities. This aspect is characterized by, among others, a sense of urgency, using any and every kind of technology to patch up where there is no access.”

He also appreciated the private sector for its contribution through investment in ICT research and development. South Africa suggested to giving special attention to human resource development. South African President Thabo Mbeki underscored the need for using open source software to eliminate digital divide.

Tunisia talked about digital divide issues in its all three submissions. It also defined digital divide as a socio-economic problem. Tunisian President Zine El Abidine Ben Ali defined digital divide the following way: “… before being just a technological divide, the digital divide is essentially a development disparity and a gap impeding the dialogue of civilizations.” Tunisia called for applying various methods to eliminate digital divide including private financing, believing that the private sector had the necessary capital and skills to deliver communication services to “consumers.”

On the other hand, India included the issues of digital divide in its all six submissions to the WSIS. It perceived digital divide as the lack of access to ICTs and was concerned about how to increase Internet access. It put forward the issue of interconnection costs as a barrier to bridging the divide and highlighted the need for multilingualization, local and multilingual content, and universal access to bridge it. India defined the views of the postcolonial states on digital divide the following way:

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66 Mbeki, Speech at Tunis.
68 Ibid.
69 Tunisia, “Tunisian working paper for the second meeting of the preparatory committee of the WSIS,” Geneva, 3 December 2002; Document WSIS/PC-2/CONTR/4-E.
The issues on which most of the developing countries are showing their concern are issues pertaining to high international communication cost of Internet (including transit traffic cost), and access cost for hardware and software multilingualism and localization of content. There is a need for an international cooperation mechanism which will help develop a roadmap or guidelines for developing countries to adopt so that Internet penetration increases to an agreed benchmark.  

To ensure universal access, India pointed out the need for developing infrastructure, affordable technology, human capacity and content in local languages. Drawing on its national experience in reducing digital divide, India pointed out the importance of businesses by saying that "private business initiatives, driven by a sense of ownership and potential for economic gain, can play a meaningful role in building up the trained human resources relevant to the needs of ICT."  

Cuba talked about digital divide issues in its all three submissions to the WSIS, and perceived digital divide as the lack of access to technology. Ricardo Alarcon de Quesada, President of the National Assembly of People's Power of the Republic of Cuba, observed that the Internet was concentrated in high income countries, especially in some regions of such countries. He argued that digital divide was a new inequality in addition to the existing socio-economic divides in both rich and poor countries. Cuba believed that the "concentrated private ownership" of ICTs contributed to this problem. It recognized market competition as a way to reduce digital divide, but argued that it was not the only way as in some cases "an active involvement of governments through public investments and programmes of development, ... is of strategic importance." Cuban Minister of Informatics and Communications Ignacio Gonzalez Planas underscored the need for technology transfer, and called for the "democratization of access to

70 India, Statement of the Indian delegation in the meeting of the Sub-Committee-A.
74 Cuba, Comments and proposals.
75 Ibid.
technological development" to eliminate digital divide. But he did not elaborate what he meant by the phrase "democratization of access".

Iran talked about digital divide in two out of its five submissions, and defined digital divide as the lack of access to technology. Iranian president Mohammad Khatami and Iranian Minister for Communication Mohammed Soleymany mentioned the issue of digital divide in their speeches at the Geneva Summit meeting and Tunis Summit meeting respectively, but the Iranian submissions to the WGIG did not include this issue. Soleymani said that digital divide existed between rich and poor countries, and suggested developing adequate mechanisms to facilitate access to the Internet and increasing international cooperation to remove the divide. Khatami suggested to ensure states' “right to development”, “right to communication” and “right to information” to reduce digital divides. He also emphasized the need for international cooperation by saying that “we urgently appeal the international community to help create new capacities in the developing countries and assist them with their empowerment.”

The EU discussed digital divide issues in five out of its six submissions to the WSIS, and defined the divide as the lack of access to ICTs. It said that bridging the digital gap requires universal access to ICTs at affordable cost, linguistic diversity, local content, and public Internet access points at the national level. It suggested "public-private partnership" for financing where the private sector will provide ICT goods and services to some users on favorable conditions.

Civil society deliberation on digital divide was the most elaborate. It defined digital divide as the lack of access to ICTs. It located digital divide between nations, within nations, and within social groups. This means, for civil society, digital divide

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77 Soleymani, Speech at the Tunis Summit.
79 Ibid.
occurs within a state because of geographic barriers and barriers created by gender, ethnicity, age, economics, culture and education. It proposed to create information commons at national and global levels to eliminate digital divides saying that “electronic commons which guarantee universal access to information and capacity to produce information essential to human development, free public spaces and technical resources [that] can be used to meet human needs.”

Civil society said that “the solely profit-motivated and market-propelled promotion of ICTs” will not ensure universal access. It also emphasized the need for open source software for universal access saying that “Free Software, with its freedoms of use for any purpose, study, modification and redistribution should be promoted for its unique social, education, scientific, political and economic benefits and opportunities. . . .”

Civil society also supported the creation of the DSF and proposed to generate another fund called “a community media fund” through a “donor civil society partnership” to develop community media.

On the contrary, the U.S. and CCBI did not mention the term digital divide, but expressed concerns over some issues related to digital divide such as interconnection costs, the DSF, and open source software. However, they agreed with the postcolonial states on the need for universal access to the Internet, creating infrastructure, local content, and multilingualism. The U.S. opposed the proposals on interconnection costs and open source software.

About interconnection, the U.S. said: “Market conditions have led to the development and expansion of Internet infrastructure and services. The United States believes that Internet infrastructure and services should be market-driven and that Internet interconnection agreements should continue to be negotiated on a private, commercial basis.” It opposed any move for developing “guidelines on Internet contracts” to deal with the negotiations on Internet traffic. It added that:

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62 Ibid.
63 Civil Society Plenary, Shaping Information Societies, 7.
64 Ibid, 17.

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The international settlement regime that applies under the telecommunications regime cannot be applied to Internet traffic. WSIS should look to ongoing work on this important topic in existing institutions, such as the ITU and the OECD, and encourage national authorities to take steps to open markets to competitive entry and promote increased competition in the market place. A competitive market creates an enabling environment that encourages investment and/or international infrastructure assistance. The development of regional Internet exchange points and local content should also be encouraged.\(^{87}\)

About open source software, the U.S. said:

The United States recognizes that open source software can contribute to increased access and diversity of choice but it is only one of many possible models for the development of software. The WSIS documents should not promote one over the other (i.e., open source vs. proprietary), but should instead foster the availability of diverse alternatives and the freedom to choose among those alternatives.\(^{88}\)

Using the term “digital opportunity”, John Marburger, Director, Office of Science and Technology Policy Executive Office of the President of the United States, suggested that digital technologies create opportunities which could be grabbed, adopting a capitalist philosophy that believes “in the power of individual creativity and entrepreneurship as the ultimate source of economic strength.”\(^{89}\) He delegated U.S. success in digital technologies to that philosophy, though evidences show the prime role of the U.S. government in developing digital technologies. He also put forward an alternative proposal called “Digital Freedom Initiative” for ICT development based on capitalist philosophy in the postcolonial states.

The CCBI also expressed similar concerns about Internet interconnection and open source software. About Internet interconnection, it said: “… the market and commercial negotiations should prevail. Recent data on Internet traffic flows indicate[s] that the market is facilitating increased intra-region traffic. Unnecessary regulation could,
in fact, constrain development of ICTs and slow the expansion of Internet infrastructure and services worldwide."

About open source software, it said, "... governmental policy on software standards should not discriminate in favour of or against any particular software development model." It recognized the need of states to reduce software costs, but added that governments:

should bear in mind that open and competitive procurement policies avoid market distorting effects and result in greater competition that benefits governments and citizens in the long term. Therefore as a general matter, multilateral government declarations, including that of WSIS, should remain neutral with respect to different technologies and modes of technology development.

The CCBI expressed concerns about the states’ move to welcome the DSF and wanted assurance that the fund would be “voluntary in nature and the contributions will come from ‘voluntary sources’”. It outlined the need for a market friendly environment which would encourage private sector investment for technological development.

The above narratives reveal the issues involved in digital divide and the alignments of the stakeholders on the issues. They show two approaches to define digital divide—it is a socio-economic divide and it is a problem of access to technology. China, Brazil, South Africa and Tunisia took the first approach, while India, Cuba, Iran, the EU, and civil society took the other approach. In terms of eliminating digital divide, the postcolonial states were in the same boat that they were willing to adopt any means for that. Civil society agreed with the postcolonial states on all the measures of eliminating digital divide, such as developing infrastructure, local content, multilingualism, mechanisms to decide interconnection costs, using open source software, human capacity development, and building information commons, except the demand for state control over Internet expansion. Civil society avoided supporting the

90 CCBI, CCBI Comments on Draft Declaration of principles and draft action plan.
91 Ibid.
92 Ibid.
demand for state control and proposed to pursue both pro-market and non-market solutions.

The EU supported the postcolonial states for having the following means to bridge digital divide: developing infrastructure, human capacity, local content and multilingualism, but remained silent about interconnection costs, the DSF, open source software and information commons. The U.S. and the CCBI had identical positions. They both endorsed the need of universal access, local content, multilingualism and human capacity building, but opposed the postcolonial position on interconnection costs, the DSF and open source software. The U.S., the EU and the CCBI opposed the demand for national control over the Internet. They suggested a "public-private partnership" where states make the necessary arrangements for businesses to invest in developing Internet infrastructure, content and human capacity. The postcolonial states, civil society and the EU suggested having provisions for some non-commercial services along with commercial services.

Of the digital divide issues, local content and multilingualism are the universally agreed ones and interconnection costs, the DSF, and open source software are the controversial ones. Given the importance of these issues and length of this chapter, I will deal with the controversial issues in this chapter and agreed issues in the following chapter.

Of the controversial issues, Internet interconnection costs has been the most contested one and has been debated in several international communication forums before and alongside the WSIS. So far, three international attempts took place to deal with international Internet interconnection costs without any success. Following a request from Australian ISP Telstra, the APEC Telecommunication Working Group tried to develop a framework similar to the accounting rate system to deal with Internet interconnection costs. But the U.S. strongly opposed the move. In a background paper sent to the APEC Telecommunications Working Group, the U.S. government told APEC
that "there is no need for government intervention into relationships between Internet Service Providers."  

Under the influence of the "developing countries", the ITU Study group 3 began reviewing the issue in 1998 and the ITU World Telecommunications Standards Assembly in 2000 finalized a recommendation—ITU-T Recommendation D.50—regarding peering or transit between ISPs and backbone providers. This resolution, adopted at ITU's Montreal assembly, says:

The World Telecommunication Standardization Assembly (Montreal, 2000), recognizing the sovereign right of each State to regulate its telecommunications, as reflected in the Preamble to the Constitution, noting:

a) the rapid growth of Internet and Internet protocol-based international services;
b) that international Internet connections remain subject to commercial agreements between the parties concerned; and

c) that continuing technical and economic developments require ongoing studies in this area,

recommends that Administrations involved in the provision of international Internet connections negotiate and agree to bilateral commercial arrangements enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission amongst others.  

Although this recommendation is voluntary and non-binding in nature, the U.S. and backbone providers severely contested this and halted its implementation. The U.S., along with Greece, formally expressed reservation about the recommendation and told the ITU that they would not abide by this. This recommendation asserts the right of sovereign states and opens the room for the ITU to do more study on Internet interconnections. It does not oppose the principles of neoliberalism.

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93 Kende, The Digital Handshake, 34.

In this context, the Study Group 3 further reviewed the issue of Internet interconnection and adopted an amendment to the recommendation. The amendment annexed as Amendment 1 is titled the "General considerations for charging criteria and options for international Internet connectivity." The principal change the amendment brought to this recommendation was that it defined the term "administration", contained in the point "c" of the resolution. Now "administration" refers to telecommunication operators. It also provided a guideline for interconnections. It talks about interconnection criteria such as the extent of network connectivity, level of traffic exchanged, contact points and service performance, and charging options (e.g., peering, transit or any hybrid forms), and points out the need for taking the value of the networks into account in determining the charge of international links. The amendment was adopted with China's note of dissent. China expressed reservation about the amendment because it included private telecom operators as administrations. Traditionally, within the context of the ITU, administration would refer to the telecommunication regulatory authorities of the member states.

Finally, under the pressure of the postcolonial states, the WGIG included the issue of Internet interconnection in its report and the subcommittee on Internet governance tried to have a consensus on a framework for guiding Internet interconnections to be approved by the Tunis summit meeting. We can see two opposing views on Internet interconnection costs—the postcolonial demand for an intergovernmental framework to reduce the costs and the western proposal to encourage businesses to develop regional backbones and exchange points to reduce costs. The subcommittee framed the issue in the following way:

We maintain that the uneven sharing of the burden of costs for international Internet connectivity should be redressed through further dialogue. We call for affordable access to ICTs, including by: a) Reducing international Internet costs charged by backbone providers, supporting, *inter alia*, the creation and development of regional ICT backbones and Internet Exchange Points to reduce interconnection cost and broaden network access; b) Encouraging the ITU to continue the study of the questions of the International Internet connectivity (IIC) as an urgent matter to develop appropriate Recommendations; c) Developing low-cost
equipment, such as computers, especially for use in developing countries.\textsuperscript{95}

The point "a" in the above paragraph received most attention. All the postcolonial states supported the subcommittee proposal and the amendments proposed by Brazil and South Africa. Brazil proposed to the subcommittee to add the following sentence: the ITU should be given the responsibility to study and develop the recommendations for reducing Internet interconnection costs to point "a", and South Africa suggested the modification of point "c": Developing low cost equipments for both individual and collective uses in the "developing countries". But the U.S., EU and CCBI opposed the point "a".

The U.S. proposed that the point should be replaced by the following paragraph:

We further reaffirm our commitment to optimize connectivity among major information networks by encouraging the creation and development of regional ICT backbones and Internet exchange points, to reduce interconnection costs and broaden network access. We call for the development of strategies for increasing affordable global connectivity, thereby facilitating improved access. Commercially negotiated Internet transit and interconnection costs should be oriented towards objective, transparent and non-discriminatory parameters, taking into account ongoing work on this subject.\textsuperscript{96}

The U.K., on behalf of the EU, also stressed for developing regional ICT backbones to reduce interconnection costs.

The CCBI suggested the deletion of the point, claiming that interconnection costs have decreased by 30-50\% since 2003, which makes the call for the reduction of the cost inappropriate. It also challenged the term "uneven sharing of burden of costs", saying that there was no proof of that. It suggested that the first section of the paragraph should include the following lines: "creating a liberalized environment that encourages backbone providers to locate network access points locally, implementing Internet exchange points nationally and regionally, and facilitating the creation of local content."

\textsuperscript{95} WSIS Executive Secretariat, "Compilation of Comments Received on the Chair's Paper (DT/10), Chapter Three: Internet Governance," 29 September 2005, Document WSIS-II/PC-3/DT/14 (Rev. 2)-E.

\textsuperscript{96} Ibid.
At every forum, the U.S. opposed making any efforts to develop an intergovernmental mechanism to decide interconnection costs and guide interconnection agreements. Because of opposition from the U.S., EU and CCBI, the WSIS could not have an agreement on this issue. So far, there is no intergovernmental mechanism to deal with international Internet interconnections. However, the committee could make some progress on the other two issues—open source software and the DSF. The committee agreed on recognizing open source software as one of the models of software development and to create the DSF on a voluntary basis.

### 4.4 Implications of the Postcolonial Positions on Digital Divide

The proposals and practices of the postcolonial states on digital divide issues at national and global levels show similarities and differences between them. All these states defined the Internet as a tool for social development and emphasized the need for making it universally accessible to remove the divide in their rhetoric at the WSIS, but none, except Brazil and South Africa, adopted universal access to the Internet as a policy goal at the national level. Only Brazil and South Africa stated that they would ensure universal access to the Internet since social movements in recent years have kept these states under pressure for the redistribution of social services which in the past were devoted to the rich.

All the postcolonial states allowed the Internet to be expanded by businesses on a pay-per basis. At the WSIS, they fought about Internet interconnection costs, the DSF and open source software to reduce access costs, but never opposed the neoliberal means of Internet expansion (e.g., privatization and liberalization etc). Providing universal access is an altruistic goal which contradicts with the neoliberal methods of distributing services. But the postcolonial states pursue altruistic goals in telecommunication and Internet sectors without rejecting neoliberal means.

For example, China liberalized its telecommunication market but did not reduce state control. Instead, it has achieved phenomenal growth in terms of expanding its telecommunication infrastructure and the Internet through state initiatives. Since the mid-1990s, the Chinese state made a huge investment in telecommunication infrastructure and promoting Internet use among government agencies, business entities and average
people as a national development priority. But it did not achieve universal access to the telephone until it resorted to a Maoist method of delivering services, argues Yuezhi Zhao.

The MII (now MIIT) first decided to create a universal service fund in 1988 with contributions from telecommunication service providers to expand telecommunication services across China, but failed to go ahead with the project because of the lack of support from other government bodies and opposition from telecommunication service providers (e.g., China Mobile and China Unicom). However, it could eventually fulfill its goal to reach a telephone in every administrative village. In 2000, the MII developed a project called “Telephone to every village” by 2005, and could reach a phone in every administrative village by 2007. People can use the phone on a pay-per basis.

The expansion of phone lines in the rural areas was possible when the Chinese state divided up the unserved areas among telecommunication companies, and instructed them to expand phone lines in the designated areas at any cost by the time. This proactive role of the Chinese state, for Yuezhi Zhao, harks back to Maoist China. Yuezhi Zhao notes that the goal of reaching the phone to every village was first designed by the Maoist administration immediately after the revolution to build socialist countryside. The MII just revived and fulfilled that goal. Yuezhi Zhao claims that the Hu Jintao government revived and fulfilled the Maoist goal amidst discontent among rural people about China’s accession to the WTO and adoption of pro-market means to manage the economy.

The Indian telecommunication authority also had to modify its policy to move toward universal access to telecommunication. It initially licensed private companies to

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97 Zixue Tai, The Internet in China, 134.
99 Ibid.
100 Ibid, 116.
101 Ibid, 111.
102 Ibid.
103 Ibid.
provide telecommunication services in profitable urban areas with a universal access obligation that the companies would expand their networks in rural areas. But after a few years it became evident that no company was interested to fulfill its obligation.\textsuperscript{104} The telecommunication authority had to revise its universal access policy. Later it took an initiative to generate a universal access fund by levying private companies to provide financial assistance for rural services. The same thing happened in South Africa where the government had to move from imposing universal access obligations to creating a universal access fund. South Africa uses some of this fund to achieve universal access to the Internet as well.

Brazil also created a similar fund called the Fund for the Universalization of Telecommunication Services (FUST) in 2001. Every telecommunication company has to contribute one percent of its revenue to the fund, conducted by the telecommunication regulator Anatel and the Ministry of Communications.\textsuperscript{105} This fund is used to provide Internet connections to schools, hospitals and municipalities.


\textsuperscript{105} Albernaz, The Internet in Brazil, 9.
Multilingualism: Does It Legitimize the ICANN Model?

Historically language has been a touchy area in colonies since colonizers always imposed their languages on the colonized. Colonial rulers would force the colonized to learn their languages by carrying out administrative activities in their languages and introducing their education system in the colonies. Colonial languages became the second language in many postcolonies and the first languages in some colonies by replacing native languages. For example, English became the second language in India and South Africa, and Portuguese and Spanish replaced the native languages in Brazil and Cuba respectively. Against this backdrop, the postcolonial states made multilingualization of the Internet an issue of global Internet policy-making.

Multilingualization can help achieve universal access, reduce digital divide and ensure cultural diversity on the Internet by allowing local content or content in multiple languages. Multilingualization is the main means to make the Internet culturally diverse. It is said that “nobody on the Internet knows that you’re a dog, nor can they easily determine if you’re Black or White, male or female, gay or straight, or rich or poor. But they can immediately notice what language and dialect you are using.”

Multilingualization of the Internet requires the availability of multilingual content and the DNS accept that. The DNS would recognize content only in English because it was the language of the Internet since its creation. The ICANN-led Internet governance

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framework approves the technical changes to the DNS, which are necessary for multilingualization. Its standards body, the IETF, determines technical standards for this, and the ICANN board approves language code tables, the addition of multilingual domain names, and the registration of language scripts.

At the WSIS, the postcolonial states pointed out the lack of multilingual content on the Internet and expressed concern about the lack of international coordination and the slow progress in this area, but did not oppose the market based approach to multilingualization. They wanted a multilateral body created within the UN system, involving states, businesses and civil society, to look after this issue. But the U.S. insisted that the existing market based system of Internet governance should carry out the job. The WSIS failed to come to a consensus on creating a new multilateral body, but urged ICANN to expedite its ongoing works on multilingualization.

In this chapter I show that the postcolonial states criticize the slow progress in the multilingualization of the Internet, but do not oppose the market based approach to multilingualization, and explain why multilingualization generated less controversy among the Internet policy issues. For that, I first review the attempts to multilingualize the Internet, and then explain the stakeholders’ position on this issue at the WSIS.

5.1 Attempts to Multilingualize the Internet

ICANN has not been proactive in multilingualizing the Internet. Private companies and individuals carried out the tasks of multilingualization on their own and compelled ICANN to coordinate the efforts. ICANN had to respond positively to justify its existence to the millions of Internet users who do not speak English.

Of the 6,800 languages of the world, only a few are represented on the Internet. English has been the dominant language of the web. Since the Internet developed as a

3 WGIG, Background Report.
project of the U.S. Defense Department, it learned to communicate only in English. Available data on web pages show the dominance of English. In the late 1990s, 82% of the web pages were in English with German as its nearest rival at 4%. By the early 2000s, 68% of the web pages were in English with Japanese and German at 5.85% and 5.77% respectively.

An important obstacle to multilingualization is that many languages do not have written forms. Of the languages with written forms, some do not have computerizable scripts. Some languages are alphabetic (e.g., English) and some are pictographic or ideographic with thousands of characters (e.g., Chinese). Some are written from left to right direction (e.g., English), some are written from right to left (e.g., Arabic), and some are written from top to bottom (e.g., Japanese). Furthermore, some languages have more than one script such as Chinese which has both traditional and simplified scripts. Some scripts have more than one encoding scheme. All these linguistic variables come into play in developing techniques to multilingualize the Internet. Multilingualization requires character sets, character encoding mechanisms, content display tools, data input mechanisms, and mechanisms for enabling the DNS to recognize and operate in other languages.

E-mails first displayed multilingual content when Internet researchers developed a mechanism to exchange e-mails in various languages. The creation of an encoding protocol known as Multipurpose Internet Mail Extensions (MIME) made the exchange of e-mails possible in various languages. Simple Mail Transfer Protocol (SMTP), the basic Internet e-mail transmission protocol, would support only 7-bit ASCII (American Standard Code for Information Exchange) characters limiting the transmission of e-mail messages in Latin Characters. But 7-bit ASCII encoding would not support the Latin alphabet based languages which include diacritics such as Germanic and Celtic, Romance, Slavic, Baltic and Cyrillic. This means texts in languages with diacritic could not be correctly represented in e-mails. MIME, as an extension to SMTP, made it

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5 David Crystal, Language and the Internet (Cambridge: CUP, 2001), 216.
6 Mark Warshauer, Technology and social inclusion (Cambridge, Mass: MIT Press), 87.

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possible to exchange multilingual content via e-mails without changing any basic e-mail protocols.\textsuperscript{8}

The development of protocols, such as HTTP (Hypertext Transfer Protocol) and HTML (Hypertext Markup Language), which support character encoding in MIME, made it possible to represent multilingual content on the WWW. But to navigate the WWW in a language other than English, we need data input tools (e.g., keyboards and web browsers) and the DNS to support the particular language. When we want to surf the WWW, we write a URL (e.g., http://www.hotmail.com) in the web browser’s address bar which includes protocol markers (i.e., http), a second level domain (e.g., hotmail), and a top-level domain (e.g., .com). We need a keyboard to write and a web browser (e.g., Internet Explorer) to navigate the WWW and a supportive DNS. Initially keyboards, web browsers and the DNS would recognize only English. Now multilingual keyboards are available and many web browsers support multilingual content. But the DNS still remains as a challenge to multilingualization.

The DNS, which facilitates the navigation of the WWW by mapping the domain names to its corresponding numeric IP addresses, can only recognize Roman characters, the characters used for writing English. The Internet adopted ASCII, an encoding system based on English alphabet, since its birth. The American National Standard Institute developed this coding system in the 1960s based on teleprinter’s encoding system.\textsuperscript{9}

The first version of the standard was published in 1963 and went through a major revision in 1967. It was updated a few more times after 1967. A presidential decree by President Lyndon B. Johnson on 11 March 1968 made ASCII the encoding system for computer communication and made it mandatory for all computers purchased by the federal government to support the standard.\textsuperscript{10} The Internet, a federal government

\textsuperscript{8} Ibid.


project, adopted ASCII as the standard character set which includes 26 alphabets from a to z, 10 numerals from 0 to 9 and the hyphen.\textsuperscript{11} And the character encoding system is based on a 7-bit code.

Now the challenge is to prepare the DNS to recognize other languages whose character encoding is not the same as English. The Internet standards bodies such as the IAB and IETF preferred a MIME-type solution for the multilingualization of the DNS, since such a solution would not alter the existing architecture of the Internet naming system. Two RFCs—one issued by the IAB (i.e., RFC 1958) and one issued by the IETF (i.e., RFC 2277)—outlined the principles of the multilingualization of domain names and content. RFC 1958 outlined the architectural principles of the Internet and ways of multilingualization.\textsuperscript{12} It says, "The principle of constant change is perhaps the only principle of the Internet that should survive indefinitely." There has been no formally codified architectural principle of the Internet; however, there has been a tradition. The overarching goal of this tradition is to ensure universal connectivity. And Internet protocols (i.e., TCP and IP) would help achieve that by staying independent from the hardware to be used. This architectural tradition is known as the end-to-end principle.

On multilingualization, the RFC suggested that the domain names and the protocol elements that are transmitted in text format should be in case-independent ASCII characters. It also noted that "designs should be fully international, with support for localization (adaptation to local character sets). In particular, there should be a uniform approach to character set tagging for information content."\textsuperscript{13} RFC 2277 recommended that the protocols should remain in ASCII characters and text strings should be the subject of multilingualization.

The IAB and IETF suggested the standards for multilingual domain names through these RFCs but left the job of creating non-English domain names, which would later be known as internationalized domain names (IDN), to private companies. Of the

\textsuperscript{11} Twomey, Effect of Multilingualism, 2.
\textsuperscript{13} Ibid.
private companies, NSI/VeriSign, the operator of the .com, .net and .org domains, first began registering non-English domain names. On August 25, 2000, NSI Registry announced its plan to open a testbed for ICANN-accredited registrars so that they could register second level domains in non-Latin languages in .com, .net and .org domains.\textsuperscript{14} ICANN did not restrict NSI/VeriSign from expanding their activities to this new area of domain name registration, but requested it to uphold IETF's principles about IDN which require registries register non-English domain names through technologies that have open and non-proprietary standards and are fully compatible with Internet's existing end-to-end principle and the structure of the DNS.\textsuperscript{15} ICANN also suggested that NSI/VeriSign should not make any effort that would hamper the current use and operation of the DNS.

NSI/VeriSign testbeds first registered names in Chinese, Japanese and Korean characters because of a huge demand for domain names in these languages. About 20 ICANN accredited registrars participated in this process, offering registrations in those languages. In competition with NSI/VeriSign, some local businesses (i.e., ccTLD registries) also conducted trials of their own for having second level domains in non-Roman character sets within their ccTLDs. For example, the Japanese ccTLD operator Japan Network Information Center (JPNIC), the Taiwanese ccTLD operator Taiwan Network Information Centre (TWNIC), and the Chinese ccTLD operator China Network Information Center (CNNIC) conducted their own testbeds. Two other global companies—i-DNS and MINC—made efforts to offer multilingual domain name services on a commercial basis. By 2003, many companies, including VeriSign, i-DNS and Multilingual Internet Name Consortium (MINC), registered IDNs at the second level of the DNS on a pay-per basis.\textsuperscript{16} But these companies used different technologies to register IDNs, raising a concern for compatibility and uniformity, and also engaged in a tug of war to establish their technology as the universal standards for registering IDNs.

Because of a conflict between IDNs providers, ICANN decided to develop a common standard for registering IDNs. ICANN requested the IETF to do the job, and


\textsuperscript{15} Ibid.

\textsuperscript{16} Twomey, Effect of Multilingualism, 3.
managed assurance from IDN providers that they would adopt the IETF standards.\(^{17}\) The IETF developed a standards system for translating non-ASCII characters into ASCII strings. In October 2002, the IETF Steering Group approved three documents for publication, which together define IDNs in applications. These documents published as RFC 3490, RFC 3491 and RFC 3492 in March 2003, are known as the IDNA (Internationalized Domain Names in Applications) standards. Under this approach, Unicode would be used to encode non-English characters, and punycode, a transfer encoding syntax,\(^{18}\) would translate Unicode characters into ASCII characters.

After the adoption of the IDNA, ICANN decided to allow the registration of IDNs at the second level of the DNS (for example the ICANN portion of www.icann.org)\(^{19}\) and tried to reach an agreement with registries that registries would apply the IDNA in registering IDNs. CNNIC, JPNIC, TWNIC, Afilias PIR, VeriSign and the registries dealing with IDNs in the .cn (China), .jp (Japan) and .tw (Taiwan) ccTLDs and .info and .org gTLDs immediately expressed their commitments to adhere to the IDNA sending letters to ICANN.\(^{20}\) All these IDN registries committed to employ language specific registration and administration rules that are documented and publicly available, adhering to ICANN guidelines. And registrars would collaborate with each other in developing language-specific policies with the objective of achieving a consistent approach to IDN registration to maintain Internet interoperability.

After establishing guidelines for the introduction of IDNs at the second level of the DNS, ICANN began initiatives to decide guidelines for IDNs at the top-level. It assigned a Swedish company, Autonomica AB, to conduct a laboratory test for the incorporation of IDNs into the top-level domain (for example, the .org portion of www.icann.org).\(^{21}\) ICANN finalized the test design in December 2006 and Autonomica


\(^{20}\) Ibid.

\(^{21}\) Twomey, Effect of Multilingualism.
AB conducted the test in March 2007 to see whether the creation of IDNs at the top level domains would have any impact on the operations of the root name servers or the iterative mode resolvers that are used to look up information related to domain names. There was no adverse effect and all involved systems behaved exactly the way Autonomica expected. Following the success of this test, ICANN approved the insertion of 11 evaluation-purpose IDN TLDs into the root zone and initiating propagation to all the root servers. These IDN TLDs were inserted into the root zone as part of the .test Program and they are known as test IDNs. These IDNs are in Arabic, Persian, Chinese (simplified and traditional), Russian, Hindi, Greek, Korean, Japanese, Tamil and Yiddish. It is now possible to write the whole URL in these languages, except the http:// portion, and the DNS is able to map it. The http:// portion, the protocol prefix, remains in ASCII. ICANN did not allow it to be changed because its change would require a significant transformation of Internet architecture.

Michael Geist critiques ICANN for its hands-off approach and slow response to the need of developing IDNs. He claims, "Notwithstanding its stated commitment to multilingual domains, the issue has languished, a victim of indifference and even occasional hostility from ICANN leadership." He goes on to say that "ICANN has repeatedly struck committees, held workshops, and introduced guidelines, yet there has been little to show for the efforts." Geist expected a proactive approach from ICANN with regard to IDNs, but the progress has been slower than expected during the last few years.

However, the ICANN Working Group on IDNs shrugs off this allegation, saying that the role of ICANN in the process of developing IDNs is bound to be limited because its agreements with the major gTLD registries give it the responsibility to authorize the registration of the IDNA-compliant internationalized domain names, but no authority to interfere with the registry-level implementation of IDNs. The deployment of IDNs in the

23 Ibid.
existing top-level domains is the responsibility of the registries. Registries should develop their own policies to deal with languages and character sets, and create as well as maintain character-equivalence tables for non-English languages.

5.2 Multilingualism in the Postcolonial States

Of the postcolonial states, China is a clear leader in terms of multilingualization of the Internet. When China got connected to the Internet it was the English speaking academic elites of the country who would use the medium. A very few of China’s 1.3 billion people can communicate in English, while most people speak Chinese. With the increase of Internet penetration, many people who did not know English went online. Chinese language websites, bulletin board systems, chatting options and e-mail system made it possible for them to do so. But people would complain that Latin-based domain names hampered their access to the Internet. It was difficult for many Chinese to remember and write web addresses and e-mail addresses because they were in English.

In 1997 CNNIC, along with Zhongxi Company, began working on methods to develop Chinese character domain names within .cn domain. In 1998, it began registering Chinese character domain names on an experimental basis and organized a Conference on the Issues of Chinese Character Domain Names in Beijing to talk about Chinese character domain names. The conference unanimously decided to deploy Chinese character domain names to facilitate access to the Internet in China. CNNIC, with official approval from the then MII, initiated Chinese character domain name registration in January 2000 on a trial basis, and the number of registered names went up to 100,000 by the end of the year. Hong Xue argues that CNNIC expedited its Chinese domain name registration to establish its control over the Chinese character domain name business because of competitive pressure from foreign companies such

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26 Ibid.
27 CNNIC, The Internet Timeline of China.
28 Hong, The Voice of China, 566.
as NSI/VeriSign, i-DNS, and MINC which began registering Chinese character domain names by the time.\textsuperscript{29} For example, out of NSI's 920,000 registered IDNs, 80% were Chinese character domain names.\textsuperscript{30}

For CNNIC, IDN was a cultural and business concern. It is a cultural obligation to expand the Internet in Chinese, and it is a business for Chinese companies to provide IDNs. CNNIC received strong support from the Chinese government for its initiative. The head of MII's Telecommunication Regulation Department, Chen Yin, told the media in November 2000 that "motivated by profit, some companies and organizations have been promoting their version of Chinese-Character domain name registration services in China and disrupted our nation's own registration service. This compromises the well-being of our enterprises, and we object."\textsuperscript{31} And he also informed that the government drafted a regulation to deal with the registration of Chinese character domain names. The MII promulgated a circular carrying the regulation which said that anyone interested to provide Chinese character domain names in China would have to obtain approval from the MII.\textsuperscript{32} It protected the interests of local businesses in terms of Chinese character domain name registration through this move.

Because of a huge demand for Chinese language domain registration, CNNIC decided to give up registration service to some registrars, limiting itself to the job of registry service (i.e., registering the registrars). Now CNNIC authorized registrars register Chinese character domain names within .cn domain.

China has also been internationally proactive in terms of developing IDNs through regional cooperation and by engaging with ICANN's IDN processes. CNNIC has initiated the creation of a Chinese Domain Names Consortium (CDNC) involving the ccTLDs which register names in Chinese characters such as TWNIC, HKNIC (Hong Kong Network Information Center), and MONIC (Macau Network Information Center) in

\textsuperscript{29} Ibid, 564.
\textsuperscript{30} Ibid.
\textsuperscript{31} Chen Yen, quoted in Hong, The Voice of China, 568.
May 2000. In the same year, it joined TWNIC, KRNIC (Korea Network Information Center), and JPNIC to create a joint engineering team (JET) to research IDNs in characters used by Chinese, Japanese and Korean languages. This initiative produced a guideline called CJK guidelines for IDNs in these languages, and the IETF/ ICANN authorized it as the guideline for generating IDNs in these languages.

While China has a guideline for IDNs, India is yet to think about it. India is a country of more than a billion people who speak more than 400 languages. But only a few of them have written forms or scripts. The majority people speak Hindi, Kashmiri and Punjabi in the northern part of the country, Marathi and Gujarati in the western part, Assamese, Bangla and Oriya in the eastern part, and Malayalam, Kannada, Tamil and Telegu in the southern part. The Indian government recognizes 18 languages as official language. With a vast number of languages, India is yet to establish a satisfactory multilingual Internet for its citizens. The Department of Information Technology took initiatives for multilingualization in the early 1990s through automatic transliteration for Indian scripts and adopted a standard known as ISCII for encoding the scripts. Unicode included ISCII as the standard for encoding Indian languages. There have also been private initiatives to provide translation services through language adaptation which involve word-for-word translation maintaining the grammatical features of the sentences. For example, Rajib Sangal and his associates have initiated a modified version of Computer Assisted Related Language Adaptation (CARLA) in their ANUSARAKA project.

But Joyojeet Pal reports that India has no web content in Indian languages, except some local entertainment and information sites, and identifies the rise of English

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33 Hong, The Voice of China, 582-583.
35 Ibid.
36 Ibid.
as the second language as a reason of that.\textsuperscript{37} He goes on to say that since the Indian elites could access the Internet in English there was not much effort to provide the Internet in regional languages. British colonial rulers introduced English to Indian subcontinent and it now remains as the de facto official language in India because the Indian elites from all language groups know English and have their descendants go to English medium schools.

Like India, South Africa is another country where 11 languages have the official language status.\textsuperscript{38} Two largely spoken languages are: IsiZulu, spoken by a quarter of the population, and isiXhosa, spoken by 18% of the population.\textsuperscript{39} Kathleen Thorpe argues that English is still the language of official communication in South Africa, and the English speaking section of the society dominates the media and economic activities.\textsuperscript{40} In a settler colony like South Africa, white people, who are the descendants of European settlers mainly from Great Britain, Germany and the Netherlands, dominate the Internet. White settlers speak English and Afrikaans, making these languages the languages of the South African Internet.

Another settler colony, Brazil, which is also a home to many indigenous languages, has Portuguese as its principal language. Portuguese, which was introduced to Brazil during Portuguese occupation in the 16th century, became the dominant language at the cost of indigenous languages.\textsuperscript{41} However, Brazilian Portuguese is different from European Portuguese since the former incorporated many elements from Tupian, the previous dominant indigenous language.\textsuperscript{42} Web content in Brazil is in Portuguese and English. Another European Language, Spanish, replaced indigenous


\textsuperscript{42} Ibid.
languages in another settler colony, Cuba. As a result of the Spanish conquest of Cuba from the early 16th century to the 19th century, Spanish became its lingua franca.\textsuperscript{43} Web content in Cuba is in Spanish.

Iran has Persian (Farsi) as its dominant language with three fourths of the population speaking it.\textsuperscript{44} There are other minority languages such as Kurdish and Turkic. But web content in Iran is in Farsi and English. Farsi Blogs/ Web Logs are the dominant form of online expression in Iran.

Tunisia, a former French colony, has Arabic as its official language. French was introduced to the Tunisians during French occupation from 1881 to 1956.\textsuperscript{45} But the web content and software necessary for Internet communication are pre-dominantly in English\textsuperscript{46} as the Tunisian elites have English as their lingua franca. The government also has taken a policy of Englishizing its education system from Arabic with the help of the World Bank which in a recent review of the Tunisian education system has suggested to develop an education system that would help meet the needs of the global economy.\textsuperscript{47} However, in recent years, some NGOs with funds from western countries like the U.S. and Canada have been working to develop web content and software in Arabic and African languages.\textsuperscript{48}

In terms of web content, the Internet is bilingual in the postcolonial states with content available in English and in the local language spoken by the majority people. English remains as a key language of the Internet not only because the Internet was designed to work in English, but also for the development of English as a second language in postcolonies as a result of colonial occupation and the recent globalization


of economic activities. In many postcolonial societies, English has been a breadwinner for many people who wanted to make a decent living. English has been the unofficial language of state administration and language of instruction for higher education in many postcolonial states as a remnant of colonialism.

This colonial legacy got revitalized under neoliberal globalization. Because of neoliberal restructuring, the economic sectors across the world have changed and have become more interconnected. The economies of the postcolonial states have become more export oriented, creating work opportunities in the private sector. In the postcolonial states, where unemployment is very high, white collar jobs go to English speaking candidates. I lived this experience throughout my life as a postcolonial subject. I grew up in a postcolony by learning two languages simultaneously—my national language Bengali and colonial language English—since my childhood. One thing that my father would say again and again when it came to education was that: if anyone could master English, they would have no problem to make a good living. It is typical of almost every educated parent in postcolonies these days. The growth of export oriented economies and jobs in the private sector within the neoliberal global economy have helped English to acquire new grounds in the postcolonial states.

S. Granville et al in a position paper on the future of disadvantaged African languages vindicated my observation in the context of South Africa. They observe that although the idea of recognizing their languages is appealing to South African blacks, an increasing number of black parents want their children to learn English.49 People are aware that English has a colonial past, but believe that they can have a bright future by learning this language since a good command of English provides an entry pass to social mobility and get white collar jobs with decent salaries. These South African scholars point out that: “British colonial domination spread the use of English from Europe to several continents. This was followed by an aggressive post-colonial policy of teaching English as a second language worldwide. English second-language teaching is

48 IDRC, IDRC in Tunisia.

currently one of Britain's largest export industries.\textsuperscript{50} We can also add with this statement that American domination over the world has contributed to the further diffusion of English.

David Crystal notes that English is an official language in many countries and it is the most widely taught foreign language as it is taught in more than 100 countries including Russia, China, Germany and Brazil.\textsuperscript{51} And finally, the elites in almost every country speak English. He goes on to say that Latin became an international language throughout the Roman Empire, but this was not because the Romans were more in numbers than the peoples they subjugated. Rather they were simply more powerful. After the decline of Roman military power, Latin remained as the international language of education for a millennium because of the ecclesiastical power of Roman Catholicism. Language dominance is closely linked with economic, technological and cultural power. Without a strong power-base, no language can become an international medium of communication. For example, British imperialism spread English around the globe in the 19\textsuperscript{th} century, and the U.S. maintained and promoted English as the global lingua franca after the fall of the British Empire.

Global institutions use English as the principal medium of communication, and diplomats of various linguistic backgrounds communicate in this language confirming its status as the global lingua franca, adds David Block.\textsuperscript{52} The Internet added a new dimension to the domination of English. The re-emergence of English as a global language have influenced Robert Philipson and Tove Skutnabb-Kangas to invoke the idea of "linguistic imperialism", implying that other languages would die under the influence of globalized English.\textsuperscript{53} But Warschauer, El Saïd and Zohry argue that on the one hand the diffusion of the Internet along with social and economic globalization has contributed to furthering English's presence as a global language, and on the other, it generated a need in local communities to take initiatives to keep their languages alive as

\textsuperscript{50} Ibid, 258.
\textsuperscript{51} Crystal, English as a Global, 4-5.
a byproduct.\textsuperscript{54} We will see in the next section how the postcolonial states make the domination of English on the Internet a global Internet policy issue.

5.3 Multilingualization and the WSIS

The postcolonial states raised the issue of multilingualism at the WSIS as a both cultural diversity and digital divide issue, and convinced the forum that it was an important issue of Internet policy-making. The EU and civil society agreed with the postcolonial states on the importance of this issue but not on the demand for the creation of a new multilateral body to ensure multilingualism. Of the postcolonial states, Brazil, India, Iran and Tunisia spoke on this issue. Brazil pointed out the need for protecting cultural diversity from the "homogenizing" effects of ICTs.\textsuperscript{55} Indian Information and Communication Minister Dayanidhi Maran pointed out that multilingualization and local content were necessary to empower communities across the world.\textsuperscript{56} Tunisian president Ben Ali said, "Statistics show that the presence of various languages and cultures on the Internet does not currently reflect the reality of human diversity ...."\textsuperscript{57} Iranian president Mohammad Khatami urged the WSIS to make cultural diversity a foundational concept of the Information Society.\textsuperscript{58}

The Civil Society Coordination Group said that multilingualism and diversity should be "at the centre of the information and communication societies."\textsuperscript{59} In its Geneva declaration, civil society observed that:


\textsuperscript{56} Dayanidhi Maran, "Speech at Tunis Summit," Tunis, 16 November 2005.

\textsuperscript{57} Ben Ali, Speech, Second phase of the WSIS.

\textsuperscript{58} Khatami, Speech.

\textsuperscript{59} Civil Society Coordination Group, Civil Society statement on Vision, Principles.
ICTs can be applied to bridge cultural and linguistic divides, given the right priorities. In the past, ICT development has too often reinforced inequalities, such as dominance of roman letter based languages (especially English) and marginalization of local, regional and minority languages. Priority should be given in ICT research and development to overcoming barriers and addressing inequalities between languages and cultures.\textsuperscript{60}

The EU said: “An inclusive Information Society founded on the preservation and promotion of diversity of cultural expression fosters mutual understanding and respect of diversity. ICTs and media as a whole can and should stimulate linguistic and cultural diversity, including through the facilitation of exchange of local content.”\textsuperscript{61} It also added that an equitable Information society should “promote cultural and linguistic diversity and create favourable conditions for the production, dissemination and protection of local content.”\textsuperscript{62}

Under the influence of the postcolonial states, the EU and civil society, the WGIG pointed out that the progress on multilingualization was slow and recommended for speedy actions in this regard. However, the U.S. and CCBI were cautious in recognizing the need for multilingualism. The U.S. expressed trust on technology saying that the development of appropriate technologies would ensure the multilingualization of the Internet. It suggested that the “WSIS should encourage continued work and collaboration on internationalized domain names by existing standards bodies and processes by which agreement can be reached on appropriate language tables.”\textsuperscript{63} The CCBI also expressed a similar opinion on this issue and pointed out the need for multilingualization saying that “there is [a] great value in expediting progress toward multilingualism in both content on the World Wide Web and in the use of non-ASCII character domain names.” However, it problematized the notion of slow progress, saying that “true progress must take into account the technical and other complexities of implementing internationalized domain names, including agreement on official language

\textsuperscript{60} Civil Society Plenary, Shaping Information Societies, 14.
\textsuperscript{61} EU, EU Statement on the Draft Action Plan.
\textsuperscript{63} U.S., Comments on the Report of the WGIG, 3.
tables." Supporting the existing efforts, it said, "Success in this area rests in substantial part on working with all organizations currently engaged in developing solutions including the browser/software development community." The CCBI also noted that "the promotion of cultural diversity and local content do not create unreasonable barriers to trade."64

Since it was a less conflicting issue, the Internet Governance Subcommittee outlined multilingualization as an "Internet governance" issue and underscored the need to speed up the works in this regard.65 The report also identified the need for developing multilingual domain names and other mechanisms to ensure multilingual content on the Internet. It suggested a coordinated effort of all the stakeholders—governments, businesses and civil society.

5.4 Multilingualization as a Policy Issue

One may wonder why multilingualization generated almost no friction between the U.S. and the postcolonial states. We can think about several explanations for this. First, as we have seen above, ICANN has made some progress and continues to work on this. Availability of multilingual input techniques, web browsers’ capacity to support more languages, and IDNs have contributed to the increase of non-English users and content on the Internet.

Second, evidences from the other areas of communication suggest that multilingualization of the Internet will happen to some extent for commercial reasons. Evidences from broadcasting make us believe that the Internet will be localized in terms of language. Initially global broadcasting giants such as CNN, STAR TV and MTV all ensured their presence in the postcolonial states such as India and China in English, but later they began to broadcast in local languages. In some cases, foreign media companies generated programs locally in cooperation with local businesses. For example, the Indian film industry Bollywood and Brazil’s TV Globo have foreign

64 CCBI, CCBI Comments on Draft Declaration.
65 WGIG, Report from the working group, 6.
investment and co-production ventures. Herbert Schiller argues that local productions in the “third world states” were in many cases the imitations of western capitalist media products.\(^{66}\) Brazilian scholar Omar Souki Oliveira documented evidences for this in the Brazilian context. Oliveira notes that Telenovelas produced in Brazil have replaced American products in the Brazilian market, but the objective of Telenovelas is no different from mainstream American programmings.\(^ {67}\) He argues that:

Telenovelas’s historical purpose has been to adapt and dramatize capitalistic notions to fit the Latin American taste. ... Television reflects the strong cultural and economic dependency ties that link Latin America with industrialized nations, and its programming has a notable absence of themes that would address the real needs and aspirations of Latin Americans.\(^ {68}\)

The same thing could be said about Bollywood because it imitates Hollywood to produce blockbusters. Moreover, all these southern cultural products reach the narrow streets of western states, where immigrants from the postcolonial world live, but not the main streets.

We can make two lessons out of this. First, global media companies have localized their products to make them more palatable for consumers in the postcolonial states by adjusting the content to local cultures and languages. Second, the number of media products produced in the postcolonial states has increased to a large extent compared to the past, but the themes which dominate the products are not different from the themes of the capitalist global media products. One can define this increase as a contribution to the plurality of media products, but not towards diversity. Drawing on Herbert Schiller we can say that localization and co-production did not change the structural inequality in global communication.


\(^ {66}\) Ibid.
Warschauer and Florio-Hansen argue that the Internet will increasingly be localized. Commercial interests will lead this localization. Daniel Dor argues that global businesses are looking for ways to penetrate local markets in local languages. Since e-commerce will continue to increase across the world, one efficient way to capture the increasingly global consumer base is going to be native language based websites. Chris Potts, the chief executive of an e-commerce company, Citria, puts it more explicitly, when he says:

As the Internet expands globally, users become less and less sophisticated technologically and in other ways. Their skills and patience are in short supply and they are not going to learn a foreign language just to use the web. To be global, to put it bluntly, you have to go down to their level. You have to provide easy screen navigation and local language.

Potts reminds us the obvious that businesses are guided by profit, and if they find that they can access more consumers via local languages, they would not be shy of using those languages to do business on the Internet. Multilingualization could be a boon for businesses. If e-commerce to spread in the postcolonial states, people need to be able to surf the Internet in their own languages. When access to the Internet grows, the sales of hardware and software grow too. It is a first step towards the expansion of e-commerce.

Finally, multilingualization of the Internet neither requires any changes to the existing Internet governance framework nor its neoliberal management principles. We saw that the postcolonial states demanded a multilingual Internet, but did not oppose the ICANN-led arrangements which are guided by neoliberalism. Local and transnational private companies provide IDNs across the globe. As long as IDNs are in demand, businesses will make them available.

Nancy Fraser argues that political demand making these days are increasingly derived by the goal of recognition at the cost of redistribution when global capital has

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69 Warschauer and De Florio-Hansen, Multilingualism, 5.
70 Daniel Dor, “From Englishization to Imposed multilingualism: Globalization, the Internet, and the political economy of the linguistic code.” Public Culture 16, no. 1 (2004): 102.
been exacerbating economic inequality across the world.\textsuperscript{72} In many cases, the demands for recognition are made in such a way that they sound like a problem of “cultural depreciation”. She goes on to say that “distribution and recognition are not neatly separated from each other in capitalist societies.”\textsuperscript{73} Economically underprivileged are also culturally under-represented. The WGIG issue paper on multilingualization of the Internet also makes a similar point that the Internet becomes available in those languages which have economic power.

So in a neoliberal Internet system, the Internet will be available in those languages which are spoken by sizable amounts of people both nationally and internationally resulting in a limited multilingualism. To guarantee a right of recognition (e.g., multilingualization of the Internet), the right needs to be defined in way that they relate to the issues of redistribution—economic inequality. But neither the postcolonial states nor the WGIG defined the multilingualization of the Internet that way. As a cultural diversity issue, multilingualism stands as a right of recognition for the nations on the Internet. Ensuring a right of recognition does not challenge the arrangements which sustain structural inequalities in society. It is always easier to achieve the right of recognition compared to the right of redistribution.

Since the multilingualization of the Internet does not require any structural change, it created less controversy as an issue of Internet policy-making. It has been a win-win issue for everyone (e.g., businesses, states and consumers). It helps maintain the existing structure of Internet governance. The stakeholders of global communication at the WSIS unanimously decided on the need of a multilingual Internet and suggested to speed up the processes in this regard, which means the existing arrangements of handling multilingualism remain in place. The existing market based approach to multilingualization, which developed during the last few years within the private sector under the tutelage of ICANN, continues.

\textsuperscript{72} Nancy Fraser, “Rethinking recognition,” New Left Review, 3 (2000), http://newleftreview.org/?view=2248

\textsuperscript{73} Ibid.
6.

**Intellectual Property Rights on the Internet: Postcolonial Struggle for a Lenient Regime**

Intellectual property right (IPR)—the right of a creator to control their creations—is said to be the principal property of the Information Society. These property rights are categorized into two branches—copyright and industrial property right. Copyright lends property right to the creators of literary and artistic works such as books, journals, essays, pictures, music and computer software etc. Industrial property relates to industry, commerce, extractive and agricultural industries, and manufactured as well as natural products. The main forms of industrial property right includes patents and protection for signs transmitting information about a product or service to consumers such as trademark, industrial design, geographical indication (GI) and integrated circuit design. Michael Perelman calls IPR a form of monopoly power given by state laws. And, the right holders enjoy an authority over the use of intellectual properties by the dint of this power.

The Internet affects IPRs in two ways. First, it makes the reproduction, dissemination, and storage of copyright materials cheaper and easier across the globe. Second, it presents an opportunity to develop new forms of intellectual property such as domain names. During the early stage of the Internet when ICANN distributed domain names on a first come first served basis, IPR became a controversial issue. Some people registered well-known business names as the names of their domains, creating anger among the businesses whose names were taken. ICANN settled this dispute by

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adopting the UDRP, but copyright of content on the Internet remained as a controversial issue. Mechanisms to ensure IPRs are a key requirement to expand e-commerce.²

The Internet affects both copyright and industrial property, but the issue of copyright gets more prominence in the global communication forums because of pressure from proprietary software, music and movie companies. Record and movie companies claim that P2P file sharing software creates havoc to their industries by enabling unauthorized downloading and distribution of copyrighted materials, such as music and movies, across the world. The International Federation of the Phonographic Industry (IFPI) claims that 95% music downloads in 2008 were illegal.³ The Motion Picture Association of America (MPAA) claims that the studios lost $18.2 billion worldwide to Internet piracy in 2005.⁴ Although there are no independent studies confirming the loss of the record and movie companies due to P2P file sharing, the IFPI and MPAA initiated a war against the P2P networks and criminalized P2P file sharing with the help of the U.S. government.

The U.S. and CCBI promoted IPR as an important area of Internet governance at the WSIS to ensure the protection of copyright, but stressed that the summit should avoid duplicating the works of other international organizations. WIPO and the WTO make international norms for IPRs and help resolve conflicts about them. WIPO exercises its influence through its “Internet treaties”—the 1996 WIPO Copyright Treaty (WCT) and WIPO Performances and Phonograms Treaty (WPPT)—and the Joint Recommendation on the Protection of Marks and Other Industrial Property Rights in Signs. The WTO exercises its influence through its Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). ICANN looks after domain name related IPR issues, but WIPO takes care of other copyright issues.

At the WSIS, the postcolonial states agreed with the U.S. and CCBI that the summit would not deal with the issue of IPR since it is being dealt by other international bodies in spite of the demand of civil society for the summit to evaluate the existing international regulations and institutions (e.g., WIPO and the WTO). The WSIS left the issue of IPR to WIPO and the WTO to deal with, reducing the influence of civil society on this issue. While the WSIS accommodated businesses and civil society as important actors, the WTO and WIPO allow them to participate as observers. The principal owners of IPRs such as west based TNCs rely on the U.S. and EU to protect their interests through these forums. To ensure that, TNCs try to include their representatives as members of government delegations, employ lobbyists to lobby state officials, and attend WIPO and WTO meetings as observers.

The U.S. wants to expand the boundary of IPR, but the postcolonial states oppose that. But the postcolonial opposition is flawed because they do not oppose IPR per se which is a tool to ensure private property right in creative works. Instead, they demand a lenient IPR regime. This is another ambiguity in postcolonial opposition to U.S. superiority in global Internet policy-making.

In this chapter, I explain the conflict over TRIPS and the Internet Treaties at the WTO and WIPO respectively to show the ambivalence of the postcolonial states that they accept the basic tenets of IPR but fight for a lenient IPR regime. To contextualize the discussion, I begin by setting IPR in a historical context.

6.1 The Tradition of IPR

Ronald Betting argues that intellectual creations had been with us from the beginning of human history, but the provision of assigning property rights to individuals for creations developed as a result of the infusion of capitalist principles into cultural production in 15th century Europe. It is a history of interplays between state, capital and technology. B. Bugbee claims that the city state of Venice, where book business thrived, issued the first recorded patent to a printer/publisher known as the John of Speyer who


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brought the first printing press to Venice in 1469.\textsuperscript{6} This patent gave John exclusive rights over some categories of books for five years. But in other European countries where state authority was weak or underdeveloped, such as Germany, France and the Netherlands, publishers maintained exclusive rights over books through their guilds or agreements between themselves.\textsuperscript{7} Publishers also initially maintained their rights through their guilds in England, but later the state got involved with a view to controlling the publication of seditious materials.

Two traditions of copyright laws developed in Europe such as civil law and common law. R.V. Ayyar points out that those countries which derived their copyright laws from the common law tradition maintain a rigorous standard for copyright, compared to those who developed their laws from the civil law tradition.\textsuperscript{8} He goes on to say that the common law tradition emphasizes the commercial exploitation of intellectual works, while the civil law tradition emphasizes creativity.\textsuperscript{9} Most European countries including France and Germany follow the civil law tradition, while the U.K. follows the common law tradition. These two traditions also spread to colonies. Francophone African countries and Latin American countries adopted the civil law tradition and British colonies adopted the common law tradition. The 18\textsuperscript{th} century patent and copyright law of England—the Statute of Queen Anne, 1710—provides the foundation for U.S. IPR laws. The U.S. patent and copyright system, which is now the dominant model of IPR implementation, developed after this British law. In the case of copyright, the Statue of Queen Anne began assigning the rights to authors instead of printers or publishers. This law authorized authors to enjoy copyrights for 21 years for the already published books and 14 years for the works to be published after the enactment of this law. It also required the printers to provide copies for distribution to various British libraries. But over the years, the terms and conditions of copyright became strict and spread to as many areas of human creation as possible.


\textsuperscript{7} Bettig, Critical perspective, 69.


\textsuperscript{9} Ibid, 12.
IPR originated with the development of capitalism in Europe to make sure that merchants make profit through monopoly rights over intellectual properties. However, non-capitalist societies like ancient India and socialist China had no tradition of IPR, and many of them developed IPR regimes when they got incorporated into the global capitalist system. The concept of IPR reached India during British colonial rule. India first enacted an intellectual property right law, known as the Patents and Designs Act of 1911, during British colonial rule in the early 1900s. Before British occupation, Indian society would count intellect as a resource, but no individual would own it as a property. Brahmins, the highest social caste, had the sole right to bear and impart knowledge but there was no IPR system, and demanding money for knowledge or intellectual creation was socially unacceptable. Rather imparting knowledge was the social obligation of a knowledgeable person.

China initiated a western style IPR system in the early 1980s by enacting patent and trademark laws when it began the process of developing a "socialist market economy", argue Lucie Montgomery and Michael Keane. China's first copyright law came into force in 1990. Chinese society, under the influence of Confucian practices, would see copying texts as a compliment to authors. In socialist China, state authorities would encourage people to copy the works of some approved authors and artists. The society would value literary and artistic products for their use values, not for their exchange values.

Before coming to Canada in 2000 for my second MA in communication, I myself as a postcolonial Asian subject did not know that photocopying books for study purposes was illegal or a violation of authors’ rights. In my birth country Bangladesh, which was a part of pre-partitioned India, people encourage the reproduction of books and journals at a cheap price to make them available to students for study as a great social service.

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However, many states benefited through the selective use of IPRs. The U.S., now the biggest bully of IPR harmonization across the world, would restrict the issuance of patents to foreigners until the mid-19th century. A British commission on IPR observed that, as a developing country at the time, the U.S. would issue patents only to those foreigners who would pay exorbitant fees. It would not provide copyright protection to books from other countries during the formative years of its publishing industry. It did not allow copyright to those U.S. authors who printed their books outside the U.S. and Canada until 1986.

Zorina Khan notes that not only the U.S. but also many first world states used patent laws to protect the interests of their industries. For example, Japan significantly benefited from intellectual properties generated in other countries in the early stages of its development. Nagesh Kumar observes that Japan assigned patent protection with a view to contributing to its industrial development. The countries which acquired significant technological and innovation capabilities had “weak” rather than “strong” forms of intellectual property protection in the formative periods of their economic development. The growth of the Indian pharmaceutical industry suggests that a weak IPR regime contributes to building local capabilities in poor countries as well. Under pressure from domestic industries, the Indian government adopted a new patent act in 1970 by reducing the scope of patentability in food, chemicals and pharmaceuticals only to processes, but not to products. This helped a rapid growth of the Indian pharmaceutical industry.

16 Kumar, Intellectual Property Rights, 6-7.
On the other hand, having a strong intellectual property right protection measure may be harmful for the economic development of the postcolonial states. One area in this regard is technology transfer. Foreign farms may not be interested in transferring technologies to the postcolonial states to extract maximum profit out of patents/copyrights.

The first international treaties protecting IPR are the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works enacted in 1883 and 1886 respectively. Powerful west European countries initiated them to formalize commitments to respect each other’s intellectual properties by signing these agreements. The signatories of the Paris convention agreed to respect each other’s patents, trademarks and other industrial properties. They would provide national treatment to each other's industrial properties and protect them from any unfair competition. But the major problem was about dispute settlement. During the signing of these agreements any country could say that they would not adhere to the dispute settlement mechanism suggested in the agreements.

The Berne Convention also involved national treatment as an important principle. It stipulated a minimum duration and coverage of copyright. It suggested that the duration of copyright for literary works would be the life of the author plus 50 years after their death. For cinematographic works, the duration would be 50 years from the day it was made public. However, the signatory states are free to add additional duration, if they wished to do so. After the end of the protection period, the works will remain in the public domain. The convention also recognized moral (non-pecuniary) rights stating that authors have the right to either associate or not associate their names with their works (i.e., right of patrimony) and the right to object any distortion, mutilation or other modification of the work which would be prejudicial to the creator's reputation (i.e., right to integrity). The convention also kept provisions allowing some free uses of copyrighted materials such as copying for teaching and research purposes (i.e., provisions for fair use).

However, the U.S., Latin American countries, and some Asian countries did not sign the Berne Convention. The international organization for IPR, the United International Bureaux for the Protection of Intellectual Property (BIRPI), created a new convention called the Universal Copyright Convention on September 6, 1952 to bridge
the gap between the Berne signatories and non-Berne countries with the same requirements as the Berne Convention. The U.S. signed the Berne Convention in 1989. Still there are many countries which didn’t sign the Berne Convention. Similar to the Paris Convention, the Berne convention also did not have any effective mechanisms to deal with those states which would either breach this convention or fail to uphold its provisions.

After the Berne and Paris Convention, the Rome Convention created in 1961 for the protection of performers, producers of phonograms and broadcasting organizations to treat neighboring rights is another important international agreement. This convention had not been revised after its creation. Like the two other conventions, the Rome Convention also adopted national treatment as a fundamental principle. WIPO, established in 1967 replacing its predecessor BIRPI, administers the Paris and Berne Conventions, but share the administration of the Rome Convention with the International Labor Organization (ILO) and UNESCO.

Of these conventions, the Berne Convention is revised after every 20 years to keep pace with new technological development. The last revision took place in 1971 amidst the NWICO movement. The “third world states” dominated WIPO processes and were successful in having a favorable revision. The revision added an appendix to the treaty called “Special Provisions Regarding Developing Countries” which would allow a developing country to “grant non-exclusive, non-transferable licenses to its nationals for the reproduction or translation of foreign-owned copyright works for educational or research purposes.” Although this appendix restricts its use by outlining exceptions and limitations, it gave the “third world states” some leverage in terms of copyright. After this revision, WIPO could not convince the member states for further revisions because of the North-South conflict in international communication which continued until the death of the NWICO.

However, IPR has remerged as an important commodity under neoliberal capitalism. Dan Schiller argues that TNCs redefined the boundary of the IPR system by

applying it to “an expanding array of products and labor processes” during the 1980s and 1990s with the help of states. Before the Second World War, France led the international efforts for the harmonization of copyright laws because it was the foremost country in terms of literary and artistic production. Now it is the U.S. which leads the supranational efforts for a strong universal IPR framework.

But under the influence of neoliberalism, the U.S., along with the EEC (European Economic Community, the predecessor of the EU), began searching for new ways to ensure stronger protection measures for IPR across the world. It began to take both unilateral and bilateral steps. It started using its own Tariff Act to fight the “infringement” of U.S. patents by foreign entities and resist the movement of counterfeit goods across the world. It made the protection of IPRs a precondition for other countries to access the U.S. market under the Generalized System of Preferences (GSP). As part of its multilateral strategy, it attempted to include IPR into GATT framework and influence WIPO to revise the Berne Convention.

Citing a U.S. diplomat, Dan Schiller goes on to say that many “developing countries” did not have IPR laws even in the late 1980s. The U.S. and its TNCs mobilized resources to develop IPR laws in these countries. They began to argue at the international forums in favor of having strong IPR regimes across the world. The arguments which have been used for strengthening IPR protection are: first, IPR provides incentives to encourage creativity and innovation. Otherwise, intellectual production would decline; second, IPR needs to be fortified to make sure that no future development will jeopardize this incentive; third, intellectual property laws need to be modified in response to technological change. James Boyle argues that the doctrine of neoliberalism facilitated the globalization of IPR, and calls this new move for a strong

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16 Schiller, How to think, 46.
19 Ibid.
IPR regime the second enclosure movement\textsuperscript{22} in comparison to the first one which took place in 16\textsuperscript{th} century England by enclosing common land for the nobility to make profit out of it. The emerging capitalist nation-state of England stood behind the nobility at that time.

In the case of the second enclosure movement, big corporations enclose the intangible properties of mind with the help of the U.S.\textsuperscript{23} This movement is global in its ambition, while the first enclosure movement was local. However, the fundamental goals of these two movements are the same: the first enclosure is related to the origin of capitalism as a socio-economic system, while the second enclosure is related to the rise of information as an important mode of capitalist production under neoliberal capitalism.

6.2 IPR and the WSIS

The postcolonial states acquiesced to the demand of the U.S. and the private sector at the WSIS to deal with IPR issues at WIPO and the WTO. The U.S. along with the private sector identified IPR as an important issue of Internet governance. Out of the five U.S. submissions to the WSIS, four carried explanations about the importance of IPR protection. But both the U.S. and CCBI suggested that the WSIS should not deal with IPR. The U.S. said that “the appropriate United Nations forum for dealing with intellectual property issues is the World Intellectual Property Organization (WIPO), which has regularly examined the interaction of cyberspace and intellectual property since the early days of the Internet.”\textsuperscript{24} The CCBI also took an identical position to the U.S. saying that “any discussions related to IP should take place within WIPO’s current and future work programmes.”\textsuperscript{25} None of the postcolonial states, except Iran, made any points about IPR at the WSIS. Iranian President Mohammad Khatami called for establishing a

\textsuperscript{22} Boyle, The Second Enclosure, 37.
\textsuperscript{23} Ibid.
\textsuperscript{24} U.S., Comments on the Report.
\textsuperscript{25} CCBI, Comments on the Working Group.
balance between the rights of creators/ owners and users.\textsuperscript{26} The EU also made a similar call.\textsuperscript{27}

Only civil society actors opposed the U.S. and CCBI in terms of IPR. In its Geneva declaration civil society identified an imbalance that:

... instead of extending and strengthening the global public domain, recent developments [in IPR mechanisms] are restricting information more and more to private hands. Patents are being extended to software (and even to ideas), with the consequent effect of limiting innovation and reinforcing monopolies. ... Copyright periods have been extended again and again, making them practically indefinite and defeating their original purpose.\textsuperscript{28}

Civil society demanded a review of TRIPS and WIPO Internet treaties. But both the U.S. and CCBI rejected the allegation of imbalance in almost identical language. The U.S. said: "Existing international intellectual property agreements encompass and reflect the balance between owners and users of intellectual property. Indeed, this balance is struck so that intellectual property owners are encouraged to develop and disseminate their works and inventions to the public for use and enjoyment."\textsuperscript{29} The CCBI said, "... it should be noted that the intellectual property system itself already represents a delicate balance between the needs of the creator and the user, and is intrinsically designed to benefit society as a whole."\textsuperscript{30} Under the influence of the U.S. and CCBI, the WSIS decided to leave IPR issues to WIPO and the WTO. The postcolonial states also consented to this. Therefore, we need to see the encounter between the U.S. and the postcolonial states in these forums. To ensure the second enclosure, the U.S. faced opposition to its move from the postcolonial states at both WIPO and the WTO. Of the postcolonial states, India, Brazil, China and South Africa played the leading role.

\textsuperscript{26} Khatami, Speech.
\textsuperscript{28} Civil Society Plenary, Shaping Information Societies.
\textsuperscript{29} U.S., Comments on the Report.
\textsuperscript{30} CCBI, Comments on Draft Declaration.
6.3 IPR at the WTO

At the WTO, the postcolonial states fought the U.S. about the adoption and implementation of TRIPS. Conflict about IPR at the WTO began when the U.S., along with the EEC, submitted a proposal (known as counterfeit code) to the Tokyo Round of GATT negotiation to create an agreement to take measures against the importation of counterfeit goods. The Tokyo Round discussed the issue but could not make any decision. The U.S. raised this issue at the subsequent round of negotiation known as the Uruguay Round. Pradip Thomas and Jan Servaes argue that the Uruguay Round, which took place from 1986 to 1993, discussed IPR issues as a result of U.S. pressure.  

Hectic lobbying by the TNCs involved in pharmaceutical, computing and life sciences industries convinced the U.S. government to take such a stand.

Jorg Reinbothe notes that the GATT negotiations on IPR from 1986 to 1989 concentrated on a question—whether GATT would be an appropriate body to host an agreement on IPR sideling WIPO.  

The postcolonial states wanted WIPO to look after IPR issues. But they changed their position to avoid dealing bilaterally with the U.S. on IPR issues. Abdulqawi Yusuf argues that the “developing countries” decided to accept a multilateral framework to deal with IPR because they thought it would help them negotiate better with the U.S. on IPR, and their agreement to include IPR into the WTO negotiations would yield benefit for them in other areas such as agriculture, textile and other tropical products.

The Group of 14—a group of developing countries—including Brazil, China, India and Cuba, submitted a proposal in May 1990, accepting the inclusion of IPR issues into the GATT framework. Their proposal consisted of two sections: part I titled “Intellectual Property and International Trade” dealt with the norms and principles related to counterfeit goods, transborder measures, and the scope and use of IPRs, and part II,

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32 Jorg Reinbothe, The WIPO Treaties, 2.

titled "Standards and Principles Concerning the Availability, Scope and Use of Intellectual Property Rights", discussed the norms and principles of various categories of IPRs (e.g., patents, marks, industrial designs, geographical indications, copyright and neighboring rights, and integrated circuit layout designs). After this, the WTO could take over the trade related issues of IPRs, and prepared a draft treaty, known as the Dunkel-Text, in December 1991. The WTO adopted a modified version of this draft as the TRIPS Agreement in April 1994.

Indian scholar and a foremost critic of IPR Vandana Shiva observes that TRIPS was not a result of democratic negotiations. With the help of the U.S. and EU, three organizations—the Intellectual Property Committee (IPC), a coalition of 12 major U.S. corporations including Bristol Myers, DuPont, General Electric, General Motors, Pfizer, Rockwell & Warner, Keidanren, the federation of economic organizations in Japan, and the Union of Industrial and Employees Confederation (UNICE) compelled the global community to swallow TRIPS.

However, the objectives and principles of this agreement stipulated in article 7 and article 8 respectively accommodated most suggestions of the Group of 14. The postcolonial states were also successful in incorporating some public interest principles into the agreement. The preamble of the agreement recognizes “the underlying public policy objectives of national systems for the protection of intellectual property, including developmental and technological objectives” and “the special needs of the least developed country members in respect of maximum flexibility in the domestic implementation of laws and regulations in order to enable them to create a sound and viable technological base.” Article 8(1) incorporated the provisions of “public interest", which says that the member states would be able to incorporate measures, which are consistent with the TRIPS Agreement, into their national IPR laws to “protect public health and nutrition” and “promote the public interest in sectors of vital importance to their socio-economic and technological development.”

The TRIPS Agreement, which began to be effected since 1995, is the most comprehensive multilateral agreement on IPR.35 TRIPS cover the following areas of intellectual property: copyright and neighboring right, trademarks, GIs, industrial designs, integrated circuit designs and undisclosed information (e.g., trade secrets and test data). The agreement sets out the minimum standards of protection for the member states. It identifies the subject-matter for protection, the rights and their exceptions, and the minimum duration of protection. The agreement adopted all the major provisions of the main conventions of WIPO—the Paris Convention and the Berne Convention—except the provisions of the Berne Convention on moral rights and the Rome Convention—and added a substantial number of additional obligations on matters where these conventions were silent or inadequate.

The agreement emphasizes IPR enforcement and suggests ways to solve IPR related disputes. Any dispute between the WTO members on TRIPS obligations is subject to the WTO's dispute settlement procedures. Signing the TRIPS Agreement, the member states agreed to approve the substantive provisions of the Berne and Paris Convention and add an additional number of obligations to the areas which were not covered by these conventions (e.g., enforcement). The member states would ensure effective steps to protect IPRs through legal process. They also agreed to streamline their IPR laws in line with TRIPS.

Since TRIPS required additional obligations from the member states, it gave them time to revise their legislations. The “developed countries” had a transition period of one year from the day the agreement went into force, the “developing countries” had five years, and the “least developed countries” had 11 years. The WTO council for TRIPS, known as the TRIPS Council, monitors the implementation of the agreement including the compliance of the member states. The member states are obliged to submit their IPR laws to the TRIPS Council for review to make sure that they are compatible with TRIPS. The goal of this review is to reduce IPR related disputes between the member states on trade issues.

The implementation of the TRIPS Agreement and its impact on the future development of the “developing countries” has been a controversial issue in the subsequent rounds of the WTO negotiations. Public health has been at the center of controversy. The postcolonial states and the U.S. had a fight at the Doha Ministerial Conference over how the TRIPS Agreement would be interpreted in the context of public health. A key agenda item of the Doha Ministerial Conference was to resolve this issue. Tshimanga Kongolo notes that two proposals about the interpretation of the TRIPS Agreement in the context of public health were on the table—one by the African group with the support of the postcolonial states and the other by the U.S., Switzerland, Canada and a few other first world states.\(^{37}\) The declaration that was adopted was close to the African proposal. The declaration said that TRIPS does not prohibit the member states from taking measures to protect public health and access to medicine.\(^{38}\) It affirmed that the member states were free to issue compulsory licenses in case of public health emergencies. It also asked the TRIPS Council to find out a way how the “developing countries”, which lacked manufacturing capability in the pharmaceutical sector, could use compulsory licenses to protect public health.

But the U.S. and its allies rejected the declaration saying that it did not take into account that TRIPS Article 31 set some conditions which needed to be fulfilled before issuing compulsory licenses to third parties to use a patented invention. The TRIPS Council under the chairmanship of Ambassador Perez Motta worked throughout the year of 2002 to come up with a decision. Ambassador Motta presented several drafts, reviewing the proposals submitted by the African group and the U.S. The U.S. was against issuing any compulsory licenses to third parties. The U.S. representatives took strong stance on public health issues under the influence of the pharmaceutical lobby. However, after intensive negotiations the U.S. relaxed its position on the eve of the Cancun Ministerial Conference, allowing the WTO General Council adopt a decision on this issue. The decision, known as the Perez Motta text, allows the member states to


\(^{38}\) Ibid.
issue compulsory licenses to export patented medicines to countries with no manufacturing capacity in the pharmaceutical sector.  

Besides public health, two other conflicting issues are the disclosure of origin and non-violation complaints. The postcolonial states proposed to the TRIPS Council to have provisions in patent applications requiring the disclosure of origin. The U.S. and EU opposed the proposal saying that this would be incompatible with the TRIPS Agreement since this would add another substantive condition on patentability beyond those already stipulated in TRIPS.  

The controversy regarding non-violation complaints was whether such complaints would be applicable to TRIPS or not and about the implications of its inclusion. The U.S. pushed for it while many countries, including developed and developing countries, have asked to drop it.  

There is no clear explanation what is meant by non-violation complaint. Under GATT, non-violation complaints referred to the protection of the “reasonable expectations” of the parties about the benefits derived from the concessions made in the trade of goods.  

It is hard to prove such complaints since they require stronger evidences compared to the violation type complaints.  

Unwillingness of the U.S. and EU to give concessions to TRIPS and other agricultural issues led to the growth of solidarity between the postcolonial states. One expression of this solidarity was the formation of a new group of the “third world states” known as the G-20+ under the leadership of the postcolonial states like China, India, Brazil and South Africa. Some international NGOs have worked in favor of the postcolonial states in the WTO negotiations by building awareness across the world against the harmful effects of IPR on these states. The campaigns of Oxfam, Greenpeace and Public Citizen stand out. However, NGOs never threatened the dominance of the U.S. and EU in IPR standard-setting, especially when these two


40 ICTSD [International Centre for Trade and Sustainable Development] and IISD [International Institute for Sustainable Development], Doha Round Briefing Series 1, no. 5 (2003): 3.


42 Ibid, 8.
entities agreed on the direction of a global regulation. They demand an approach which
draws a balance between TNC interests and popular interests. However, the alignment
of the stakeholders on TRIPS is not permanent rather issue based.

In most cases, the U.S. and EU moved together, but in some cases they differed.
For example, the U.S. and EU had dispute over the latter's GI regulation. The U.S.
challenged the EU that its GI regulations were inconsistent with its TRIPS obligation, and
the WTO ruled in favor of the U.S. In some cases, the EU acted as a mediator between
the postcolonial states and the U.S. Public health issue is a good example here.

6.4 IPR at WIPO

In parallel to the WTO, WIPO concluded two Internet treaties in 1996 to deal
specifically with copyrights in digital context. Conflict at WIPO in framing these treaties
was about determining the level of copyright protection of content on the Internet. The
U.S. and EU wanted to have TRIPS-plus measures, while the postcolonial states wanted
to remain at the TRIPS-level of copyright protection. Initiatives to revise the Berne
Convention to make it up-to-date with digital technologies began before the incorporation
of IPR into the WTO framework. The Assembly and Conference of Representatives of
the Berne Union decided in 1989 to convene a committee of experts to assess the
feasibility of creating a protocol to the Berne Convention. The objective, outlined in the
WIPO program for 1990-91, says, "The protocol would be mainly destined to clarify the
existing, or establish new, international norms where, under the present text of the Berne
Convention, doubts may exist as to the extent to which that Convention applies."

In 1992 the Assembly and Conference decided to create two committees of
experts—one for preparing the protocol and the other for preparing a new instrument on

43 Peter Drahos, "Developing Countries and International Intellectual Property Standard-Setting," Study
Paper 8, Commission on Intellectual Property Rights, 2002, 3,
http://www.iprcommission.org/papers/pdfs/study_papers/sp8_drahos_study.pdf


45 WIPO, "Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the
Protection of Literary and Artistic Works to Be Considered by the Diplomatic Conference," August 30,

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the protection of the rights of performers and producers of phonograms. The committee for the protocol was assigned to consider 10 items: computer programs, databases, rental rights, non-voluntary licenses for sound recordings of musical works, non-voluntary licenses for primary broadcasting and satellite communication, distribution rights (including an importation right), duration of the protection of photographic works, communication to the public by satellite broadcasting, enforcement of rights, and national treatment. And the other committee was assigned to deal with everything related to the international protection of the rights of performers and producers of phonograms. The International Bureau of WIPO guided the works of these committees.

The committees invited their government members and the European Commission to submit proposals and comments for discussion in September 1995 and February 1996 sessions of the committees. Of the member states, Brazil, the EC, China, South Africa and the U.S. submitted proposals and comments. The EC and U.S. submitted proposals to the expert committee for a *sui generis* protection of databases. Following a proposal of the U.S., the Chair of the Committees of Experts recommended to hold a diplomatic conference in December 1996 for signing necessary treaties. The conference aimed to adopt one or more multilateral treaties on copyright and the protection of databases.\(^{46}\) The diplomatic conference took place from December 2 to 20, 1996 and produced the Internet treaties.

At the diplomatic conference, the "developing countries" participated in groups to better convey their opinions. They reorganized into regional groups such as the group of Latin American and Caribbean countries (GRULAC), the group of African countries and the Group of Asian countries. Of the postcolonial states, Brazil and Cuba were in GRULAC, South Africa and Tunisia were in the African group, and India and China were in the Asian group. These groups would sit together to hammer out common positions on issues, but had problems to reach a consensus in some cases because of the different interests of the states.

Ninety NGOs, many of which were TNCs, attended the conference as observers. They include content providers such as music and film producers, Internet access providers, manufacturers of electronic hardware and consumer electronics, and civil society groups such as librarians and researchers. The content providers who attended the conference include the International Federation of the Phonographic Industry (IFPI) and the Motion Picture Association of America (MPAA). The Commercial Internet eXchange Association (CIX) which comprised 149 companies including 3C Europe Ltd., Advantis (IBM Global Network), AT&T, British Telecom, International Systems Inc., Fujitsu Ltd., Hitachi, Korea Telecom, MCI Telecommunications, NEC Corporation and Sun Microsystems represented Internet access providers at the conference. The manufacturers of electronic hardware and consumer electronics which participated in the conference include the Computer Industry Group comprised of 24 associations from countries such as Brazil, Mexico, the U.S., India and Germany. The librarian and researcher groups which attended the conference include the Educators Committee of Copyright Law (ECLA), the International Federation for Information and Documentation (FID) and the International Federation of Libraries Associations (IFLA). U.S. based entities were dominant in each of these groups. Some TNCs participated in the conference as members of the U.S. delegation. The huge U.S. delegation included representatives from content providers, electronic hardware and consumer electronics manufacturers and access providers.

At the conference, the postcolonial states such as India, Brazil, China and South Africa demanded to ensure a balance between the interests of users and right holders. The postcolonial states exercised more influence at WIPO compared to the WTO since the former as a UN entity makes decisions on majority votes while the latter follows a weighted voting system. In the case of copyright, protection of computer programs, right of distribution and importation, database protection, non-voluntary licenses, rental right, reproduction right, electronic rights management system created discord among the participating states. The leading postcolonial states took a common stand that they would not extend the purview of copyright and neighboring right beyond the level

recommended by the TRIPS Agreement. The EU and U.S. wanted TRIPS-plus measures for copyright protection. Business actors differed between themselves depending on issues.

Under the influence of the content providers, the U.S. suggested rental right for all categories of work saying that commercial and public rental of copyrighted works such as sound recordings, video cassettes and computer software violated the “legitimate” interests of content providers. Neither the Berne nor the Rome Convention recognizes this right, but the TRIPS Agreement gave a limited rental right. The Agreement in Article 11 and 14(4) allows the member states to provide copyright owners with the right to authorize or prohibit the commercial rental of computer programs and phonograms and cinematographic rights. Rental rights on phonograms and cinematographic rights are subject to an impairment test (i.e., to check whether such rentals lead widespread copying of the works). The U.S. did not succeed because of India and the Latin American group which opposed moving beyond the TRIPS level of protection.

Under U.S. influence, the expert committee proposed to expand rental right to all categories of works subject to impairment test, except computer programs and databases. India, Australia and some Francophone African countries brought three different amendments to this proposal. India proposed to remain at the TRIPS level of protection, while Australia and Canada wanted databases to be subject to an impairment test. And Francophone countries wanted the abolition of the provision of impairment test. The Indian proposal won the majority votes. To achieve this favorable result, India had to gain support from the Asian group, China, Egypt, the U.S. and the EU. Latin American countries criticized the Indian proposal for invoking the TRIPS Agreement, which they thought was irrelevant here since the forum was discussing the right of authors not trade, and abstained from voting on this proposal.

Parallel imports, a derived importation right, empower a right-holder to authorize or prohibit the importation of his works into a country where he has not assigned his


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rights. In case of parallel imports, the EC wanted regional exhaustion for the EU countries, but to keep the national exhaustion for other countries. National exhaustion means when a right-owner assigns his right in a country his right is exhausted in that country. Another country cannot import this work from the country where the right was exhausted, and if it does so, it would be a violation of the author’s right. But the EC wanted regional exhaustion that if a right holder would assign their right in a member state of the EC, they would exhaust their right throughout the EC. The U.S., the African and the Latin American group opposed regional exhaustion. The conference decided to remain at the TRIPS level of protection, which is national exhaustion. The content providers also lobbied the states for national exhaustion as they felt that regional exhaustion would affect their interests.

In case of non-voluntary licenses, the expert committee (in Article 6 of the draft copyright treaty) proposed to phase-out such licenses within a three-year period. The U.S. opposed the abolition of non-voluntary licenses for sound recordings of musical works as its recording and music industries wanted it to do so because of fear that that might disrupt established business practices. China proposed not to abolish non-voluntary licenses in broadcasting as well. In its informal sittings the Main Committee I decided to give up the idea of abolishing non-voluntary licenses in both sound recordings and broadcasting.

Both the U.S. and EU wanted to ensure that the states participating in the conference agree to protect right management information (RMI). But there was a discord between access providers and content providers over the drafting of language on the right of communication of copyright holders. The expert committees discussed to confer an exclusive right to copyright holders to communicate to the public through digital networks and broadcasting and other communication under the rubric of transmission right. But the access providers opposed it because they thought that such a provision would make them vulnerable to liability for infringement by third parties. And the language of the draft was modified to allay their fear that they would not be liable for any infringement by third parties. The issue of RMI put the content providers and electronic hardware manufacturers in opposite camps. Although the provision of RMI was not in the TRIPS Agreement, the WCT included this TRIPS-plus provision in Article
11 and 12 with some exceptions and limitations under pressure from the U.S. and EU. The TRIPS-plus provision is codified as follows: ^50

**Article 11:**
Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.

**Article 12:**
(1) Contracting Parties shall provide adequate and effective legal remedies against any person knowingly performing any of the following acts knowing, or with respect to civil remedies having reasonable grounds to know, that it will induce, enable, facilitate or conceal an infringement of any right covered by this Treaty or the Berne Convention:
(i) to remove or alter any electronic rights management information without authority;
(ii) to distribute, import for distribution, broadcast or communicate to the public, without authority, works or copies of works knowing that electronic rights management information has been removed or altered without authority.
(2) As used in this Article, “rights management information” means information which identifies the work, the author of the work, the owner of any right in the work, or information about the terms and conditions of use of the work, and any numbers or codes that represent such information, when any of these items of information is attached to a copy of a work or appears in connection with the communication of a work to the public.

The exceptions and limitations are^51:

**Article 10:**
(1) Contracting Parties may, in their national legislation, provide for limitations of or exceptions to the rights granted to authors of literary and artistic works under this Treaty in certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.
(2) Contracting Parties shall, when applying the Berne Convention, confine any limitations of or exceptions to rights provided for therein to certain special cases that do not conflict with a normal exploitation of the

^50 Ibid.
^51 Ibid.
work and do not unreasonably prejudice the legitimate interests of the author.

This TRIPS-plus provision is to protect against the circumvention of technologies which are used to protect copyrights in digital works. Technologies that are commonly used for protecting copyrights include the use of watermarks which enable a right holder to encrypt data on a digitized work and track its unauthorized use. Technologies that prevent unauthorized use of digital works are also capable of preventing lawful use authorized by the exceptions and limitations included in the agreements. The application of the circumvention clause depends mainly on how exceptions and limitations are interpreted.

A tussle between the U.S. and EU dominated the discussions on neighboring right. Conflict between these entities began with the rights of performers in films, more specifically on the transferability of rights and national treatment. Different copyright systems of film which developed across the Atlantic caused problems in IPR negotiations. In the U.S., the maker of the film, in most cases a corporate body, which takes the initiative and financial responsibility for making the film, is its author. But in Europe all of those who contribute to the production of the film are co-authors. The U.S. and Europe differ in transferring the rights of authorship. In the U.S., contributors give up their rights by signing contracts with the author, but in Europe, they hold authorial rights. The acceptance of the European system would demand a restructuring of the film industry in the U.S. Performers in films will acquire the right of fixation of their performance, moral rights and the right of modification by affecting the commercial practices of Hollywood. On the other hand, accepting the U.S. system would have curtailed the rights of performers which they enjoy in Europe. As a solution, the expert committee proposed to the states to have the right to make reservation with regard to audio-visual works. In response, the EC proposed to allow a country to opt for reservation with regard to some selected rights not to all rights. But the U.S. opposed this because such a provision would eliminate national treatment to films. Because of

disagreement between the U.S. and EU, the conference decided not to make any decisions on audio-visual works.

Librarian and researcher groups were concerned that the potential Internet treaties would restrict fair use. Under the influence of these groups, India brought amendments to the preambles of the treaties, proposing to ensure a balance between the interests of right holders and larger public interest. Right holders would allow fair use for education and research purposes. India was successful in this regard. The preambles of the Internet treaties say that the states signed the treaties by "Recognizing the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention, ..."53 In spite of this recognition, the WIPO Internet treaties are supposed to work to best protect the rights of copyright holders since the organization subcribes to the notion that user interests are best served through the protection of IPRs.

The issues the Diplomatic Conference left unresolved are the protection of audiovisual performances and databases and the protection of folklore and of broadcasters’ rights.

6.5 No Respite for the Postcolonial States

The WIPO Internet Treaties and TRIPS would supplement each other to eliminate any gaps in copyright protection on the Internet. The preambles codified that by saying that the states signed the treaties "Recognizing the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments, ..."54 There is no time limit for the member states in adopting these treaties and they are not obligated to adopt them. But the TRIPS Agreement requires WTO members to implement the agreement. WIPO Director

54 Ibid.
General Arpad Bogsch argues that the Internet treaties would have a de facto impact on the "developing countries". 55

Most first world states, mainly the U.S. and EU, immediately responded to the WIPO Internet Treaties by enacting TRIPS-plus copyright regulations within their jurisdictions. The U.S. enacted the Digital Millennium Copyright Act (DMCA) in 1998 which strongly protects the interests of copyright holders. This act contains protection against the circumvention of technological right protection measures. It prohibits the circulation of technologies, which may help with circumvention, at the cost of the lawful use of technologies provided by the exceptions and the tempering of copyright management information. It also eliminated the flexibility of non-profit libraries and archives in accommodating and preserving digital technologies, which was provided by the section 104 of the U.S. Copyright Act. Under the new law, they could only circumvent technologies for the purpose of making decisions on purchasing authorized access.

Powered by the DCMA, copyright holders aggressively assert their rights through law suits. They hunted down an early P2P program called Napster and Grokster through litigation in the U.S. court, and negotiated a deal with the largest P2P network Kazaa out of the court. The deal, announced on July 27, 2006, stated that Kazaa would compensate the companies, which brought copyright infringement suit against it, and introduce filtering technologies so that its users would not be able to distribute copyrighted materials for free. 56 Record and movie companies regularly bring criminal charges against P2P users. In 2003, various U.S. courts issued about 1,000 DMCA-based subpoenas against ISPs, requesting them to stop file sharing activities. Record and movie companies filed more than 500 lawsuits against individuals for alleged copyright violation. 57

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The EU issued a directive called the "Directive on the Harmonization of certain aspects of copyright and related rights in the Information Society" in 2001. The directive includes TRIPS-plus provisions and a list of exceptions to copyrights. The U.S. and EU legal provisions created in response to the WIPO Internet Treaties were a shift toward protecting private interests at the cost of the public ones. While the U.S. and EU modified their copyright laws in response to the WIPO Internet Treaties, many postcolonial states are yet to sign them. Of the postcolonial states, China and South Africa signed the WIPO Internet treaties. And, China is already in the process of implementing them. Of the postcolonial states, China is more integrated with the global capitalism and is dependent on the U.S. market for its export oriented economy. To maintain its economic interests, China has to take strong measures for protecting IPRs. However, the other postcolonial states, who are the members of the WTO, have also modified their IPR laws, including copyright laws, to bring them in line with TRIPS.

A strong IPR regime may have a negative impact on the development of the postcolonial states which are the major importers of technologies and copyrighted products by increasing costs. For example, proprietary software incurs very high licensing costs and cannot be adapted to local needs, provide narrow training opportunities, and creates further technology dependence. Commonly used computer software costing over $100 may not be considered expensive in a developed country because of the income levels of people there, but it is an expensive proposition for many low income Chinese. In India, a computer application software, on an average, is sold at $250, a good quality audio product is not available below Rs 200, in Indian currency.

61 Thomas, Uncommon Futures, 182.
The development of the Internet as a global medium demonstrates that strict IPR protection is not necessary for encouraging innovation. The architecture of the Internet is primarily based on open source software, whose source codes are open to all, not on proprietary software. Open source software, based on an alternative model of IPR, helps innovation more than earning money. A user of open source software, also known as free software, is free to use them for any legitimate purposes. They can study the software to know how it works and adapt it to their own needs, redistribute it, improve the existing program and present the improvement to the public. In order to do all these things, the users must have access to the source codes. In the case of proprietary software, such as Microsoft software, the source code is not accessible and is protected as a copyrighted material. Open source software encourages innovation more than proprietary software, but there is a huge pressure from proprietary software vendors such as Microsoft to have a strict IPR regime.

Instead of opposing IPR, the postcolonial states accepted to expand the purview of IPR laws to the Internet in principle because of their increasing integration with transnational capital and the adoption of the neoliberal means. For example, India earns a substantial amount of revenue from computer software and Bollywood films, and also expects success in the animation industry and the cross-over music industry. Brazil also has strong media and ICT sectors. Brazilian TV Globo has a regional market for its telenovelas. All these ventures are heavily export oriented and are based on foreign investment. As already mentioned above, China’s quietness about IPR issues is also understandable. The media and ICT sectors in these countries have strong TNC presence through joint ventures with local capital. Local capital, along with global ones, put pressure on the states for having a strong uniform IPR regime for the digital domain. While these big three postcolonial states have made a significant progress in terms of ICT development, the others aspire to do so by attracting TNC investments.

However, there is also opposing tendencies in these states. Popular movements against IPR are on the rise. In India, popular movement against patents on agricultural issues is pretty strong, while the movement around IPR on the Internet is growing slowly
through the open source software movement.\textsuperscript{62} India, Brazil and South Africa promote Free/ Open source software in state sponsored IT projects because of popular demands.

But I doubt how long the postcolonial states will be able to maintain the gain they made in IPR negotiations. Since IPR is a key property under contemporary capitalism, both the U.S. and EU keep using regional and bilateral efforts, alongside international forums, for stronger IPR protection measures. Since its TNCs dominate the creation and export of intellectual properties in the communication sector, the U.S. is more aggressive in this regard. U.S. agencies undertake policy initiatives, training and assistance activities to improve the protection of intellectual property abroad. Policy initiatives include regularly assessing global challenges to IPRs and identifying the countries which do not protect IPRs. The U.S. Trade Act of 1974, as amended, requires the Office of the U.S. Trade Representative (USTR) to identify the countries which do not provide “effective” protection of IPRs or fair and equitable access to U.S. persons who rely on intellectual property protection.\textsuperscript{63} The USTR depends on TNCs and other U.S. government agencies for identifying the countries.

The USTR annual review known as “Special 301” states that: “The U.S. is committed to promoting strong intellectual property rights through a variety of mechanisms, including the negotiation of free trade agreements (FTAs) containing IP chapters that establish strong protections for copyrights, patents and trademarks as well as rules for enforcement.”\textsuperscript{64} The U.S. uses the trade and investment framework agreement (TIFA) negotiations to enhance intellectual property protection and enforcement. The USTR reviews IPR practices in connection with the implementation of trade preference programs such as the generalized system of preferences (GSP), which the U.S. designed to provide preferential access to products from the “developing countries”.\textsuperscript{65}

\textsuperscript{62} Ibid, 177.


\textsuperscript{64} USTR, Special 301.

\textsuperscript{65} Ibid, 4-5.
The U.S. also uses the WTO dispute settlement system to take action against IPR violations. For example, on April 10, 2007, it initiated a consultation request against China at the WTO alleging that China's legal framework for protecting and enforcing copyrights and trademarks on a wide range of products was deficient. The U.S. claimed that some Chinese measures were inconsistent with China's obligations under the TRIPS Agreement. The consultation request focused on three main issues: the limit of Chinese law in initiating criminal prosecutions of copyright piracy and trademark counterfeiting, rules for the disposal of IPR infringing goods seized by the Chinese customs authorities and copyright protection for foreign works entering the Chinese market. The U.S. found the Chinese copyright law weak because the law did not allow bringing criminal charges against people unless they illegally reproduced copyrighted works and distributed them. It also alleged that China denied foreign companies right to import publications, movies, music and videos into China as well as impeded their distribution of publications and videos within the country. Under U.S. pressure, China is in the process of laying out detailed strategies for improving IPR protection.

The EU also has an arrangement similar to Special 301 and uses FTAs to promote IPR protection. The EC-Mexico FTA is an example here. Both the U.S. and EU withhold trade concessions or impose trade sanctions on their trading partners whose IPR frameworks do not meet their expectations. They are in the same boat for extending and protecting the IPRs of their businesses across the world.

The postcolonial states accepted TRIPS in principle, but fight for the protection of their own products under the agreement. They will also have to implement the WIPO Internet treaties, if they continue to pursue neoliberalism and the goal of negotiating a better access for their exports to the western markets. They will not be able to stick to their strategy of selectively enforcing IPR under increasing pressure from the U.S. and EU through bilateral and multilateral means.

66 Ibid, 15.
7.

Cyber-Security and States:
Same Bed, Different Nightmares

The Internet provides the base for many critical infrastructures in the Information Society. Data transmission, transport systems, and finance as well as banking both at national and global levels rely a lot on the WWW and Internet. And the emerging mode of business—e-commerce—as its name suggests is based on the Internet. For all these purposes, everyone needs a secured Internet.

Despite their different sources of security threats, the postcolonial states and the U.S. agreed at the WSIS that cyber-crime is a common security threat but differed on the ways of ensuring cyber-security. The postcolonial states wanted to create a new international body to look after Internet security issues, but the U.S. wanted the existing arrangements of Internet security to prevail. The apparent agreement between the postcolonial states and U.S. on Internet security masks the tension of the states which arise out of their individual notions of security. For example, the security of China, Iran, and Cuba is at least partly security from the U.S. and broadly form western penetration through the Internet, while the U.S. is afraid of terrorism from the "third world" based "terrorist" groups. But all these different states agreed to create a global culture of cyber-security. Cyber-security as an issue gives them a cover for maintaining state control of the Internet in the national context.

Every stakeholder of global Internet policy-making at the WSIS, except civil society, unwaveringly agreed to create a global culture of cyber-security.¹ Only civil society opposed this because ensuring a culture of security would require surveillance of

the Internet, increasing the risk of the violation of freedom of expression and people’s privacy. The states supported the creation of a global culture of security with their individual goals in mind. The issue of security helps the U.S. to maintain its control of Internet policy-making and allows some postcolonial states to serve the interests of their ruling elites by suppressing freedom of expression and violating privacy. Although all states are officially committed to protect freedom of expression and privacy, the actions of some states such as the U.S., China, Cuba, Iran, and Tunisia in ensuring security in the national context undermine freedom of expression and people’s privacy and foreshadow the repressive nature of the state.

In this chapter, I explore the agreement and disagreement between the postcolonial states and the U.S. over cyber-security issues. And for that, I first review how security is defined in the context of the Internet and then move to reviewing the existing cyber-security measures. And then I discuss the conflict between the postcolonial states and U.S. on cyber-security issues and how these issues help reinforce state control over the Internet at the national level.

7.1 Internet Security

What does Internet security entail? The Internet could be both a target and tool for crime/terrorism. When the Internet is a target, we need to think about the security of Internet infrastructure, and when the Internet is a tool we need to think about the security of users and their resources. Users include individuals, corporations and state machineries. The Internet becomes a victim or a tool for crime and terrorism through “malicious” actions. Such malicious activities can be categorized into three groups—threats against the DNS and Internet protocols, threats against networks such as unauthorized access (i.e., accessing a computer network without the permission of the network administrator) and denial of service attacks (i.e., preventing or impairing the normal functionality of a network or system through exhausting resources), threats against Internet users such as identity theft (i.e., stealing someone’s identity to gain illegal benefits), and phishing (i.e., collecting information by pretending to be someone who could be trusted such as the banks in the case of business). Criminals and terrorists can conduct any of these malicious acts to attack the Internet or use it as a tool for heinous acts. Usually they do that by planting and operating malicious codes (e.g., virus,
worm, spyware, bot, Trojan horse, or other code-based malicious entities that infect or affect an operating system or application) on the networks or using the Internet as a coordinating and propaganda tool.

When criminals use the Internet to carry out malicious acts, it is called Internet crime or cyber-crime, but when terrorists use the Internet for doing the same thing, it is called Internet terrorism or cyber-terrorism. Terrorism is different from crime in terms of its goals and objectives. Usually a crime is committed to make a narrow gain, but terrorism is intended to achieve a broad political goal. However, the definition of terrorism and terrorist is ideologically loaded. Chomsky points out that the term terrorism changed meaning over the years saying that at the end of the 18th century the term terrorism was used to mean the violent actions of a government or state, but now it is used to define violence committed by a particular group against a state or a legitimate authority. Rhonda Callaway and Julie Harrelson-Stephens see terrorism as a violent act of a deprived social group. They note that the violation of human rights such as political rights, personal security rights, and basic human needs by a state leads a particular social group to take violent actions. State authority, public resources and citizens are common targets of such violent actions. Any violent actions conducted by a social group with a view to realizing their rights from a state is called terrorism by the state because only the state has a legitimate right to conduct violence within its territory.

But we can also think about state terrorism to identify violent actions conducted by a state against a particular group of citizens or another state. There are many evidences of such violent actions across the world. For example, secret service agents killed many political dissidents in many Latin American countries (e.g., Argentina and Brazil) in the 1970s and 1980s. People, mainly dissident voices, would "disappear" from the scene. "Disappear" was a popular term to identify the missing people. The conflict


\footnote{Noam Chomsky, Pirates and emperors, old and new, new edition, (South End Press, 2003), vii.}


\footnote{Edward Herman, The Real Terror Network: Terrorism in Fact and Propaganda (Boston: South End Press, 1982): 7.}
between Palestine and Israel provides us examples of group terrorism and state terrorism. Palestinian militants conduct terrorist attacks against Israeli targets and the Israeli state conducts terrorism against the Palestinians, killing civilians and destroying homes and businesses. There are many other examples of state terrorism. When any form of terrorism involves more than one country in any way, it is called international terrorism. A group commits international terrorism when it conducts violence against a state from outside the boundary of that state. In recent times—Cuba and Lebanon—faced international terrorism.⁶ The September 11 attack on the U.S. made terrorism a key international concern. The Internet governance conflict which took place amidst the U.S. global war on terror,⁷ following the September 11 attack, provided the necessary background for the stakeholders to treat Internet security with utmost importance. Internet security threats—cyber-terrorism and cyber-crime—can be a national and international security threat at the same time because of the transborder nature of the Internet. But, how often are we at risk from cyber-crime and cyber-terrorism?

In assessing the possibility of cyber-terrorism, Dorothy E. Denning takes two things into consideration—targets and actors.⁸ She identifies the Internet as the target and terrorist groups as the actors and the inherent vulnerabilities of the computer networks to attacks. The decentralized nature of the Internet architecture is both its strength and vulnerability. The actors of cyber-attacks are people called hackers who have technical knowledge to conduct denial of services attack, phishing and administer malicious software. Hackers are not criminals or terrorists unless they are motivated and hired by a terrorist group or act with criminal intent. There are many evidences of cyber attacks conducted by hackers against computer systems. For example, Israeli and Palestinian hackers fought many cyber-wars, and the Kashmir conflict and the Kosovo conflict involved cyber attacks.

⁶ Chomsky, Pirates and emperors, 130.
⁷ Recently the Obama Administration has discarded this term
With the increasing availability of the computer and Internet, cyber-terrorism may become a serious threat in the future and some signs of that are already there. These days, global conflicts increasingly involve cyber dimensions. For example, terrorist groups like Al-Qaeda use the Internet for propaganda and coordination purposes, adding a cyber dimension to their violence. Rand Corporation researchers John Arquilla and David Ronfeldt use the idea of netwar to explain the cyber dimension. Netwar refers to a “new spectrum of conflict that is emerging in the wake of the information revolution.”

The actors of these conflicts are terrorist groups like Al-Qaeda which have a network like flexible and resilient organizational structure and maintain communication networks. This idea implies that netwar is a war against social resources by non-state groups. But this definition is deficient since it does not recognize netwar at the international level. There are emerging evidences that the spy agencies of powerful states are engaged in netwars where they regularly monitor each other’s computer networks for vulnerabilities. The ongoing tension between the U.S. and China is a good example here. The U.S. alleges that China runs cyberspying networks to steal U.S. technological know how. The US-China Economic and Security Review Commission, created by Congress in 2000 to review issues related to US-China relationship, in its annual report to Congress alleged that China was aggressively pursuing cyber-espionage against the U.S.

However, so far, cyber-crime has appeared as a bigger threat for people compared to cyber-terrorism. But it is hard to measure the rise of cyber-crime as many states are yet to have mechanisms to collate this kind of data. Private companies involved in creating Internet security software are the key source for data related to the rise of cyber-crime. U.S. based Cyber Security Industry Alliance (CSIA), which would compile and make surveys conducted by cyber-security companies on cyber-crime, suggested that the number of cyber-crime continued to increase during the last few

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years."\(^\text{11}\) Gregory Garcia, an Assistant Secretary at the Department of Homeland Security, claims that U.S. organizations lose about $50 billion per year due to cyber-crime.\(^\text{12}\)

### 7.2 States and Their Different Perceptions of Security

Security is the domain of the state. The state as a political unit or governing body justifies its existence by providing security to its citizens, preserving national resources and maintaining order and stability. Or, in other words, it is a state's responsibility to protect its citizens and their resources from any potential harm and maintain order and stability. The response of a state to threats depends on the nature of its political orientation and the threats. In order to ensure security, a state has to assess the nature of threats or risks. In the context of the ancient society, anthropologist Mary Douglas notes that every society has a lot of risks to respond to, and societies differ in terms of the types and number of dangers they select.\(^\text{13}\) She argues that dangers get selected either because they offend the basic moral principles of the society or they enable the criticism of disliked groups and institutions. Nation-states also have a lot of challenges. The principal challenge is to maintain their existence, and they regularly monitor existential threats for that. The U.S. perceives that threats to its security come from clandestine groups in the “third world societies”, while many postcolonial states perceive that U.S. and western actions in international communication generate security threats for them.

The U.S., as the dominant state, assesses the sources of threat to its interests and influence on a regular basis to protect its interests and publicize that. The State Department produces annual reports on “global terrorism” as the Title 22 of the United States Code, Section 2656f (a) requires it to do so. The year 2000 saw three important

\(^{11}\) CSIA, Data on cyber-crime, http://www.csialliance.org/resource/csiadatacompilation.html, retrieved 31 January 2008. However, after its merger with the Information Technology Association of America (ITAA) in April 2008, CSIA does not maintain this online data source anymore.


\(^{13}\) See Barry Glassner, The culture of fear: Why Americans are Afraid of the Wrong Things? (New York: Basic Book, 1999), xxxvi.
publications on the assessment of threats—*International crime threat assessment, 2000*, a global assessment of criminal activities by a U.S. government interagency working group in support of and pursuant to the president’s international crime control strategy; *The electronic frontier: the challenge of unlawful conduct involving the use of the Internet*, a report prepared by the president’s working group on unlawful conduct on the Internet; and *Global trends 2015: a dialogue about the future with non-government experts*, a second report prepared and published by the National Intelligence Council (NIC) on global situation. The NIC published its third global report *Global future 2020* in 2004. The annual report on global terrorism, which is called country report on terrorism since 2004 and submitted to Congress by April each year, names the groups and states the U.S. identifies as terrorists.

All these publications on threat assessment suggest that criminal activities became international with the globalization of economic and political activities, and the threats to U.S. security were increasingly coming from non-state groups. *Global future 2020* noted that no state was capable of challenging the U.S. either militarily, politically or economically. It singled out a non-state actor, Muslim radicals, as a key threat, predicting that they would use the Internet to carry out their acts by the year 2020.

The country report on terrorism, issued in April 2007, observes that U.S. international efforts, in cooperation with other countries, have produced genuine security improvements—particularly in securing borders and transportation, enhancing document security, disrupting terrorist financing, and restricting the movement of people who the U.S. identifies as terrorists. It claimed that the U.S. has achieved significant success in dismantling “terrorist” organizations and disrupting their leadership. The report identified Iran, Syria and Cuba as the sponsors of terrorism. According to the report, Iran supports Shia militants in Iraq and anti-Israeli Islamic radical groups in the Middle East. The charge against Cuba was that it opposed the U.S. war on terror and provided shelters to the members of separatist groups like the ETA (i.e., a Spanish separatist group which believes in armed struggle), FARC (Revolutionary Armed Forces of Colombia) and the ELN (National Liberation Army of Bolivia), and maintains a good relationship with Iran. Now Yemen is the number one terrorist state from the U.S. point of view, and the U.S. defines Yemen as a safe haven for the Al-Qaeda operatives. The U.S. defines those
states and groups as terrorists which do not go along with it, or affect its or its allies' interests, or try to build alternatives to the capitalist social system.

Of the postcolonial states, Iran and Cuba openly renounce U.S. dominance and as a result, the U.S. identifies them as rogue states. US's thorny relationship with Iran and Cuba goes back to the cold war era. The U.S. used to influence Iranian domestic politics before the establishment of the present Islamic state in Iran in 1979 by Ayatollah Khomeini's Islamic revolution against the U.S. backed Shah kingship. The U.S. installed Reza Shah Pahlavi as the ruler of Iran in 1941 by removing the nationalist government of Prime Minister Mosaddek and ignoring the democratic rights of the Iranians. Khomeini, using Islamic rhetoric and anti-U.S. sentiment, staged a revolution against Shah to establish the present Islamic theocracy in Iran. The anti-U.S. position of Khomeini irked the U.S. to list Iran as an enemy state. These days Iran pursues a strong anti-U.S. position in international forums. The U.S. imposed economic sanctions on Iran and directly and indirectly supports Iranian opposition groups.

Three groups—one external and two domestic—are in conflict with each other for the control of the Iranian state. The domestic groups are the religious fundamentalists and the reformists and the external group involves the expatriate Iranians who fled the country to avoid the persecution of Khomeini's Islamist government. The current leadership of Iran, which belongs to the fundamentalist group, is under threat from the U.S. and Israel. Given the occupation of Iraq by the U.S., Iran was scared that the U.S. might pursue a policy of regime change in Iran. The uncertainties of U.S. military victory in Iraq and Afghanistan and the changes in the U.S. domestic scene (i.e., the ascendance of the Obama administration) may have reduced the chance of direct U.S. military intervention in Iran.

Cuban rivalry with the U.S. began after the ascension of the socialist government in Cuba through a revolution led by Fidel Castro. Cuba was a key ally of the Soviet Union and was a leader in Latin America in organizing resistance against U.S.

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14 Prashad, The darker, 75.
imperialism. The U.S. administration took many attempts to dismantle the Castro regime, including imposing economic sanctions, with no success. The U.S. organized expatriated Cubans with money and arms to stage coups against the Castro government. Cuba also faced international terrorism from the groups backed by the U.S. U.S. attempts to dismantle the Castro government by organizing anti-communist groups, and support for Israeli atrocities prompted Noam Chomsky to call the U.S. a terrorist state.

Although China does not have a hostile relationship with the U.S. as Iran and Cuba do, China perceives that its security threats come at least partially from the U.S. The present leadership in China is under pressure from diverse intellectual groups. For example, the pro-American liberal intellectuals want the state to fully move toward a free market economy, while the old Marxists want it to re-build as an ideal socialist state, argues Yuezhi Zhao. There is also tension in Chinese society for the increasing income inequality due to China’s integration with the global capitalism through the economic restructuring which had been taking place since 1978. And the demand for freedom of speech by both intellectuals and disgruntled social forces is now louder than ever. The threat to the Chinese party state comes also from other opposing social forces and political dissenters, such as groups like the Falun Gong and Dalai Lama-led Tibetan monks, which use all kinds of communication media including the Internet. Chinese dissident groups use the Internet as a tool for mobilization. China’s external threat comes from the U.S. since it is now emerging as the competitor of the U.S. in global politics. The U.S. supports political dissenters to create pressure on China in terms of human rights and freedom of expression.

While China, Iran and Cuba face the principal threat to their security from the U.S., the other postcolonial states—India, Brazil, Tunisia and South Africa—face security threats from disparate sources. For example, Muslim radicals pose a severe threat to

16 Chomsky, Pirates and emperor, 130.
17 Ibid.
India’s stability. India’s dispute with Pakistan on Kashmir, which originated during the partition of India under the British Raj, earned enemies from Pakistan-based Islamic radicals. The rise of Hindutva, a Hindu fundamentalist movement, also created religious conflicts, including riots, in India where Muslims were the principal victim. Islamic radicals from Pakistan and Afghanistan have been active for a long time to destabilize India and already conducted some bomb attacks on civilian targets. There are also separatist movements going on in some of its states such as Assam and Kashmir, threatening India’s geographical integrity. An armed radical group, known as the Maoist guerrillas, has grown stronger in the eastern part of India. Particularly, threats from the Islamic radicals have put India and the U.S. in the same boat with regard to the global war on terror.

Although Brazil, South Africa and Tunisia have no explicit source of direct external threats, their ruling parties may face threats or legitimate pressure from political opponents and subaltern groups since they are all highly unequal societies in terms of the distribution of wealth.

The U.S. claims to face threats from “third world” based radical groups, while Iran, Cuba and China—face threats from the U.S. and groups supported by the U.S. The other postcolonial states face threats from internal political dissidents and disgruntled groups. However, in the case of cyber-crime, all these states face threats from the same type of sources—criminals using the Internet for their personal gains.

7.3 Internet Security and the WSIS

In spite of their differential sources of security risks, the postcolonial states and the U.S. agreed to create a global culture of cyber-security. The other stakeholders, except civil society, also joined them supporting the idea of creating a global culture of cyber-security. But the U.S., EU and CCBI in identical tone opposed the creation of any intergovernmental bodies demanded by the postcolonial states to tackle security issues.

Of the postcolonial states, the big four—China, India, Brazil, and South Africa—outlined their positions on Internet security and called for the creation of an international framework to deal with it. China had included this issue in three out of its five submissions to the WSIS and called for international cooperation to deal with it. Chinese
Ambassador Sha Zukang identified security as the key element of the Internet because the lack of security invites risks and causes financial loss and jeopardizes consumer confidence.\textsuperscript{19} He cited the 9/11 incident to highlight the importance of security. He proposed to create international organizations, laws and regulations, and technologies to ensure cyber-security. Chinese Information Minister Wang Xudong repeated the same proposal at the Geneva Summit meeting by saying that the international community needed to develop "measures to stop the use of information technologies and resource for pornographic, violent and terrorist purposes as well as for criminal activities endangering national security."\textsuperscript{20} Chinese Vice Premier Huang Ju also reiterated the same at the Tunis summit meeting.\textsuperscript{21} The key lapse in China's deliberation was that it totally ignored the issue of freedom of expression and privacy which might be at risk due to many cyber-security measures.

Brazil was cautious in discussing the issue of security. It recognized "information network security" as an important issue of Internet policy-making, but warned that it "should not override the development-oriented focus of the WSIS."\textsuperscript{22} Brazil wanted the UN to study the "possibility of creating an international convention ... on the security of information and communication networks."\textsuperscript{23} It underscored the need for international cooperation to deal with those kinds of surveillance and monitoring systems which jeopardize human rights and democracy. It also sought for protection against the illegal monitoring of the information possessed by civil society and businesses. It noted that the information security measures taken at the national level should take the issue of privacy into consideration. It supported the creation of a global culture of cyber-security, but pointed out that it should be done without undermining human rights such as freedom of expression, right to communication and privacy. It proposed to create a new framework for dealing with Internet security issues, saying that "a multilateral, transparent and democratic mechanism of Internet governance shall constitute the basis for the

\textsuperscript{19} Sha, Chinese Statement at PrepCom 1.
\textsuperscript{20} Wang, Strengthening Cooperation.
\textsuperscript{21} Huang, Statement at Tunis summit.
\textsuperscript{22} Brazil, Brazil at PrepCom 2.
\textsuperscript{23} Brazil, Brazilian Government Contribution at PrepCom 3.
development of a global culture of cyber-security." It suggested that all countries should share the responsibility of securing the cyberspace "according to their level of social and economic development." Identifying "information security" as a sensitive issue, Brazil suggested that international efforts on "information security" should take the "existing as well as evolving national policies, laws and regulations" into consideration.

India discussed the issue of security at the PrepCom 3 of the Geneva phase. It also supported the creation of a global culture of cyber-security, and suggested that it should be done by "enacting suitable statutes at national and international level, wherever necessary, on priority" (emphasis original). It highlighted the need for building awareness against cyber-threats at the national level saying that:

[G]overnments must promote awareness in their societies of cyber security risks and seek to strengthen co-operation with the private sector and civil society to prevent the use of information technologies for criminal or terrorist purposes, so as to build confidence and trust by protecting their privacy and confidentiality in the use of ICTs (emphasis original)

India was the only postcolonial state to openly suggest the inclusion of businesses and civil society in dealing with Internet security issues.

South Africa talked about security issues at the PrepCom 3 of the Tunis phase by defining security as a prime concern for Internet governance and earmarked it as an area of "government collaboration". South Africa rationalized its position by saying that:

The [I]nternet [medium] has the ability to permeate borders fairly easily thus it becomes critical for governments to work together to deal with issues related to security since these can impact on sensitive issues such

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24 Ibid.
25 Ibid.
26 Ibid.
28 Ibid.
29 South Africa, South Africa's general statement.
as national sovereignty. As governments we have the responsibility to ensure that this global resource is used for the public good.  

The U.S. hailed the consensus of the states on the need for creating a culture of Internet security. John Marburger, U.S representative at the WSIS Geneva phase, said, “This is an issue that transcends national boundaries, but together we can create a global culture of network security that seeks to protect users, no matter where they live. The consensus achieved this week emphasizes the importance of cyber-security.” The U.S. outlined “building confidence and security in the use of Information and Communication Technology (ICT) systems and networks” as a priority for itself. It rationalized this action by saying that ensuring security was a key requirement for the expansion of Internet use and e-commerce which face threats from multiple sources. The U.S. also included spam as an Internet security issue by saying that it was one of the means by which viruses and other security threats can be delivered to computers. It observed that the “[I]ndustry must play a lead role in developing technical tools to address this problem.”

The U.S. highlighted the need for a “concerted effort by all stakeholders, appropriate to their roles.” It gave an outline for creating the global culture of cybersecurity saying that: “National action and international collaboration across a range of legal, enforcement, administrative and technical areas are required to build a global culture of cybersecurity.” It suggested all states to draw lessons from the existing structures and processes such as: the Council of Europe Convention on Cybercrime, UNGA Resolutions titled Combating the criminal misuse of information technologies (55/63 and 56/121) and Creation of a Global Culture of Cybersecurity (57/239), and the actions taken by the computer security incident response teams (CSIRTs) in developing national strategies to tackle Internet security issues.

30 Ibid.
31 Marburger, Speech at the WSIS, at Geneva.
33 Ibid.
34 Ibid.
35 Ibid.
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The U.S. softened the postcolonial demand to create an international framework to deal with Internet security, suggesting that:

The WSIS should endorse a global approach to cybersecurity rather than urging the creation of a global instrument on this topic. The WSIS should promote the adoption of effective substantive and procedural laws to counteract electronic crime; prevention of and defense against threats to cyber infrastructures; encouragement of information-sharing regarding computer emergency response; and support for existing international and regional mechanisms.\(^{36}\)

The EU also pointed out security as an important issue “for the continued growth of electronic commerce and the use of new technologies more generally.”\(^{37}\) For the EU, consumer privacy, the availability of illegal and harmful content online and the protection of children were the key concerns in the case of cyber-security. It emphasized the need for achieving greater reliability of those systems and applications that store and transmit data.\(^{38}\)

The EU outlined Internet security as both a local and global issue which involves rules, regulations and concerns for data protection and privacy.\(^{39}\) It called for balanced measures which would enhance security and ensure the protection of data and privacy, but would not create new barriers to trade.\(^{40}\) It also pointed out the need for the involvement of all the stakeholders in creating a global culture of Internet security, and suggested that “governments should work in close coordination with private enterprises, civil society and with international expert bodies in the field of network and information security.”\(^{41}\) The EU also rejected the idea of creating an international mechanism to deal with Internet crime saying that:

[G]overnments should, in cooperation with the private sector, adopt a specific common policy against the global threat of crimes committed

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\(^{38}\) EU, European Union statement at PrepCom2.

\(^{39}\) EU, Reflections of the European Union.

\(^{40}\) EU, European Union statement at PrepCom2.

\(^{41}\) EU, EU Contribution to the Draft Declaration.
using information technology—Cyber crime—through legislation and international cooperation. The Council of Europe’s Convention on Cyber crime lays down balanced standards and creates a cooperation process open to all states.\textsuperscript{42}

At the same time, it invited states “to set up a focal point for real-time incident handling and to develop an open cooperative network between these focal points.”\textsuperscript{43}

The CCBI also supported the idea of creating a global culture of cyber-security. It suggested to developing legal measures to deal with Internet crime, but not for Internet security. The rationale it gave was:

1. Different sectors and different types of information and transmissions necessitate different levels of security, and laws/regulations do not always account for such differences; 2. It can lead to inefficient direction of security expenditures, skewing innovation, creating a security floor, and resulting in a failure to keep-up with technology; and 3. It offers hackers information about the security measures deployed.\textsuperscript{44}

The CCBI rejected the need for creating any new institutional framework to deal with security, privacy, consumer rights and spam.\textsuperscript{45} It claimed that multilateral mechanisms and tools were available to address Internet crime and security issues.

About spam, it said, there could be no unified approach to deal with it. Citing the attempts of the ITU, APEC and the OECD, the CCBI said that fighting spam requires multiple approaches and there was no “silver bullet” for that.\textsuperscript{46} It consented to the need for the protection of privacy, but pointed out that “there are different ways of doing so, including self regulation, which address privacy in the context of issues and preferences that are frequently national or regional in nature. …“\textsuperscript{47} It invoked the idea of cultural difference in terms of the issue of consumer rights saying that “[D]ifferences in culture

\textsuperscript{42} EU, EU contribution to the Draft Action Plan.
\textsuperscript{43} Ibid.
\textsuperscript{44} CCBI, CCBI Comments on Draft Declaration.
\textsuperscript{45} CCBI, CCBI comments on the Working Group.
\textsuperscript{46} Ibid.
\textsuperscript{47} Ibid.
and 'conflict of laws' makes the achievement of a global standard for consumer rights difficult."\(^{48}\)

Of the stakeholders, civil society actors did not make any interventions on the Internet security issue until the end of the WSIS process. In its Tunis declaration, civil society expressed concern over the creation of the culture of Internet security from a human rights perspective. The declaration criticized the official documents of the summit for undermining the issue of privacy. It said, "In the Tunis Commitment, it has disappeared to make room for extensive underlining of security needs, as if privacy were a threat to security, whereas the opposite is true: privacy is an essential requirement for security. ..."\(^{49}\) It also expressed reservation about a paragraph on combating Internet crime in the Tunis Agenda, saying that: "With regard to paragraph 40 of the Tunis Agenda, we are disappointed that there is no mention that efforts to combat cyber-crime need to be exercised in the context of checks and balances provided by fundamental human rights, particularly freedom of expression and privacy."\(^{50}\)

In spite of civil society opposition, the WSIS decided to create a global culture of Internet security, but maintained the status quo in terms of method for combating cyber-crime. As far as Internet security issues are concerned, we can see a universal agreement between the states on the need for ensuring security, but a disagreement on ways to ensure security. The U.S., the EU and businesses opposed the postcolonial proposal for creating an international framework to deal with Internet security issues.

7.4 Implications of the Stakeholders’ Agreement on Internet Security

The states have agreed to create a global culture of cyber-security because of their fear of cyber-crime and cyber-terrorism, and to maintain the status quo in terms of combative measures. In the existing Internet security measures, which developed within the context of neoliberalism, states and businesses work hand-in-hand to fight the

\(^{48}\) Ibid.

\(^{49}\) Ibid.

\(^{50}\) Civil Society Plenary, Much more could have been achieved, 7.
threats. In the national context, states create legal frameworks and ensure law enforcement, while businesses develop technical solutions for network security.

In the international context, there is no comprehensive framework to deal with cyber-crime and cyber-terrorism. The Background Report of the WGIG, which outlined the existing mechanisms to deal with them, says that the policy authority is fragmented and policy implementation is private sector based.\(^{51}\) There are some informal arrangements and regional norms and awareness programs such as CERTs, made up of technical people, to deal with global cyber-crime. CERTs have developed recently in some countries, mainly in the first world, as "the first line of defense" against any breach of information and network security. Some CERTs are private organizations and some are government organizations. They are connected to each other and regularly share information and technical know how to deal with cyber-security issues.

Of the international organizations, the IETF generates and approves security protocols such as public key infrastructure (PKI) for Internet architecture. The ITU conducts regular seminars to make its members aware of Internet security issues, and carries out research on technical security measures such as PKI. APEC's Telecommunication Security Taskforce coordinates the regional initiatives for Internet security, and APEC's Electronic Commerce Steering Group (ECSG) has established guidelines for consumer protection and privacy. The OECD (Organization for Economic Cooperation and Development) produced the first supranational guidelines known as the "Guidelines for the Security of Information Systems" in 1992 to deal with cyber-crime. Its objective was to build awareness among states, businesses and people about the benefits of developing a culture of security.\(^{52}\)

However, the Council of Europe developed the most comprehensive framework known as the "Council of Europe Convention on Cybercrime" to deal with cyber-crime and terrorism which went into effect in July 2004.\(^{53}\) Twenty-one states ratified this

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\(^{51}\) WGIG, Background report.


\(^{53}\) Council of Europe, "Council of Europe Treaties," http://www.conventions.coe.int
convention by January 2008. This convention outlines laws, process of execution as well as jurisdiction to deal with cyber-crime/terrorism and the principles of international cooperation and extradition, and recognizes the right of the member states to have additional measures. This convention includes the following offences as cyber-crime: illegal interception and access to computer data and systems, misuse of devices, forgery and fraud, and child pornography and infringements of copyright and related rights. The convention has provisions allowing the collection of electronic evidence, search and seizure of computer data, real-time collection of traffic data, and interception of content data. By ratifying the convention, the member states agree to ensure that their domestic laws would criminalize the offences outlined in the convention and establish necessary tools to investigate and prosecute such crime. The EU and U.S. have already ratified the convention. APEC and the Organization of the American States (OAS) have advised their members to ratify it.

Both the EU and U.S. initiated other arrangements to deal with cyber-threats. The EU banned spam by issuing its e-Privacy Directive (2002/58/EC) and created anti-spam enforcement authorities. It also created a European Network and Information Security Agency (ENISA) to look after network and information security in EU states. The U.S. tried to control the proliferation of encryption technologies, which secure the transaction of data on the Internet, influencing the OECD and Wassenaar Arrangement—an international framework adopted by 33 industrialized countries to control the export of non-conventional weapons and dual use technologies to countries at war and the "pariah states" such as Iran and Cuba. It tried to influence both the Wassenaar Group and OECD to adopt key escrow, a data security measure where encryption key is entrusted to a third party, for controlling the spread of encryption technology, but failed because of opposition from Japan and the Scandinavian countries. However, industrialized countries reached to compromised solutions at both forums and adopted encryption policies including cryptography guidelines. The U.S. has also struck bilateral agreements on legal cooperation in criminal matters with more than

54 Gelbstein and Kurkalija, Internet governance, 61.
55 Ibid.
20 countries to deal with cyber-crime.\textsuperscript{56} The USDcC controls the trade of encryption technologies produced by U.S. private companies by banning the sell of such technologies to states like Cuba, Iran, Iraq, Libya, North Korea, Syria and Sudan.\textsuperscript{57}

The WSIS decision to maintain the status quo in terms of cyber-security measures has various implications. It keeps the existing neoliberal cyber-security measures alive, allowing U.S. control of the Internet. And it helps the postcolonial states to reinforce government control of the Internet to protect the interests of the elites.

In the case of the U.S., Dan Schiller argues that Internet security issue has further reinforced the relationship between the state and telecom TNCs.\textsuperscript{58} He goes on to say that state actions have created a new section of the communication industry which specializes on surveillance technologies and equipments.\textsuperscript{59} This industry is global in terms of supplying surveillance mechanisms. The U.S. elites can oversee and police the cyberspace through the surveillance industry, which Dan Schiller calls the new terrain of private property, to continue the neoliberal order in global communication.\textsuperscript{60} And the 9/11 gave an ideological cover for that, adds Dan Schiller.

When Internet security is concerned, the U.S. is the leader and other states, including the postcolonial ones, follow its lead. The U.S. government modified its legal framework by adding provisions to deal with cyber-crime and cyber-terrorism, especially after the September 11 attack. The Patriot Act enacted in October 2001 broadened the purview of electronic surveillance capability of law enforcement agencies. Before the Patriot Act, the law enforcement agencies also had power to monitor telephone conversation, e-mail, pagers, wireless phones, computers and many other electronic communication devices. The Federal Wiretap Act, the Title III of the US Code, adopted in 1968 and expanded in 1986, and the Foreign Intelligence Surveillance Act (FISA) of 1978 gave them the monitoring power. The Wiretap Act allows the law enforcement

\textsuperscript{56} WGG, Background Report.
\textsuperscript{58} Schiller, How to think, 53-54.
\textsuperscript{59} Ibid, 54.
agencies to eavesdrop all forms of electronic communication. Before monitoring any communication, the law enforcement authorities have to get a court order, satisfying that the communication has a connection with a crime which was committed or is being committed or will be committed. The Patriot Act expanded the list of criminal offences for which wiretap could be ordered.

FISA allows wiretap the conversations of both foreigners and citizens, if it can be justified that the person, whose conversations would be taped, is a member of a terrorist group or agent of a foreign power. In the case of U.S. citizens and permanent residents, the law enforcement agencies need to satisfy that their activities are criminal in nature, but for foreigners, an allegation that they are members of a terrorist group is enough to get wiretap orders. The law enforcement agencies also can conduct eavesdropping overseas under the Executive Order 12,333, issued by President Ronald Reagan in 1982, which is still in force. Before targeting a U.S. citizen or permanent resident for surveillance outside the U.S. border, the law enforcement agencies need an approval from the Attorney General who needs to be satisfied that the suspect is a member of a terrorist group defined under FISA. The forms of wiretap which has been used so far include content-wiretap of e-mail traffic, trap and trace wiretap (i.e., authority to identify and record the destination of a communication such as e-mail addresses of the recipient), and pen-register (i.e., a reverse trap and trace wiretap which tracks the source of a message). The law enforcement authorities can subpoena ISPs to obtain the stored transactional records of Internet use.

The U.S. Computer Fraud and Abuse Act aids the law enforcement agencies to hold people responsible for illegal data interception and modification, data theft, network interference, network sabotage, unauthorized access, virus dissemination, aiding cyber-crime, and computer related fraud.61

U.S. spy agencies use software known as spyware such as key-stroke loggers for surveillance of online communication. Key-stroke loggers can capture every

60 Ibid.
keystroke a user makes onto a computer and record the name of the application with which the keystrokes are associated, and the time and date of the use of the application. The FBI once used a spyware called carnivore for key-stroke logging. It is now widely known that under authorization from President George W. Bush, the National Security Agency (NSA) carried out electronic surveillance inside the U.S. border without any court orders. The NSA, the largest eavesdropping agency, scoops up billions of communications through satellite dishes and other collection techniques and monitors the e-mail and Internet traffic which moves through the U.S. For Internet security, the U.S. government relies on a public-private partnership since businesses own and operate most computer systems and networks in the country. The Clinton administration initiated this neoliberal method of Internet security, and the subsequent Bush administration reaffirmed and pursued it.

Among the postcolonial states, China, Cuba, Tunisia and Iran have developed surveillance systems to monitor the Internet with many purposes in mind: to protect the existing political order, to minimize western, especially U.S., infiltration into their political process, and to deal with cyber-crime. China maintains a comprehensive control of the Internet through public-private partnership involving several state agencies and private ISPs. China censors the content transmitted through web pages, web logs, online discussion forums, bulletin boards, and e-mails through filtering which takes place at various control points of the Internet. Filtering takes place mainly at the backbone level of China’s network. Chinese search engines filter content by keyword look-up and remove certain search results from the list. The law enforcement agencies block any

information that may be sensitive to state security and opposes Communist Party rule. URLs related to Taiwanese and Tibetan independence, the Falun Gong, Dalai Lama, the Tiananmen Square incident, and any anti-government movement do not show up on the Chinese Internet. Search engines also filter out pornographic and obscene content.

The Chinese Internet filtering system has been built on the equipments and software supplied by leading U.S. networking companies such as Cisco Systems, Sun Microsystems and 3COM, and Canadian Nortel Networks. The core of China’s Internet relies on Cisco technology. Cisco supplied technology and equipments for the nationwide backbone networks of ChinaNet and CERNet. ChinaNet, the gateway owned by China Telecom, controls all incoming and outgoing network traffic from China. The routers Cisco provided to China for backbone routing purposes have filtering capability. Cisco is also a partner in the development of China’s next-generation Internet network, known as CERNET2. This network began its journey in December 2004 and expects to connect 100 universities across the country.

A bunch of government agencies together has created an Internet control structure in China. The MIIT regulates ownership and operation of telecommunication services and software industries, and license Internet content providers. The General Administration of Press and Publication (GAPP) licenses and monitors all kinds of publications including websites. The General Administration for Customs, which confiscates the import and export of anything deemed harmful to the state, assists GAPP. The State Administration of Radio, Film and Television regulates Internet broadcasting along with radio, television and satellite broadcasting. The Ministry of Public Security regulates Internet access through its monitoring mechanisms placed at various levels.

ISPs have to take a license from the MIIT to provide services, and record customers' account numbers, phone numbers and IP addresses. For-profit Internet content providers (ICPs) also need to have a license, while non-profit ICPs have to file reports on a regular basis to exist. Any ICPs interested to provide bulletin board services need to have a special license. ISPs and ICPs are responsible for the use and abuse of their Internet facilities by customers. To maintain business, ISPs and ICPs exercise strict control over Internet use. Jack Goldsmith and Tim Wu point out that TNCs like Yahoo! and Google have also complied with the filtering requirements in China out of their commercial interests. Leslie Harris claims that the Chinese Internet users who want to surf the WWW through Google.com, Yahoo.com and Microsoft.com within China (Mainland) are redirected first to a Chinese government's anti-pornography website and then to a Chinese search engine named Baidu.

Since 1996, Internet subscribers are required to register with local police bureaus within the first 30 days of signing up with an ISP. China also developed legal measures to penalize those who illegally modify data, interfere with networks and disseminate viruses. Wangbas, a major source of access to the Internet, are licensed by the Department of Commerce and are monitored by pre-installed software. Chinese law requires Wangbas to equip their computers with software which would block pornography and other “subversive” or “harmful” content. The officially stated goal of Internet control is to provide “good” services and promote “socialism”, maintain social

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71 Jack Goldsmith and Tim Wu, Who Controls the Internet? Illusions of a Borderless World (Oxford: Oxford University Press, 2006), 10; However, recently Google has created a lot of noise by protesting China’s Internet censorship efforts, which critics see as an effort by Google to refurbish its brand identity since it fell behind the Chinese search engine Baidu in the Chinese market. See Nicholas D. Kristof, “Google Takes a Stand,” The New York Times, January 14, 2010, http://www.nytimes.com/2010/01/14/opinion/14kristof.html


order and stability and prevent the leakage of state secrets. The police regularly raid wangbas to shut down the unauthorized ones and prevent the violation of state rules in terms of Internet use and arrest people for doing political and religious activities on the Internet. The case of Lin Hai, an entrepreneur from Shanghai who got arrested and sentenced to two years in prison for submitting 30,000 e-mail addresses to VIP Reference, a U.S. based underground “pro-democracy” newsletter, has been a well-publicized example of state repression, although the Chinese government said that Lin was punished for espionage as he handed over the e-mail addresses to foreign sources.

Iran and Tunisia also use filtering techniques for Internet surveillance. Similar to China, Iran controls the Internet by using filtering software at the backbone level—at the access points or gateways, controlled by the TCI, where ISPs and ICPs get connected to the Internet. Iran uses a filtering technology known as SmartFilter provided by a U.S. company called Secure Computing. The Iranian state usually blocks content in native Farsi language, leaving English content as it is. It behaves like a moral guardian by blocking websites with pornography, gay/lesbian content and on women’s rights, and politically sensitive sites such as the sites which criticize the state authority, the “Islamic revolution”, and the “supreme guide”. The Press Law of 1986, which is used for regulating online content, requires the individuals, who are interested to subscribe Internet services from ISPs, to give a written undertaking that they will not access “non-Islamic” sites.

78 ICTRC (Iran CSOs Training & Research Center), “A report on the Status of the Internet in Iran,” November 2005, 5 http://www.genderit.org/upload/ad6d215b74e2a8613f0c5416cc9f3865/A_Report_on_Internet_Access_in_Iran_2_.pdf
80 OpenNet Initiative, Internet Filtering in Iran, 3-4.
ISPs and ICPs, as part of their licensing conditions, are also required to install filtering software to block websites and e-mails. The state authorities regularly provide the list of websites to be blocked. The Iranian state strictly monitors web logs (blogs) out of fear that the U.S. has put together a blogging network to undermine the Iranian government.61 In an interview with the BBC, Iran’s former President Ali Mohammad Khatami stated that Iran implemented “the minimum necessary” control over the Internet, and did not censor the BBC or the Voice of America (VOA). He added that Iran only censored some “obscene” sites, which were not morally compatible with the culture of Iranian society, and the sites that were insulting to Iranian religious values.62

The police keep cybercafés under surveillance to control the use of “non-Islamic” content. Under Iranian law, ISPs, ICPs and cybercafés are responsible for monitoring the content of the Internet services they provide. Compared to other media, the Internet is less regulated in Iran.63 But the recent chaos in Iran, which erupted regarding its latest presidential election, and U.S. involvement in that would provide the Iranian government with more reasons to impose strict control on the Internet.

Tunisia uses the same technology from the same U.S. company as Iran to block access to the Internet sites which are critical of the ruling government, discuss human rights abuse in Tunisia, offer tools that help Internet users circumvent filtering, and contain pornography or sexually explicit content.64 The Tunisian Internet agency, the ATI, executes the control at the backbone level. Every ISP has to access the Internet through the ATI, which performs the filtering duties at the access points. Tunisian law requires publins (Tunisian cybercafés), the number one means of Internet access, to monitor their customers’ Internet surfing. The police regularly raid publins and arrest people who access the prohibited sites.65

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61 This was claimed by a hard-line Iranian newspaper called Kayhan in an editorial titled “CIA runs Spider Web in Iran” on September 29, 2004, http://horder.com/weblog/archives/012304.shtml
63 ICTRC, A report on the status of the Internet in Iran, 9.
65 Ibid, 7.
Cuba controls the Internet through legal measures. The Decree-Law 209—Access from the Republic of Cuba to the Global Computer Network—which the state authority promulgated in June 1996, says that the Internet cannot be used to violate the moral principles of the state’s law and jeopardize national security. Cuba does not block any websites or content by using filtering techniques; however, intelligence officials closely monitor cybercafés through keyword look-up software. Nobody can write any e-mail on public computers, using the forbidden words, such as the name of a known political dissident. When anyone tries to do so, a message pops up saying that the document has been blocked for “state security” and the application (e.g., word processor, web browser etc.) used for creating the text gets shut down automatically.

Like China, Cuba, Iran and Tunisia, the other postcolonial states do not maintain constant surveillance on the Internet. However, they have developed legal frameworks to deal with cyber-crime and cyber-terrorism. Brazil, South Africa and India have updated their laws with provisions to deal with cyber-crime. India has generated a legal framework to penalize for illegal data modification, data theft, network interference and sabotage, unauthorized access, virus dissemination, and aiding cyber-crimes as well as other computer related frauds. The Indian IT ACT of 2000 lists the cyber-crimes which are punishable under criminal laws. Law enforcement agencies in cities like Bangalore, New Delhi and Mumbai set up cyber-crime cells. Brazil also has framed laws to deal with the people involved in illegal data modification, network sabotage, unauthorized access, and aiding cyber-crimes. South Africa enacted a law, known as the Electronic Communications and Transactions Act (ECT), to deal with cyber-crime, which works along with other criminal laws such as the Prevention of Organized Crime Act (POCA).

Brazil, India, and South Africa do not maintain constant surveillance on the Internet for security. But Iran, China, Cuba and Tunisia maintain constant surveillance on the Internet to secure the Internet mainly from domestic political dissidents and western, mainly U.S., infiltration. On the other hand, the U.S. maintains surveillance on the

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86 Voeux and Pain, Going Online Cuba, 3.
87 Ibid, 4.
88 McConnell, Cyber crime … and punishment? 5.
89 Ibid.
Internet with a view to securing the Internet from terrorist groups like Al Qaeda. The surveillance mechanisms which developed in these countries involving legal and technical measures to secure the cyberspace have elements to suppress freedom of expression and violate privacy.

But in spite of having rigorous surveillance on the Internet, China, Cuba, Iran and Tunisia are yet to establish total control over political dissidents, who use alternative technologies to break official control over the Internet often with U.S. help. For example, Chinese dissidents use proxy servers and other anonymity tools to transmit subversive materials. Iranian reformist bloggers use Real Simple Syndication (RSS) technology to evade government blockade.
New Multilateralism as a Postcolonial Utopia

Giovanni Arrighi predicts that a new world order could be built by "southern states" like China and India. He observes that China has been rising as a winner of the U.S. war on terror, and an expression of this is the rise of a new consensus, a new method of development called "Beijing Consensus" as an alternative to the Washington Consensus. He claims that the Beijing consensus, defined by Joshua Cooper Ramu, refers to an idea which suggests designing development agenda according to local need in contrast to the increasingly discredited Washington Consensus which suggests identical policies for every state. And, the Beijing consensus advocates "multilateralism"—the recognition of the importance of interstate cooperation in constructing a new global order based on economic interdependence which is respectful of political and cultural differences—to replace the current practices of U.S. unilateralism. Drawing on Arif Dirlik, Arrighi argues that the Beijing Consensus: "may lead to the formation of a new Bandung—i.e., a new version of the third world alliance of the 1950s and 1960s—aimed, like the old, at countering economic and political subordination but suited to an age of unprecedented global economic integration." He goes on to say that this new Bandung could build on exploiting the market as a mechanism to balance the power relations between the north and the south. While, according to Arrighi, the foundation of old Bandung was "political-ideological", the emerging new Bandung is primarily economic.

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2 Ibid, 379.
3 Ibid.
For him, the inspiration for the new Bundung is the rise of China, and depends largely on how China maintains itself. If the U.S. co-opts China, or other "southern states" gang up on China with the U.S., the "third world states" would have a little chance to have the new world order to establish control over their socio-economic processes. However, if China can pursue:

self-centered market-based development, accumulation without dispossession, mobilization of human rather than non-human resources, and government through mass participation in shaping policies, then the chances are that China will be in a position to contribute decisively to the emergence of a commonwealth of civilizations truly respectful of cultural differences (emphasis original). ⁵

Alternatively, Samir Amin notes that "a new comprador structure" which has grown in "southern states" during the last two decades with the onslaught of neoliberal capitalism is pulling such states towards having capitalist formations. ⁶ The ruling classes of the so-called "emergent" postcolonial states such as China, India and Brazil are pursuing goals similar to their counterparts in the hegemonic state with the help of their respective state, argues Samir Amin. ⁷

He goes on to say that for a new Bandung a solidarity between the peoples of the south is necessary, arguing that "[O]nly then can hope be reborn, only then can governments be forced or new governments created to shake off the grip of neoliberalism and to lay the basis for a new active front of the South." ⁸ For such a unity "southern states" need to be democratic because authoritarian structures favor the ruling class whose interests are bound up with the transnational capitalist class, suggests Samir Amin, warning that democratization will be a long and difficult process.

While Giovanni Arrighi takes the common economic interests of the "third world states" as the basis for a new Bandung, Samir Amin argues that these states have common political interests as well. Samir Amin indicates that at the political level they all

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⁵ Ibid.
⁷ Ibid, 150.
are critical of the U.S. policy of preemptive war, while at the economic level they all feel a need to control international capital transfer, regulate foreign investment, pursue an agricultural development policy for food security, and challenge the legitimacy of external debt.⁹

There are also two other key differences between Samir Amin and Giovanni Arrighi. First, Giovanni Arrighi's new multilateralism is centered on China, but Samir Amin would take China as a partner in forming the new alliance. Second, Samir Amin highlights the actual problem of creating a new democratic multilateralism—the rise of a new comprador class in the postcolonial states and their relationship with the transnational capitalist class. But Arrighi left this aspect unstressed by being got carried away by his high hope on the rise of China.

For Samir Amin, if the postcolonial states want to create a new multipolar world, they need to have a long term goal such as "building world socialism" and fulfill that goal by dismantling the comprador structure.¹⁰ They need to challenge and transform the existing institutions and create new institutions. He goes on to say that the gradual fulfillment of this project will happen only if social forces and projects first take shape at the national level as a vehicle for the necessary reform. Although Samir Amin and Giovanni Arrighi have differences, they both see a possibility of developing an alternative to U.S. hegemony.

While Samir Amin and Giovanni Arrighi foresee the possibility of developing a counter-hegemonic bloc against the U.S. in the global political economy, in this dissertation, I have explored postcolonial encounters with the U.S. in the context of global Internet policy-making to see whether the postcolonial states could lead to the growth of a counter-hegemonic bloc in global communication. I have explored their encounters on the key issues of global Internet policy-making such as U.S. control of the root and ICANN, digital divide, intellectual property right, multilingualism and Internet security.

⁸ Ibid.
¹⁰ Ibid, 147.
My research suggests that the global communication policy-making is not a multistakeholder process with the equal participation of states, businesses and civil society. Rather it is a hegemonic process through which the U.S. facilitates the hegemony of the transnational capitalist class in global communication.

The U.S. controls global Internet policy-making by controlling the root of the Internet and by establishing the doctrine of neoliberalism as a guiding principle for Internet policy-making. The USDoC authorizes the required changes to the root of the Internet, and a U.S. based Internet TNC, VeriSign, maintains the root zone files. ICANN—a product of the neoliberal era—manages the Internet on the basis of neoliberal principles. The postcolonial states opposed unilateral U.S. control of the ICANN model of global Internet policy-making, but did not challenge the ideological foundation of U.S. power over the Internet—the doctrine of neoliberalism. Their goal was to create a UN body to take over Internet governance.

The postcolonial states opposed the U.S. to establish digital divide as an important Internet policy issue which required immediate action by the international community. However, they were divided in defining the divide. Brazil, China, South Africa and Tunisia defined digital divide as a part of the overall socio-economic divides which exists between states and within states, while India, Cuba and Iran defined it as a problem of access to ICTs. However, the postcolonial states were in the same boat in terms of accepting any means including the neoliberal ones to expand the Internet and maintaining state control over the expansion of the Internet. The issue of state control over the Internet was a bone of contention between the postcolonial states and the U.S. None of the postcolonial states, except Cuba, identified the expansion of the Internet through market oriented means as a reason for the unequal expansion of this medium. The issues of digital divide and U.S. unilateral control of global Internet policy-making were the issues of conflict between the postcolonial states and the U.S.

Multilingualization of the Internet was the area of compromise where the postcolonial states and the U.S. agreed to speed up the existing processes of multilingualization carried out by ICANN. The postcolonial states wanted an intergovernmental body to carry out the works of multilingualization, but did not make it a big issue since ICANN already made some good progress in this regard. Instead, they
have emphasized that ICANN should become more proactive in this regard and received U.S. endorsement for that.

In case of other two issues—intellectual property right and Internet security, the postcolonial states were complicit to the U.S. In terms of intellectual property right, the postcolonial states have accepted the key policy goal—assigning private property right to intellectual creations—but fought for a lenient international intellectual property regime which would allow them to use discretion to protect the interests of their domestic copyright holders.

The postcolonial states and the U.S. agreed to create a culture of cyber-security in spite of their different security concerns. The U.S. wants to secure its cyberspace from the non-state actors based in the postcolonial states, while China, Iran, Cuba and Tunisia want to protect their cyberspaces from the infiltration of the west, mainly the U.S. The postcolonial states demanded to create an intergovernmental framework to deal with cross-border cyber-crime and cyber-terrorism, but failed to make any gain on this issue because of opposition from the U.S., the EU, businesses and civil society.

The postcolonial states had a common position on the Internet policy issues that they all opposed the U.S. power over the Internet and Internet policy-making but not the ideological foundation of that power. This is an ambiguity which is persistent in the postcolonial responses to the U.S. in all Internet policy issues which I have discussed in this dissertation. Their similar positions did not lead the postcolonial states towards creating any formal alliance or a new bloc to face the U.S. In order to understand the root of ambiguity in the postcolonial responses to the U.S., I have looked into the actions of such states related to the Internet in their national contexts.

Communication capital in the postcolonial states has got connected with transnational capital in recent years, primarily through joint ventures. All the postcolonial states have allowed private capital to expand the Internet on a pay-per basis. Of the postcolonial states, Chinese and Indian communication systems are the most integrated with transnational capital as they are the popular destinations of FDI, followed by the Brazilian and South African systems. To get further integrated with the global capitalist system, the postcolonial states are in the process of restructuring their intellectual property right regimes in light of the TRIPS Agreement.
China, Iran, Tunisia and Cuba have created legal and technical mechanisms to maintain a constant surveillance on the Internet to protect their existing power structures. China, Iran and Cuba have also have threats of U.S. infiltration through the Internet requiring surveillance of the Internet.

The Internet is still concentrated in the major urban areas where the elites live in the postcolonial states. Internet access rate is the lowest in India, South Africa, Tunisia, and Cuba. English is the lingua franca of the Internet in India, South Africa and Tunisia, while most people speak in local languages. Cuba’s low Internet access is mainly caused by U.S. economic embargo. Because of the embargo, international Internet bandwidth is limited for Cuba. To cope with this problem, Cuba gives priority to state employees in providing Internet access.

There are growing social movements in all these states. The political structures in Brazil and South Africa have changed in recent years because of social movements. Social movements in Brazil brought the Workers’ Party to power in 2002 and kept demanding the redistribution of social services. Social movements in South Africa have de-racialized the state by establishing the African National Congress government in 1994. Both Brazilian and South African state negotiate with businesses and social movements in making communication policies. They both have adopted universal access to the Internet as a policy goal and created universal access funds by levying private companies. The goal for the Brazilian universal access fund is to make Internet connections available in public places such as schools, public libraries and community centers, while the goal for the South African universal access fund is to make the Internet available in underserved and unserved black dominated areas. Both countries have state and private initiatives to expand the Internet to the public on a pay-per basis.

India has a growing social movement against the World Bank, the IMF and the WTO. Indian masses unseated the Bharata Janata Party government, which candidly embraced neoliberal policies, with the Indian National Congress government in 2004. Anti-censorship movement or movements demanding an end to Internet censorship is growing strength to strength in China, Tunisia, Iran and Cuba.
In spite of their differences, one thing is common in all the postcolonial states that they have established state-controlled commercial Internet systems where the state mediates between the interests of private capital and popular interests. They have used both state and private funds to expand the Internet mostly on a pay-per-basis. The Internet still remains as a medium of the elites with an increasing desire among the public to go online. The role of the postcolonial states in Internet management and policy-making at the national level reminds us of Samir Amin’s postulate of a new comprador structure discussed above.

The ambiguity in postcolonial response to the U.S. eventuated because of their neoliberalization and the growth of domestic capitalist class and their alliance with transnational capital. Their communication businesses want to negotiate favorable deals with TNCs in the areas of telecommunication and the Internet with the help of their respective states, while the masses want to enjoy the benefits of ICTs. Because of these two pressures, the postcolonial states have allowed both state and private interventions to expand the Internet. The postcolonial states have worked hard at the WSIS to establish the primacy of the state in controlling the Internet, but did not challenge the neoliberal means of Internet expansion.

The Internet governance controversy at the WSIS shows change and continuity in global communication in terms of the alignments of actors, ideas and issues. The issue of the freedom of expression still haunts some postcolonial states (e.g., China, Iran, Cuba and Tunisia), as it did during the NWICO. The postcolonial states demanded the democratization of international communication by undoing the dominance of western TNCs during the NWICO, but at the WSIS, they demanded their participation in global Internet policy-making framework. Today the postcolonial states want TNCs to be a partner of developing the Internet, while during the NWICO they treated TNCs as an enemy of their development. The alliance between the postcolonial domestic capital and transnational capital in the post-NWICO period has helped this to happen.

During the NWICO, states were the only legitimate representatives in global communication policy-making forums, but during the Internet governance conflict,

11 Bhulyan, Conceptualizing the information, 109.
businesses and civil society had substantive participation since their participation was facilitated by the U.S. and EU. Business participation increased in the global communication policy-making forums since the 1990s, and in most cases it surpasses civil society since the latter lacks financial capacity to send representatives to the global forums and lobby states. The first world-based entities dominate both business and civil society representation in the global forums. Although both businesses and civil society were allowed to make written contributions on Internet policy issues at the WSIS, intergovernmental bodies made the decisions. Compared to the NWICO, both businesses and civil society enjoyed an elevated status at the WSIS. But states are still the decision-making entities of transnational communication.

At the NWICO, the postcolonial states received a strong support from the Soviet Union, but they missed such an ally during the Internet governance controversy. The EU has emerged as a new power bloc in global politics and acts as a partner of the U.S. to protect the interests of transnational businesses. As a leading authority on EU, Andrew Moravcsik argues that "the EU is overwhelmingly about the promotion of free markets. Its primary interest group support comes from multinational firms, not least U.S. ones." In case of global Internet policy-making, the EU had only slight disagreement with the U.S.—that was in the case of the latter's unilateral control of the Internet. Otherwise, in all other issues it stood side by side with the U.S. To defeat the opposition to its control over global Internet policy-making, the U.S. first co-opted the EU.

Businesses always stood by the U.S., while civil society played a variable role. Although multiple actors with a multitude of ideological orientations took part in the WSIS processes under the civil society umbrella, they expressed their positions in univocal language by issuing two declarations—Geneva declaration and Tunis declaration—following the Geneva summit and Tunis summit respectively. On some issues (e.g., national control over the Internet) civil society organizations sided with the U.S., while on some issues (e.g., digital divide) they sided with the postcolonial states. They took a unique position in terms of IPR and Internet security. They demanded the WSIS to deal with intellectual property right issues, while the other stakeholders including the U.S. and

12 Andrew Moravcsik, quoted in Perry Anderson, Depicting Europe, 20.
the postcolonial states preferred not to do so. Civil society actors were the only stakeholder group to oppose the creation of a global culture of cyber-security to secure the Internet because of privacy concerns. They argued that cyber-security measures should include strong provisions to protect people’s privacy. However, their opposition to national control over the Internet at the WSIS helped the U.S. to maintain the status quo in Internet policy-making.

How should we characterize the postcolonial challenge to the U.S. in global Internet policy-making? Drawing on Gramsci we can call it a war of movement, an assault on the U.S. power, which exposed the democratic deficit in Internet policy-making in the sense of representation, but did not challenge the ideals of free market liberalism which guides the policy-making. The postcolonial resistance to U.S. hegemony has signs of hope and despair at the same time for creating a new multilateralism in global communication. The sad part is that it shows that the postcolonial states accepted market logics for governing the Internet, while the optimistic part is that they have a common ground and willingness to challenge U.S. power. The postcolonial states find U.S. power over global Internet policy-making as an obstacle to achieving self-determination over the Internet, but are yet to develop any meaningful alternative to the U.S. sponsored Internet policy-making framework.

To have self-determination over the Internet, they need to develop an alternative to the U.S. led framework—a new multilateralism. In order to create a new multilateralism, the postcolonial states need to overpower the U.S. and confront the emerging hegemonic transnational communication system. They need to build a commonwealth based on their common interest in the Internet. They need alternative ideas to neoliberalism and willingness to re-organize the Internet in light of that. For this to happen, both the communication sector and the state need to be democratized at the same time in the McPhersonian sense which defines “democracy not just as a set of procedural rules but as a societal environment that nourishes developmental power.”

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13 Gramsci, Selection from the Prison, 229-238.
14 C.B. McPherson, quoted in Zhao and Hackett, Media globalization, 12.
This perspective of democracy suggests direct participation of people in political, economic and cultural decision making for the equitable distribution of resources.

One goal of democratizing the Internet could be to reorganize it as a "global public good", as suggested by Brazil. One way of realizing the public good, which we can find in the Brazilian context, is to make the Internet universally accessible. Another goal of democratizing the Internet could be transforming the Internet into a commons, as suggested by some civil society proponents.

The civil society idea of information commons was largely influenced by the writings of Lawrence Lessig, a professor of law at Stanford University, who took part in the WSIS processes as a civil society actor. Drawing on Oxford English Dictionary, Lawrence Lessig defines "commons" as a resource held "in common" or a community resource where community members enjoy control free use rights and contribute to its preservation. Commons as a resource can be both finite and infinite. Finite resources are those resources whose use by one person diminishes the chance of its use by other people, while infinite resources are the opposite.

Lessig argues that out of the three layers of the Internet—the physical segment (i.e., the physical base of the Internet such as telecommunication lines and computer hardware), the code segment (i.e., internet protocols and software which make the hardware work) and the content segment (i.e., the content of the Internet such as information, data, images etc), the code segment developed as a commons and the content segment developed as a partial commons. He goes on to say that the Internet has formed an innovation commons at the code and content segments. But he laments that "Yet so blind are we to the possible value of a commons that we don't even notice the commons that the Internet is. And, in turn, this blindness leads us to ignore changes to the norms and architecture of the Net that weaken this commons."

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17 Ibid, 23.
18 Ibid.
Lessig notes that the idea of the tragedy of commons outlined by Garrett Hardin is frequently used to undermine the commons. Using an “open to all pasture” as an example, Hardin argues that everyone wants to reap benefit out of a commons, but nobody contributes to its preservation and eventually the commons faces a tragic death. Lessig repudiates this argument, saying that Hardin’s observation does not apply to every commons as there is no tragedy in the use of infinite resources. He also points out that holding things in common does not mean that there cannot be a mechanism for its preservation. Instead of seeing commons as a tragedy, Lessig sees “a benefit to resources held in common” and shows the Internet as the best evidence of that. He claims that the Internet developed as a global medium at least partly because of its innovation commons, and the tragedy of this commons is that it is being usurped by big corporations.

What is frustrating about Lessig is that he does not go very far with his argument about commons. Lessig’s concern is to protect the existing commons of the Internet, and he repudiates what he calls the “blindness” of people in the U.S. about the benefits of commons that bars people from recognizing the positive contribution or benefits a commons can yield for society. His struggle is to save the innovation commons, not to challenge the social and political structure which leads to this tragedy of the commons. My study for this dissertation implies that it is not “blindness” which resists the society from appreciating a commons. Rather it is the blind and unbridled appropriation of pro-market means that makes people blind about collective interests but encourages them to realize individual interests.

Therefore, the rebuilding of the Internet as a commons would require rebuilding the state as a radically democratic state at the same time. For that, we need to think about structural transformation of the state and communication. If the postcolonial states want to transform the Internet into a global commons by challenging the neoliberal logics of its administration they need to transform themselves through democratization. Our concern is to assess whether there is a potential for that.

20 Lessig, The Future, 22.
The opposing tendencies which exist in the postcolonial states give us some hope. The resolve of the Chinese working class, the pressure of Indian masses, and the success of organized social movements in Brazil and South Africa, and anti-censorship movements in China, Iran, Cuba and Tunisia make us hopeful that the postcolonial states may move towards democratization. The struggles of Chinese peasants and workers in recent years have compelled the Hu Jintao government to take initiatives to redress the unequal distribution of wealth. Indian masses have unseated the BJP government for being too biased towards protecting elite interests. Trade union-led social movements in South Africa compelled the deracialization of the state. Social movements in Brazil brought a workers’ party to state power. Many of these events happened before the WSIS took place and their impact was ongoing during the WSIS.

All these social movements have included diverse social groups such as farmers, trade union activists, students, women right activists and NGO activists, and ideologies ranging from socialism to anarchism. But all these people can be grouped together on the basis of their common will to create pressure on the states to counter the market forces to ensure equal participation in political and economic decision making for more balanced distribution of resources.

However, these social movements, except the anti-censorship movements, have yet to take the democratization of communication and the state as their principal goal. But it is pretty common for these movements to use the Internet as a tool. For example, Chinese left leaning intellectuals use the Internet as a tool to attack the neoliberalization of the Chinese state, and the recent anti-government movement in Iran has heavily used the Internet. When the social movements in these states will take the democratization of the Internet communication and the state as their goal and become successful in achieving that goal, the postcolonial states will become the real forces to create a new multilateralism. This new multilateralism may include China, but will not be built around it since it does not lead the postcolonial states on the Internet policy issues.

21 Ibid, 23.
22 Zhao, Communication, 342.
However, the democratization of Internet communication and the state would require a protracted struggle and alliance between pro-democratic forces in the postcolonial states and the U.S. History seems to be on the side of these people as the fall of neoliberalism looms large because of the ongoing world financial crisis.
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